RPA

REPARAMETRIZE

ATELIERS

LEBANON - SYRIA - PAKISTAN - GERMANY

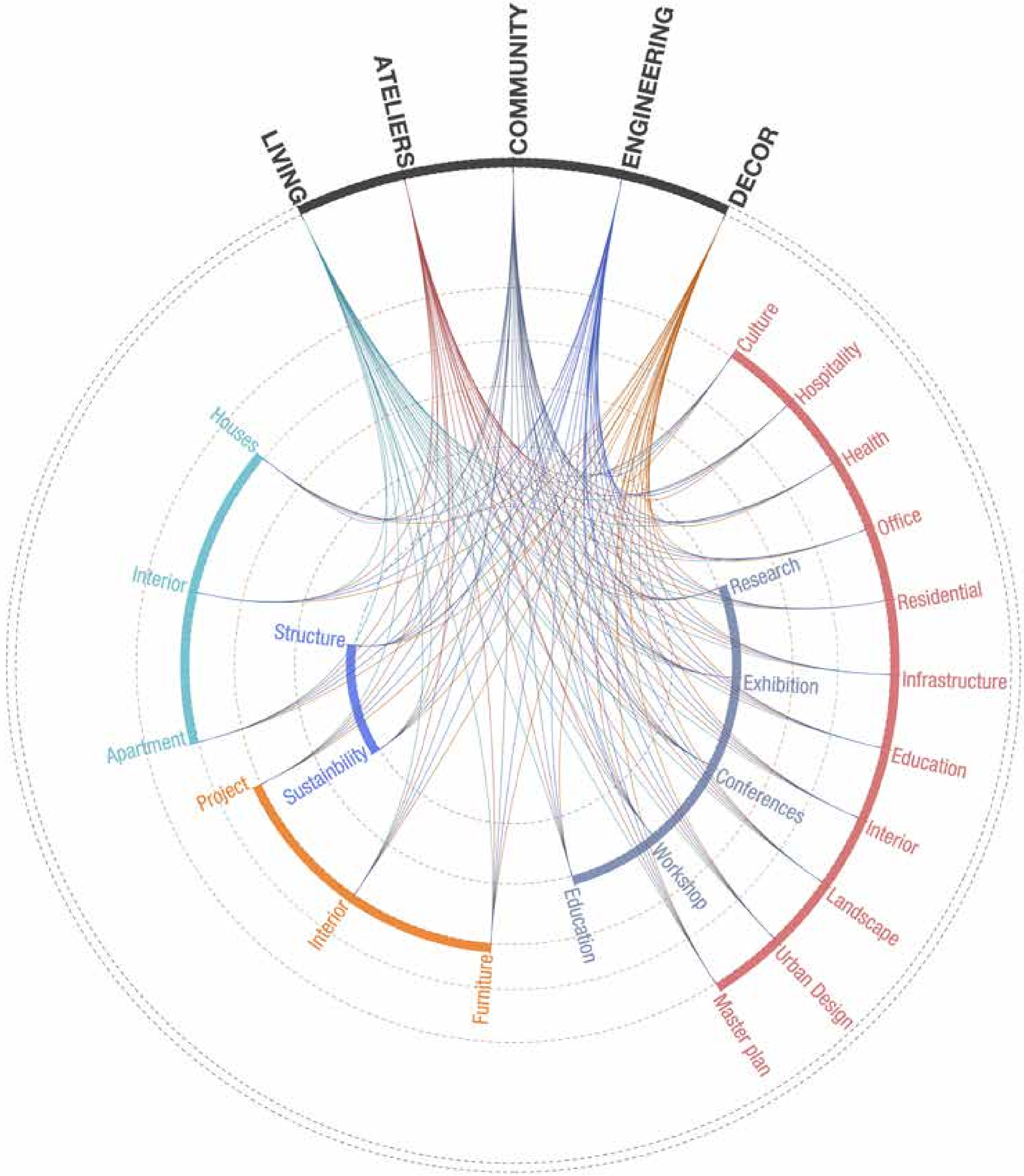
ABOUT US

Discover Reparametrize Ateliers, where architecture becomes an immersive journey. Founded in 2016 by the visionary Bilal Baghdadi, we redefine spaces across Asia, Middle East, and Europe. The firm employs a distinctive approach founded on the integration of computational intelligence and an “information-driven design” methodology, coupled with a core commitment to sustainability, we craft Smart Design Systems that adapts to variable scales.

From our roots as Reparametrize we’ve evolved, into Ateliers (RPA), Decor (RPD), Living (RPL), Engineering (RPE), and Community (RPC). This evolution springs from our unyielding commitment to diverse client needs. Our innovation is seamlessly LACED into each Project, leaving an indelible mark on the canvas of design.

At the heart of our success is our exceptional team. Our professionals are not just architects; they are dream weavers and problem solvers. Their expertise knows no bounds, and they go above and beyond to turn imagination into tangible structures, consistently surpassing our clients’ expectations. Their passion and skill are the cornerstones of our achievements.

in our Projects consistently strives to combine design ingenuity with technical proficiency in every project. Operating through the cohesive structure of the LACED framework allows the firm to deliver advanced, innovative architectural outcomes that aim to contribute significantly and positively to the broader built environment.



LIVING
ATELIERS
COMMUNITY
ENGINEERING
DECOR
Culture
Hospitality
Health
Office
Residential
Infrastructure
Education
Interior
Landscape
Urban Design
Master plan
Research
Exhibition
Conferences
Workshop
Education
Houses
Interior
Apartment
Structure
Sustainability
Project
Interior
Furniture

COMPANY STRUCTURE

Our latest Transformation, Reparametrize LACED, represents a further commitment to this collaborative approach. This acronym encompasses Reparametrize Living, Ateliers, Community, Engineering, and Décor – a powerful network of in-house expertise fostering a multifaceted perspective on design.

The collective strength of our individual talents ignites a collective creative genius. The incremental contributions of each member coalesce to form the transformative force that is Reparametrize LACED.

L

Reparametrize Living fosters exceptional residential experiences through a collaborative design process. We prioritize open communication to translate your vision into a bespoke living space, meticulously crafted with sustainable luxury principles and an unwavering commitment to detail and quality. The result is a residence that embodies your individuality, minimizes environmental impact, and stands as a testament to enduring design excellence.

A

Reparametrize Ateliers, we envision architecture as a transformative force for a more sustainable and inspiring future. We transcend the limitations of conventional practice, rejecting the false dichotomy between impractical, purely expressive designs and solely functional, yet uninspiring solutions. Our design philosophy, “Sustainable Innovation,” embraces a dynamic nexus where cutting-edge parametric design principles converge with unwavering environmental responsibility.

C

Reparametrize Community fosters a more equitable and inclusive future for architecture by empowering the next generation of design leaders from diverse backgrounds. We achieve this through a comprehensive suite of programs, including workshops, courses, and acclaimed internship opportunities. These initiatives equip students with the necessary skills and knowledge to flourish within the architectural industry.

E

Reparametrize Engineering transcends traditional engineering boundaries by offering a comprehensive suite of services encompassing structural, mechanical, electrical, and environmental engineering disciplines. This integrated approach fosters unparalleled project efficiency and a holistic understanding of each project’s long-term social and environmental impact.

D

Reparametrize Decor understands that exceptional architecture extends beyond the blueprint. It’s a meticulously woven tapestry of design elements that create a seamless and enduring user experience. This philosophy transcends the physical boundaries of a space, influencing the very objects that inhabit it. Reparametrize Décor, our dedicated design studio specializing in bespoke furniture, lighting, and fixtures, embodies this holistic approach.

Bilal Beghdadi

Founder

Bilal founded Reparametrize in 2016, drawing from his experience in multinational architecture firms. His vision centers around seamlessly integrating cities and buildings with the evolving human experience. He emphasizes local cultures, climate patterns, and contemporary life as cornerstones of his design philosophy. His commitment to “information-driven design” ensures that each project reflects a deep understanding of its context and purpose.Sustainable Approach: Bilal champions cutting-edge solutions such as renewable energy integration and sustainable materials. These aren’t mere options but integral to his design process. His dedication has led to a portfolio of impactful projects recognized globally for their elegance and positive environmental impact. Accolades: Reparametrize’s work has garnered attention. The studio was shortlisted for The Tamayouz Award Excellence and the Mohamed Makiya Prize for Architecture in 2020. Additionally, it was recognized as one of the 300 World Best Practices on Sustainability and Innovation by the Global Entreps Awards and 5Gcitizens International Congress. Exhibition and Outreach: Reparametrize’s projects have been showcased at prestigious events like the Bi-City Biennale of Urbanism/Architecture, Design for Peace Architectural Exhibition in New York, and London Design Biennale. Bilal’s engagement extends beyond practice he’s actively involved in lectures, workshops, and seminars at universities worldwide.

OUR TEAM










Our team comprises architects, designers, and sustainability specialists with a collective wealth of experience and a unifying passion for design excellence. Their diverse skillsets, combined with a collaborative spirit, ensure the delivery of exceptional results on every project.

OUR SERVICES.

CONSTRUCTION SUPERVISION

Our team of on-site supervisors acts as a vital bridge between design and execution and guarantees Quality assuring strict adherence to the highest technical standards and Agile Problem-Solving Anticipating and resolving real-world construction challenges is paramount. Our team provides clear and immediate solutions for unforeseen site conditions, guaranteeing the integrity of your design vision construction with full adherence to relevant regulations.

URBAN DESIGN

Our team seamlessly integrates civic design, landscape architecture, and infrastructure engineering, fostering vibrant and functional spaces at every scale – from intimate plazas to bustling city centers. Amenities are meticulously planned to prioritize user needs, sustainability, and optimal functionality.

MASTER PLANNING

Our Team elevate master planning beyond mere site allocation. We meticulously craft comprehensive visions that seamlessly integrate with the surrounding environment, fostering vibrant and sustainable communities for generations to come.

ENGINEERING & STRUCTURAL DESIGN

Our team leverages their expertise in sustainable design principles to craft cost-effective solutions that minimize material usage. Structural integrity is paramount; our engineers possess unparalleled proficiency in earthquake engineering, ensuring structures can withstand even the most formidable seismic challenges. We embrace a technologically advanced approach, utilizing Parametric Design software and cutting-edge design tools to deliver engineering solutions with exceptional precision and efficiency.

PLANNING

Our planning services extend beyond ensuring regulatory compliance. We employ a holistic approach, meticulously analyzing all facets critical to project success. This includes conducting in-depth location studies to identify optimal sites based on feasibility, infrastructure, and long-term impact.

EXTERIOR & INTERIOR ARCHITECTURE

Our commitment to meticulous attention to detail guarantees the highest quality finished product, translating your vision into a tangible reality that surpasses expectations. This collaborative approach fosters a strong partnership, ensuring that our expertise is seamlessly integrated to bring your unique design needs to life in the final execution.

CONTENTS.

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ARCHITECTURE

Culture

KUMA MUSEUM

Seoul-t ukpyolsi ,Korea

Client: National Agency for

Administrative City

Construction (NAACC)

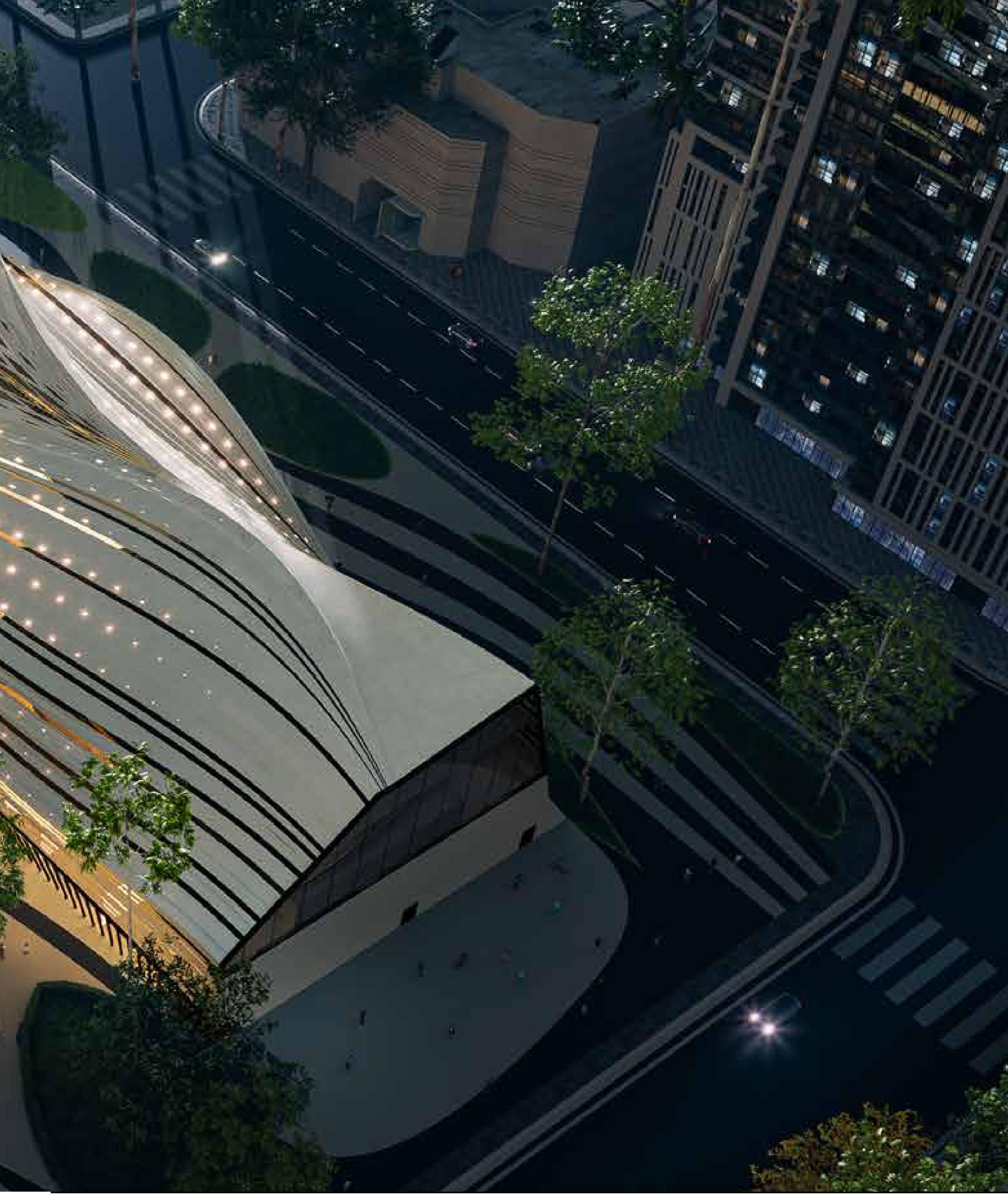
Size: 14,000m^2/150,000f^2

Status: Proposal

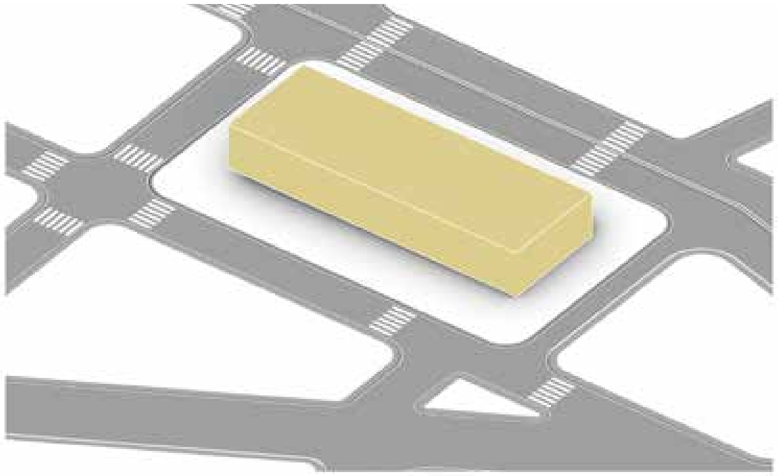
Typology: Culture

Year: 2020

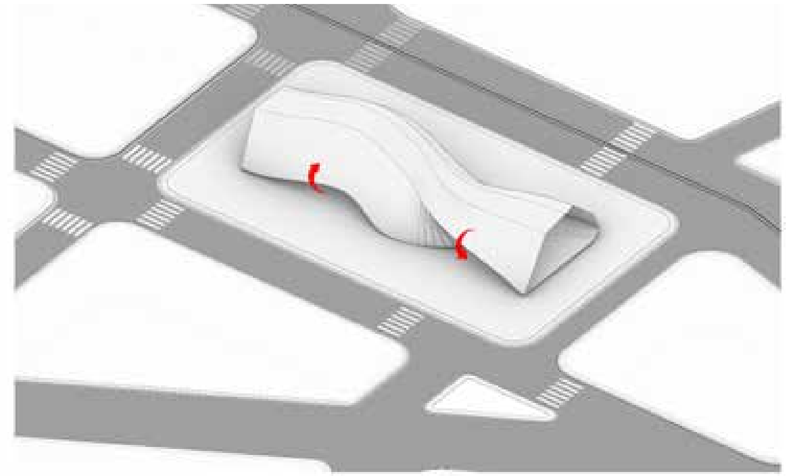
The competition was organized by the National Agency for Administrative City Construction to design the Korean Museum of Urbanism and Architecture (KMUA) in Sejong, South Korea. KUMA museum features a sleek Central Large-Scale Lobby, dynamic Exhibition Ramps, a state-of-the-art Conference Hall, and tranquil Open Courtyards occupying a building area of approximately 120,000 square feet.



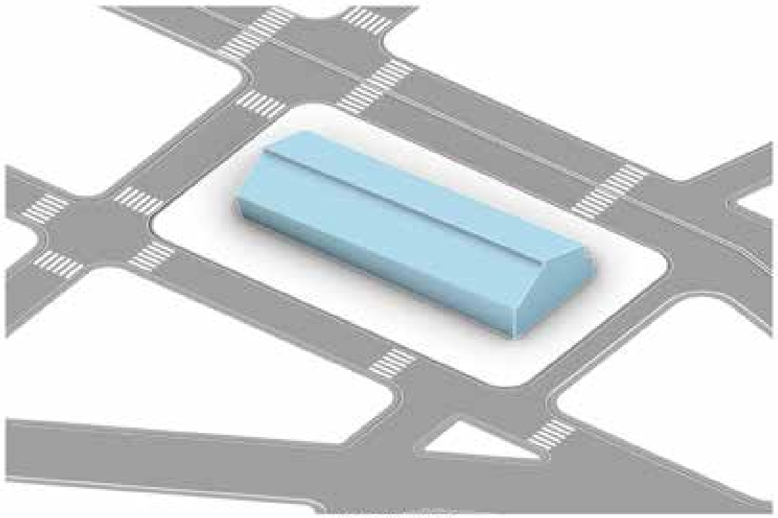
This museum transforms into a captivating space, inviting visitors to embark on an exciting and enriching cultural odyssey. Crafted in harmony with the city's vision of becoming a smart city and embracing green architecture, this museum is a living embodiment of progressive design. Each element of the Kuma Museum responds to the dynamic force and spirit of Sejong-si, seamlessly blending technology and sustainability.



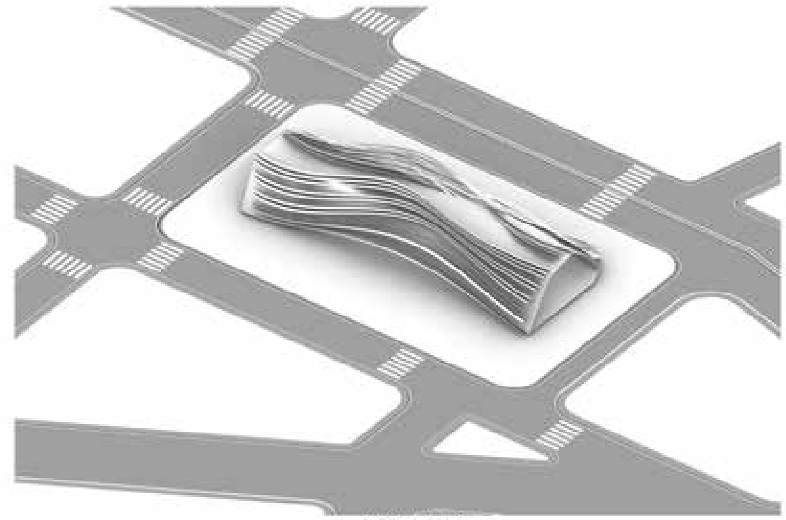
MAXIMUM VOLUM



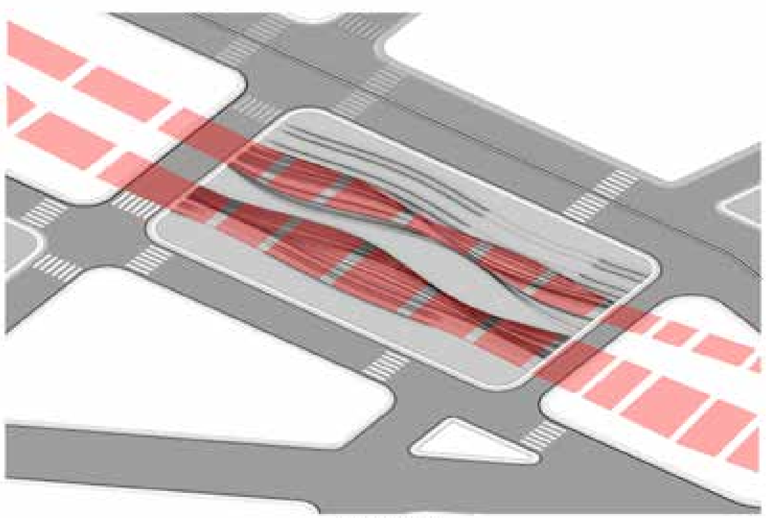
TWISTING



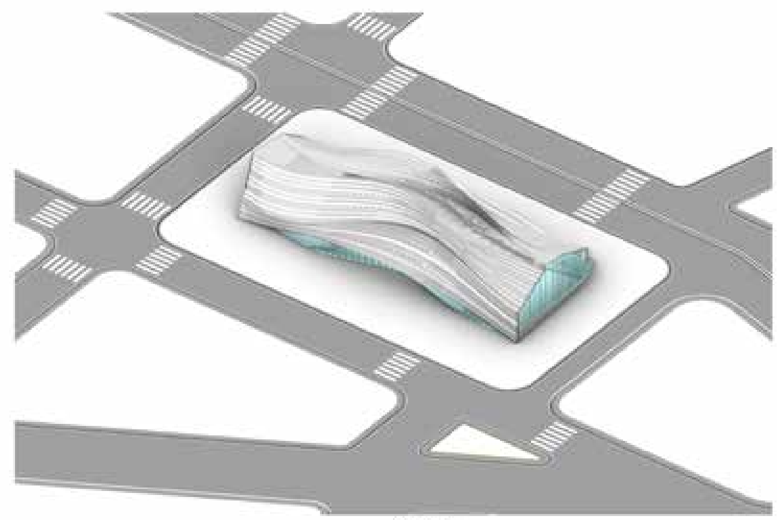
ENVELOP EXTRUDE



ADDING LOUVERS

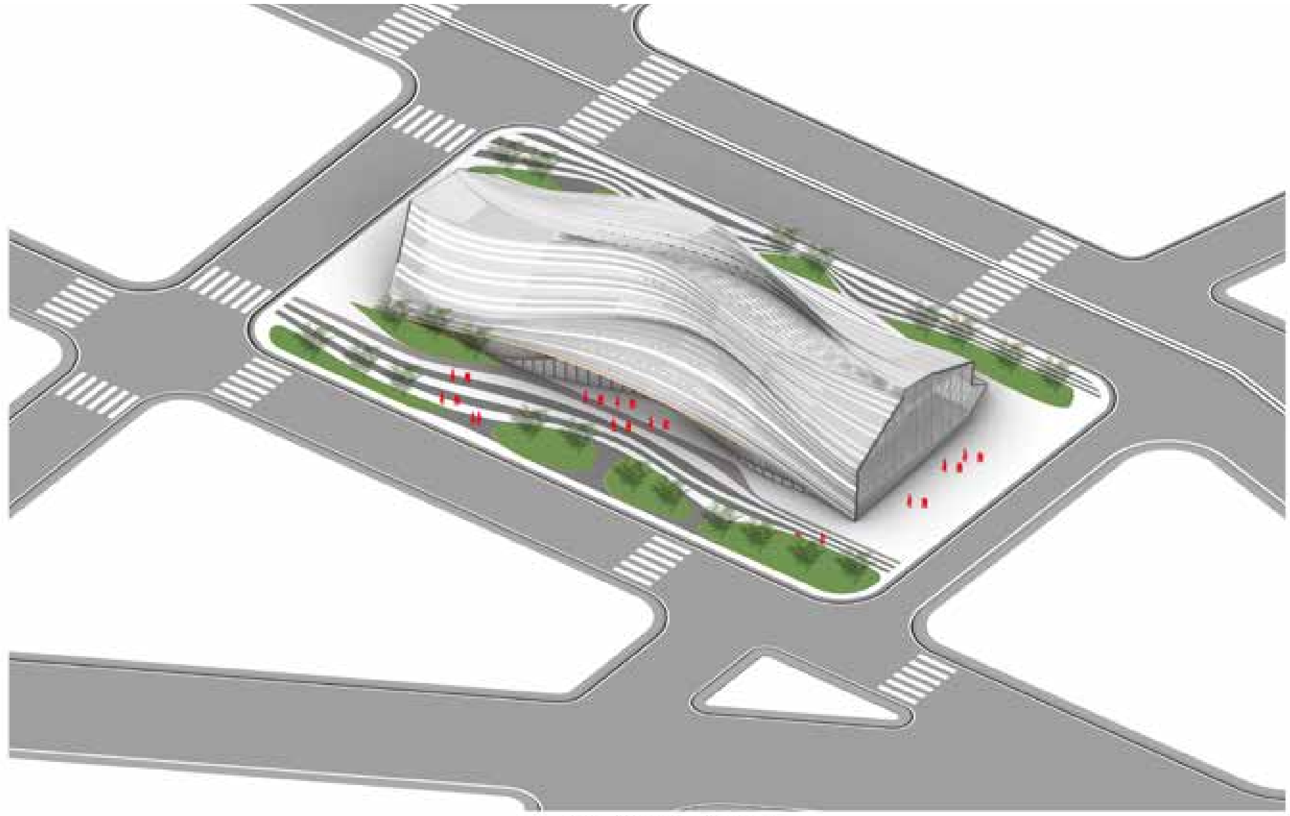


CONNECTIVITY



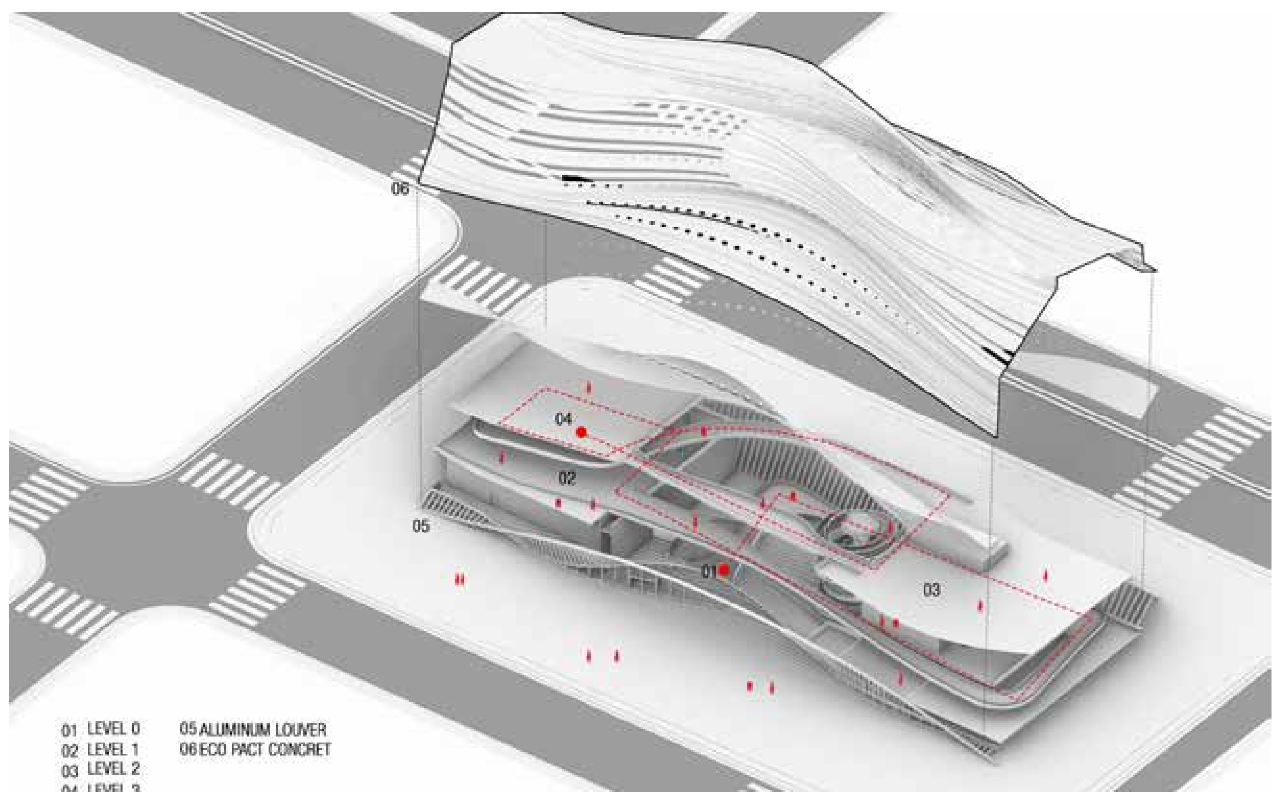
GLAZZING

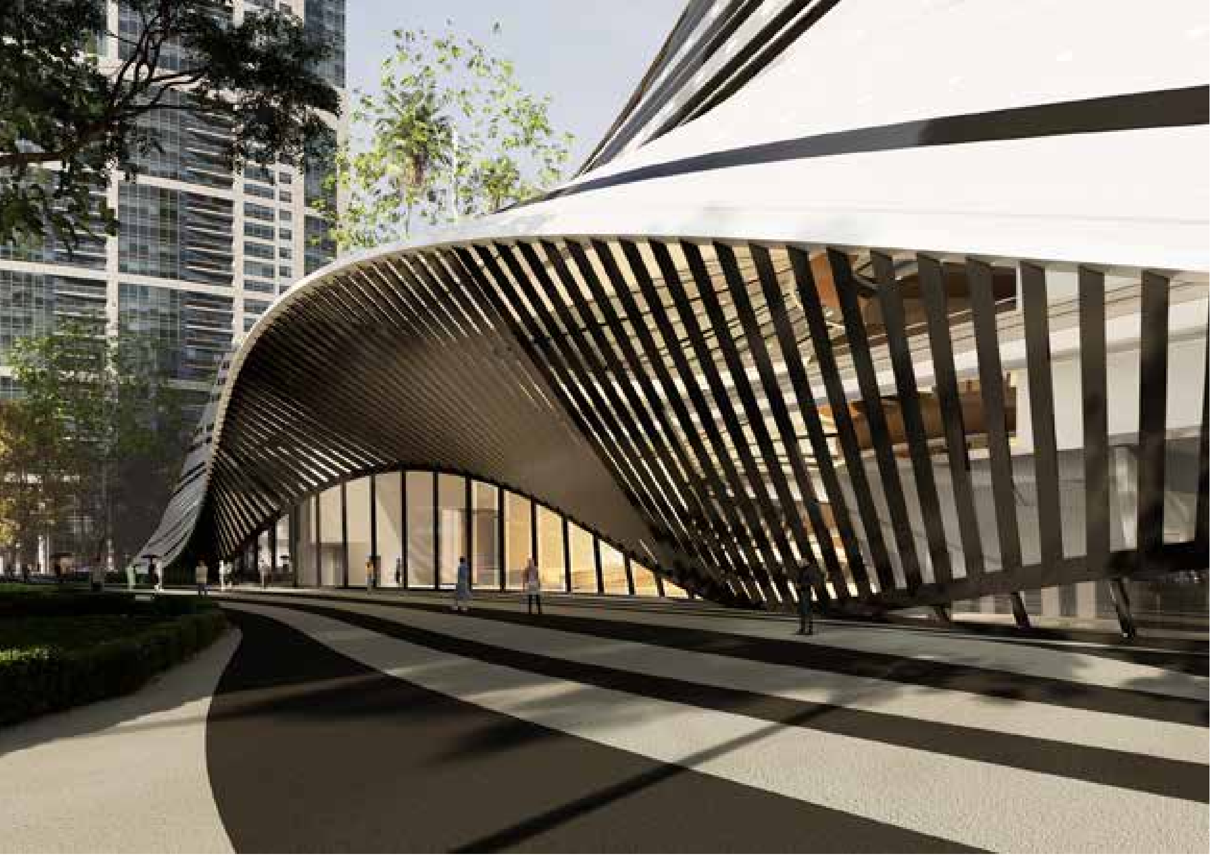
Aligned with the principles of the Design for Disassembly doctrine, the building consciously preserves material resources, ensuring their availability for future use at the end of its lifecycle. The sculpting process reflects a profound commitment to Sejong-si's identity, art, smart technology, and culture, seamlessly integrating the museum with its surroundings to establish a harmonious visual and spatial dialogue with the landscape.



ADDING LANDSCAPE

This design philosophy results in a structure that feels inherently and organically embedded in its environment. Moreover, the horizontal louvers not only contribute to the building's aesthetic appeal but also function as a responsive and sustainable element. By utilizing ECOPACK green concrete as a key material, the structure underscores its commitment to environmentally conscious practices, showcasing a smart fusion of architectural aesthetics and environmental consciousness.





The Kuma Museum stands as a meticulous masterpiece, intricately sculpted to harmonize profoundly with its natural surroundings. Its design reflects a thoughtful connectivity that embraces the contours of the landscape, mirroring the organic flow inspired by the elements of wind and water prevalent in Korea's natural landscapes.

This intentional design choice allows the building to seamlessly integrate into the natural topography, establishing a symbiotic relationship with the environment.

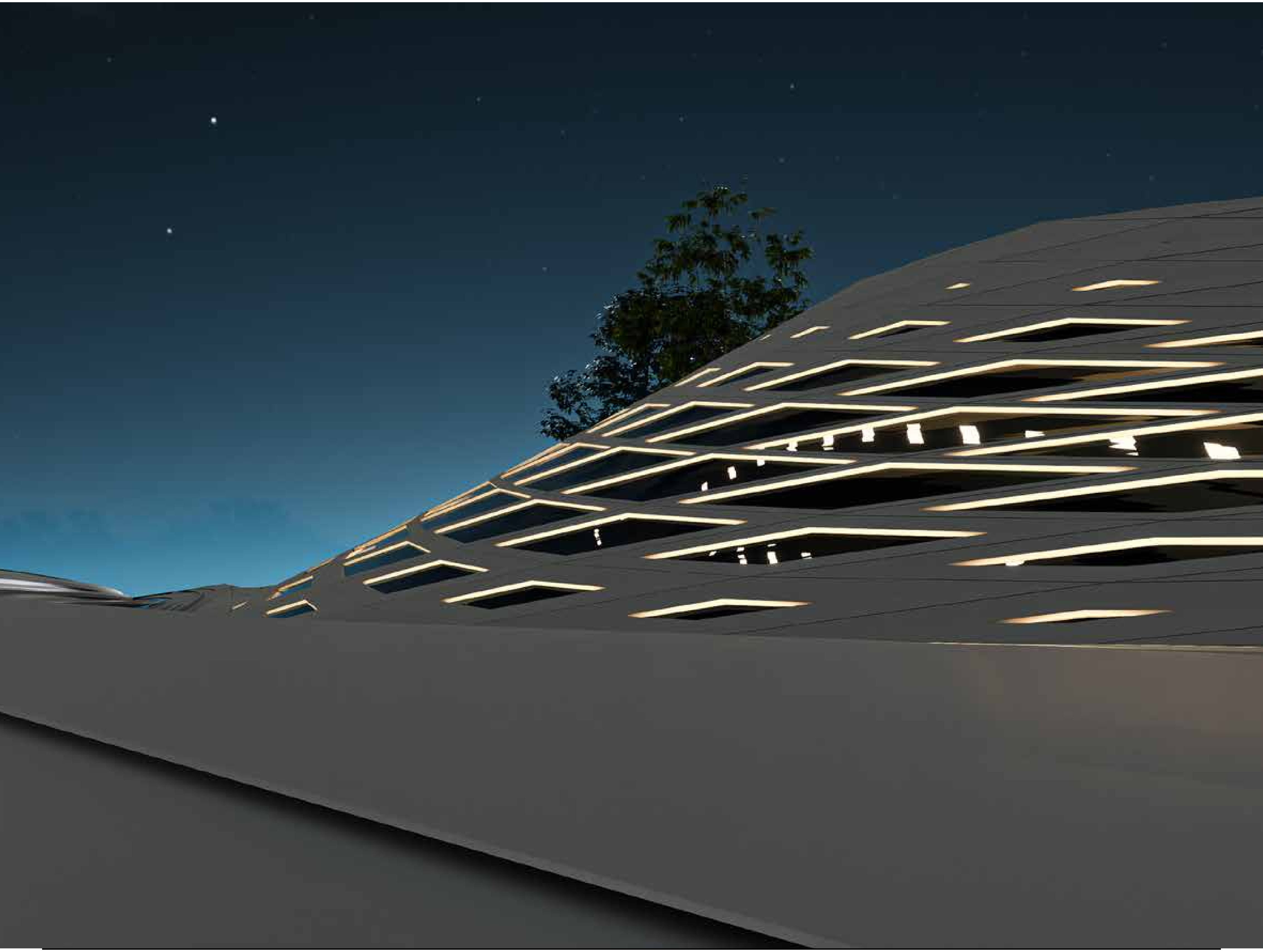
Notably, the museum's skin is purposefully shaped through the optimization of sun and wind, showcasing a commitment to sustainable design. The incorporation of Ultra-High-Performance Concrete (UHPC) as an advanced eco-material further underscores the museum's dedication to environmental consciousness. UHPC not only contributes to the visual allure of the structure but also enhances its durability and ecological footprint.

Innovatively, the interior structure features a post-tension slab system, enabling the achievement of expansive spans within the museum's interior. This structural choice not only enhances the architectural integrity but also underscores a commitment to creating a dynamic and open space for visitors. The Kuma Museum seamlessly combines nature-inspired design, eco-friendly materials like UHPC, and innovative structural solutions, positioning itself as an epitome of architectural brilliance. The convergence of aesthetic appeal, sustainability, and functionality defines its unique and exceptional character.

The Kuma Museum features a sleek chrome ramp that not only adds modern elegance to the architectural design but also creates a dynamic play of reflections with its smooth and reflective surface. This polished pathway enhances the sense of fluidity, providing visitors with a visually immersive experience.

The integration of the chrome ramp with vertical circulation points inside ensures seamless connectivity between different levels, adding both accessibility and visual continuity. As visitors traverse the ramp, it becomes a dynamic element intersecting with vertical circulation, contributing to the museum's overall narrative of architectural sophistication, fluidity, and discovery.

Through the design approach, the Kuma Museum intricately weaves itself into tWhe natural context, responding to the contours of the land. The result is a dynamic skin adorned with horizontal louvers, transforming the façade into an intelligent interface that skillfully controls sunlight penetration and ventilation. This innovative design harnesses the rhythm of the wind and the patterns of sunlight, ensuring a harmonious relationship between the museum's interior and the external environment.



Muslim Youth Power

Southland ,New Zealand

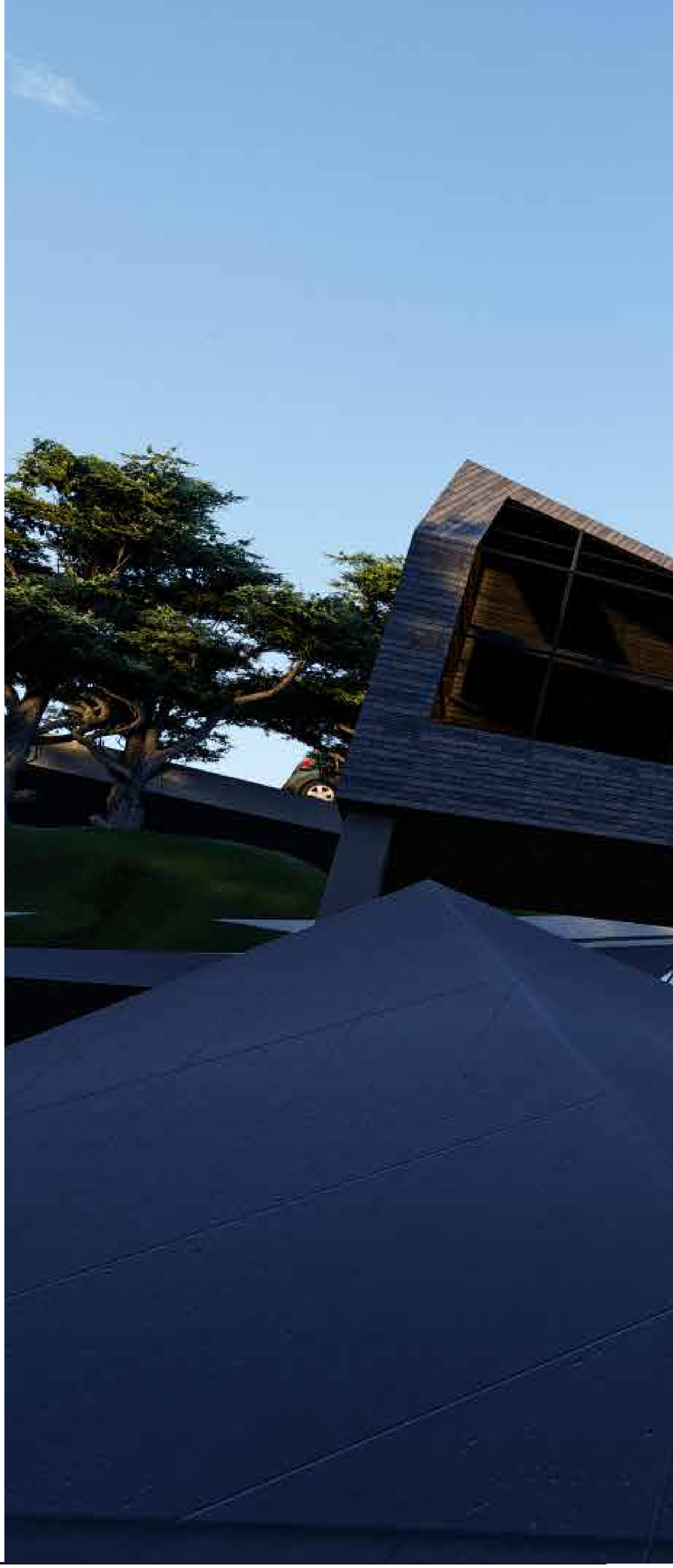
Client: MyFundAction

Size: 3,000 SQM./ 32,292 SFT.

Status: Competition

Typology: Education,Culture

Year: 2020



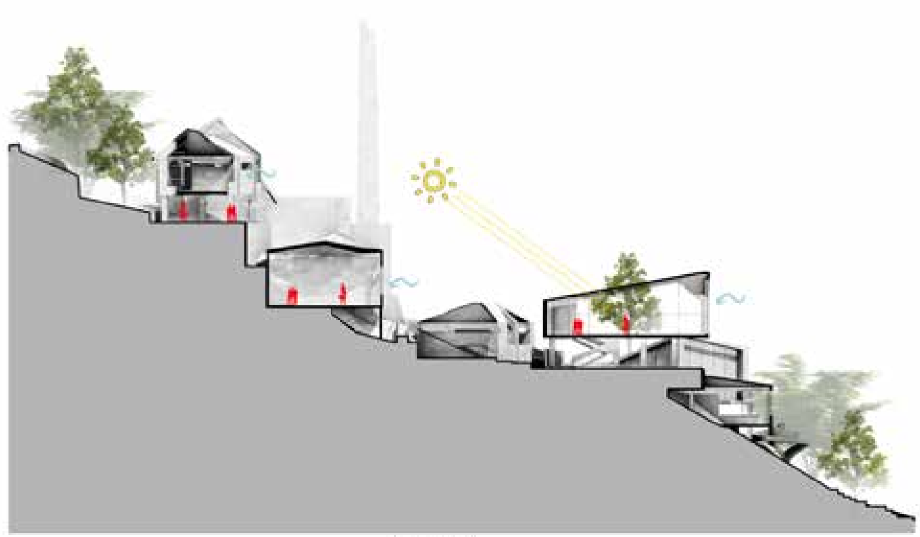
Spanning 3000 square meters, occupying a prime location on Queenstown's eastern flank, the Queenstown Community Hub serves as a vibrant social anchor seamlessly integrated with the picturesque Frankton walking track. This meticulously chosen site boasts captivating panoramic vistas of Lake Wakatipu and the surrounding mountains, beckoning visitors with its scenic grandeur. Strategically positioned at the nexus of Queenstown's bustling CBD and the dynamic Frankton area, the expansive two-site development embodies the project's unwavering commitment to fostering adaptability, sustainability, and a deeply connected community.

The Queenstown Community Hub's design prioritizes fostering a vibrant social atmosphere. Inspired by the enduring spiral motif of Māori culture, the project features three distinct plazas serving as the heart of the Hub.

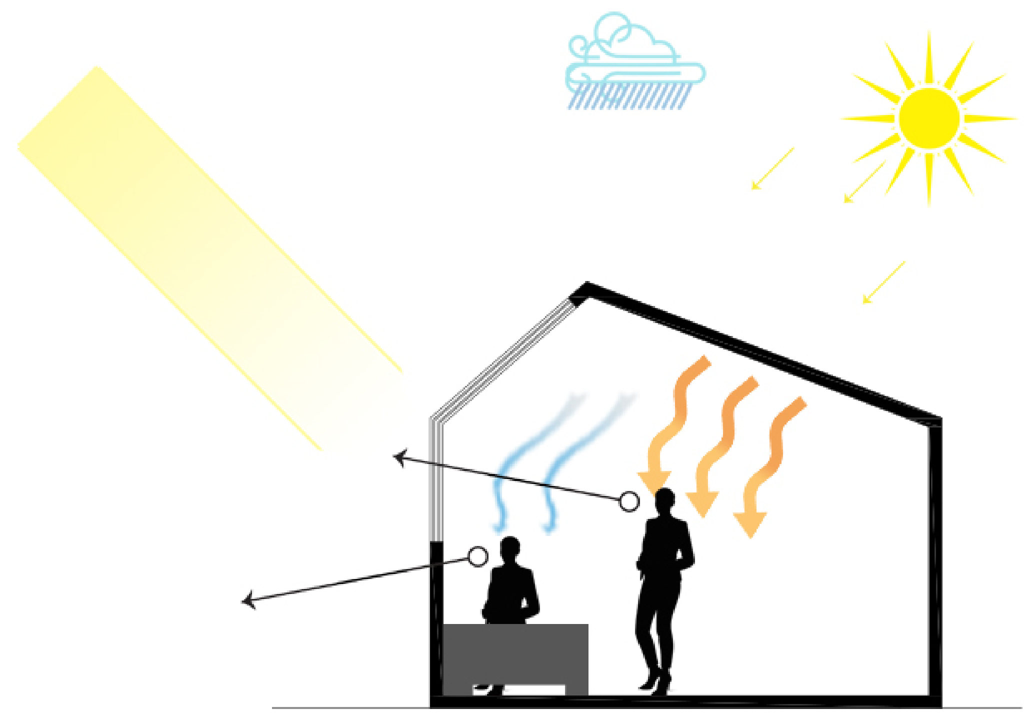
These carefully curated outdoor spaces, adorned with thoughtfully placed seating and lush greenery, offer gathering areas for residents and visitors to connect. This innovative design approach not only enhances the site's natural beauty but also subtly weaves the principles of community and togetherness into the very fabric of the Hub's identity. The classroom design leverages the science of biophilic design to optimize the learning environment. A strategically lowered north-facing roof maximizes exposure to direct sunlight Conversely, a reduced southern slope angle facilitates the entry of indirect light, illuminating the right side of the classroom without creating disruptive glare. High windows on both sides further contribute to a focused yet well-lit atmosphere, fostering a sense of connection to the outdoors. This meticulously crafted approach to natural light optimization improves concentration, and creates a stimulating space that fosters a love of learning.

It integrates a serene sanctuary into a dramatic mountainside location. Bordered to the north by a major thoroughfare and to the south by a charming pedestrian walkway, the design masterfully responds to the contrasting environments. The zoning strategy employs a tiered approach, dividing the area into three distinct terraces. Each terrace features a central plaza that progressively transitions from a spacious, open square in the south to an intimate, secluded pathway in the north. This thoughtful layout fosters a gradual sense of seclusion, culminating in a peaceful northern enclave ideal for introspection.

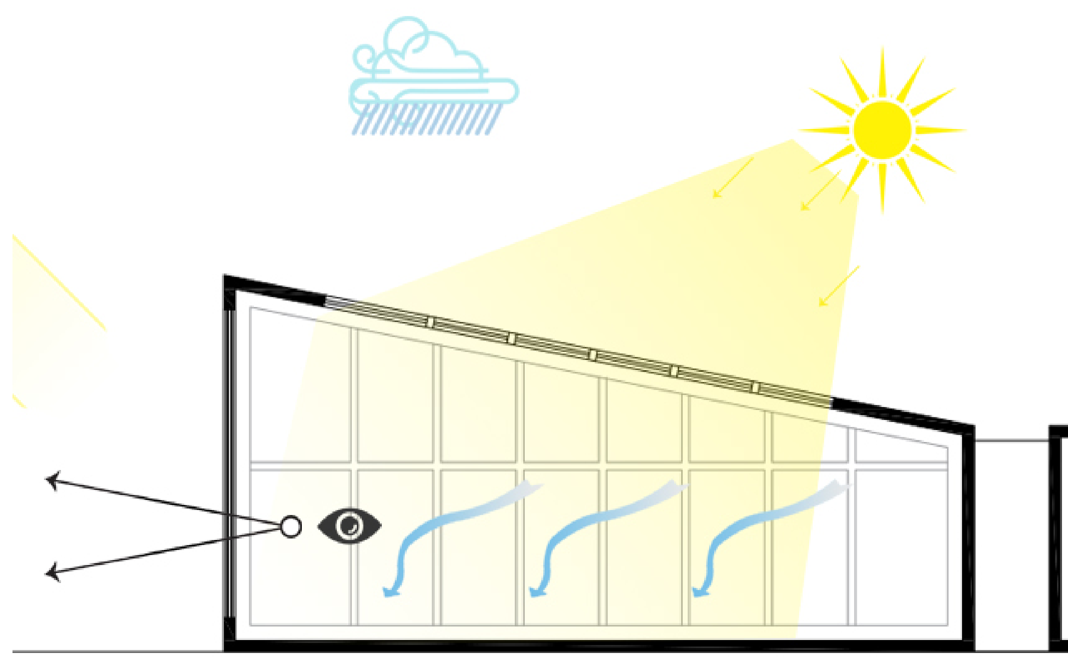
Within this tranquil haven, a mosque, hostel, and library serve as the programmatic cornerstones. Their placement on these terraced levels ensures they benefit from the calming environment, allowing visitors to engage in spiritual reflection, intellectual exploration, and comfortable accommodation, all amidst a serene setting.



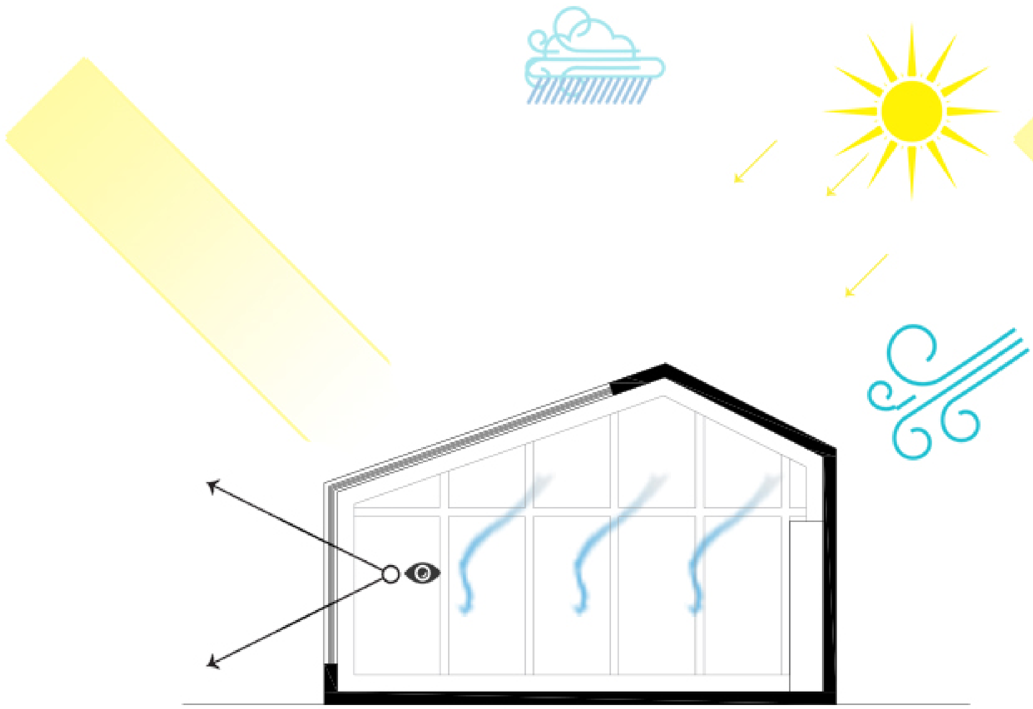
Section



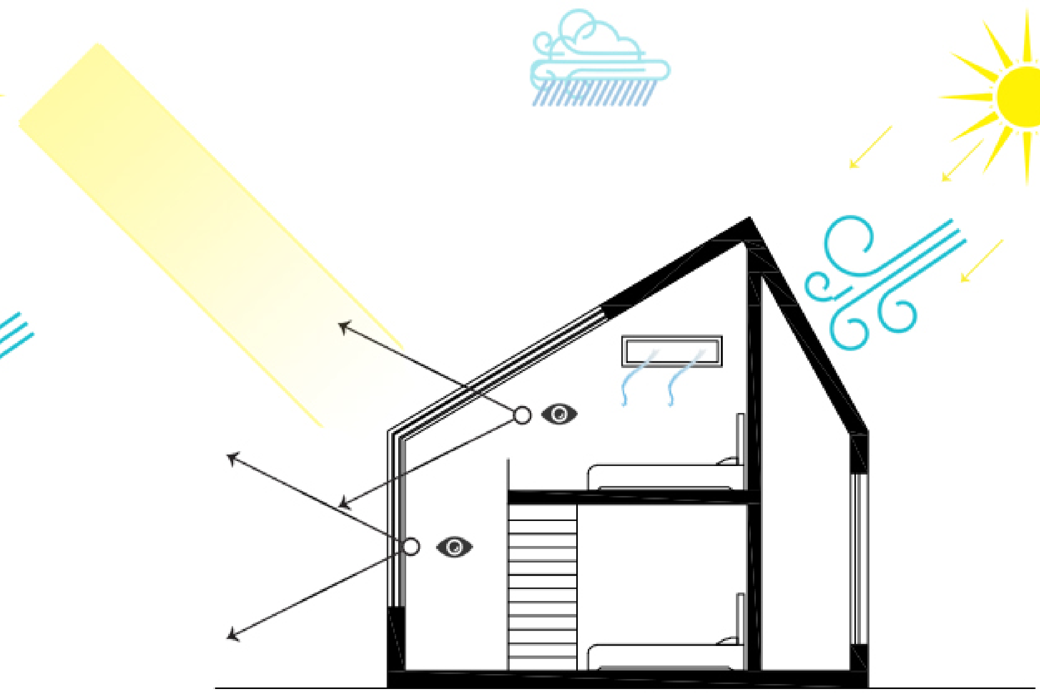
ClassRooms:
A lower roof directed to make a wider connection with the direct sun light to make the classes warmer. And to lower the southern slope angle to enter indirect light to the class. High windows to create more focused atmosphere to the students and welcome indirect light to the left of the students.



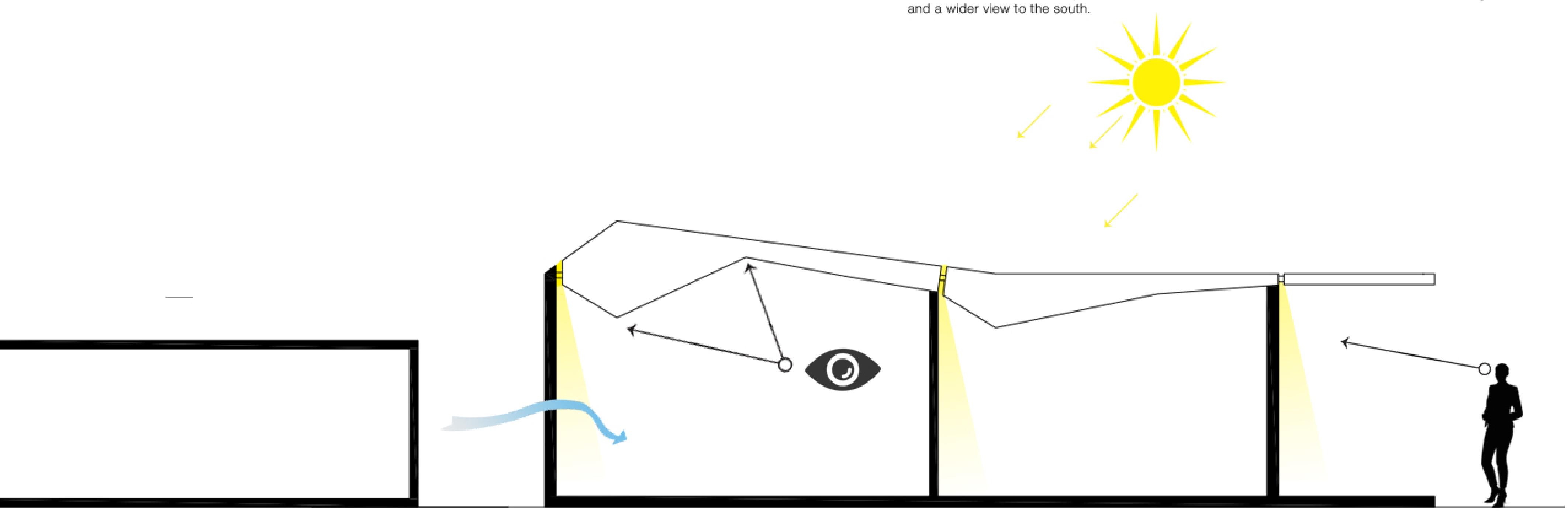
Dinning Hall:
View directed to the lacke and the Social Plaza to impower the connection between the Dinning hall and the plaza. the building will be direted with the sun and a sloped glass roof has beem interdused to welcom sun light.



LIBRARY:
The Library is one floor with open on the west to make a better ventilation and a connection with the plaza. The window and skylight to the south to welcome indrect light for the readers and a view to the site and the lacke.



HOSTEL:
The sloped roof is designed and directed to block the cold air in the winter and welcom the west breeze of the summer to insure vintilation. a high roof to create an addittional level and more room for beds. which is why the roof is d'rected tawards the north to welcome more indirect light and a wider view to the south.

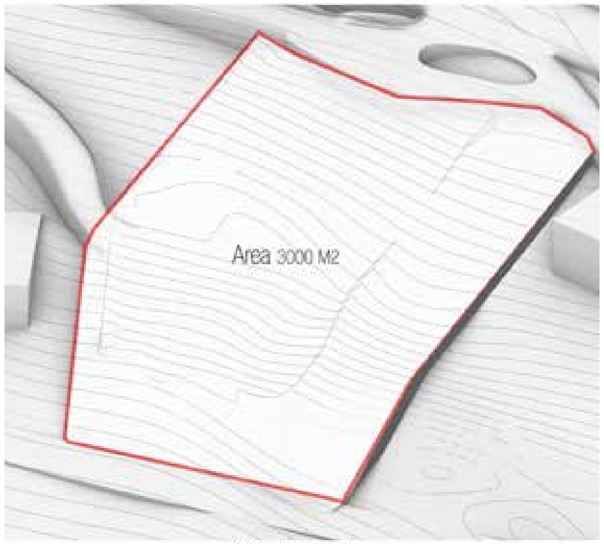


Mosque:
the mosque is designed to create a holic atmosphere by light and shadow and to direct the users tawards the Qubla by openening the roof and the walls to project light on the walls where the emam will stand. the same was used to highlight the entrance and the path way.

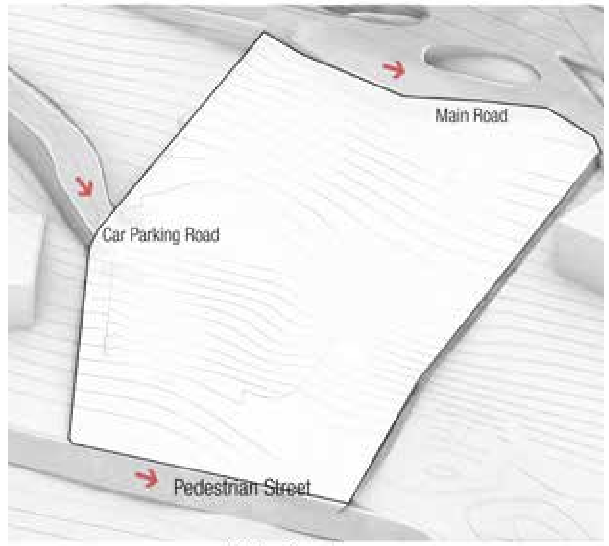
This meticulously designed library fosters a haven for focused reading and intellectual exploration. Embracing the principles of biophilic design, the space boasts an open-plan layout with expansive west-facing windows. This configuration promotes natural ventilation and fosters a seamless connection with the adjacent plaza, creating a vibrant yet tranquil atmosphere conducive to study and relaxation. Strategically placed south-facing windows and a skylight introduce abundant, yet glare-free, natural light, further enhancing comfort and offering captivating views of the surrounding landscape and the glistening lake.

This meticulously curated environment prioritizes both user well-being and a connection with nature, inviting patrons to lose themselves in the magic of words while immersed in the serenity of their surroundings.

The thoughtfully designed nursery fosters a nurturing and stimulating environment for children of all ages. This dedicated haven prioritizes the cultivation of creative expression and exploration, featuring designated areas for imaginative play, interactive learning activities, and captivating storytelling sessions. Ample natural light illuminates the space, while expansive windows offer a connection to the surrounding natural beauty. A curated selection of age-appropriate learning materials and toys ignites young minds and fosters a love for discovery. Qualified caregivers provide a safe and supportive environment conducive to optimal learning, growth, and development for all children.



Site Boundry



Main Streets

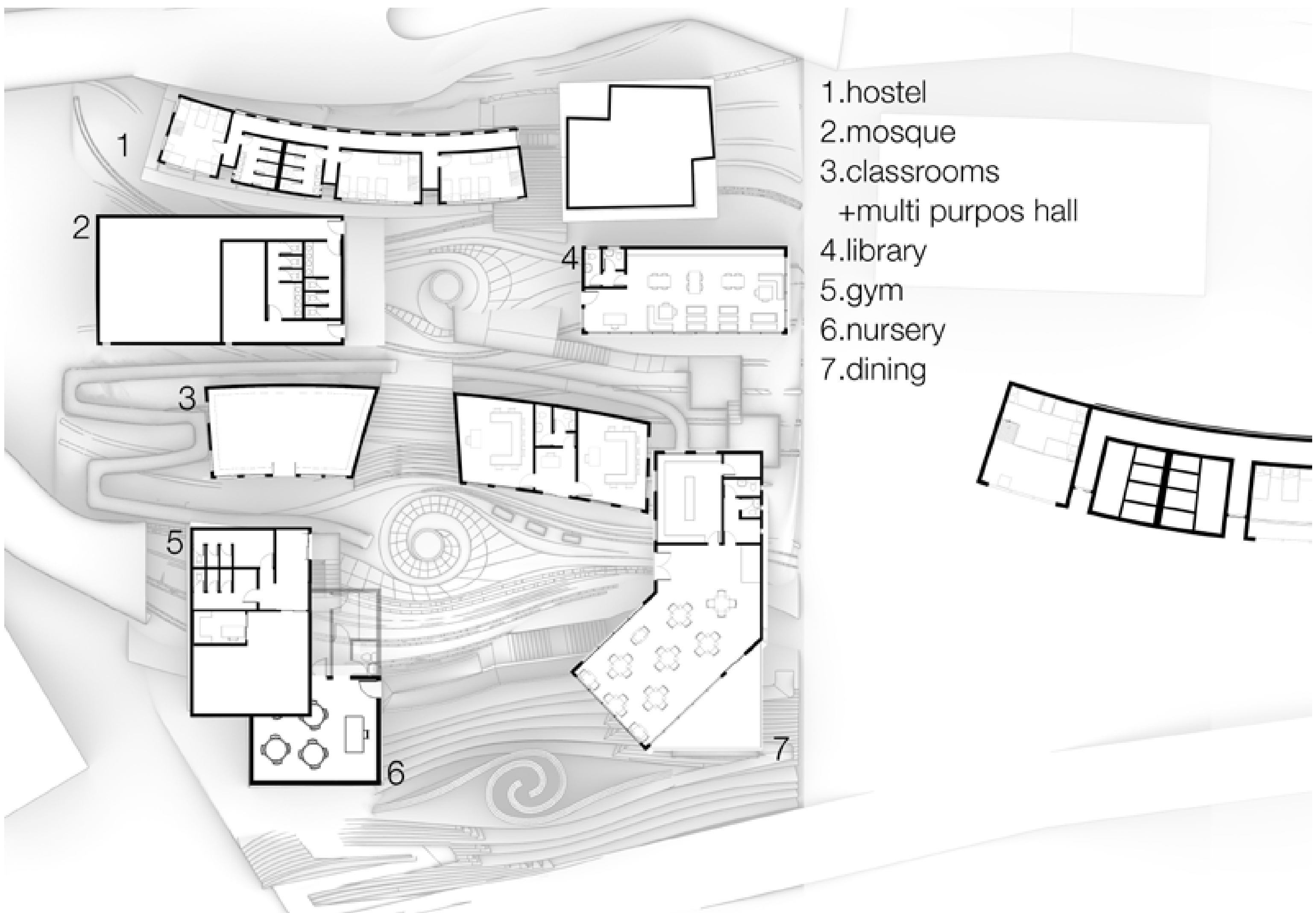
Adding Landscape And Vegetation Cover To Define Axis

The Way To The Mosque
from a wide axis south to smaller axis with a more quite zone with calm atmosphere

Plaza &Circulation Analysis
from a wide axis south to smaller axis with a more quite zone with calm atmosphere

ction
Nursery
Pavilion
Dining hall
Gym
Classrooms
Mosque
Library
Hostel

This meticulously designed hostel exemplifies a thoughtful fusion of comfort and functionality. The north-facing, sloped roof employs a bioclimatic approach, strategically blocking harsh winter winds while promoting natural ventilation with refreshing summer breezes. This ingenious design element further serves a practical purpose, creating a raised section that optimizes the available space for additional beds. The upper level, bathed in soft, indirect north light, boasts expansive southward views, fostering a bright and inviting atmosphere for guests. This meticulously crafted design prioritizes both environmental harmony and guest comfort, ensuring a refreshing and visually stimulating haven for every traveler. he mosque's design transcends mere aesthetics, meticulously orchestrating a symphony of light and shadow to evoke a profound sense of serenity. Strategically positioned apertures in the roof and walls bathe the interior in a muted, ethereal glow. This interplay of light not only serves to highlight the Qibla (direction of prayer), but also subtly guides users towards the Imam's position, fostering a sense of focused devotion. This commitment to thoughtful illumination extends to the building's entrance and pathway, ensuring a dignified and reverent experience for all who enter this sacred space.



Al Nouri Complex

Mosul ,Iraq

Client: UNESCO

Size: 1100m² / 11840sqf

Status: Proposal

Typology: Competition

Year: 2021

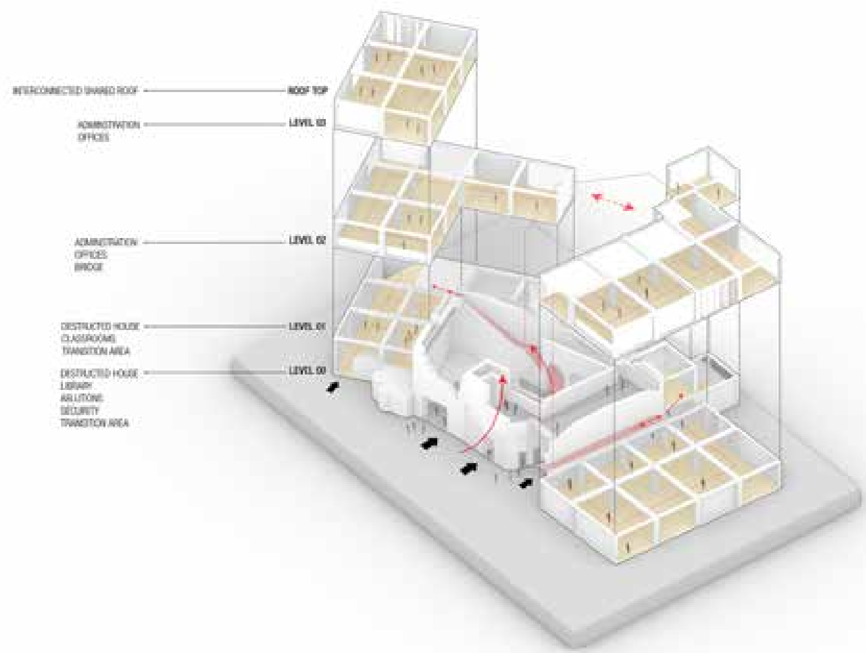
The Al Nouri Complex represents a landmark endeavor in architectural conservation and urban renewal. This comprehensive undertaking transcends mere reconstruction; it embodies a meticulous fusion of heritage preservation, architectural excellence, and a commitment to the revitalization of Mosul, Iraq. Our vision extends beyond the physical restoration of the complex, seeking to rekindle the spirit of resilience and hope that defines the city. The Al Nouri Mosque, with its iconic leaning minaret, once stood as a powerful testament to faith and cultural identity. Its intricate stonework, graceful horseshoe arches, and mesmerizing geometric patterns served as a living record of centuries of history. Tragically, in 2017, conflict inflicted devastating damage upon this architectural gem, leaving a profound void in the heart of Mosul.

The project prioritizes the meticulous restoration of the Al Nouri Mosque and its surrounding historic structures. This objective entails the faithful reconstruction of every detail, from intricate stonework to defining architectural elements. This ensures the preservation of the site's cultural legacy while establishing a bridge between the past and a vibrant future. Furthermore, the iconic leaning minaret, a symbol of resilience in the face of adversity, will be stabilized and restored to its former glory, serving as a permanent testament to the enduring spirit of Mosul.

The project's scope transcends the physical restoration of the Al Nouri Complex, encompassing a comprehensive urban regeneration initiative for the surrounding area. This objective envisions a revitalization of the historic city center, once a thriving hub in the shadow of the mosque. The project proposes the creation of inviting public spaces, shaded courtyards, and pedestrian-friendly pathways that seamlessly integrate with the existing urban fabric. This holistic approach aims to not only enhance the aesthetic appeal of the area but also foster a vibrant public realm that encourages community engagement.

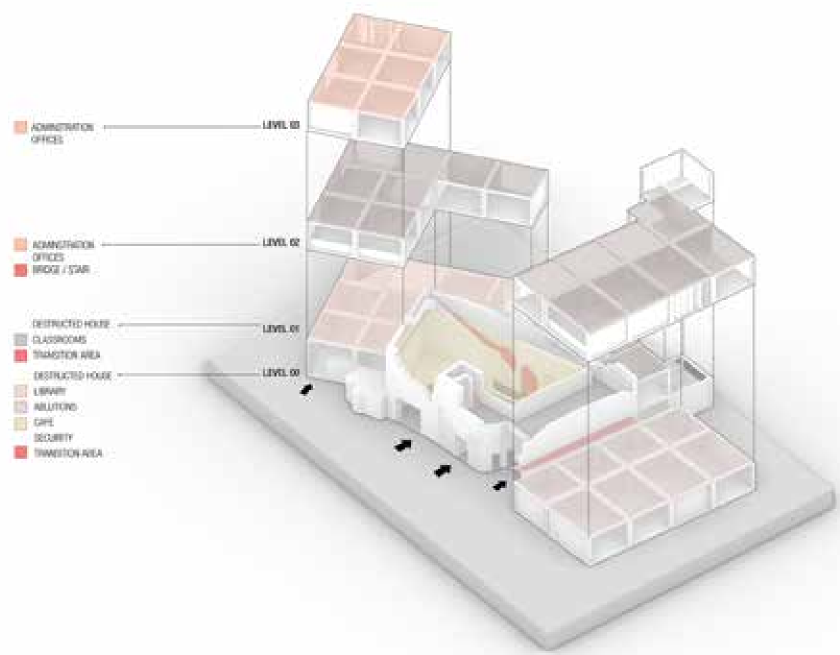
Destructed House.10 Intervention - Exploded View

CIRCULATION



Destructed House.10 Intervention - Exploded View

FUNCTION

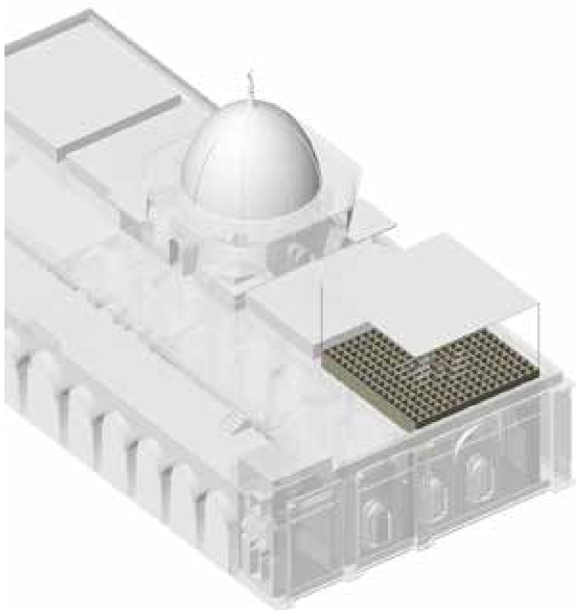


The Al Nouri Complex Restoration recognizes the centrality of the local community to its success. Therefore, a critical objective is to actively engage the community throughout the process. The project will incorporate the stories, memories, and aspirations of local residents as a guiding force in shaping the design.

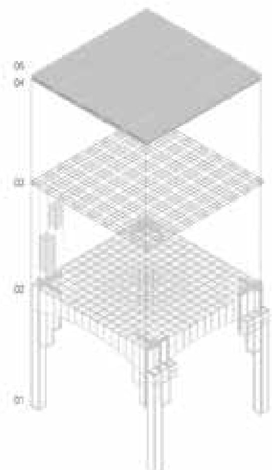
This ensures that the Al Nouri Complex is not merely a static monument, but rather a dynamic hub designed to foster gatherings, cultural exchange, and shared experiences. By empowering the community to reclaim its heritage and actively participate in shaping the future of this landmark, the project fosters a sense of ownership and inclusivity.

The project meticulously preserves the existing architectural fabric, recognizing the historical significance embedded within each weathered stone. Through meticulous restoration techniques, the inherent character and cultural legacy of the site are safeguarded, ensuring a sense of continuity across generations. Carefully designed new elements seamlessly integrate with the existing structures, signifying a harmonious co-existence between eras. Modern materials, such as steel beams, are employed to bridge the gap between historical grandeur and future aspirations. This juxtaposition allows the mosque to breathe new life, reflecting the city's evolving character. Innovative design elements, acting as "catalyst points," are thoughtfully introduced within the historical framework. Imagine a central courtyard where the sonorous echoes of past prayers intertwine with contemporary conversation. A revitalized library, for instance, could seamlessly integrate ancient manuscripts with the accessibility of e-books, fostering a connection between tradition and technological advancement. These "catalyst points" encourage interaction and engagement across generations, transforming the complex into a dynamic and inclusive space.

Mosque Roof System Intervention

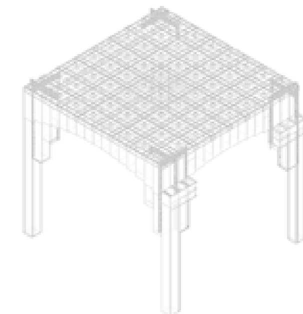


Exploded View



01/ Steel Rods Supporting Structure Columns
02 / Recycled Pre-Cast Concrete Interlocking Cross Support
03 / Rebar centrally reinforced slab base
04 / Recycled Plastic Waste Concrete Slab
05 / Finishing Calcium Hydroxide Cladding for insulation

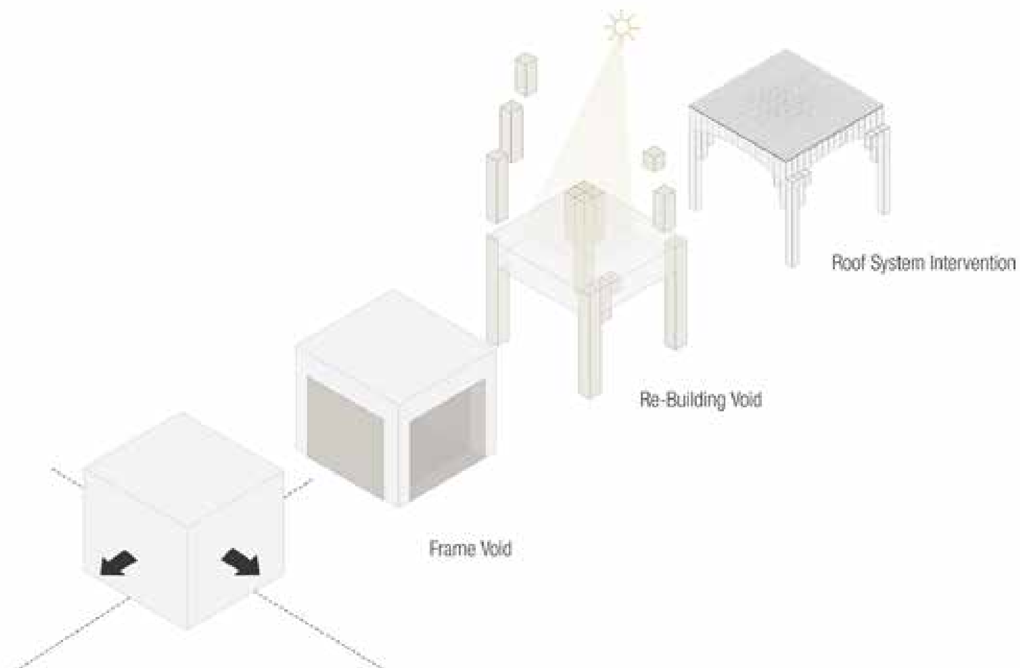
Mosque Roof System Intervention - Unit Structure



Superposed units forming roof and Column System Supported by Steel Grid and Finished by Recycled Concrete Slab

Superposed units made from Recycled Lime Stone and Cement Pre-fabricated Panels

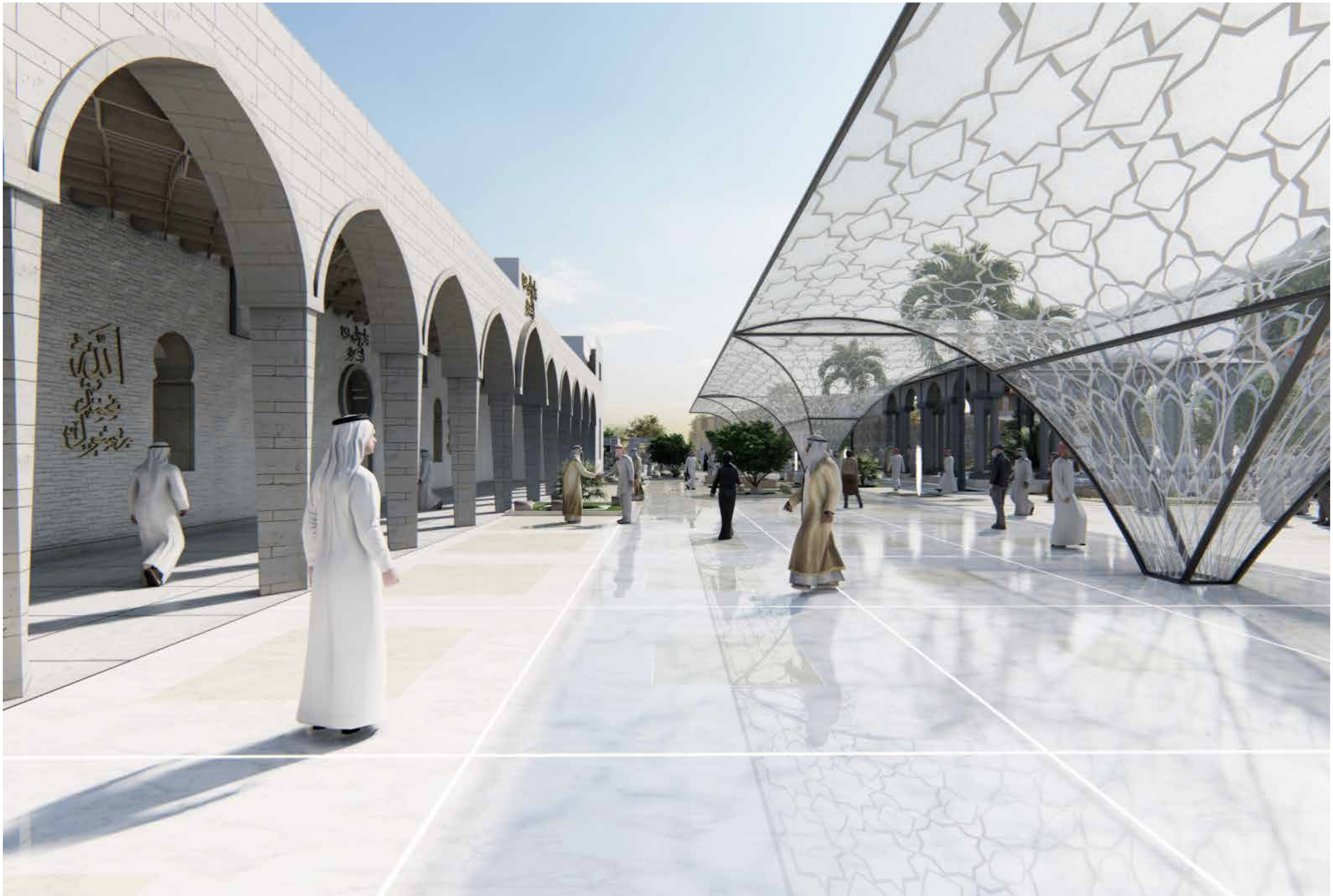
Prayer Hall Roof Unit - Form Concept



The restored rooftop transforms into a public space offering breathtaking vistas. The once-leaning shadow of the minaret becomes a welcoming canopy, sheltering moments of conversation, laughter, and shared sunsets.

This transformed public area transcends its physical function, becoming a symbolic gathering point and a powerful testament to the resilience of the community.

The restoration process prioritizes meticulous attention to detail, ensuring each stone and tile is meticulously placed and contributes to the overall architectural integrity. The horseshoe arches, meticulously refashioned, recapture their original grandeur and once again frame the prayers of the faithful. This dedication to detail reflects a commitment to lasting quality and respect for the site's architectural heritage.



The “catalyst points” become a harmonious tapestry woven into the existing framework. Classrooms and tearooms interweave, fostering a vibrant space where history and the modern world collide. Scholars, artists, and curious minds alike are welcomed. Courtyards transformed into flourishing gardens, scented by native plants, become natural conversation starters, inviting dialogue across time and generations.
Sustainability principles are seamlessly integrated into the design. Discreetly incorporated solar panels harness the power of the sun. Rainwater harvesting systems nurture flourishing gardens where native plants release fragrant scents. Additionally, the project prioritizes the skills of local artisans, whose traditional craftsmanship shapes limestone into a contemporary expression of the city’s rich heritage.

"The Al Nouri Complex Restoration Project exemplifies a forward-thinking design philosophy. By seamlessly integrating new elements with the existing architectural fabric, the project honors the past and creates a dynamic space that embodies the enduring spirit of Mosul."

ARCHITECTURE

Hospitality

Al-Jalaa Hotel

Damascus ,Syria

Client: Daaem Group

Size: 840m² / 8,826f²

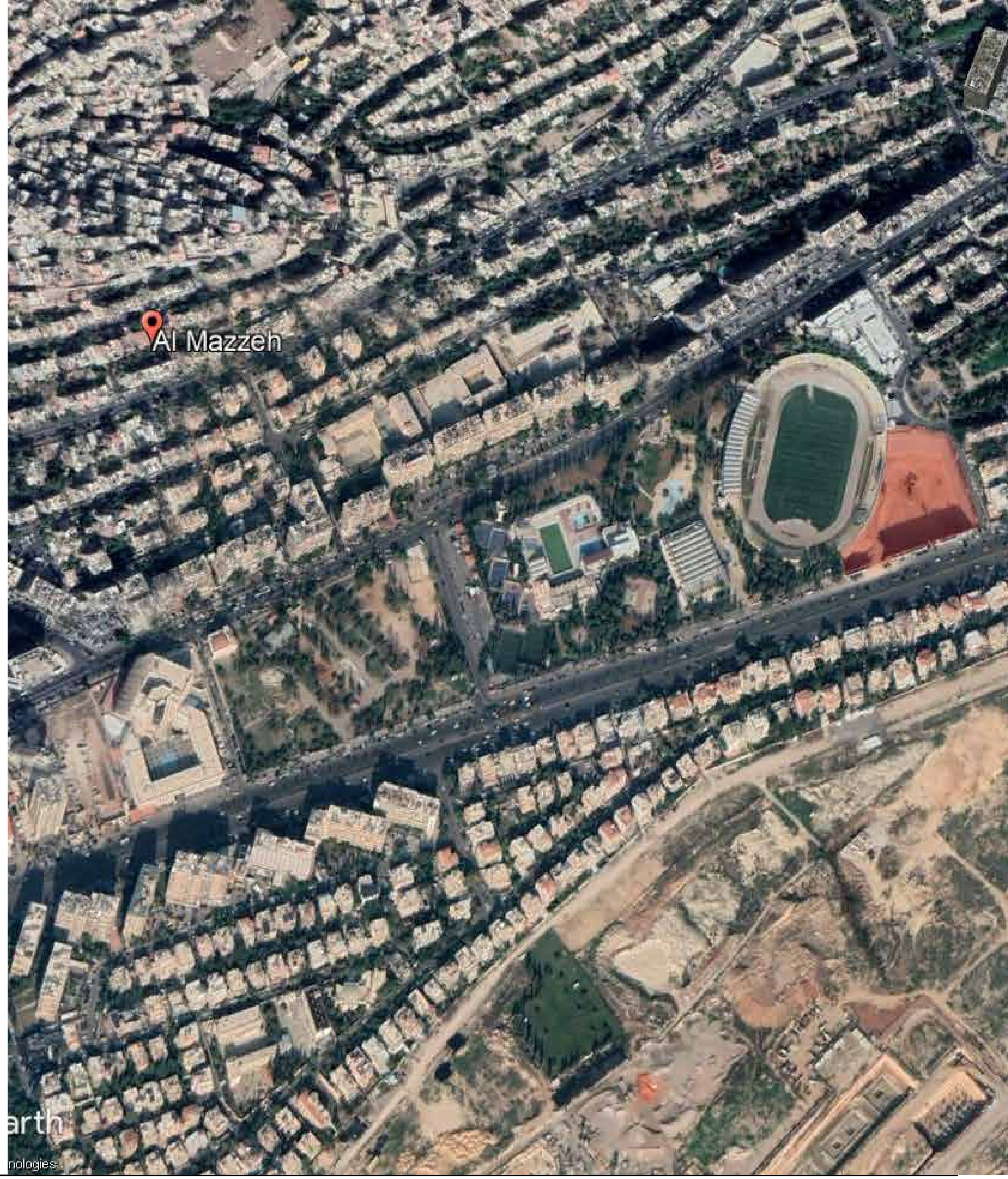
Status: Proposal

Typology: Hotel

Year: 2019


40
SLOW

Located in the vibrant Mazzeh Street neighborhood of Damascus, Syria, a groundbreaking project is unfolding to transform an existing building into a hotel and commercial podium with a visually stunning facade inspired by Islamic architecture. Our team in RPA Studio worked together to design a skin that adapts carefully with the existing building.



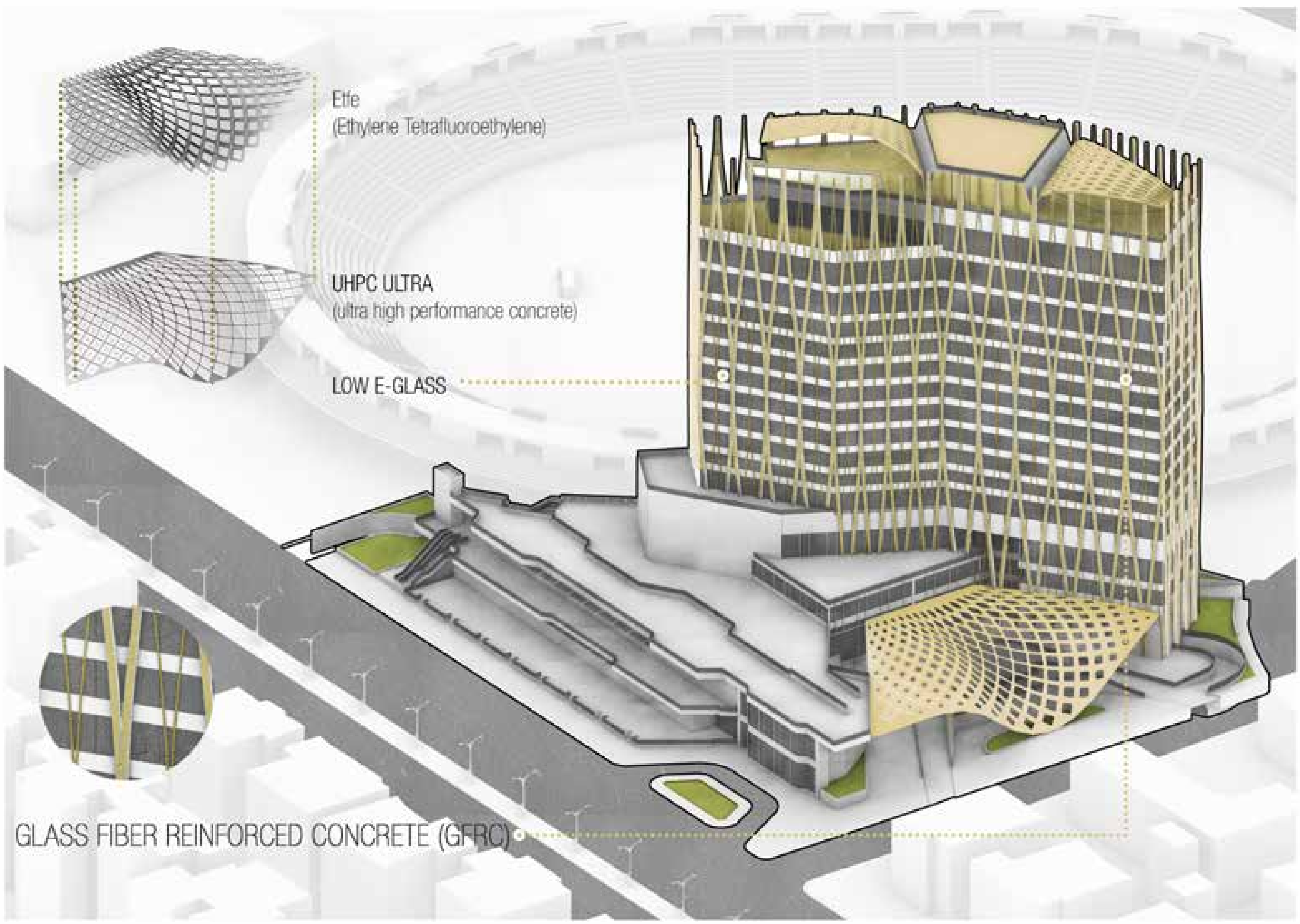
The innovative skin design, crafted through advanced computational design methods, seamlessly blends traditional Islamic motifs with contemporary aesthetics. This fusion of ancient design principles with cutting-edge technology not only pays homage to the rich Islamic architectural heritage but also ensures a harmonious integration with the surroundings of Mazzeh Street.

The hotel's exterior undergoes a mesmerizing transformation inspired by the rich tapestry of Islamic architecture, specifically the pointed stars and diamond shapes seen in the ornaments of the Umayyad Mosque in the old city of Damascus. Through a meticulous design process, these iconic elements are subjected to a profound abstraction, guided by the precision of computational design methods.

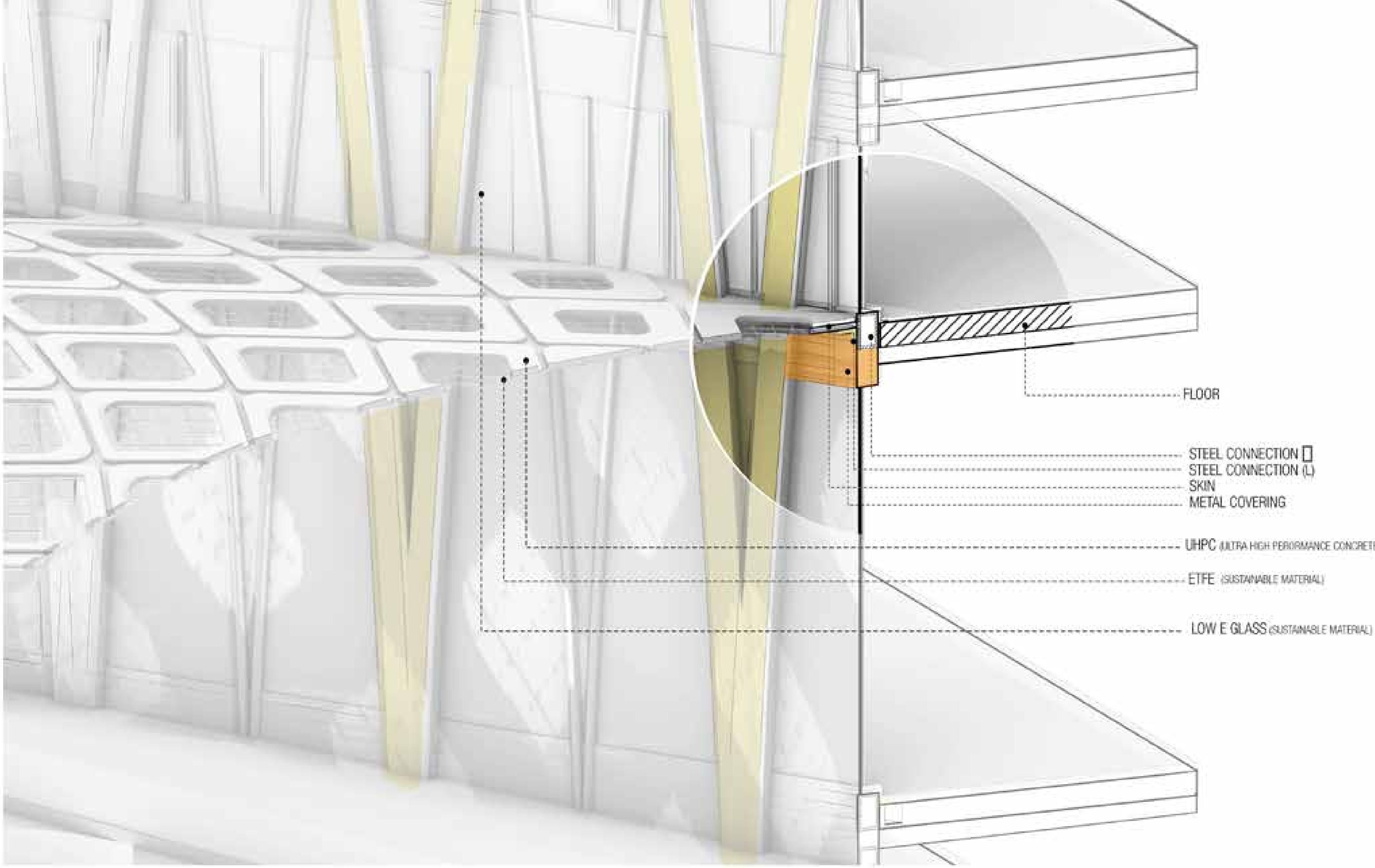
The result is a sophisticated geometric pattern that gracefully manifests on the building's skin. The meticulously abstracted forms find expression in the orderly arrangement of vertical panels. As a cohesive ensemble, these panels create a harmonious rhythm, transforming the hotel into a living canvas that pays homage to the rich cultural heritage of Damascus while exuding a contemporary and innovative allure.

The incorporation of vertical panels in the hotel's skin design brings forth a myriad of advantages, most notably in the play of light and shade. These panels serve as aesthetic elements and enhance the functionality of the building. The vertical orientation of the panels creates an engaging interplay between light and shadow, casting dynamic patterns across the facade throughout the day. This adds a captivating visual dimension and contributes to energy efficiency by providing natural shading. The carefully calculated spacing and arrangement of the panels allow for the modulation of sunlight, controlling the internal temperature and reducing the reliance on artificial lighting.

This skin design emphasizes sustainability with a composition of low-E glass and Glass Fiber Reinforced Concrete (GFRC). Low-E glass enhances energy efficiency by minimizing heat transfer, while GFRC provides durability and flexibility with its lightweight properties, offering a sustainable alternative to traditional concrete. It also facilitates intricate detailing, allowing for the seamless incorporation of the geometric patterns inspired by the Umayyad Mosque's ornamental elements. The entrance pavilion seamlessly combines Ultra High Performance Concrete (UHPC) for robust structural elements with Ethylene Tetrafluoroethylene (ETFE) panels, ensuring durability and transparency. UHPC provides strength and sleek profiles, while ETFE allows natural light transmission, creating an inviting atmosphere. This material synergy not only enhances the pavilion's modern aesthetic but also underscores a commitment to both durability and sustainability in the design.



Skin Structure

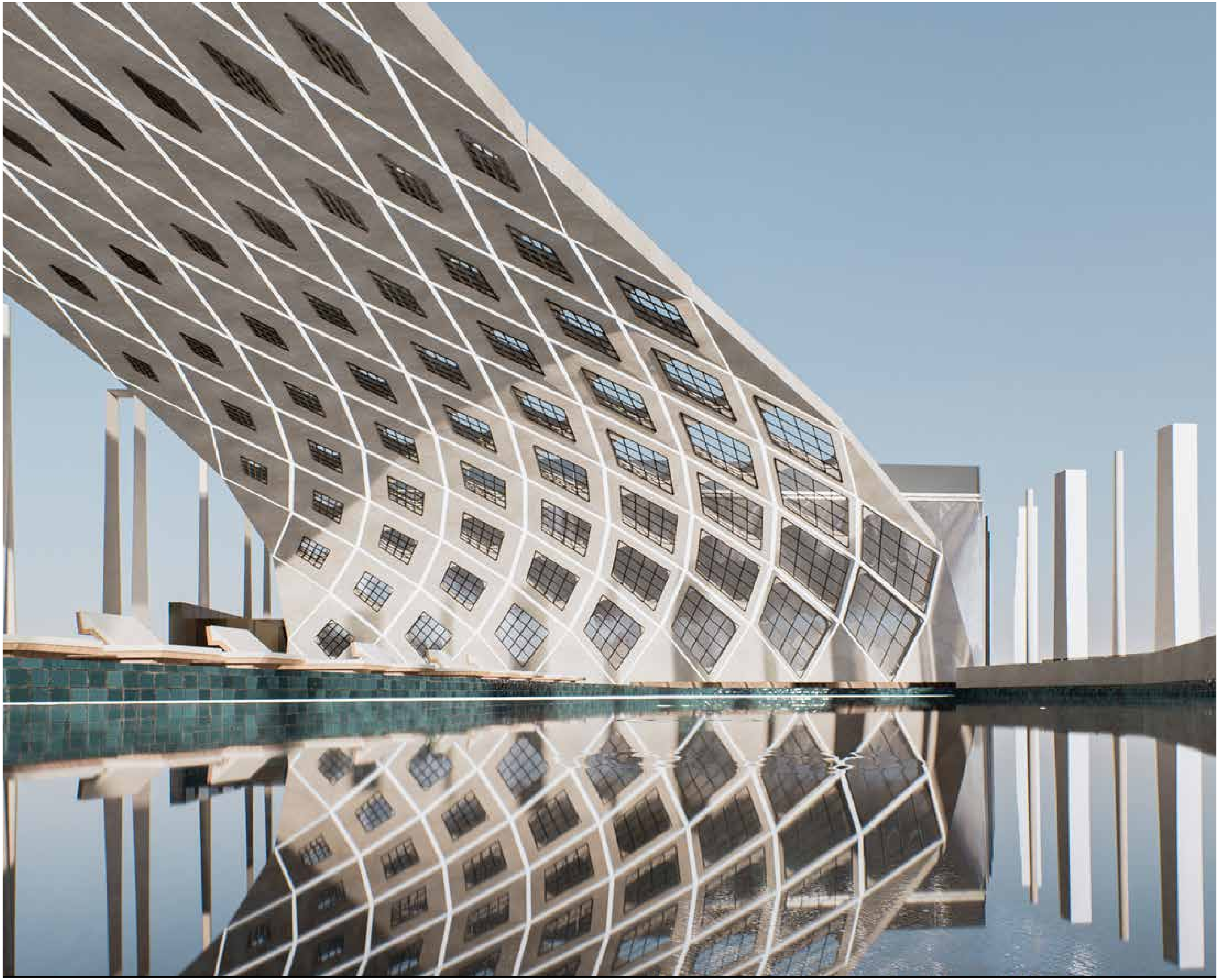


Skin Cladding And Details

The skin of the hotel is ingeniously structured using a diagrid framework, demonstrating a sophisticated architectural approach. The diagrid, a diagonal grid of interconnected elements, imparts both strength and flexibility to the building envelope. This design enhances the structural integrity of the facade and allows for an open and visually dynamic appearance. Inspired by the efficiency of natural systems, the diagrid framework minimizes material usage while optimizing load distribution, resulting in a lightweight and sustainable structure.

The entrance pavilion is thoughtfully designed to create a warm and inviting environment while incorporating effective sun shading strategies, the pavilion blends aesthetic appeal with functionality.

Large overhangs and strategically placed elements provide shading, shielding visitors from harsh sunlight while creating a comfortable arrival experience. The play of light and shadow, influenced by the intricate design, enhances the visual interest of the entrance.



The hotel's rooftop serves as a sophisticated entertainment floor, featuring a swimming pool and upscale restaurants. The focal point is a meticulously designed pavilion inspired by Islamic patterns, providing both cultural resonance and functional shading. This architectural masterpiece enhances the rooftop experience, offering a harmonious integration of leisure, culinary excellence, and cultural immersion. The pavilion not only contributes to the aesthetic appeal but also establishes a distinctive identity for the rooftop, creating a refined and visually compelling space that aligns seamlessly with the overall architectural vision of the project.

The commercial podium, accessible from Al Mazzeh Street, features a welcoming entrance and hosts a diverse mix of restaurants, cafes, and shops. Inspired by the Umayyad Mosque's architectural motifs, the podium seamlessly integrates with the surroundings.

Its open layout encourages fluid interactions between indoor and outdoor spaces, fostering a vibrant community atmosphere. With a commitment to sustainability, the podium contributes to the economic vitality and cultural richness of Mazzeh Street, creating a dynamic urban experience.

Squares Showroom

Dammam City ,Saudi Arabia

Client: S Squares

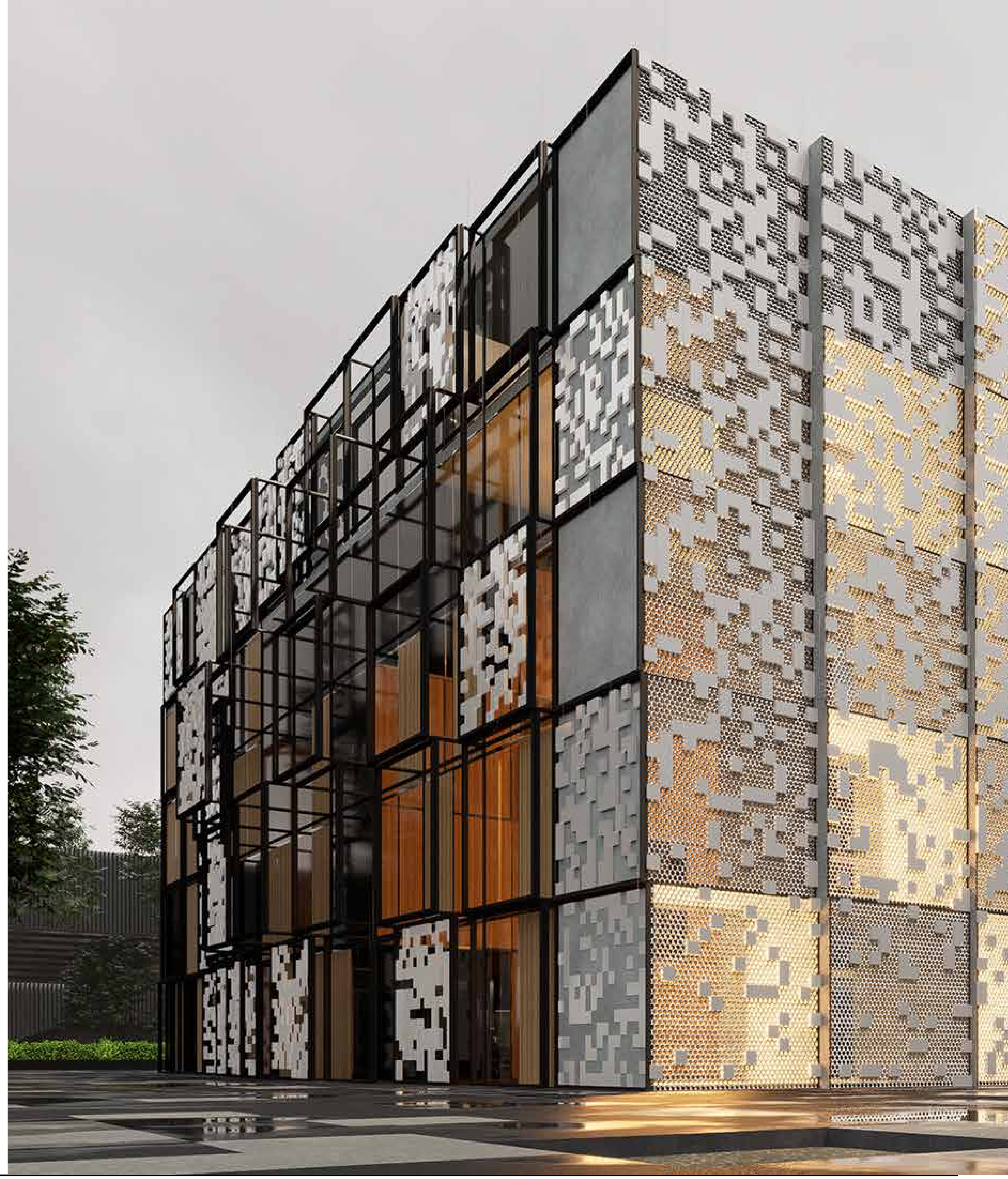
Size: 2,100m^2 / 22,604f^2

Status: Proposal

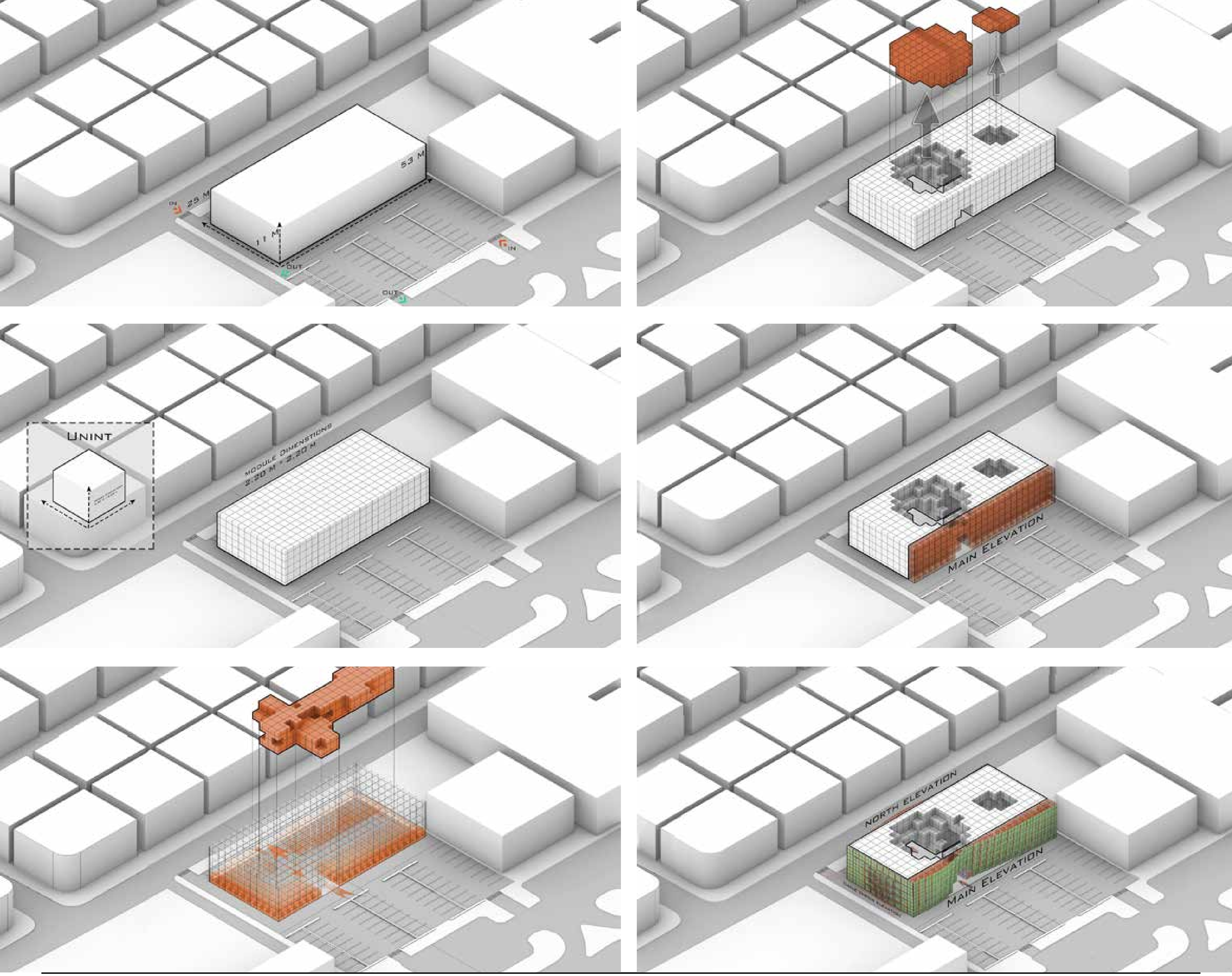
Typology: Office , Retail

Year: 2020

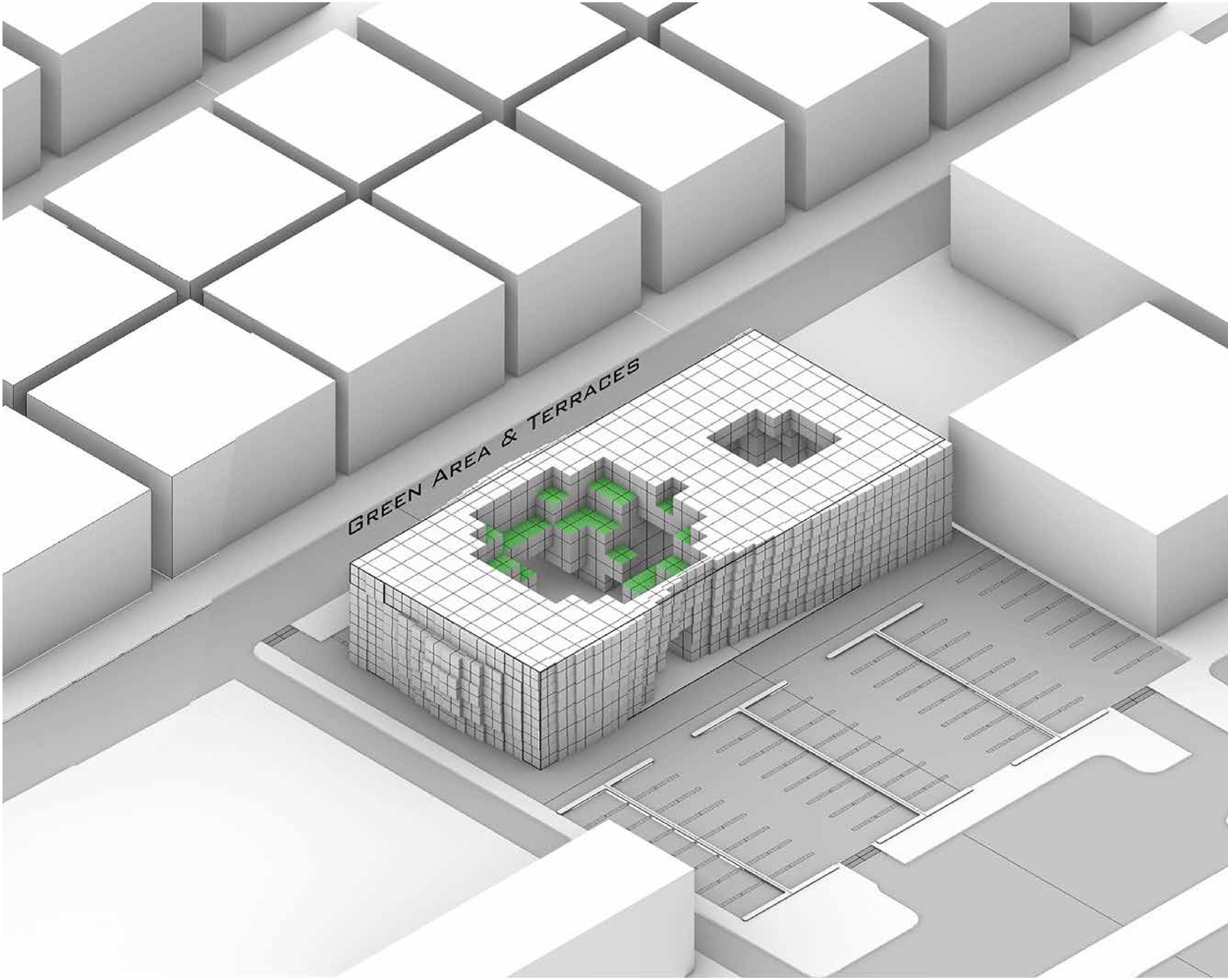
Situated along the gorgeous coastline of Dammam, KSA, the Square Oasis Showroom is a commercial complex that stands as a testament to the elegance inspired by the structured and geometric appearance of the Kufic calligraphic Arabic script.



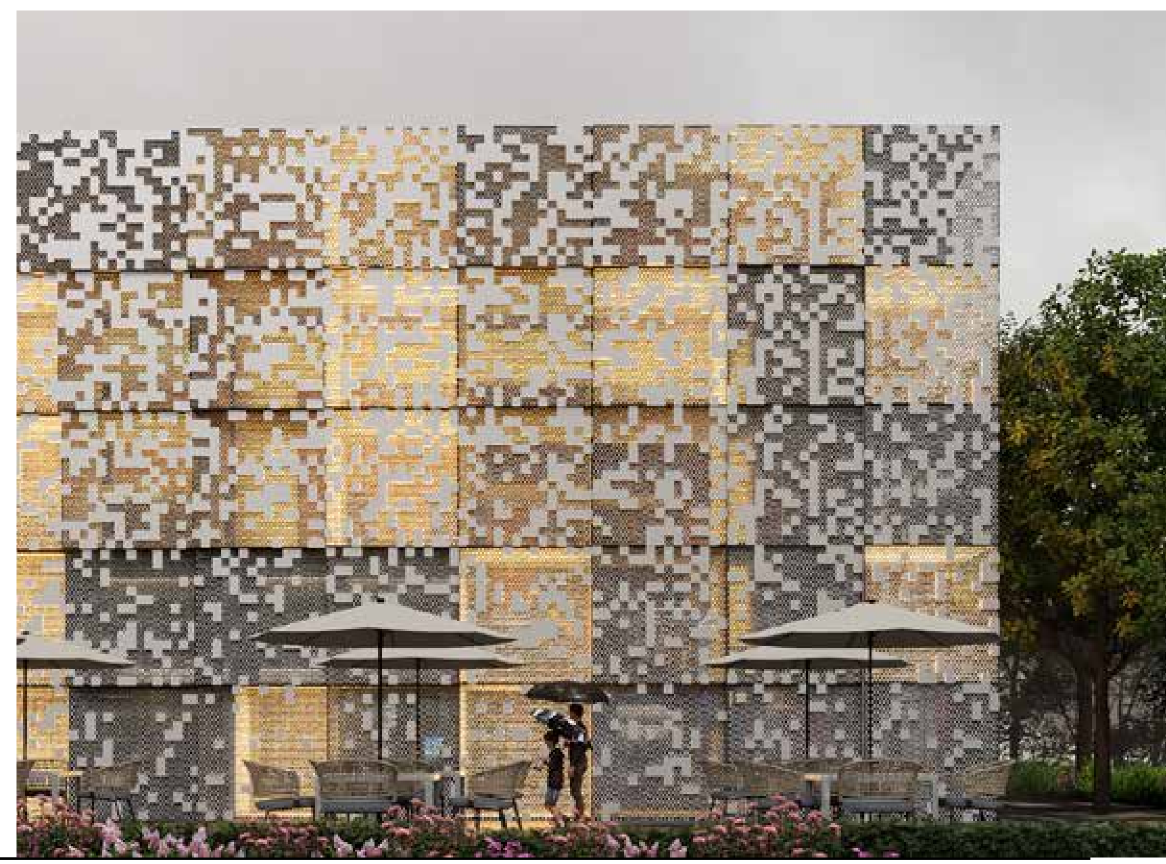
This form is based on a grid system featuring squares or rectangular shapes, which was the inspiration behind selecting the square as a unit. It can be extruded and used to construct more complex structures, adapting according to our spatial needs.



53 M
25 M
11 M
IN
OUT
OUT
IN
UNINT
MODULE DIMENSIONS
MAIN ELEVATION
NORTH ELEVATION
MAIN ELEVATION


GREEN AREA & TERRACES

Design of the panels Pattern on the main facade was also inspired by Kufic calligraphic script with an organic sense of randomness, which added to the originality of the design.

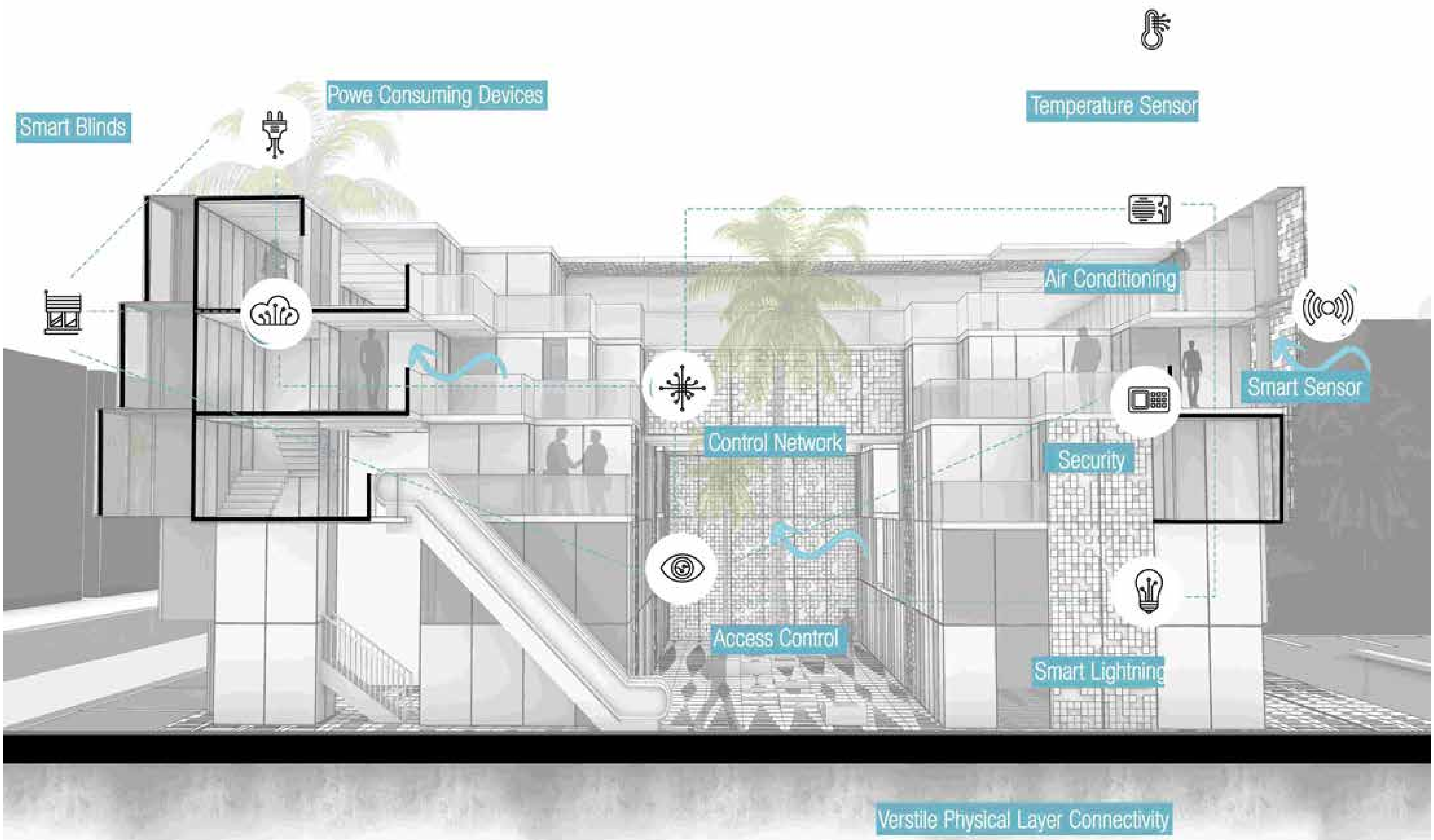


The main void of the Square Oasis Showroom serves as the architectural focal point, embodying both functionality and aesthetic allure. Designed as a central circulation hub, this void seamlessly connects various parts of the building, facilitating easy movement and visual continuity across its five floors. Its strategic positioning creates a sense of openness and spaciousness, enhancing the overall flow and accessibility within the complex. Inspired by the concept of an oasis, the void features green stepped terraces, evoking a serene and inviting ambiance amidst the commercial setting.

This central oasis not only enhances natural ventilation but also fosters a connection with nature, offering visitors a tranquil retreat within the bustling environment of the showroom. Through thoughtful design and spatial organization, the main void emerges as a dynamic and integral element, reflecting the project's commitment to blending modern functionality with cultural inspiration.

Square Oasis Showroom is a dynamic commercial complex that seamlessly integrates various functions across its five floors. The dual entrances, positioned opposite each other, establish a clear axis and visual continuity. The central void, acting as a circulation hub, connects different parts of the building. The east side houses retail stores and showrooms, while the west side accommodates offices and a spacious praying hall. The 5th floor is dedicated entirely to cafes, restaurants, and terraces, providing a vibrant and inviting environment for visitors.

Square Oasis Showroom embraces smart building technologies for enhanced efficiency and user experience. Smart blinds, temperature sensors, and intelligent lighting systems contribute to energy optimization. These technologies not only align with modern architectural trends but also ensure a comfortable and responsive environment within the building. The integration of such smart systems underscores the commitment to staying at the forefront of technological advancements in the realm of commercial architecture.



Commitment to sustainability is ingrained in Square Oasis Showroom's design. Perforated metal sheets adorn the facade, not just enhancing aesthetics but also serving practical purposes such as solar shading and noise reduction. Solar studies influenced the density of aluminum panels, contributing to effective solar shading. The central oasis aids natural ventilation, complemented by the use of green concrete for its mechanical and thermodynamic properties. Additional sustainable features include low-e glass, laminated veneer lumber (LVL wood), and piezoelectric slabs, collectively minimizing


BRAND



DHA Food Court

Lahore ,Pakistan

Client: Swiss Group

Size: $10,117m^2$ / $108,899f^2$

Status: Proposal

Typology: Hospitality

Year: 2021

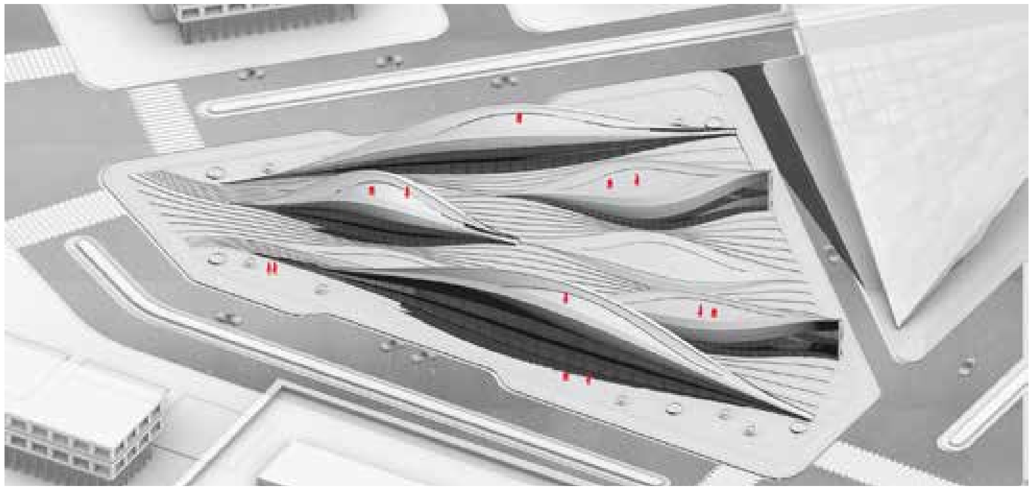

20

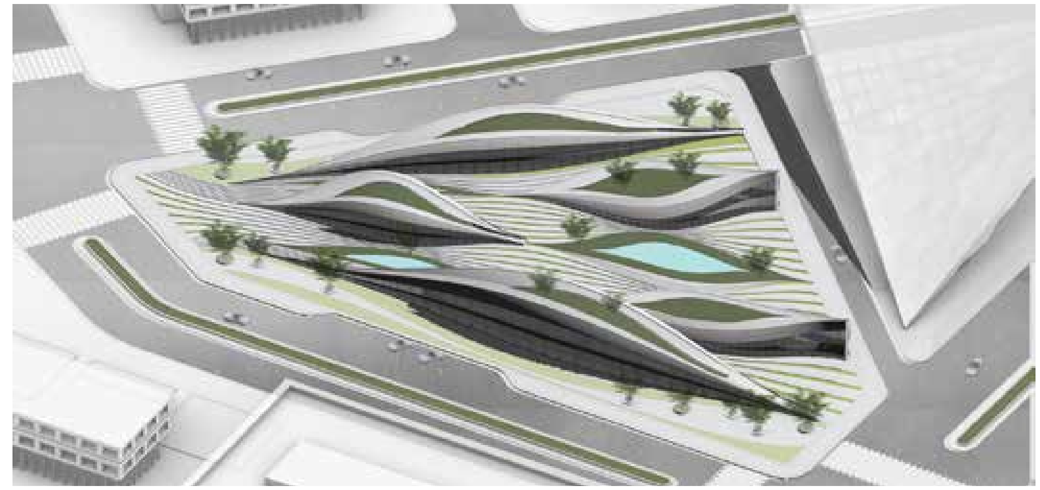
DHA food court is an urban hub located in DHA Lahore, Pakistan. This project is a lively centralized location that creates a vibrant and social atmosphere centered on culinary delights. Visitors can explore a diverse range of cuisines, from traditional Pakistani delicacies to international flavors.

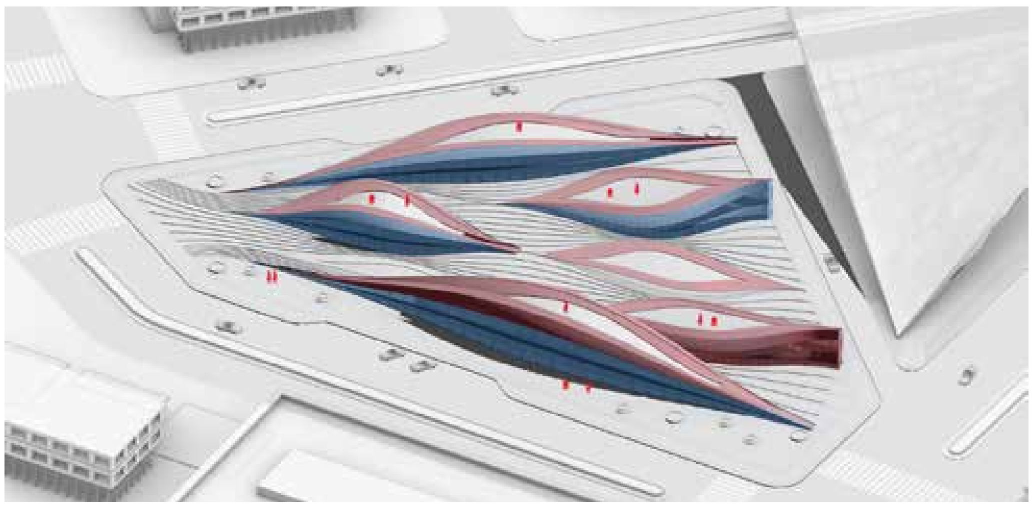
The design of the units and the landscaping showcases an innovative architectural approach that emphasizes a harmonious, seamless relationship between the built structure and the surrounding landscaping elements. Featuring flowing curves and biomimetic aspects, characterized by a series of undulating volumes that mimic the fluidity of water, these fluid forms create a sense of movement and dynamism. The use of curved lines and open spaces encourages a fluid transition between the interior and exterior, promoting a connection with nature.

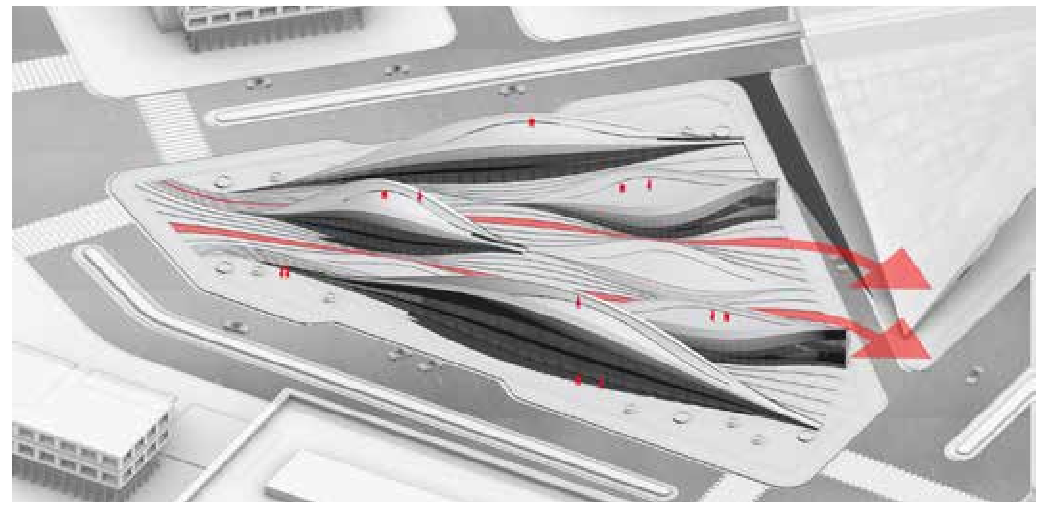
this project incorporates a diamond pattern inspired by Islamic architecture in Pakistan, generated through computational design methods. This pattern, symbolizing unity and harmony, flows with the land contours, forming the five main buildings and pathways.

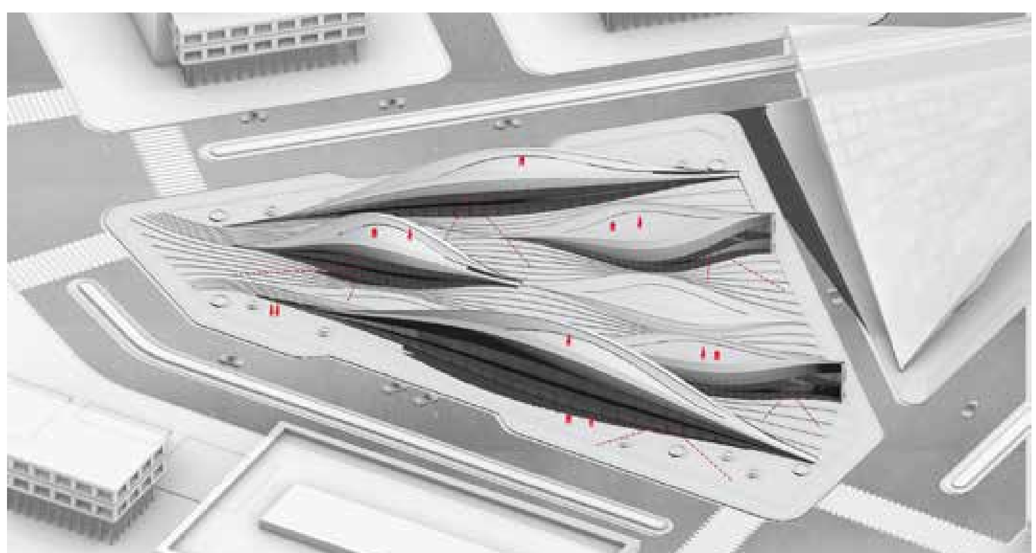
The pathways formed by the diamond pattern likely contribute to the overall fluidity and connectivity within the space. This leads to forming an urban hub nestled amid residential buildings. This hub serves as a vibrant center where residents and visitors can enjoy diverse culinary offerings from restaurants while also engaging in social activities.











The design process of the DHA food court project began with a strategic approach, focusing on defining surrounding streets to establish a framework. Pathways, shaped by the diamond pattern, were then intricately planned to connect the start and end points of the land, ensuring an open and accessible layout. This thoughtful arrangement not only enhanced accessibility but also influenced the creation of masses and shells within the space. The pathways acted as guiding elements, defining the architectural components, including panoramic views and green roofs. This comprehensive design process aimed to harmonize accessibility, aesthetics, and functionality, resulting in a dynamic urban hub with a blend of open spaces, visual appeal, and environmental

DHA food court's masses are designed with lines derived from the ground, forming pathways that seamlessly connect from the ground to the roof. This design strategy enhances connectivity and accessibility across the entire length of the land, providing a structured and visually appealing route for visitors.

The pathways, suitable for both walking and biking, contribute to a diverse urban landscape by incorporating features like water ponds and green paths. Water ponds serve as natural cooling elements, contributing to temperature regulation in the surrounding area, they also provide recreational opportunities, allowing visitors to enjoy a tranquil environment.

Furthermore, we have embraced design principles by harnessing natural light, integrating greenery, and implementing meticulous ventilation strategies. Strengthening our commitment to environmental responsibility, we deliberately selected building materials such as ETFE for its exceptional light-transmitting properties, lightweight nature, and resilience to environmental conditions, thereby minimizing reliance on artificial lighting. Our dedication to sustainability is evident in the choice of eco pact concrete, incorporating recycled materials and adhering to eco-friendly production practices. Additionally, the utilization of Hydro media concrete not only addresses water runoff concerns but actively contributes to rainwater harvesting initiatives.

1 ETFE

100% ETFE TRANSPARENCY PROVIDES REDUCED USE OF ARTIFICIAL LIGHTING WHICH LOWERS AREA COSTS. INNOVATIVE PLASTIC CUSHIONS ALSO TRANSFORM THE PATIO INTO A LIGHT AND AIRY SPACE.

2 FIBER CEEMENT BOARD

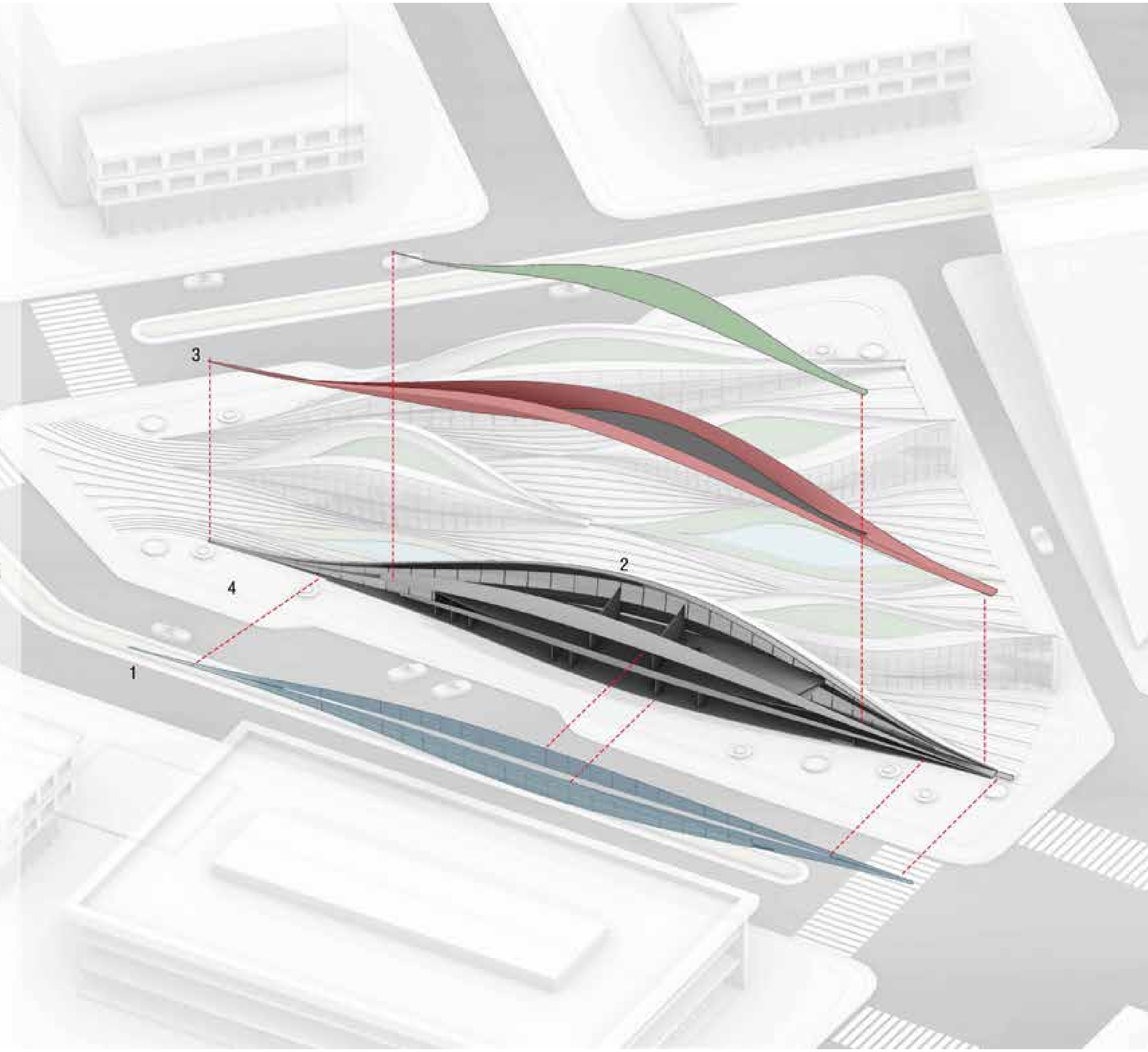
A MULTI-PURPOSE BOARD THAT OUTPERFORMS OTHER MATERIALS IN TERMS OF FLEXURAL STRENGTH, IMPACT STRENGTH AND DURABILITY. HICEM BOARDS ARE A1 NON-COMBUSTIBLE, WATER RESISTANT AND ARE NOT AFFECTED BY PESTS OR INSECTS.
MANUFACTURED WITH CEMENT, CELLULOSE FIBRES AND PERFORMANCE ENHANCING ADDITIVES

3 ECO PACT CONCREATE

ECOPACT IS A LOW-CARBON CONCRETE PRODUCT RANGE WHICH CAN REDUCE THE EMBODIED CARBON OF BUILDINGS, INFRASTRUCTURE AND HOMES BY AT LEAST 30% WITHOUT OFFSETS.

4 HYPERMEDIA CONCREATE

MORE THAN A PRODUCT, HYDROMEDIA IS A WATER MANAGEMENT SYSTEM THAT RAPIDLY ABSORBS RAIN WATER OFF STREETS, PARKING SURFACES, DRIVEWAYS, AND WALKWAYS – REDUCING THE RISK OF FLOODING.OLUTION COMBINES THE PROPERTIES OF CONCRETE AND ADVANCED DRAINAGE TECHNOLOGY



Chilli Cafe

Damascus ,Syria

Client: MA Development

Size: 250 SQM./ 2,690 SFT.

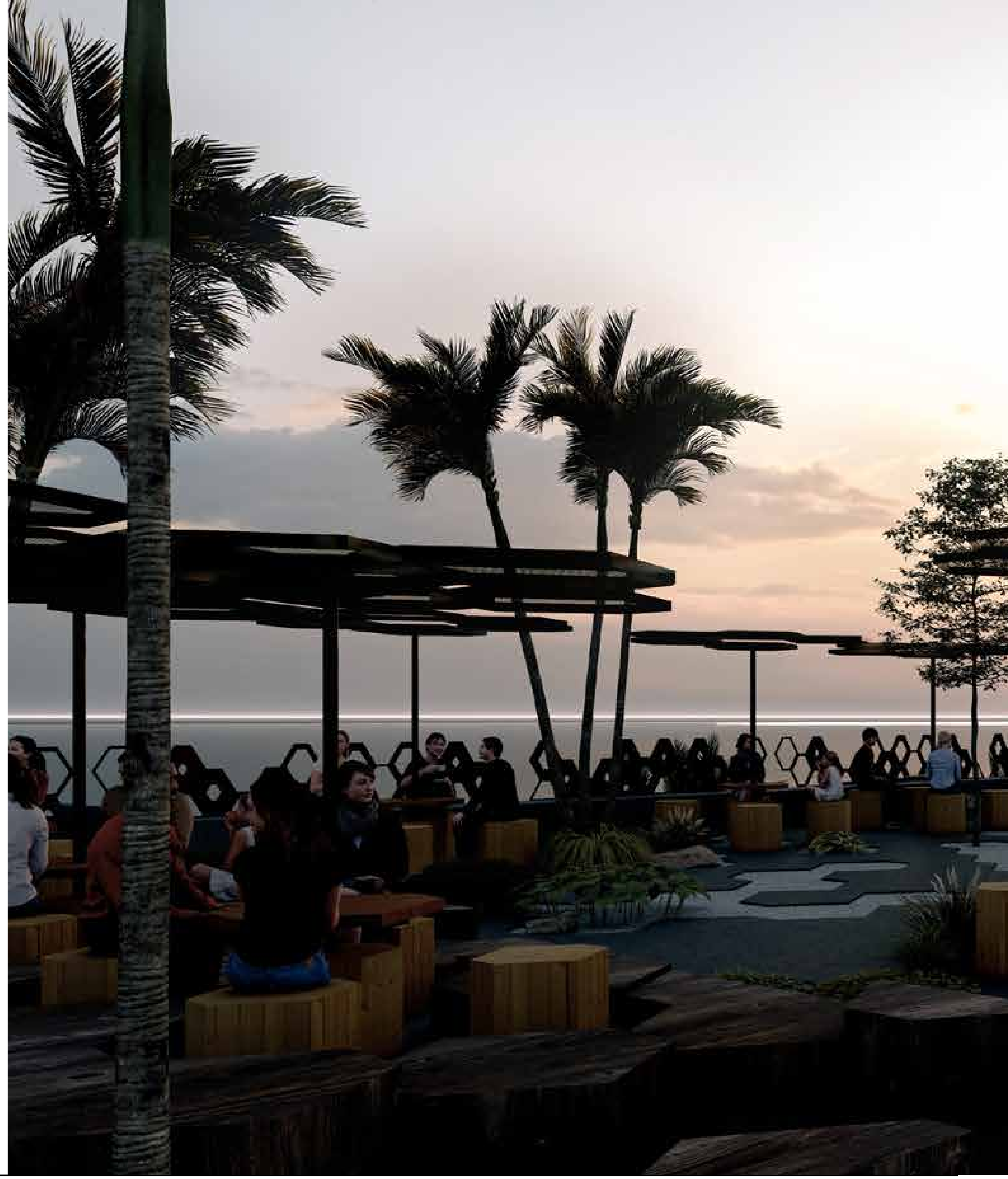
Status: Proposal

Typology: Culture

Year: 2022

The Chili Cafe, situated in the charming Damascus suburb of Qudsaya, exemplifies a thoughtful fusion of modern architectural design and a harmonious connection with nature. This unique establishment serves as more than just a dining destination; it offers a tranquil refuge, providing an idyllic environment for unwinding and appreciating the cafe's stunning panoramic vistas. The cafe prioritizes open-air seating areas, adorned with sleek, geometric canopies that provide

shade and enhance the visual appeal. These canopies, featuring a distinctive hexagonal motif, reflect a sophisticated design approach that balances functionality with artistic expression. Lush greenery and towering palm trees are strategically interspersed throughout the layout, creating a serene atmosphere and promoting a connection with nature. This thoughtful landscaping not only adds visual interest but also provides natural shade and cooling, reflecting the cafe's commitment to sustainability and ecological sensitivity.



The Chili Cafe meticulously blends contemporary design principles with natural elements, fostering a space that cultivates relaxation and social interaction.
The hexagonal theme extends to the ground level, where seating arrangements are thoughtfully planned in a hexagonal pattern that mirrors the overhead canopies. This geometric consistency ties the entire space together, offering a cohesive visual experience that is both modern and inviting.

The seating arrangement embodies a perfect blend of rustic charm and contemporary comfort. Guests can select from a variety of high-quality wooden stools and benches designed for comfort and visual appeal. Material and finish choices exude warmth and natural beauty, fostering a welcoming ambiance that encourages guests to linger. Strategic placement of seating options optimizes views and privacy, catering to both small groups and individuals seeking a peaceful retreat.



The open layout and ample seating are designed to facilitate a variety of social interactions, fostering a sense of community and providing a welcoming space for connection and lasting bonds. Events and activities are envisioned to further strengthen community engagement, making Chili Cafe an integral and lively part of the Qudsaya community.
The cafe is strategically positioned to offer breathtaking sunset views. Open spaces and unobstructed sightlines ensure that every guest can experience the natural spectacle, making Chili Cafe an ideal spot for unforgettable evening gatherings.

This design approach creates a space that is not only visually engaging and environmentally conscious but also fosters social interaction and connection within the Qudsaya community. The Chili Cafe aspires to be a haven for relaxation, social gatherings, and appreciation of the natural landscape.

ARCHITECTURE

Office

Brixel Tower

Islamabad ,Pakistan

Client: Group A

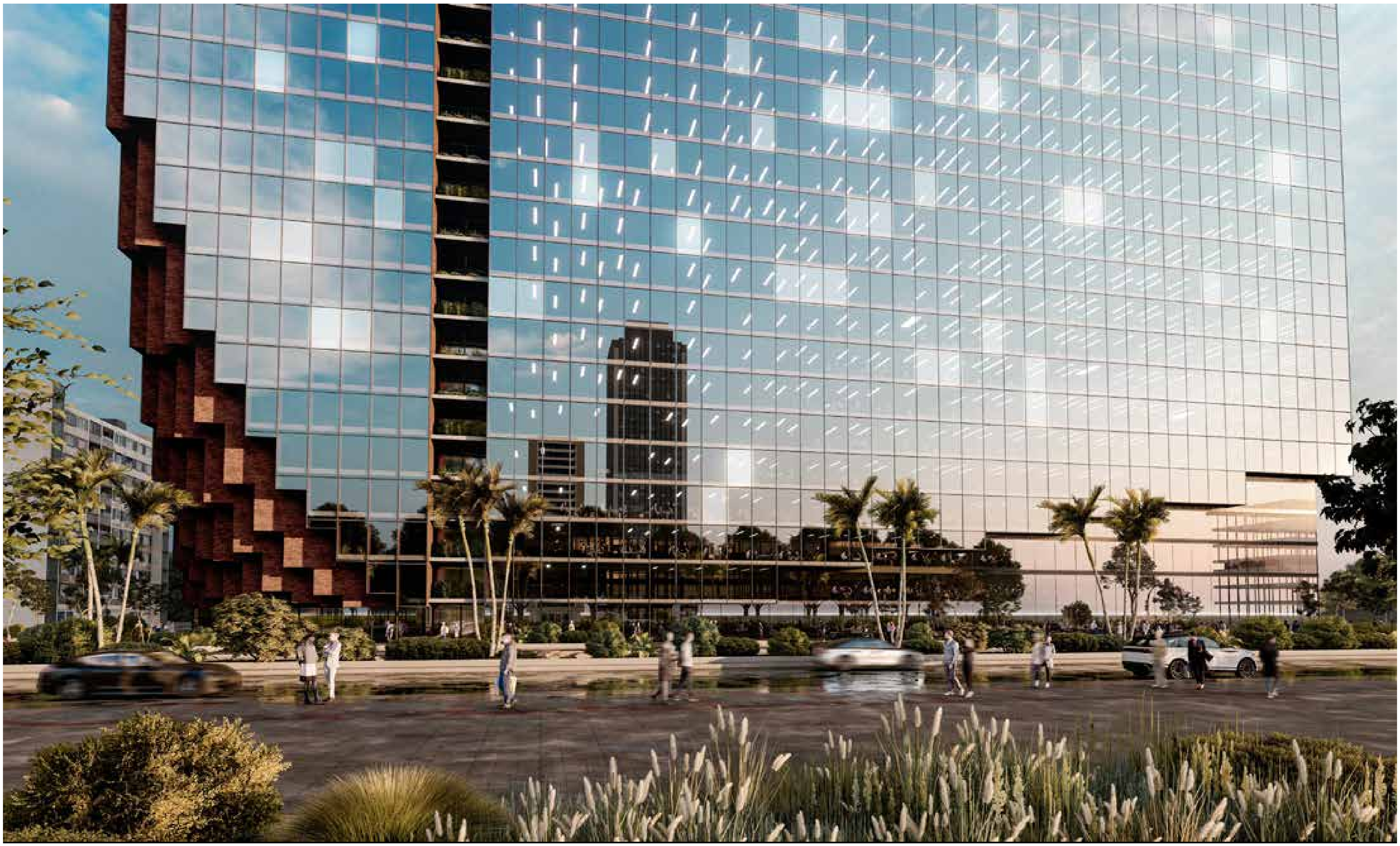
Size: 1,000m²/10,700f²

Status: Proposal

Typology: Office

Year: 2023

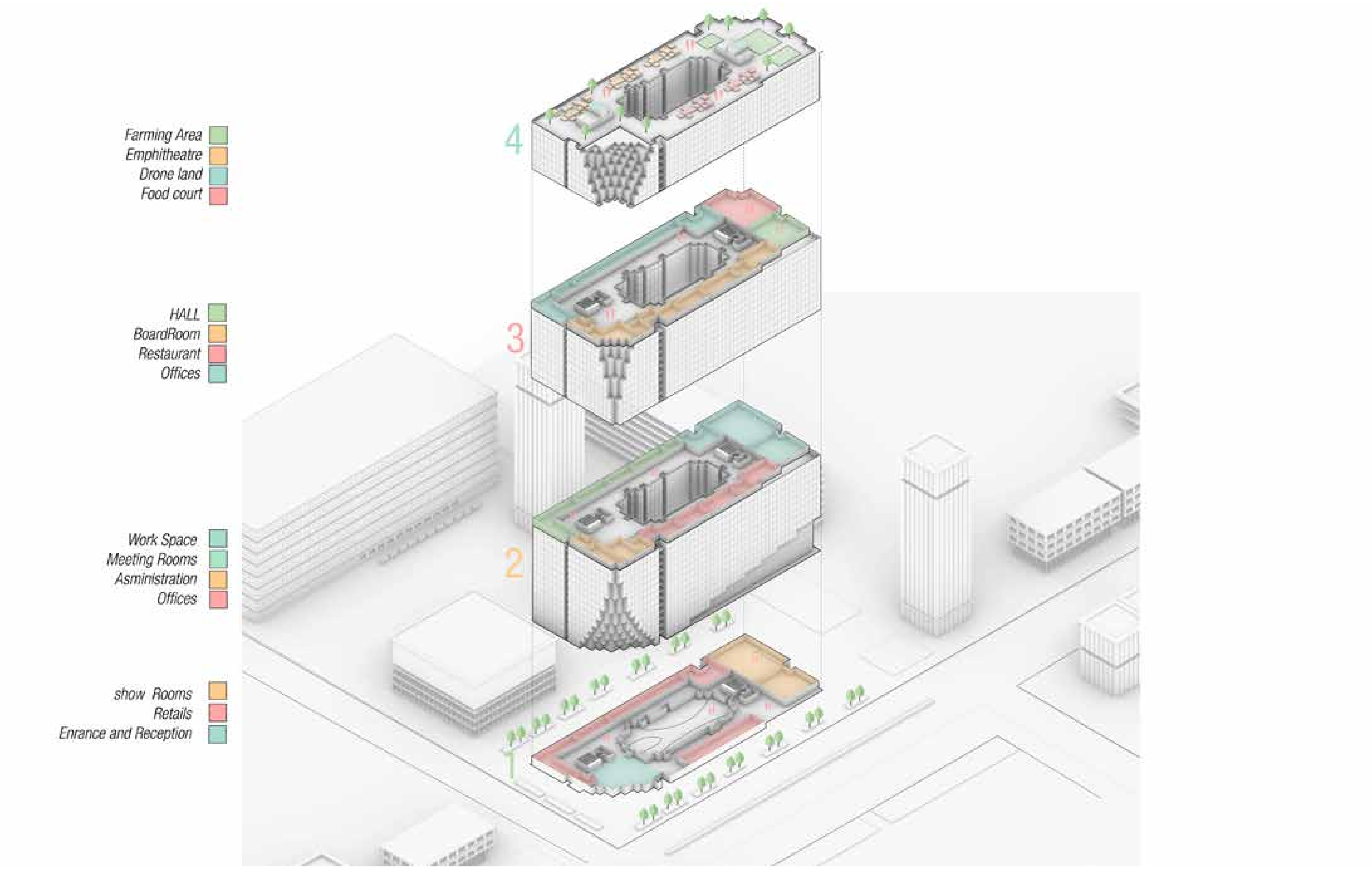
Our inspiration drawn from Mughal architecture, particularly the abstraction of the Muqarnas, lends a unique and captivating character to the building's facade. The pixelated characteristic, a departure from conventional structures, is a visual testament to the fusion of traditional Islamic design elements with contemporary architectural innovation. The incorporation of a pixelated facade immediately distinguishes the building from its surroundings. Each pixel, reminiscent of the intricacy seen in Muqarnas, contributes to a mesmerizing pattern that adds depth and richness to the overall design.

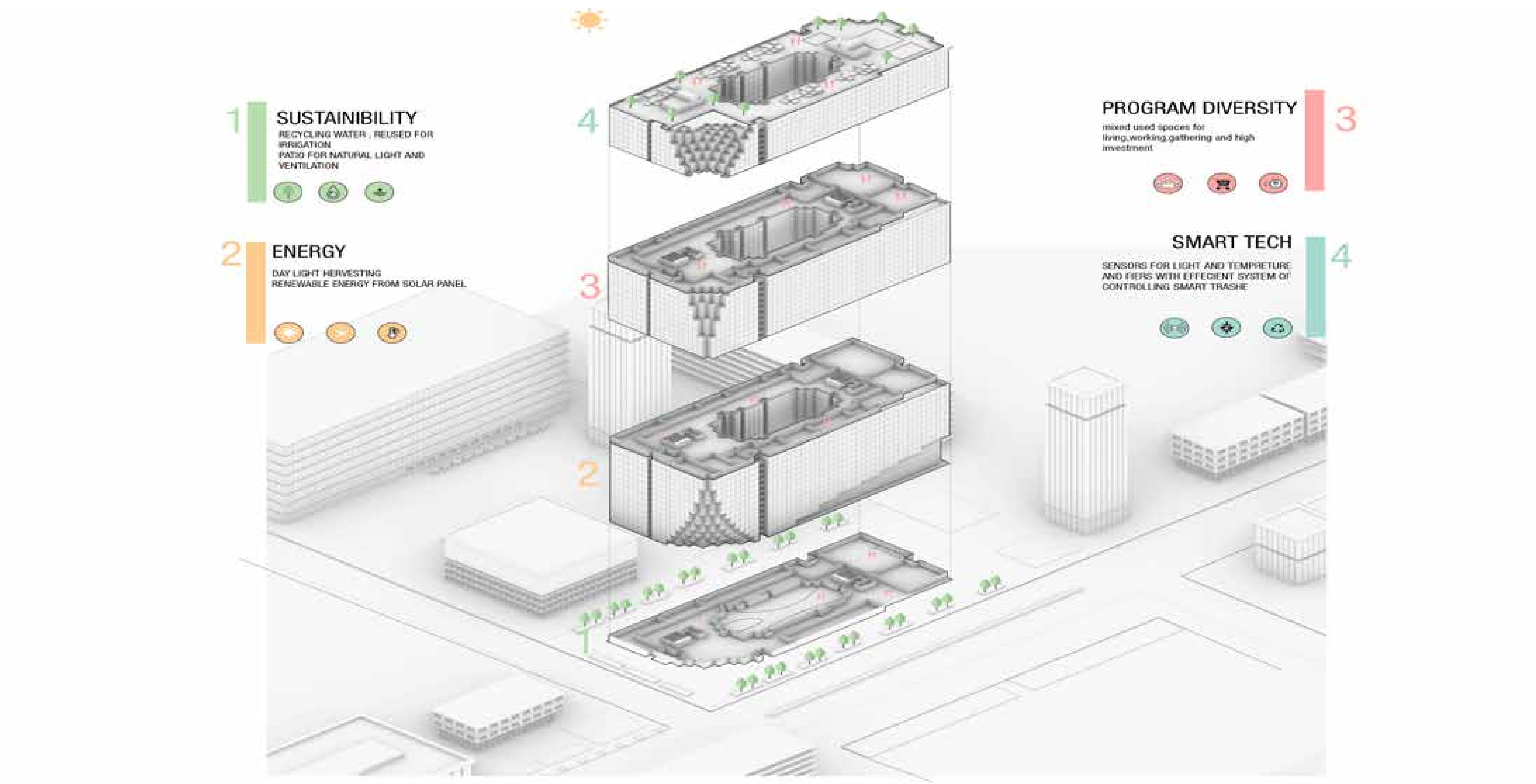


However, deviating from uniformity, these pixilations break away at the northeast edge from both upper and lower corners, giving way to striking brick pixels.

The intentional breakaway of pixels at the northeast edge adds an element of dynamism to the façade, and creates a play of light and shadow, emphasizing specific areas and contributing to the overall visual interest of the building. While glass facades maximize natural light, the use of specific materials like bricks can help in maintaining thermal comfort.

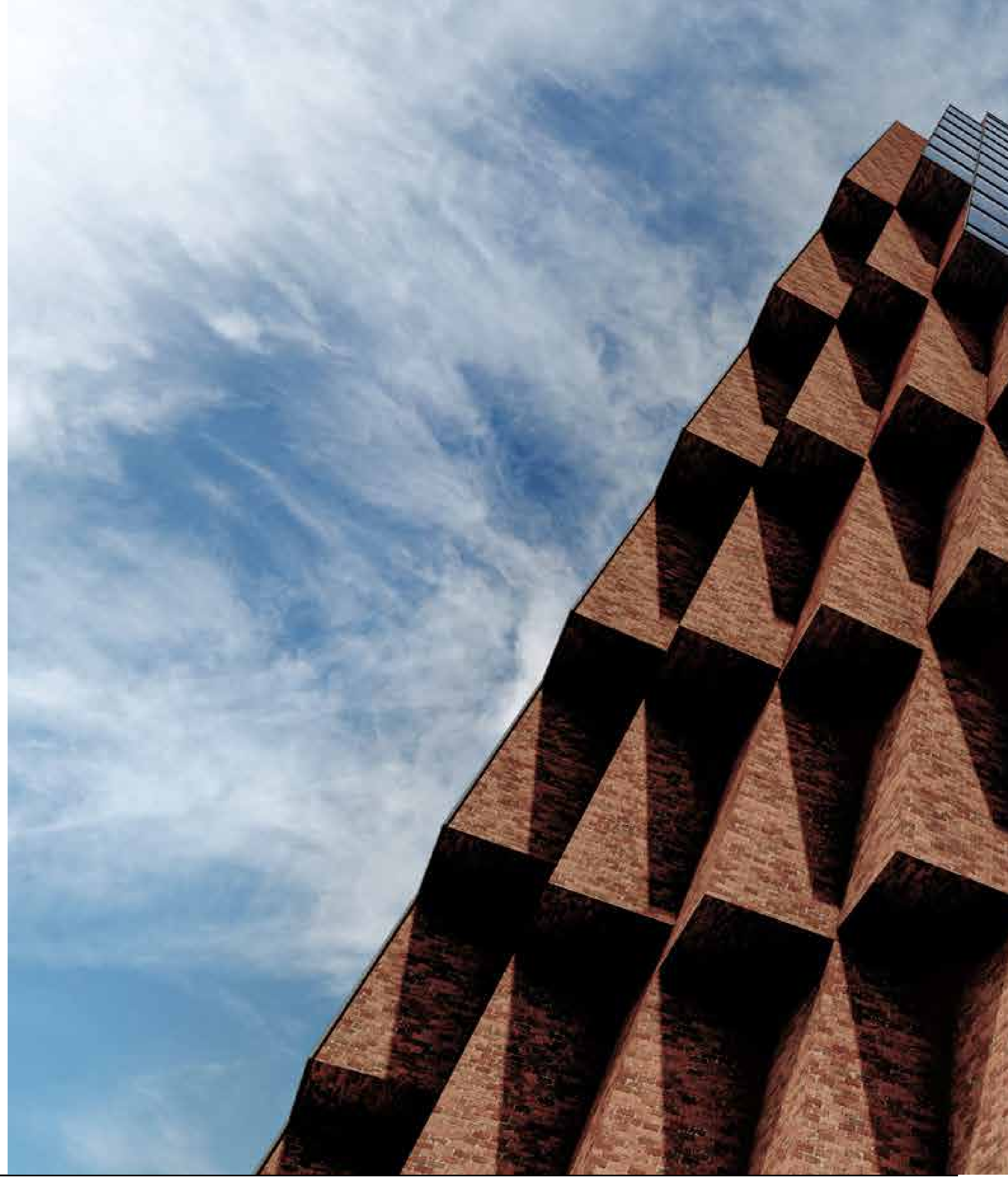
Visitors are welcomed with a grand, spacious lobby with its reception area showcasing a range of showrooms and retail stores distributed across the ground and first floors, plus a restaurant on the first floor. From the second floor and upward, the building transitions into office spaces, catering to diverse business needs. The 28th floor hosts another restaurant, providing a breathtaking views of the city. At the top, a rooftop restaurant and garden offer a cool hangout while supplying fresh produce for the building's restaurants.





The strategic distribution of functions across various floors ensures a dynamic and versatile space. The inner patio serves as a central gathering point, encouraging interaction among occupants, visitors, and patrons of the building's amenities. Whether for work, dining, or leisure, the design creates an integrated environment that caters to a variety of needs while promoting a sense of community and connectivity. However, Our commitment to sustainability shaped the design. The central atrium cuts down on the need for excessive lighting, and the rooftop garden not only adds charm but also provides fresh produce for the restaurants. We believe that Sustainability isn't just about being green; it's about creating a space where people can live, work, and connect right in the heart of Karachi.

The strategic use of glass facades ensures maximum natural light, complemented by specific spots adorned with bricks to maintain comfort.



Glass facades allow ample natural light to penetrate the interior spaces, creating a bright and well-lit environment. This not only reduces the need for artificial lighting during the day but also contributes to a more energy-efficient and sustainable building.

It also provide a sense of openness and transparency, allowing occupants to connect with the external environment. This transparency helps in creating a welcoming atmosphere at the entrance, making the building more inviting to visitors. In summary, the strategic use of glass facades with carefully integrated traditional materials like bricks can create a building design that maximizes natural light, fosters a connection with the surroundings, and also pays homage to traditional building materials, fostering a nuanced interplay between the old and the new.

The Sine Tower

Islamabad ,Pakistan

Client: Swiss Group

Size: 20,000m^2/ 215,278f^2

Status: Proposal

Typology: Office

Year: 2020

located In Lahore, a ten-story tower spans 1860 m^2 its dynamic form shaped by zoning rules and setbacks. The first four levels host vibrant showrooms and retail spaces, contributing to a lively streetscape. The rest levels are office spaces. This landmark exemplifies Lahore’s commitment to urban planning while providing a dynamic hub for commerce and work.

This project integrates cutting-edge features to minimize environmental impact. Transparent solar panels embedded within the windows exemplify a forward-thinking approach, seamlessly blending renewable energy generation with architectural functionality.

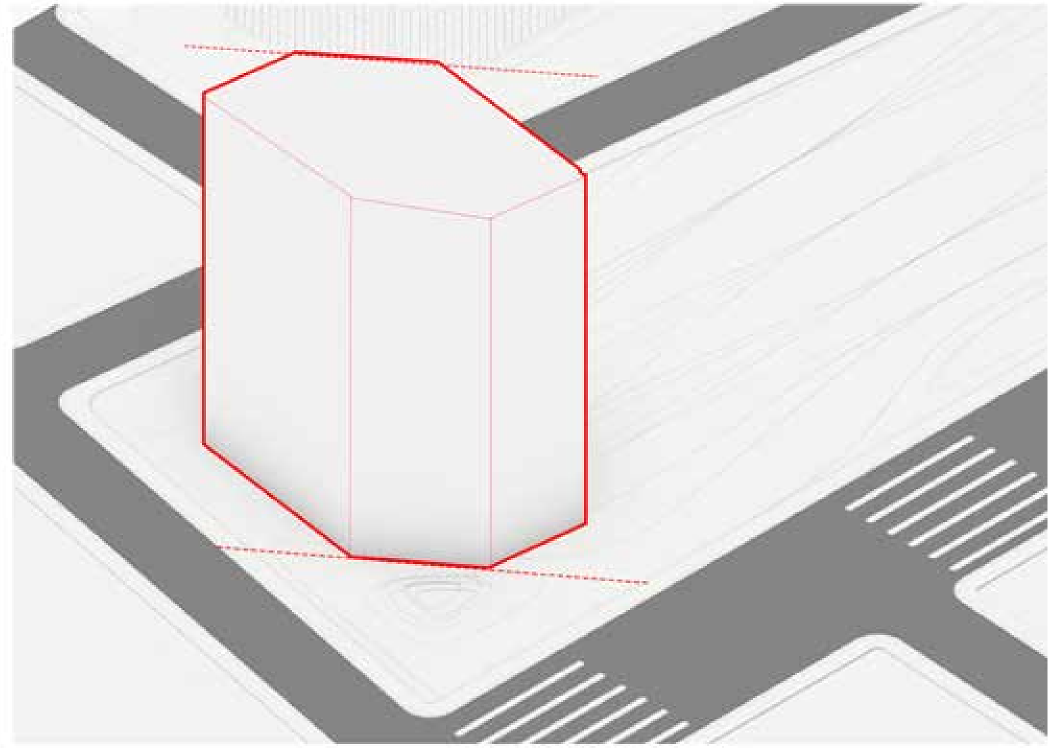
These innovative solar panels not only harness sunlight for power but also maintain transparency, allowing natural light to permeate the interior spaces, this dual-purpose design contributes to on-site renewable energy generation and enhances the overall energy efficiency of the tower. By capitalizing on the transparency of the solar panels, the project maximizes daylighting, reducing the need for artificial lighting and subsequently lowering energy consumption.

The mass of this tower, situated at a pivotal crossroads in Lahore, was sculpted with precision, and at the corner, a deliberate cut was introduced to establish a visual axis. This thoughtful decision served as an aesthetic focal point, also influenced the creation of a captivating entrance.

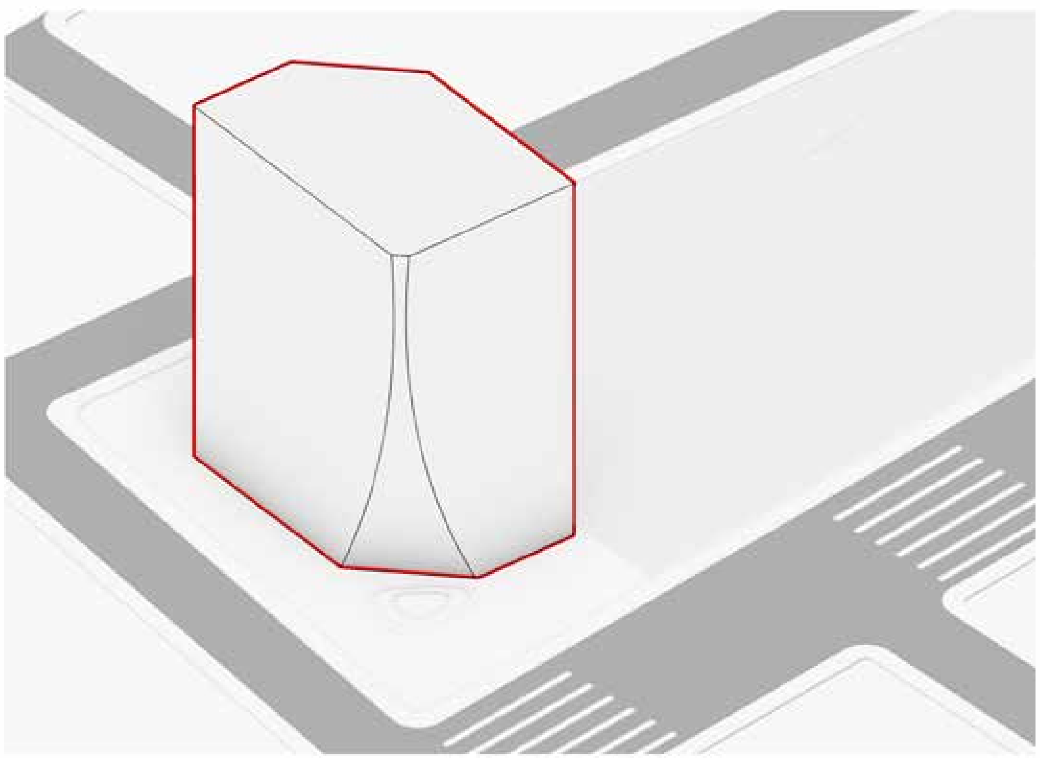
The sliced corner not only enhances the building's visual appeal but also directs attention, drawing visitors seamlessly into the structure. The intersection of form and function in the design process underscores the importance of urban context, as this tower becomes a dynamic landmark, harmonizing with its surroundings while ingeniously guiding the observer towards an inviting entrance experience.

In a nod to both heritage and functionality, the tower's elevations showcase a striking addition – visible structural columns inspired by Mughal architecture. These columns not only pay homage to the region's rich cultural history but also serve a dual purpose. Specifically, on the first four levels, these columns extend prominently, affirming the presence of retail spaces and showrooms within. These columns meticulously crafted through computational design methods, with a focus on the intricate use of diamond units. remaining firmly rooted in the cutting-edge realm of contemporary architecture. This avant-garde approach introduces a geometric precision and complexity to the columns, showcasing the mix of technology and aesthetics. The diamond-inspired patterns, born from computational algorithms, create a visually stunning and dynamic facade, embodying a contemporary architectural language. The computational generation of the diamond shapes imparts a unique, futuristic character to the columns, elevating the overall visual impact of the tower while

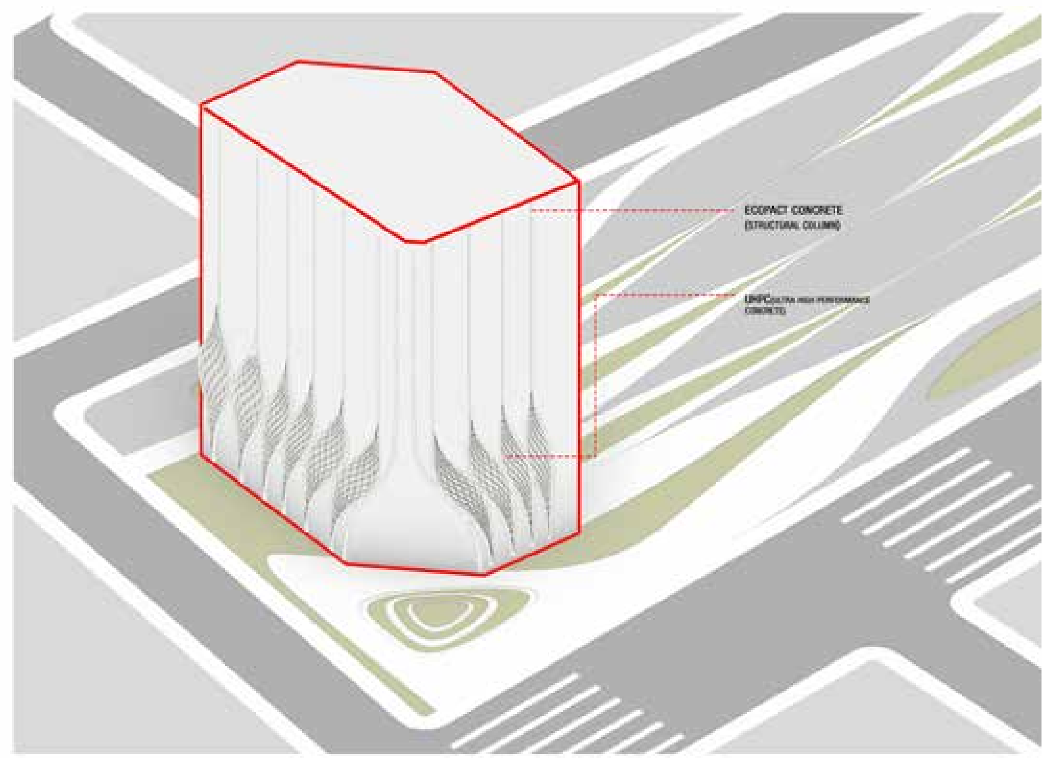
SITE



MAXIMUM VOLUME



CARVING THE VOLUM

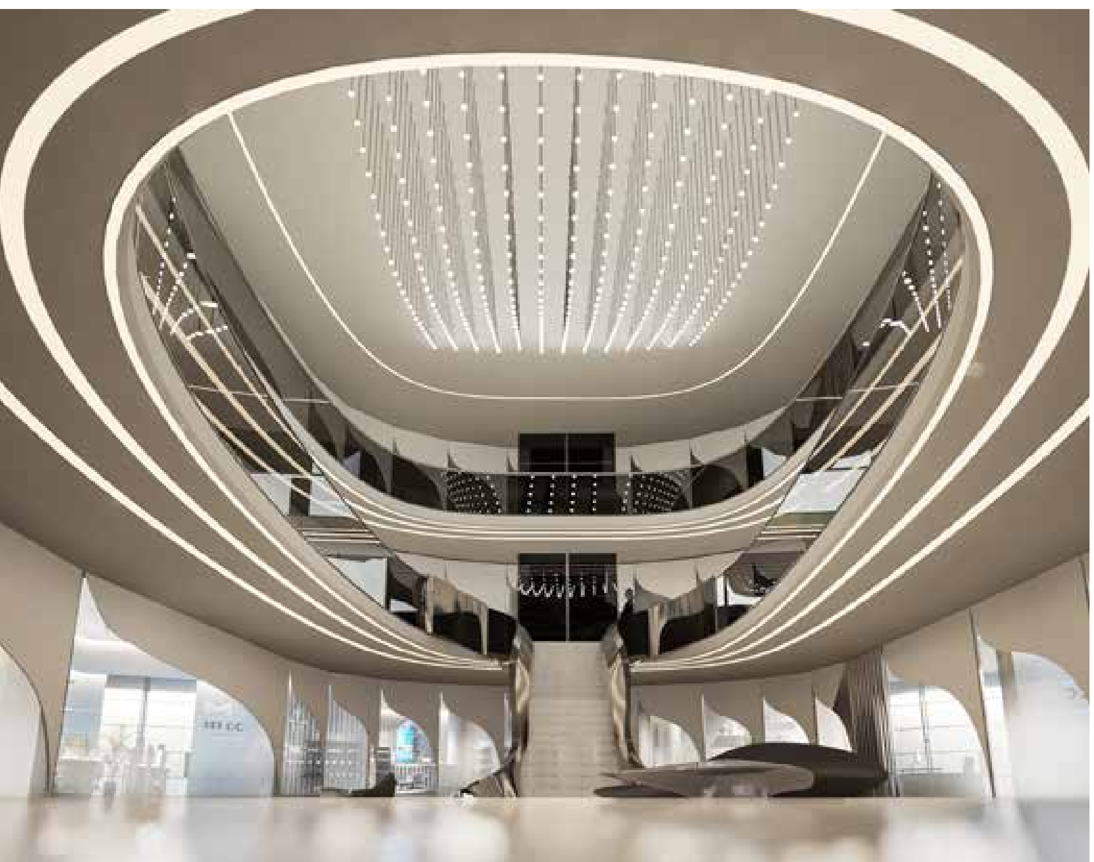


STRUCTURE

The deliberate cut at the tower's corner, extends into a curve that ascends to the pinnacle of the structure. This curvature plays a pivotal role in unifying the various levels of the project. The seamless transition from the corner cut to the curve creates a visually cohesive element that ties the entire mass together.

This design feature not only imparts a sense of continuity but also fosters a harmonious flow, forging a connection between each level. As a unifying motif, the curved accent transforms the tower into a singular, dynamic entity, elevating both its visual impact and its internal coherence.

ADDING LANDSCAPE



The interior design of the project is a seamless extension of its architectural excellence, especially in the lower four levels dedicated to public facilities, retail, and showrooms. Upon entering the building, visitors encounter intimate spaces marked by a coherent formal logic of continuous curve linearity. This design choice enhances the flow within the space, also creates a sense of unity and purpose. A modern staircase serves a dual role as both a functional element and a focal point, contributing to the dynamic and sophisticated ambiance of the interior.

The staircase not only facilitates vertical circulation but also stands as a visual anchor, guiding users through the captivating curves of the space. Moreover, a custom-made chandelier graces the area, infusing a sense of luxury and elegance. This bespoke lighting fixture illuminates the space and becomes a statement piece, further elevating the overall aesthetic and reinforcing a commitment to meticulous design throughout the interior. The interplay of curves, functionality, and bespoke elements ensures that every facet of the interior design contributes to a cohesive and visually stunning environment.

Feroze Tower

Lahore ,Pakistan

Client: IAN Contracting

Size: 4.148m²/44,649f²

Status: In Design

Typology: Office , Retail

Year: 2022

This 14-story high-rise in Lahore, perched along Ferozepur Road, adopts a modern aesthetic on its 8.2 kanal plot. Its exterior features a consistent grid of windows and panels, giving it a clean and uniform appearance.

Yet, to inject a touch of uniqueness, three curvy channels break through the monotony. Notably, the eastern channel aligns with Ferozepur Road's axis, carving a clear path toward the building's center and culminating in a semi-enclosed plaza. Below ground, discreet parking is seamlessly integrated. Varied showrooms and adaptable workspaces grace the ascending levels, while the rooftop, a communal sanctuary, offers panoramic views.

The mass creation went through meticulous design process starting with the focus on creating a dynamic and inviting space. Two primary curves, stemming from distinct axes, played a pivotal role in shaping the courtyard. The first curve is derived from Ferozepur Road, a major thoroughfare, seamlessly integrating the tower into the urban fabric and establishing a strong visual connection with the city’s primary artery.

The second curve, influenced by a secondary street, intricately weaves the structure into the local context, fostering a sense of accessibility and engagement with the surrounding environment.
The placement of the stairs on the elevation between the curves is a masterstroke in architectural design, not just for functional connectivity but also for its profound impact on the visual experience.

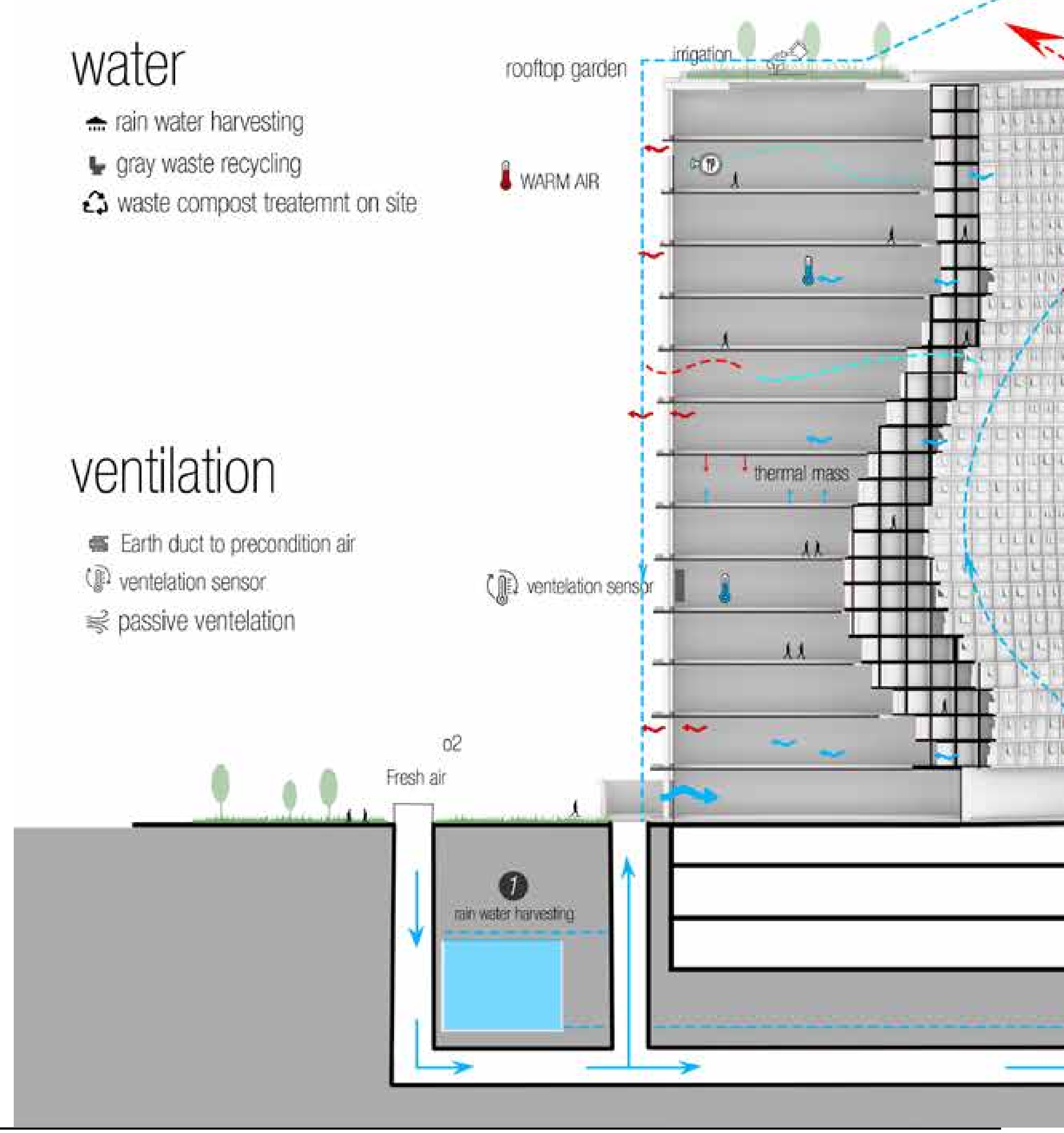
Positioned strategically, these stairs offer more than just vertical circulation they serve as elevated vantage points providing an open panorama of the city. As occupants ascend or descend, they are treated to unobstructed views, creating a dynamic and engaging connection with the urban landscape. Turning each step into a journey, it adds a layer of openness, transparency, and connection, blurring the boundaries between the interior and the external environment.

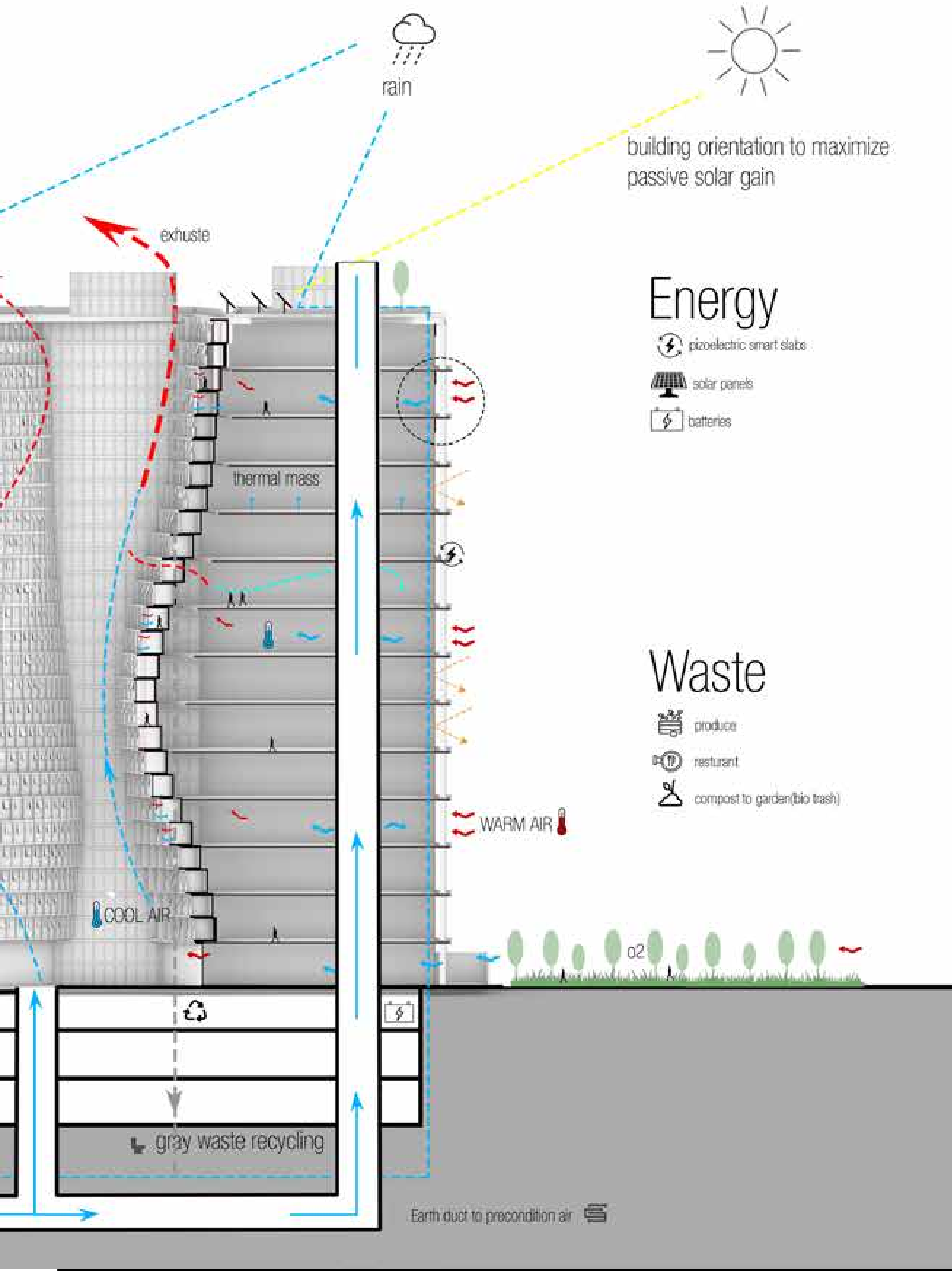
The courtyard, thus formed, acts as a central focal point, drawing attention to the heart of the structure. Its spatial prominence not only aesthetically anchors the design but also provides a functional and communal space. It becomes a strategic conduit for natural light and ventilation throughout the building.

The well-conceived placement of the courtyard allows it to act as an open-air atrium, facilitating the penetration of ample natural light into the interior spaces. The curves of the structure, framing the courtyard, are designed to optimize the exposure to sunlight at different times of the day.

Sustinibilty Strategy

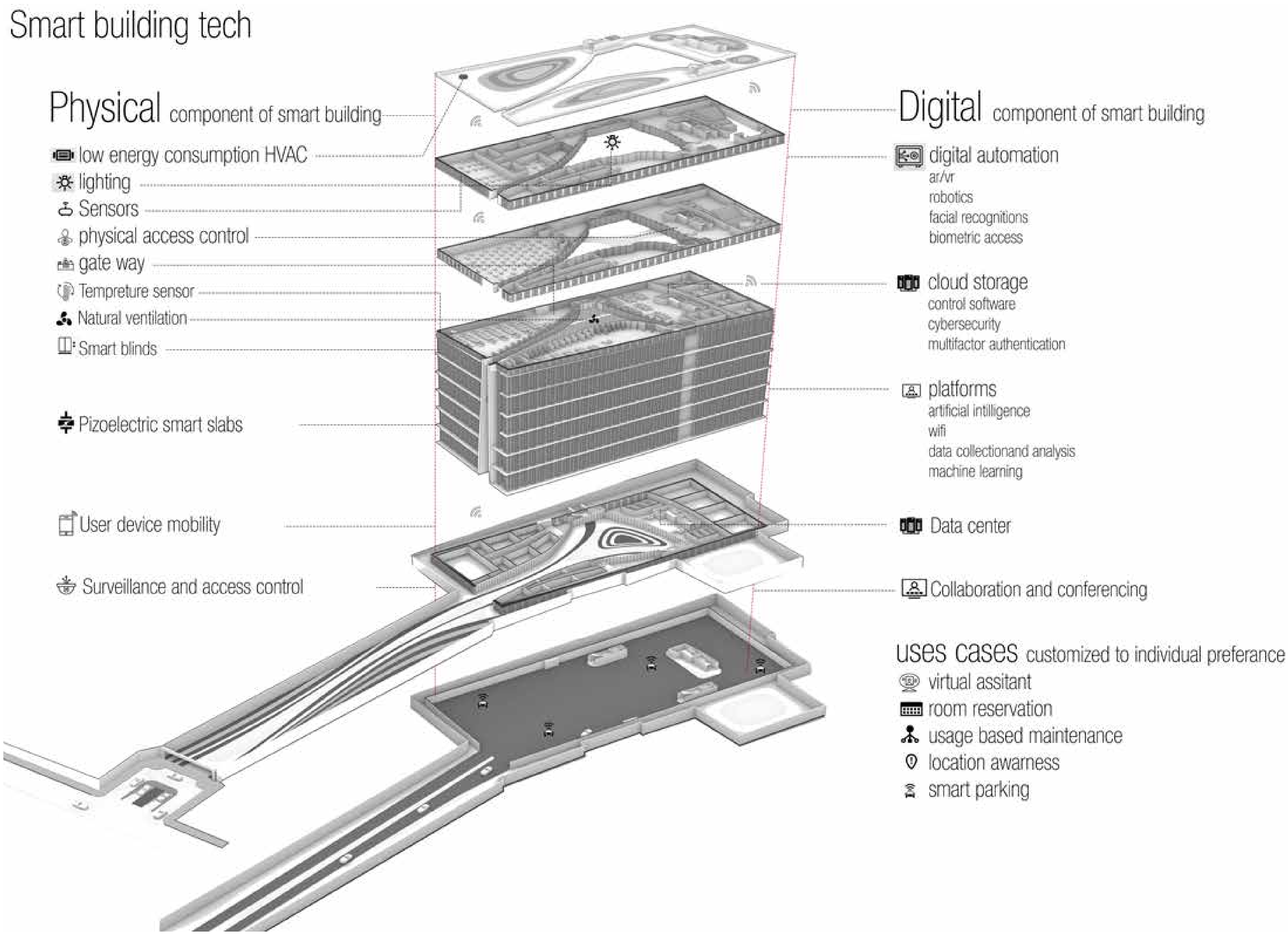
Adopting the forefront of techno-logical innovation, this project incorporates an array of smart technologies, seamlessly blending physical and digital components to enhance user experience, efficiency, and sustainability. Intelligent building systems are integrated to optimize energy usage, dynamically adjusting lighting and climate control based on occupancy and external conditions.





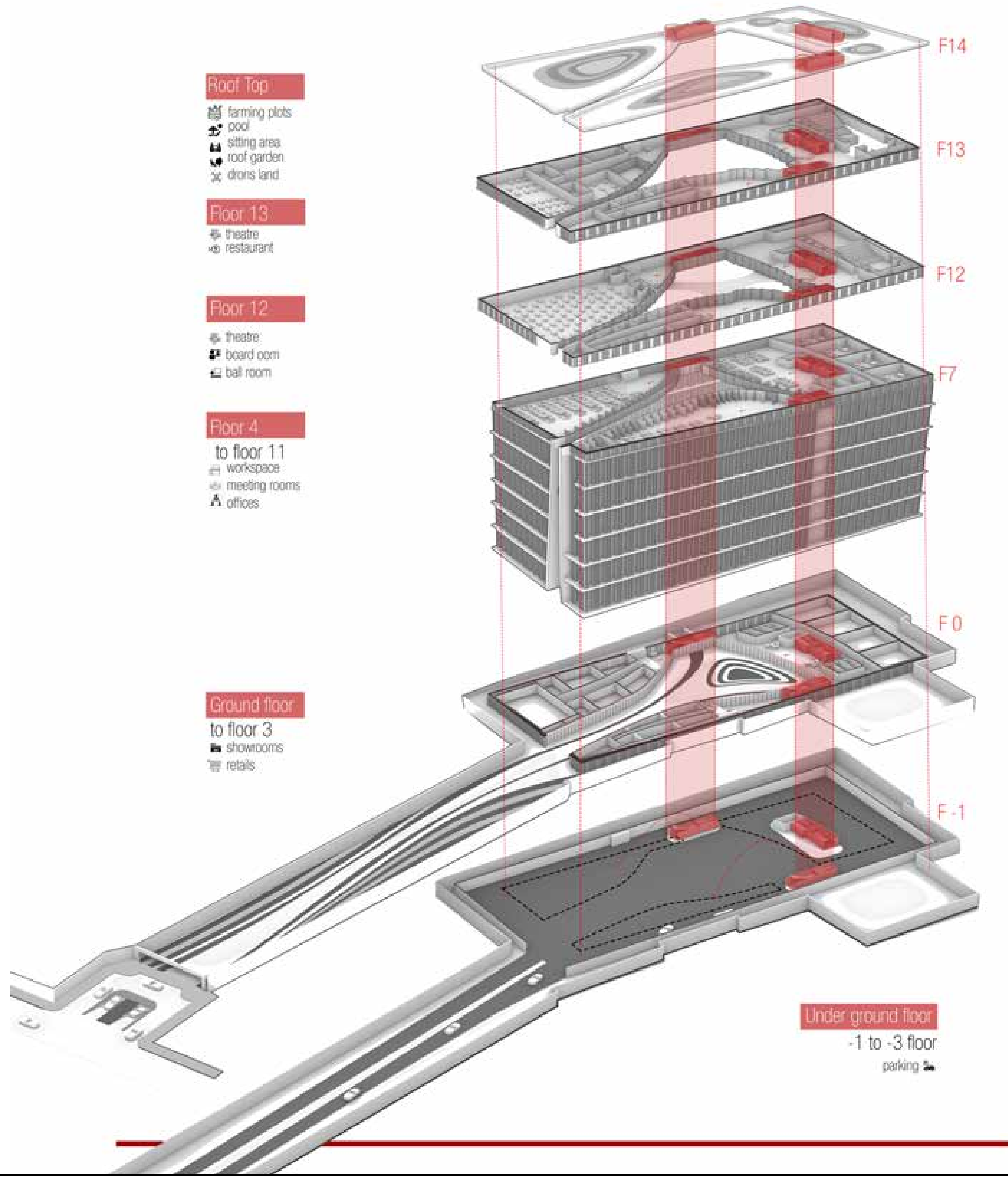
In addition, a robust building management system enables real-time monitoring and control of various parameters, promoting operational efficiency and predictive maintenance. Furthermore, the building incorporates smart features for occupants, such as smart lighting, automated blinds, and integrated digital interfaces for personalized control.

Smart building tech



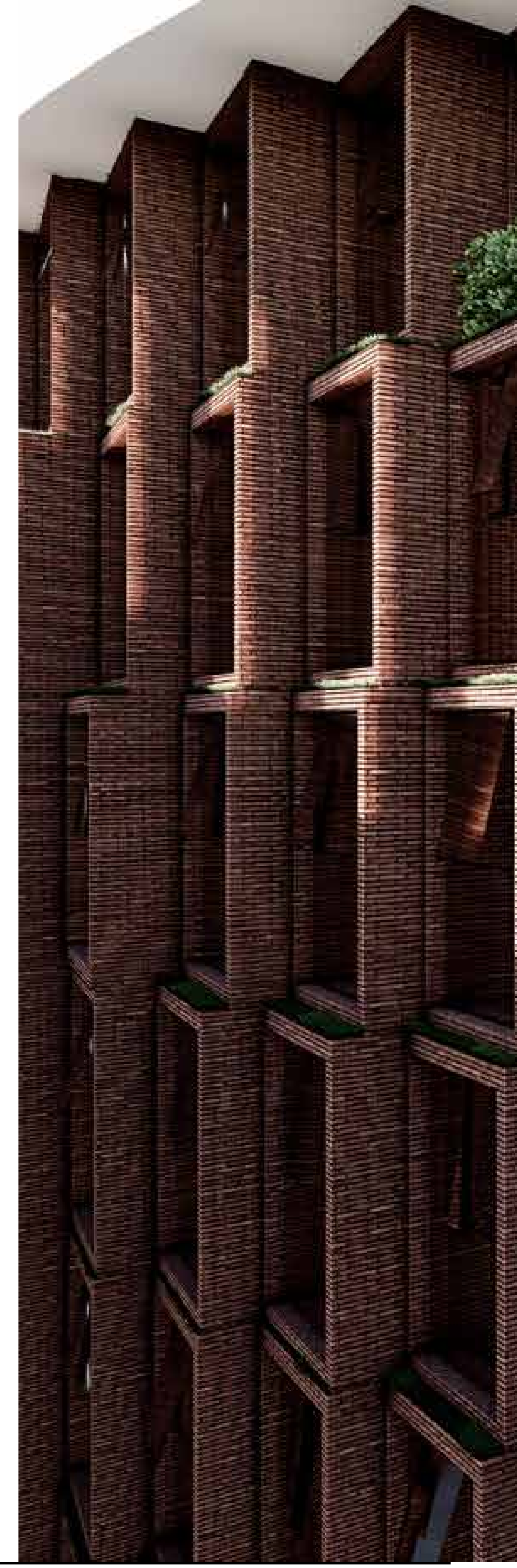
Cores and Circulation on levels

this project orchestrates a harmonious blend of eco-conscious materials, innovative technology, and thoughtful spaces, creating not just a structure but a dynamic, collaborative ecosystem that resonates with the soul of the city."



-At its core, this project prioritizes sustainability, evident in the meticulous selection of environmentally conscious materials that adorn both elevations and slabs. The internal elevation features a synergy of low E-glass and energy-smart glass, harnessing natural light to minimize energy consumption. Bricks, known for their durability and thermal mass properties, contribute significantly to the building's energy efficiency

They act as a natural insulator, regulating indoor temperatures and reducing the reliance on artificial heating and cooling systems. Additionally, the incorporation of brick reflects a connection to the architectural heritage and vernacular traditions of the region, fostering a sense of cultural continuity

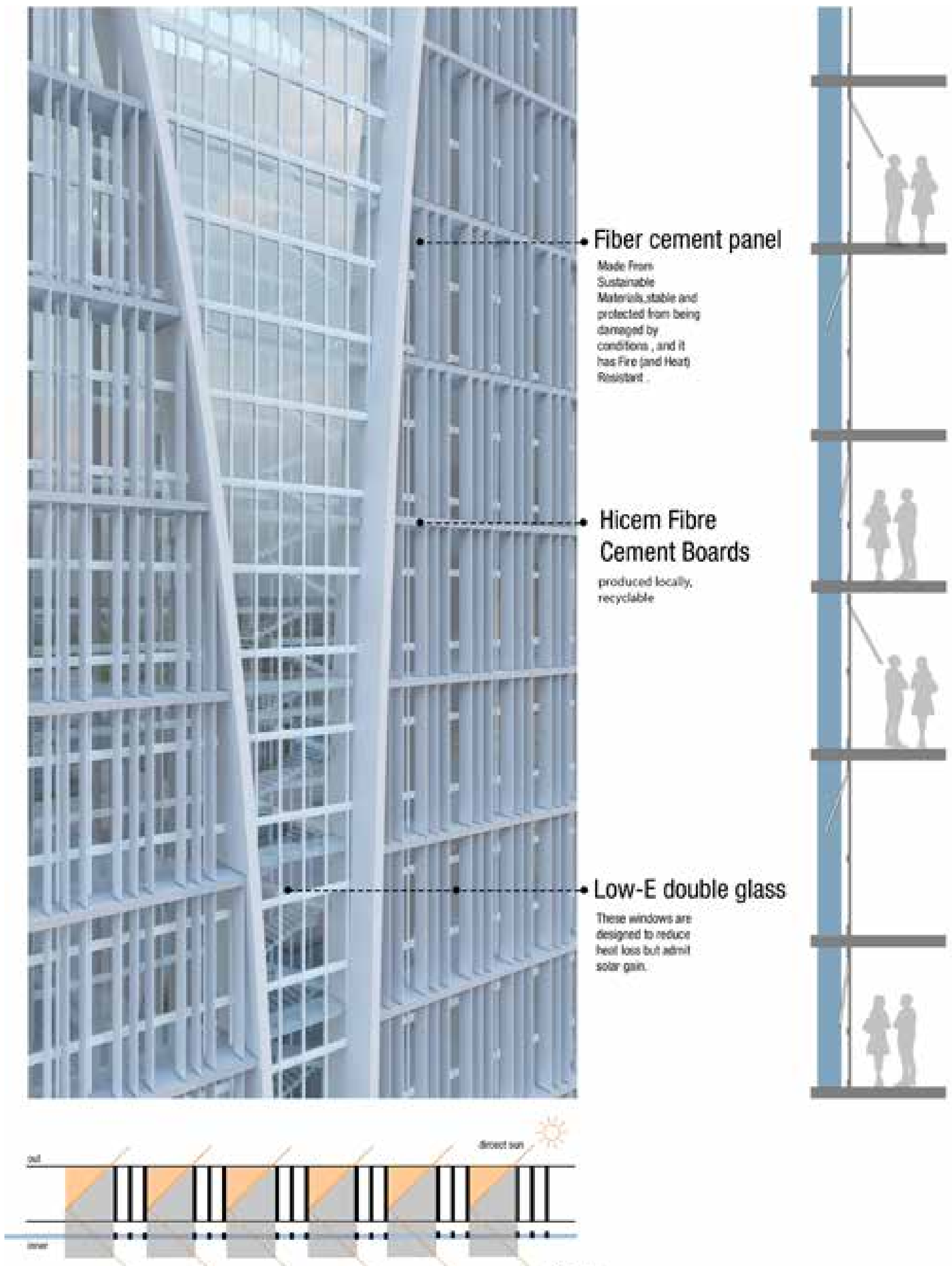


The internal open facades within this tower transcend conventional boundaries, redefining the essence of communal spaces. These thoughtfully designed expanses foster a vibrant social co-working environment, seamlessly blending the interior with the courtyard and promoting a sense of connectivity.

The open facades not only serve as conduits for natural light, creating a bright and inviting atmosphere, but also establish visual transparency, encouraging interaction and collaboration among occupants. Workspaces strategically positioned along these open facades benefit from an abundance of daylight, fostering a conducive environment for productivity and well-being

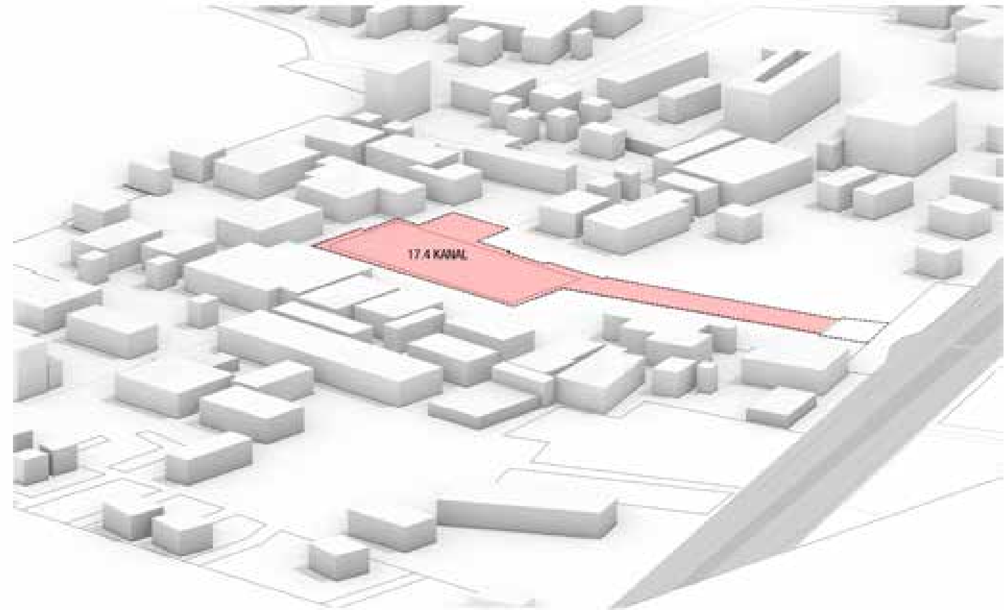
This intentional design choice transforms the interior into a dynamic, shared co-working ecosystem, where individuals can engage, exchange ideas, and collectively contribute to a collaborative and innovative professional atmosphere. The internal open facades become more than architectural features; they become catalysts for a synergistic and socially engaging work environment.

External facades boast a fusion of modernity and eco-consciousness, with fiber cement panels and hicem fiber cement boards contributing durability and a low environmen tal footprint. Completing the ensemble, low E-double glass on the external facade not only adds to energy efficiency but also establishes a seamless integration of sustainability into the architectural narrative.

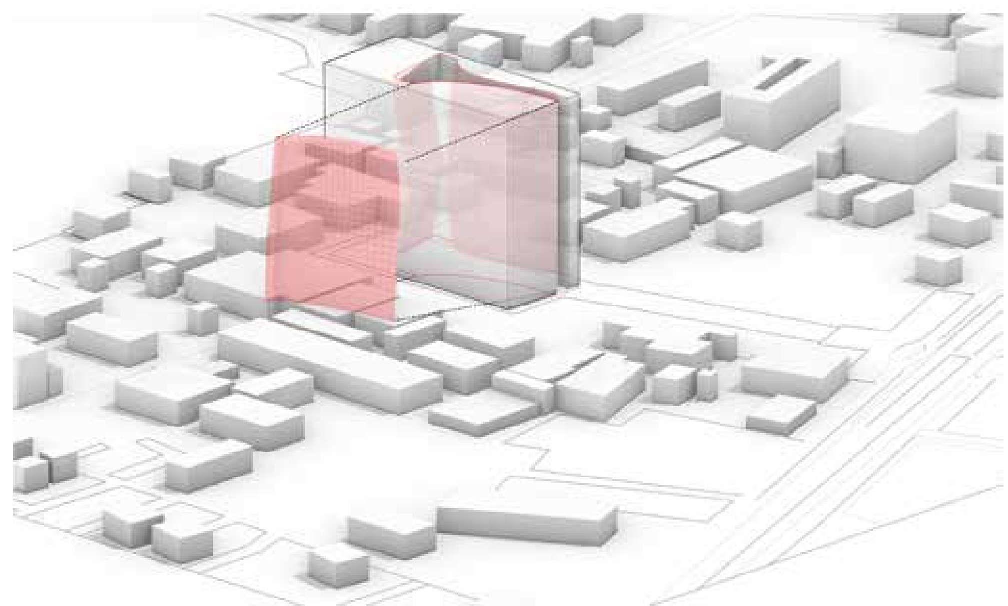


Beyond its appealing design, the building seamlessly combines form and function. The ground to the third floor forms a vibrant commercial hub, hosting retail stores and showrooms. Moving up, from the 4th to the 12th floor, the space transforms into efficient office areas, featur

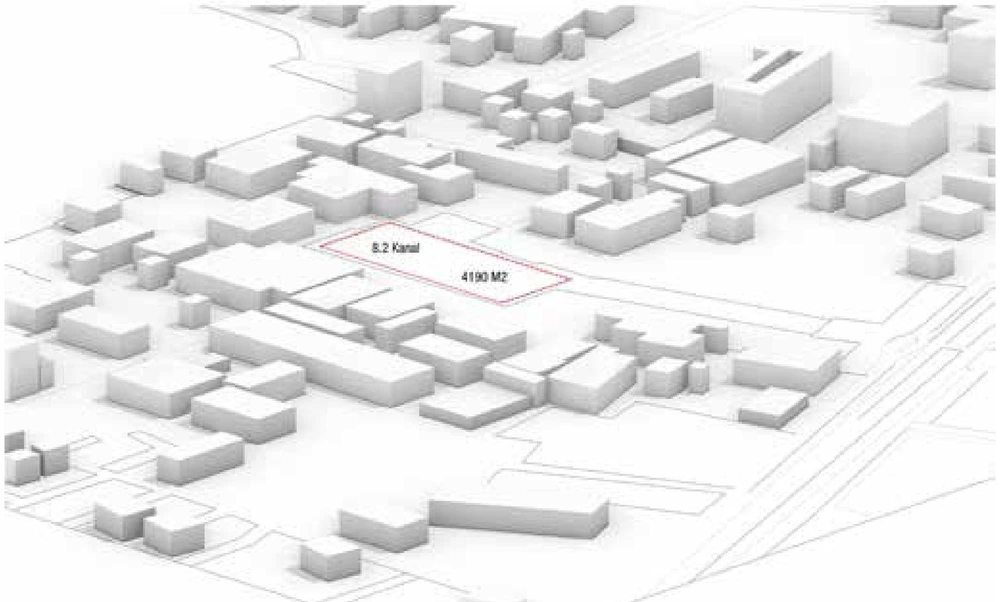
ing a lecture hall on the 12th floor. The 13th floor adds a delightful touch with a restaurant boasting scenic views and an additional theatre. Ascending to the 14th floor reveals a rooftop oasis, complete with a garden supplying fresh produce to the restaurant, a refreshing pool, and a designated area for drone landings. A thoughtful arrangement catering to various needs.



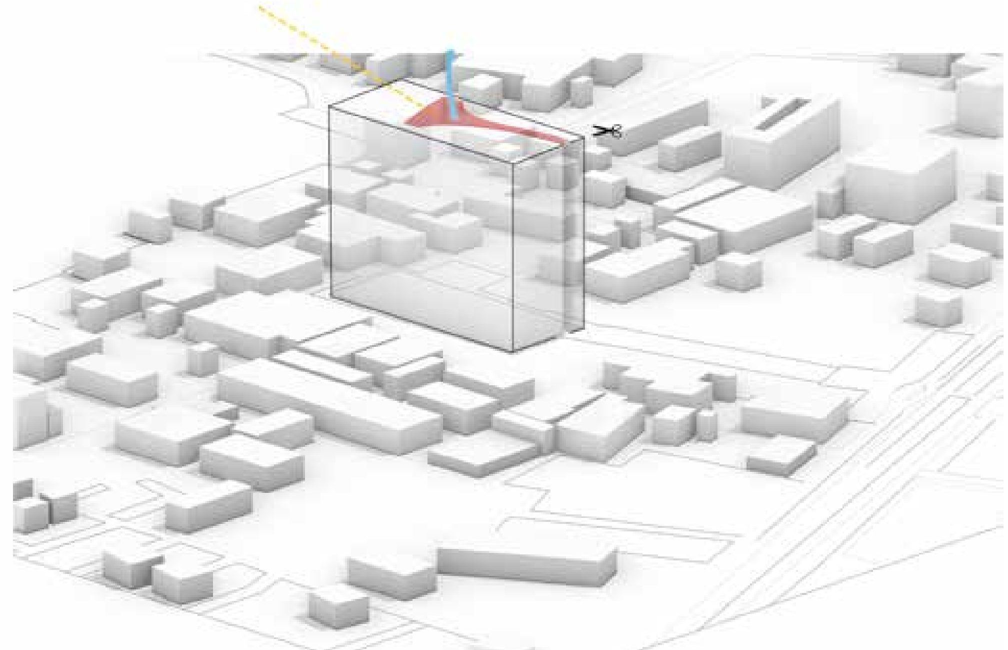
Site- In Lahore, Pakistan, overlooking a major artery connecting north and south of Lahore, which is Virurud Street and an area of 17.2 kanal



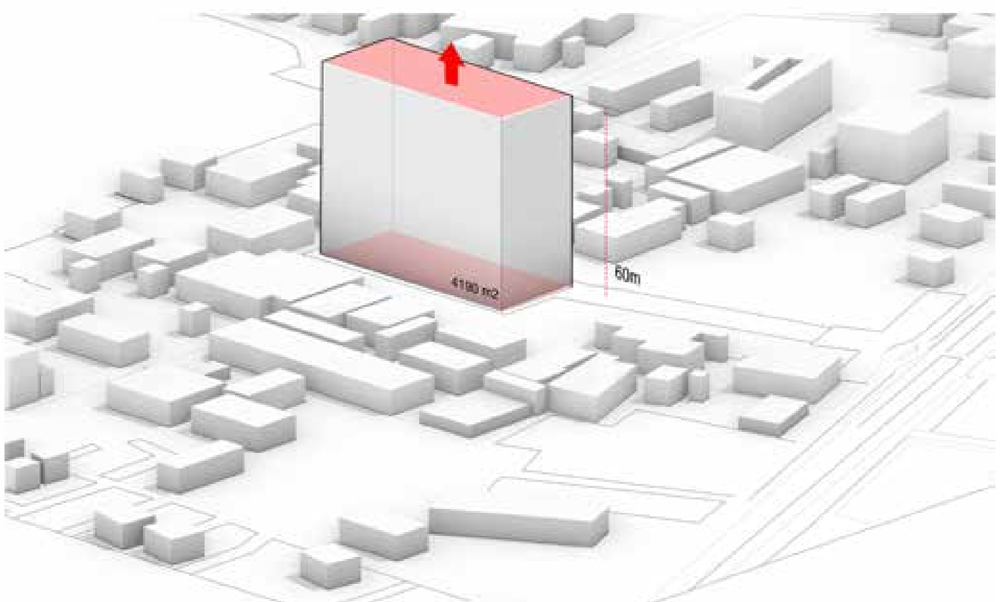
PATTERN- the office floor plates are as large as possible to maximize workspace,flexibility, orianted to maximize daylight and visual connecting . the main material is brick for good ventelation during the day



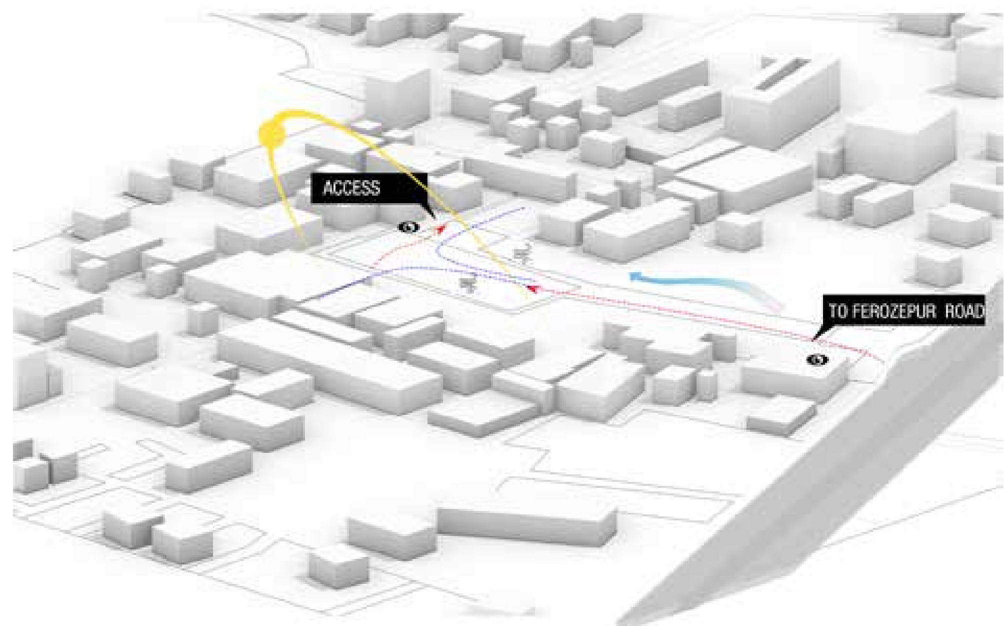
PLOT - the area of building plot is about 8.2 kanal



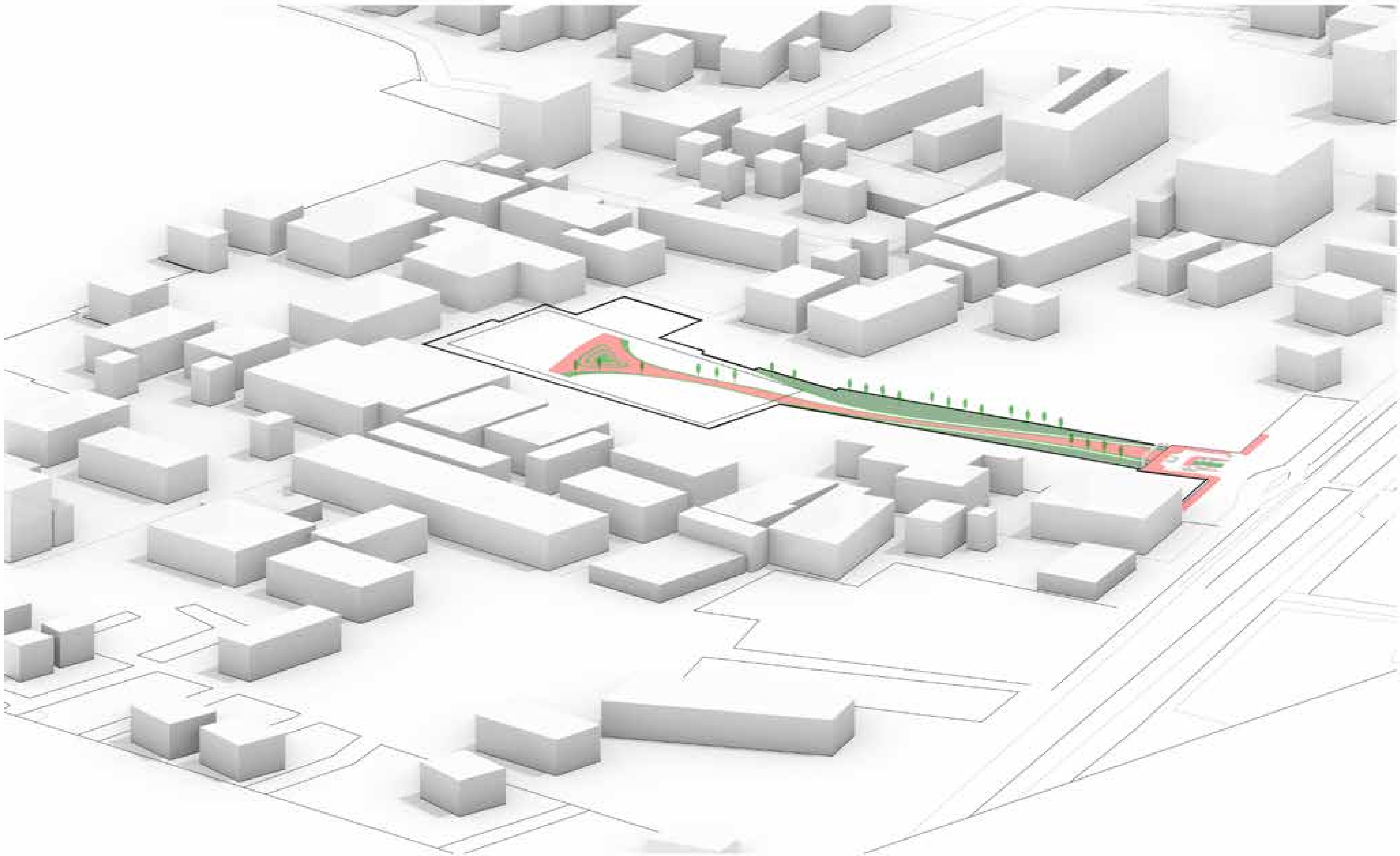
COURTYARD- introdusing court yards brings daylight and natural ventilation into the building ,as well as astonation views over the lush greenary and visual connecting between emploves and social relation between coworker



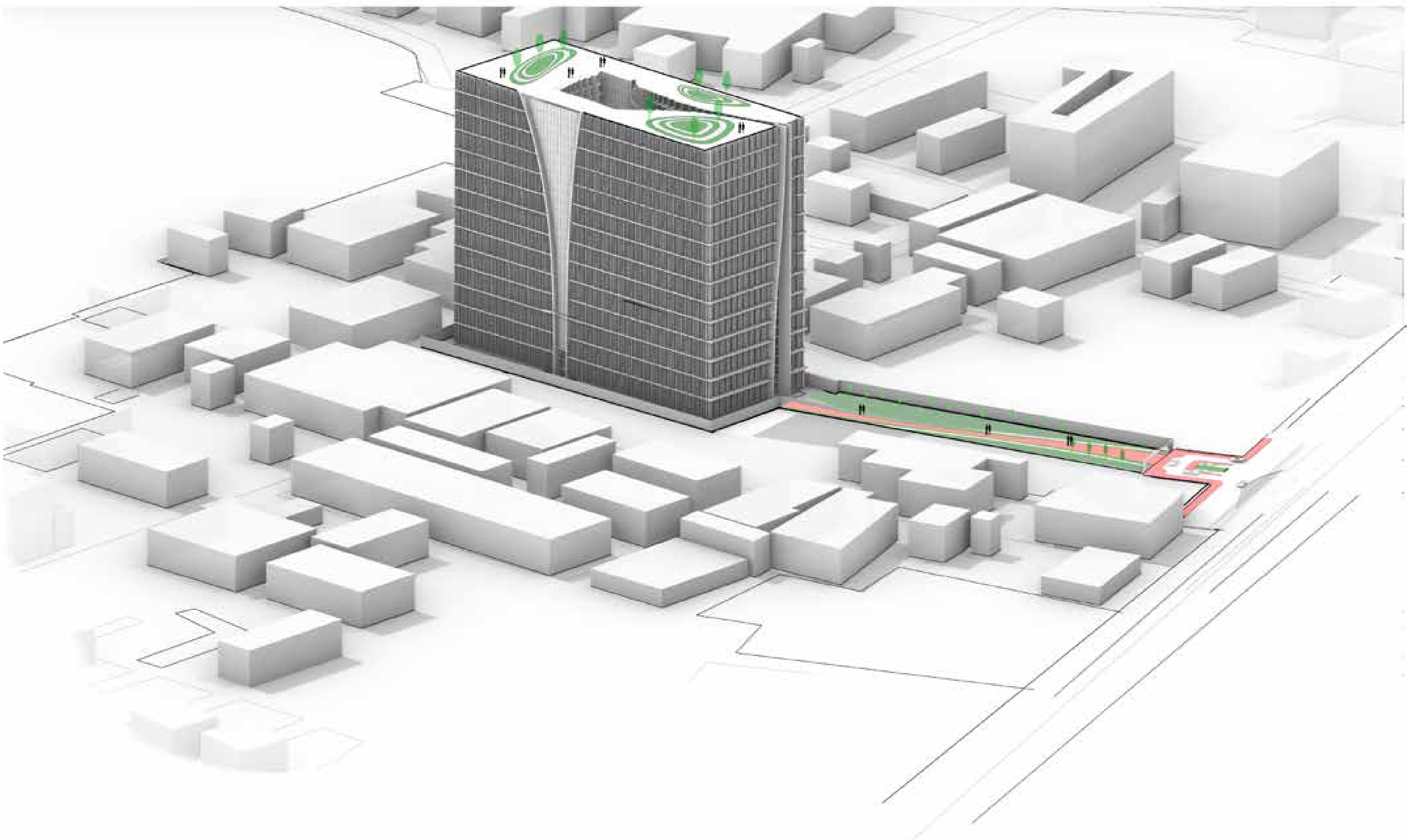
SITE- we generate 3 simple curves foremed by two main axes They have an effect on mass formation ferozepur road and Secondary Street In addition to studying the thermal comfort, wind and sun movement suitable for the method of shaping the



VIEW OPTIMIZING- we generate 3 simple curves foremed by two main axes They have an effect on mass formation ferozepur road and Secondary Street In addition to studying the thermal comfort, wind and sun movement suitable



LANDSCAPE- the entrance path is orianted to ferozpur road and to the building it is for pedestrian and ambulance cars ,fuel car s down to basement under ground by ramps where there are parking spaces
the path has continuous to building entrance by three ways



GREENARY- it is founded in land scape and especially in roof top to creat social activities

This intentional design choice transforms the interior into a dynamic, shared co-working ecosystem, where individuals can engage, exchange ideas, and collectively contribute to a collaborative and innovative professional atmosphere. The internal open facades become more than architectural features; they become catalysts for a synergistic and socially engaging work environment.

Cuboscape Tower

Ar Riyad ,Saudi Arabia

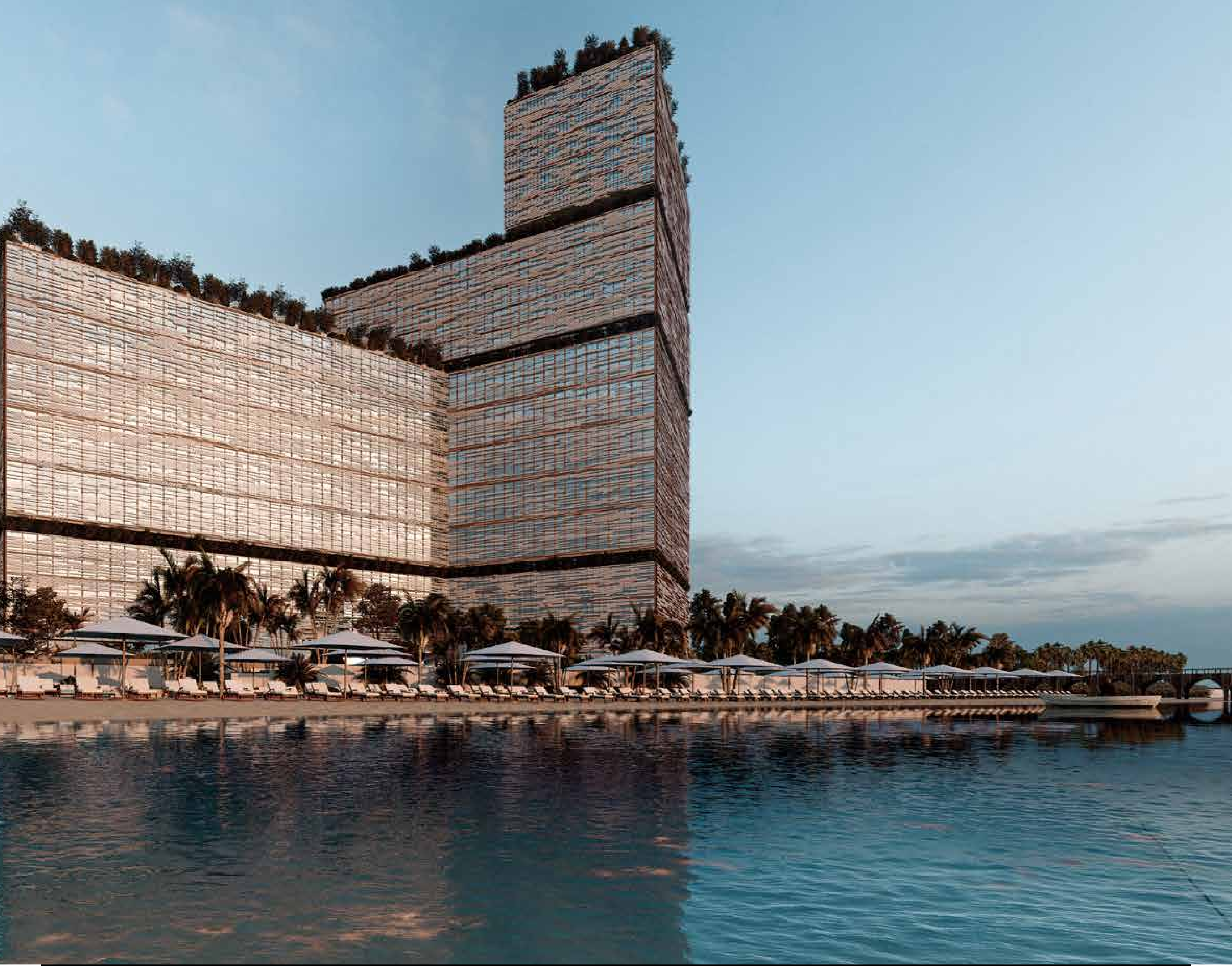
Client: Group A

Size: 5,058m²/5,4450f²

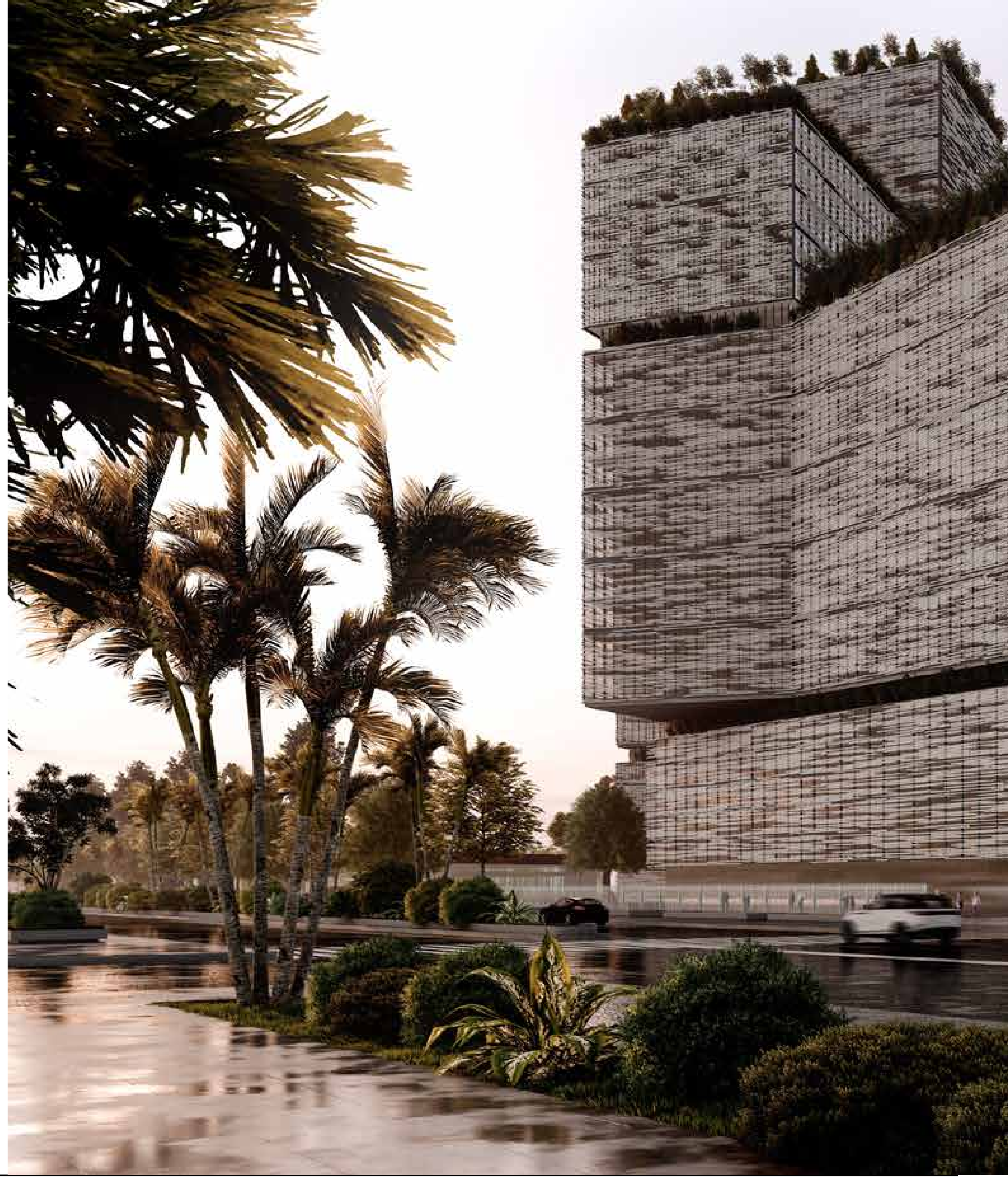
Status: Proposal

Typology: Office, Residential, Retail

Year: 2022



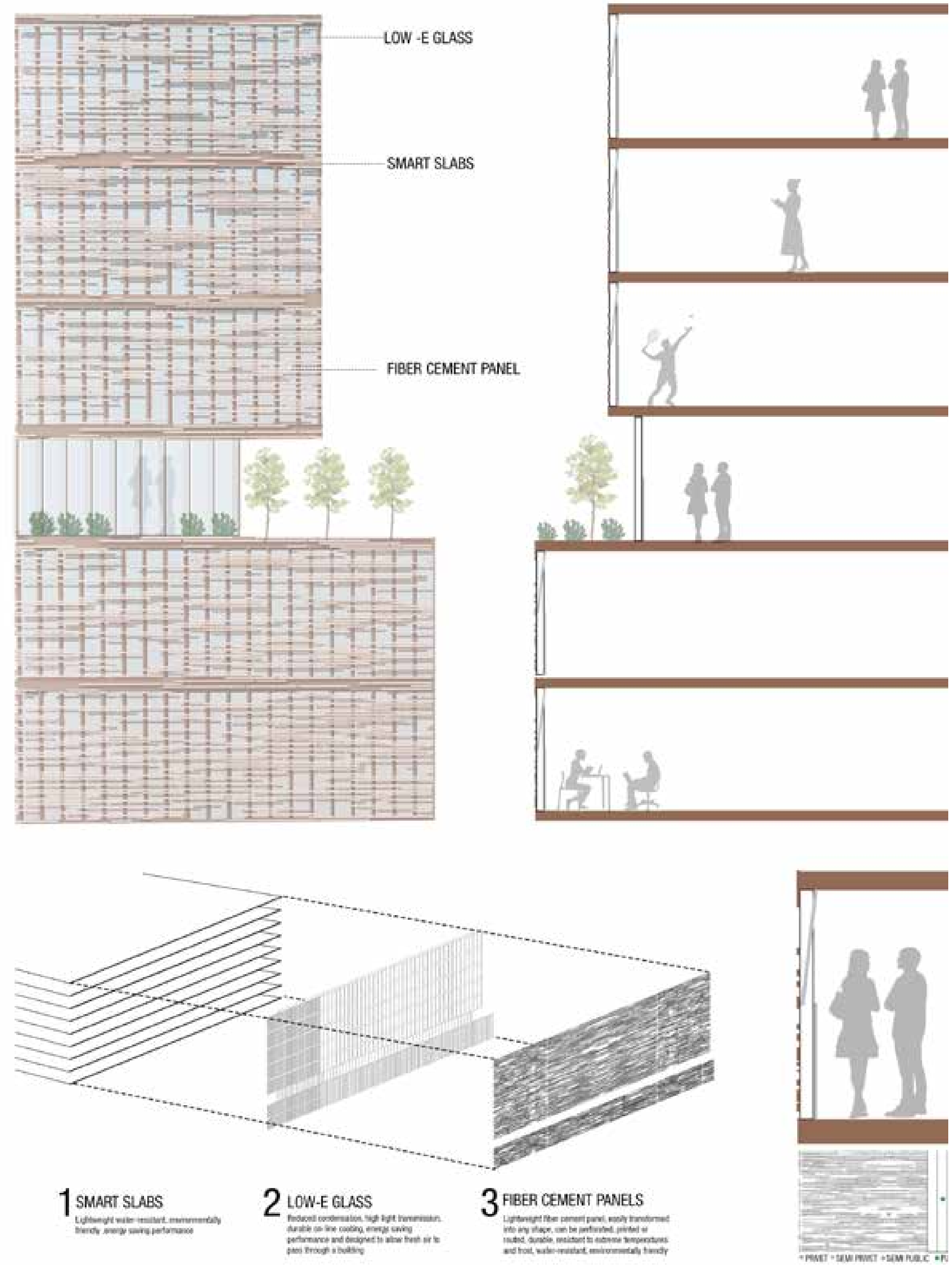
Rising on the coastline of Jeddah, KSA, this 29-floor beachfront resort is a meticulous fusion of form and function. The architectural composition revolves around thoughtfully positioned cuboids, strategically arranged to maximize panoramic views of the seaside. Each cuboid not only serves as a window to the coastal scenery but also plays a crucial role in casting dynamic shadows and crafting inviting terraces.



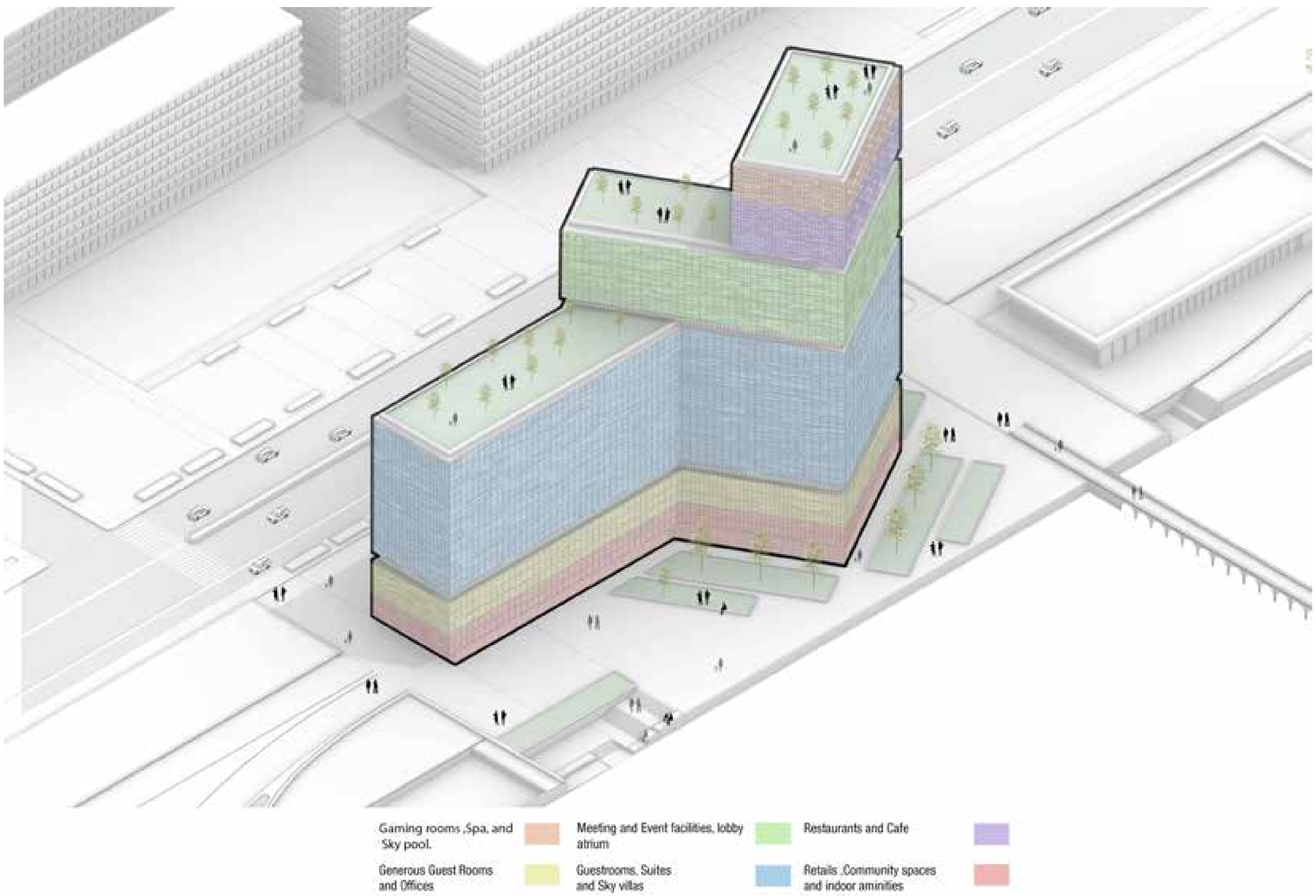
The facades are adorned with sun shading louvers, their varying density a product of careful solar studies. This not only shields the interiors from harsh sunlight but also imparts a rhythmic aesthetic to the gridded facade. Introducing intervals of greenery, these lush layers not only break the monotony but contribute significantly to the microclimate control within the building, creating an environment that seamlessly blends with the natural surroundings.

The introduction of green layers along the facades not only enhances the visual appeal but actively contributes to a controlled microclimate, fostering a sustainable and comfortable atmosphere inside. Furthermore, the sun shading louvers of the facades are crafted from lightweight and flexible fiber cement panels, allowing for customizable shapes while promoting environmental sustainability.

Tailored to solar studies, these louvers efficiently regulate sunlight, reducing the need for excessive cooling. Additionally, the use of low-emissivity (low-e) glass enhances energy efficiency by minimizing heat transfer, ensuring a stable indoor environment.

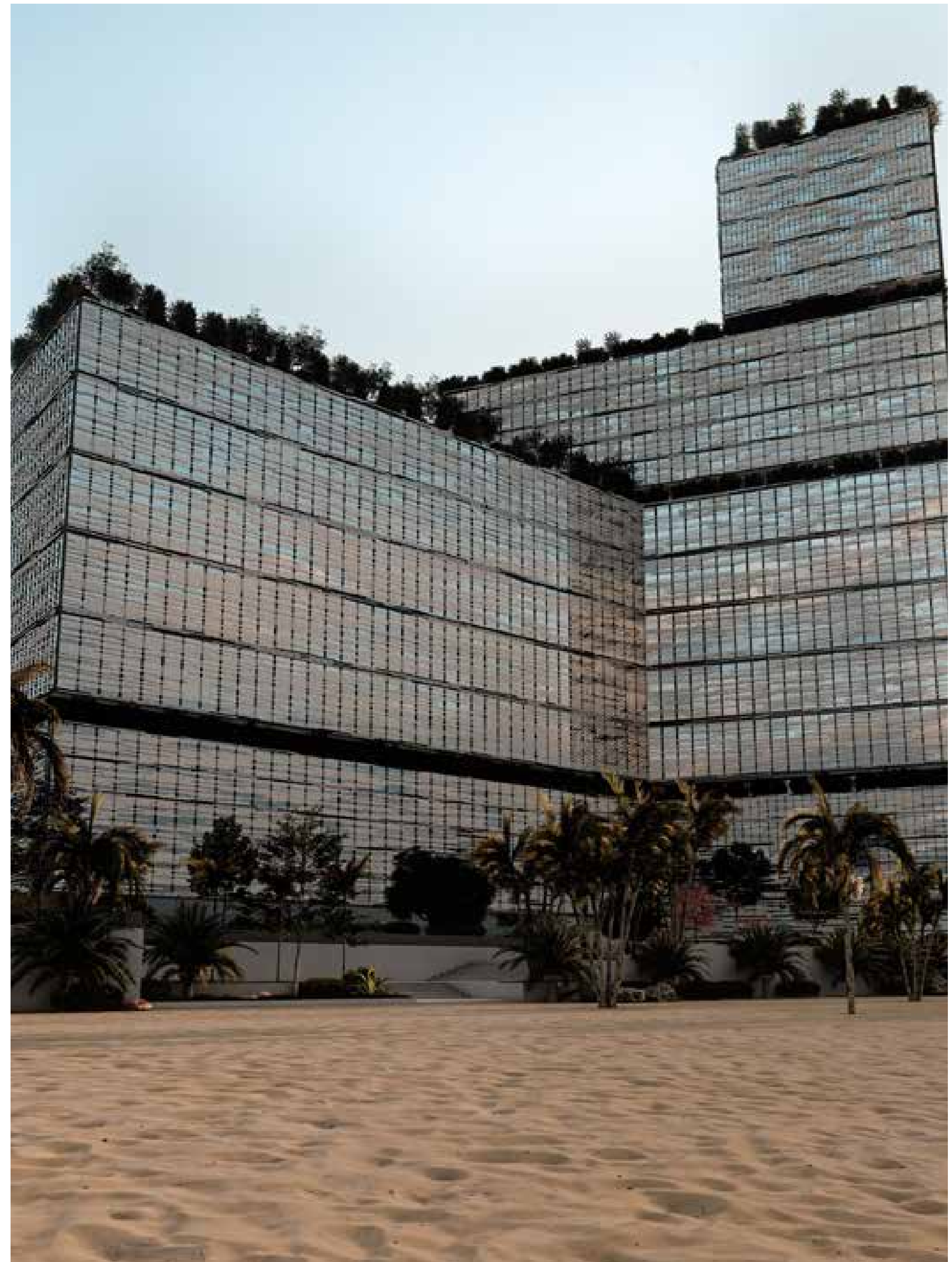


The resort's functionality is as diverse as its design is captivating. The first three floors house a vibrant blend of retail stores, community spaces, and indoor amenities, creating a lively and accessible atmosphere. As one ascends, the building's purpose evolves. Generous guest rooms and offices find their place on the 4th to the 6th floors, providing a comfortable and functional stay From the 8th to the 17th floors, the resort unveils an array of guestrooms, suites, and sky villas, offering elevated luxury and unparalleled seaside views. The 19th to the 23rd floors are dedicated to meetings and event facilities, ingeniously arranged around a central atrium. Continuing the vertical journey, the 25th to the 27th floors host a variety of restaurants and cafes, each designed to provide a unique culinary experience The culmination unfolds on the last two floors, the 28th and the 29th, where gaming rooms, spas, and a sky pool invite residents and guests to indulge in relaxation and entertainment.



By strategically adjusting the density of the louvers based on solar studies, the resort effectively regulates sunlight penetration. This enhances the visual and aesthetic aspects of the façade. The louvers act as a dynamic barrier, controlling the amount of sunlight entering the interiors and thereby optimizing the internal temperature and lighting conditions.

Creating a grand entrance experience for guests, the welcoming axis leading to the resort is more than just a physical pathway; it is a carefully choreographed experience. it is a carefully choreographed experience. It sets the stage for the unique architectural features, panoramic views, and the overall ambiance of the beachfront resort, ensuring that guests feel embraced and captivated from the very first steps of their journey.



Regalia Tower

Lahore ,Pakistan

Client: Swiss Group

Size: 3,000m²/ 13,229f²

Status: In Design

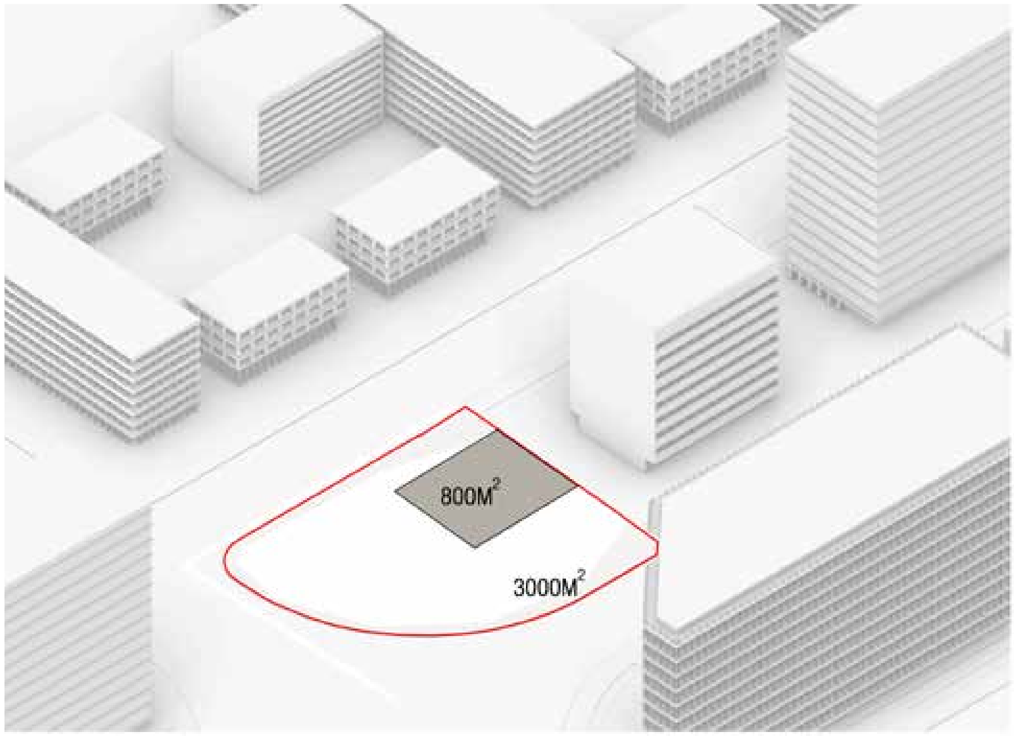
Typology: Office, Retail

Year: 2022

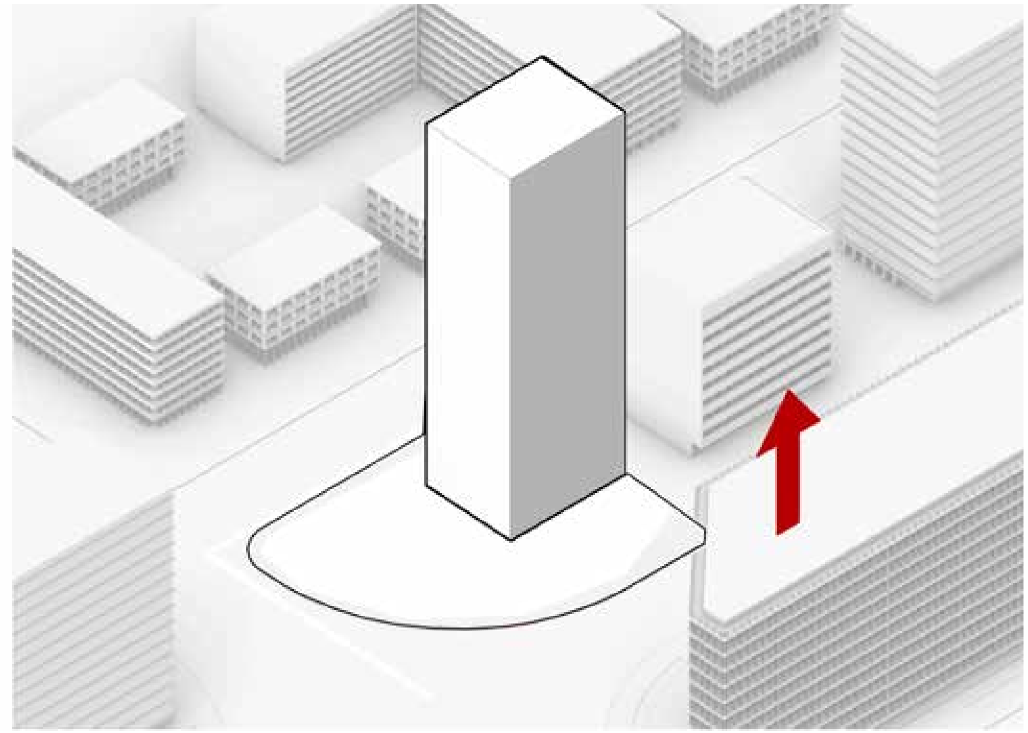
In the dense urban fabric of Karachi, Pakistan, Crafted by RPA Studio this towering masterpiece is a transformative upgrade of the cityscape, redefining the skyline with its seamless blend of tradition and modernity.

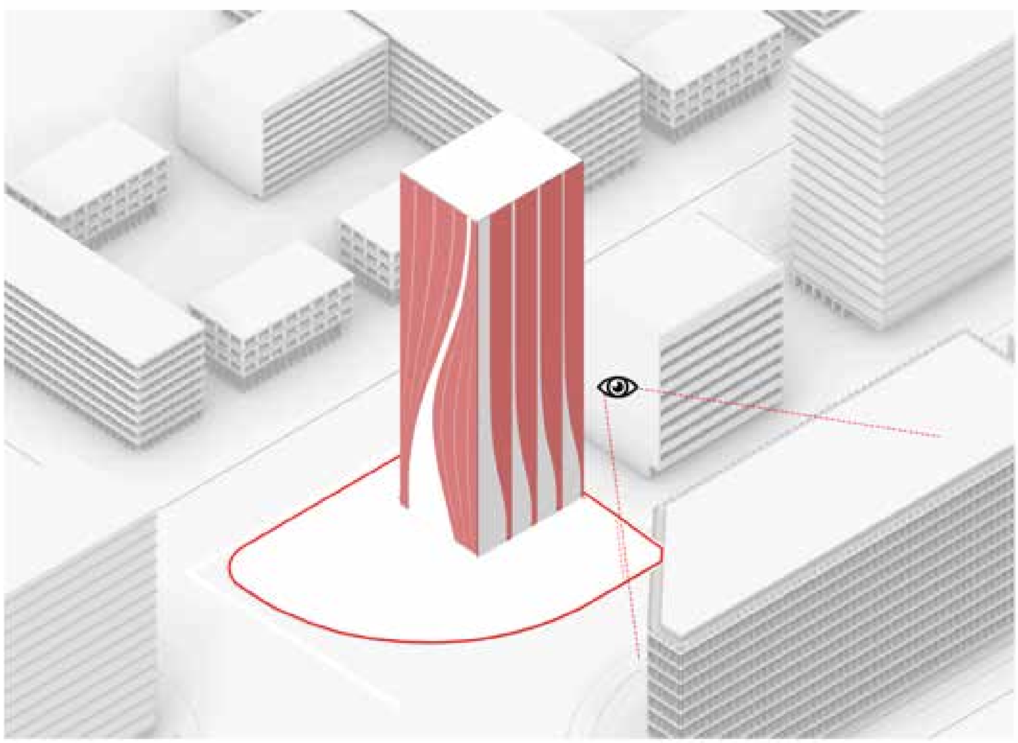
This mixed-use tower rises to a height of 93 meters, spanning 29 floors on a plot of 3000 m^2, Drawing inspiration from the towering columns and intricate ornaments that define the grandeur of historical Mughal buildings, the facade features a mesmerizing interplay of organic vertical lines that gracefully link each floor, creating a sense of continuity and unity.

The prominent columns, reminiscent of those seen in Mughal structures, command attention as they rise vertically along the facade. These stately elements not only contribute to the structural integrity of the tower but also serve as a symbolic bridge between the historical architectural legacy and the contemporary skyline of Karachi, These columns take center stage as organic vertical lines linking the various floors together.

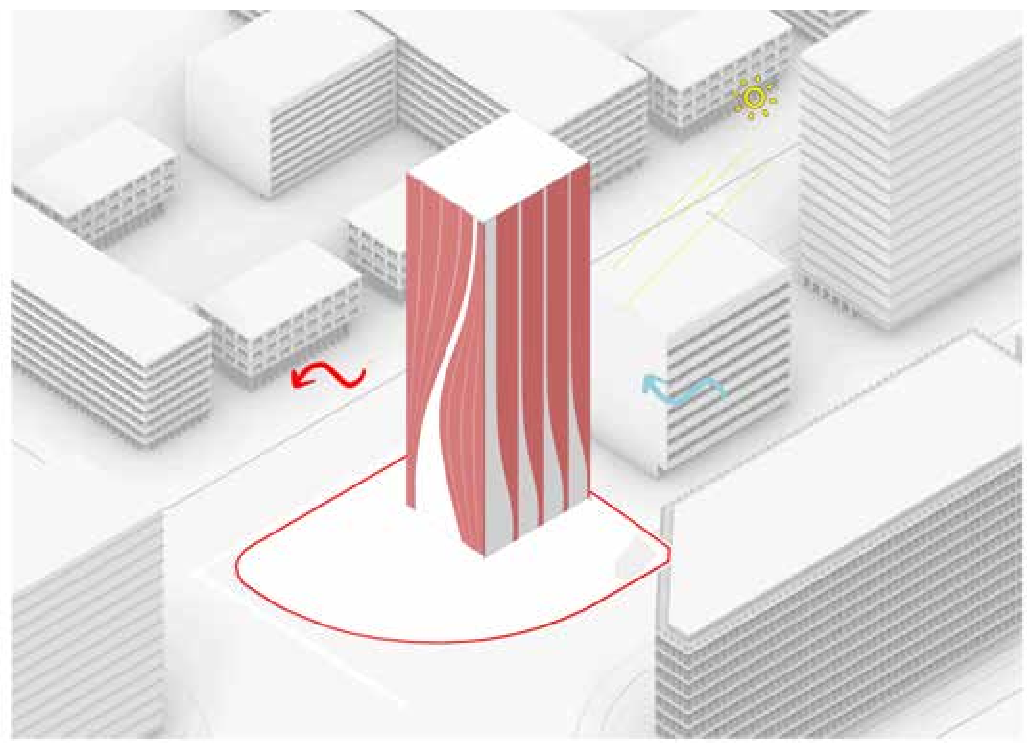


SITE





VIEW AND ENTRANCE



SIMULATION

The design ingeniously incorporates distinct features on both the north and west-facing facades. The north facade boasts a vertical recessed slot, curving and linking the ground floor to the roof garden, serving as a visual marker and emphasizing the building's entrance. Meanwhile, the western face introduces undulating curves embodied in planar panels, contributing to the overall visual identity.

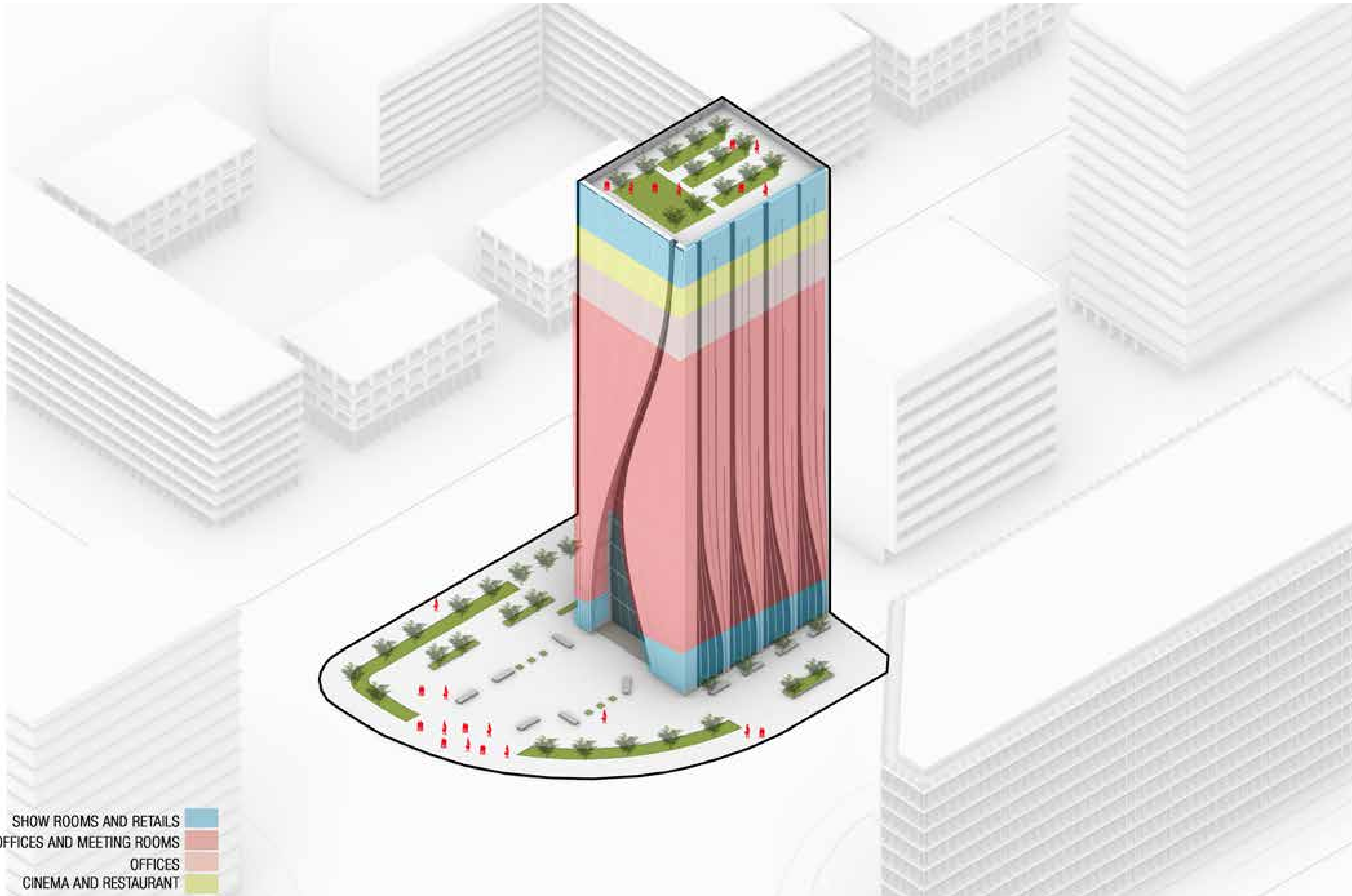
The vertical recessed slot is adorned with polished stainless steel featuring an intricate perforated pattern, while Ecopact concrete, chosen for its durability and eco-friendly nature, graces the planar panels.

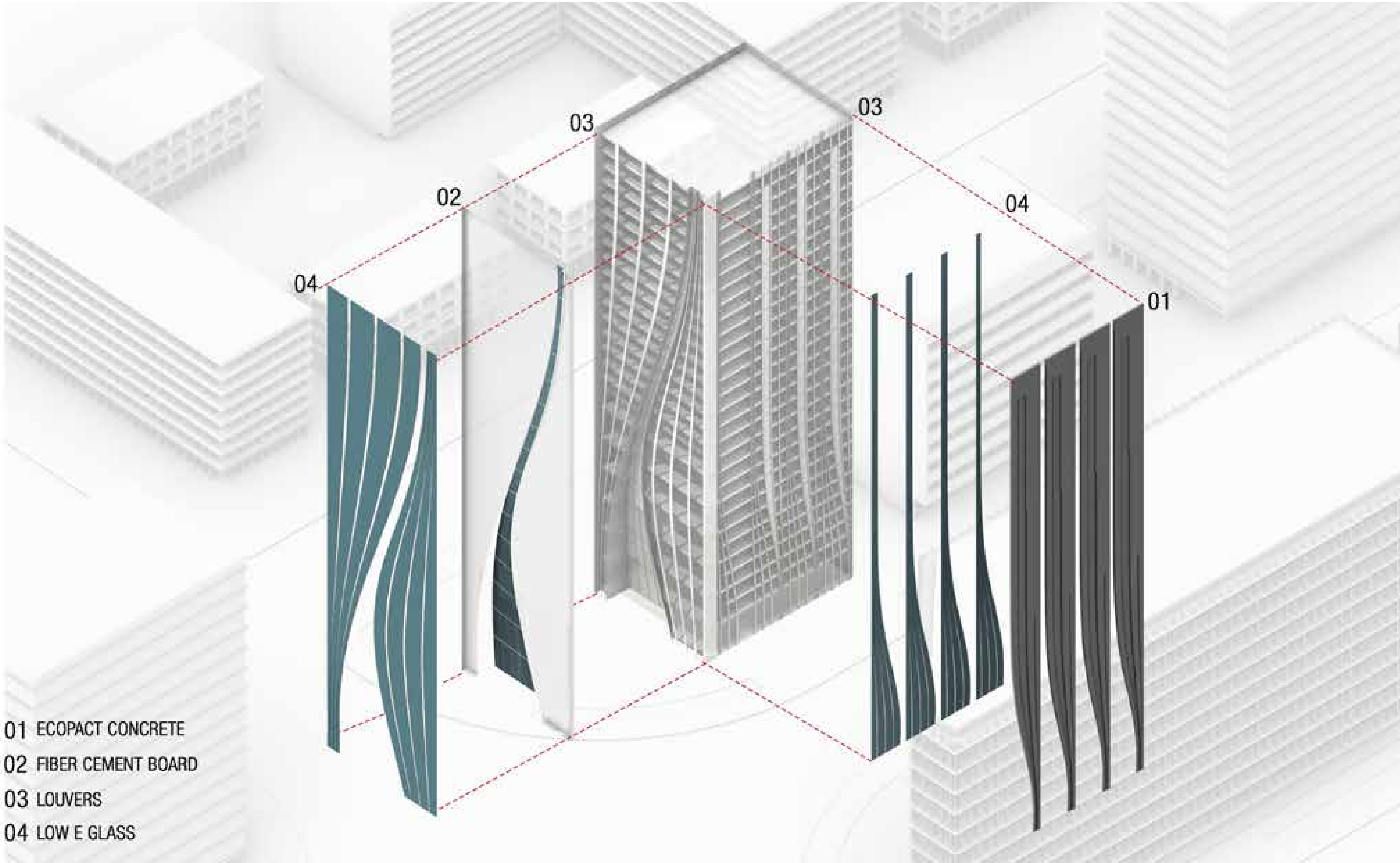
GREENARY

The entrance of the Tower is a grand and distinctive experience, artfully defined by the towering organic columns that serve as not only structural elements but also as captivating design features.

The height and grace of these organic lines command attention and evoke a sense of reverence, inviting visitors into a space that pays homage to PAKISTAN'S rich cultural heritage.

The functionality of this tower seamlessly integrates with its urban surroundings. The ground, first, and second floors house showrooms and retail stores, establishing a vibrant street-level presence. From the 4th to the 24th floor, the tower transitions into office spaces, providing a dynamic and efficient work environment. The 25th and 26th floors offer a cultural escape with a cinema and restaurants, providing entertainment options for occupants and visitors alike. The last three floors return to retail spaces, creating a diverse and engaging experience. The rooftop, designed as a lush garden, not only enhances the visual appeal but also serves a practical purpose supplying the restaurants below with fresh produce, fostering sustainability and a connection to nature.





EXPLODED FACADE

In its commitment to sustainability, this tower incorporates various eco-friendly features. The use of low-E glass enhances energy efficiency by minimizing heat transfer, contributing to a comfortable interior environment and reducing reliance on artificial cooling. Additionally, the inclusion of a green roof not only adds aesthetic value but also promotes environmental sustainability by reducing storm water runoff, providing insulation, and supporting biodiversity. The choice of Ecopact concrete, with its recycled materials, aligns with a vision of responsible construction. Through these sustainable initiatives, the tower aims not only to stand as a visual landmark but also as a conscientious contributor to Karachi's urban ecosystems

Adding to the allure of the entrance are the curves adorned with perforated concrete, inspired by the delicate and intricate patterns found in Mughal ornaments of Pakistan. Together, the organic columns and the perforated curves redefine the concept of entrance, turning it into a multisensory and culturally rich experience.

Al-Sham Bank

Damascus ,Syria

Client: Al Sham Bank

Size: 510m² / 5,489f²

Status: Proposal

Typology: Office

Year: 2018

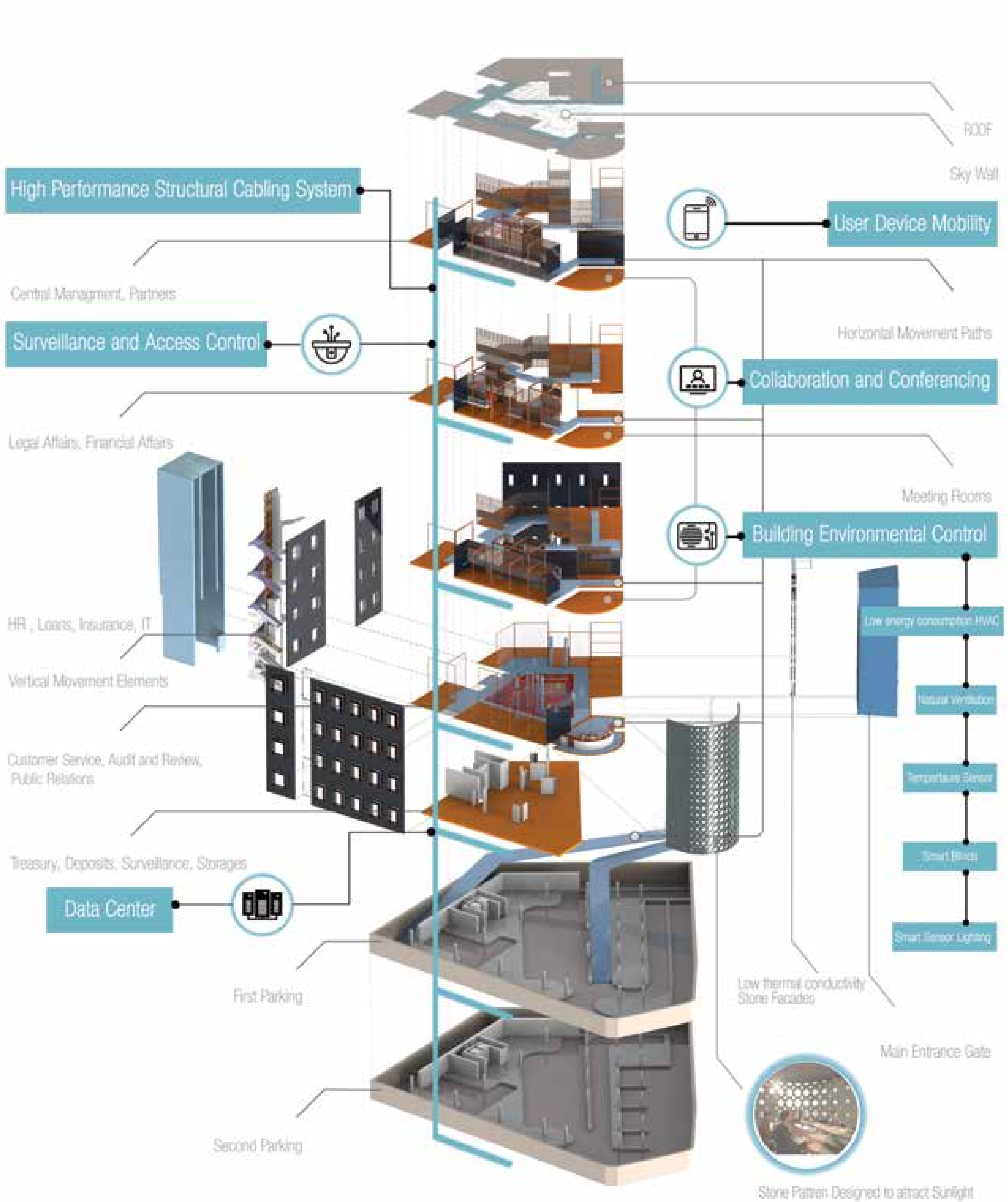
The transformation of Al-Cham Bank by RPA involved maintaining the existing structure and employing sustainable methods to dismantle the former facade. The outcome is a versatile office building crafted to accommodate the current and future needs of employees.

This approach is in line with the industry's shift towards emphasizing the refurbishment and renewal of existing structures, giving priority to sustainability and the preservation of historical significance.

Redefining Office Spaces for Enhanced Well-being Taking cues from the revitalized building, thoughtfully optimized floor plans prioritize views and ample daylight, significantly influencing a positive energy balance and enhancing the overall comfort of occupants.

With features like a new entrance, seamless connectivity, and a purposeful gradient of activity within office floors, our design contributes to fostering an ideal workplace environment.

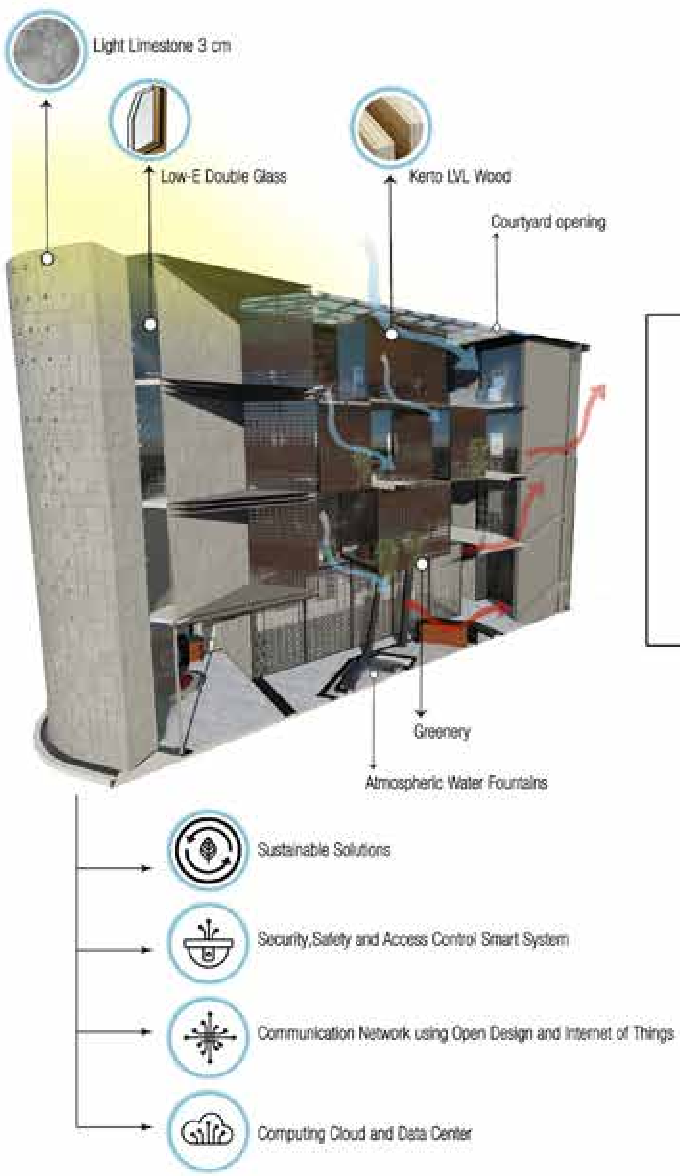
Exploded Smart Analysis

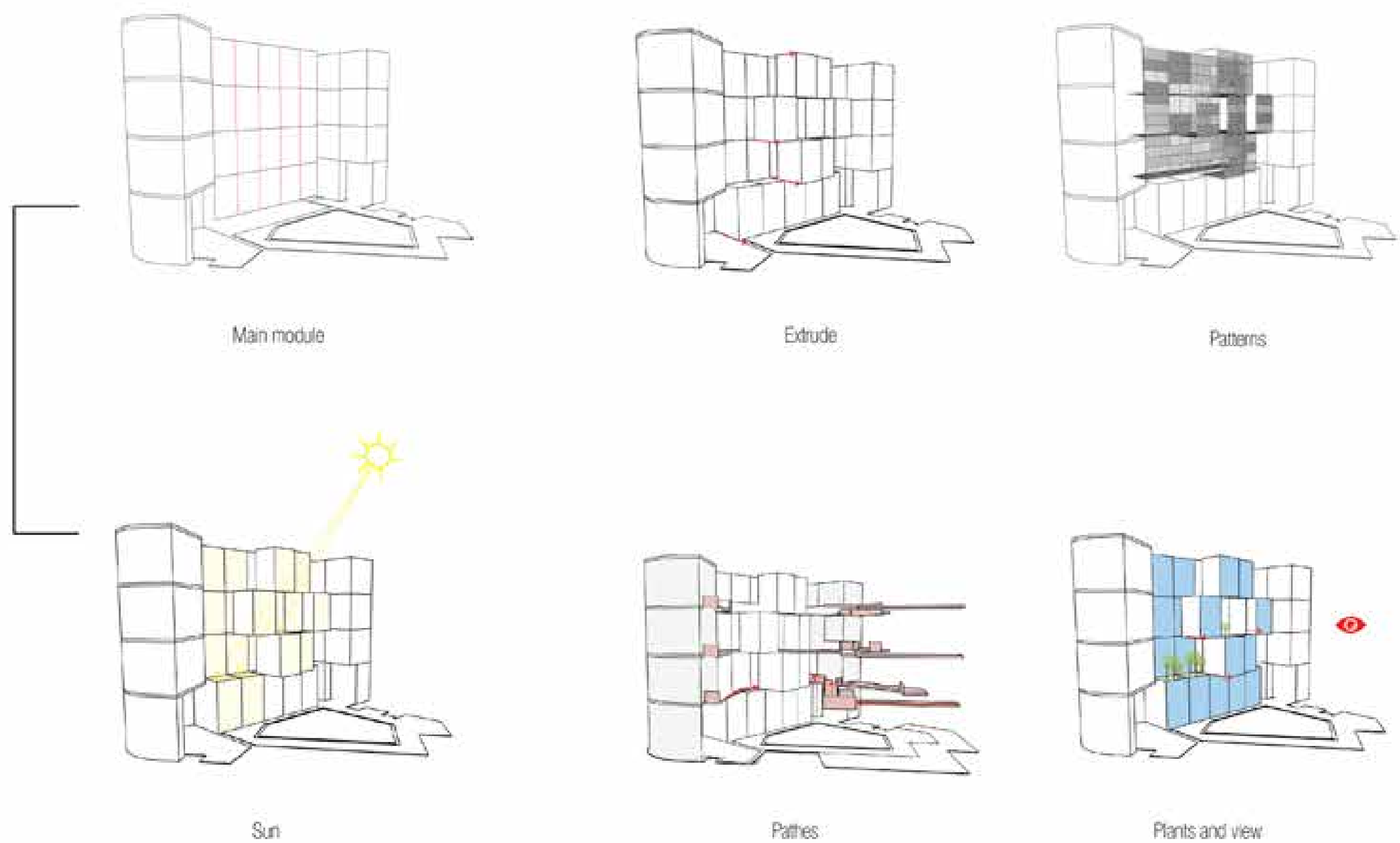


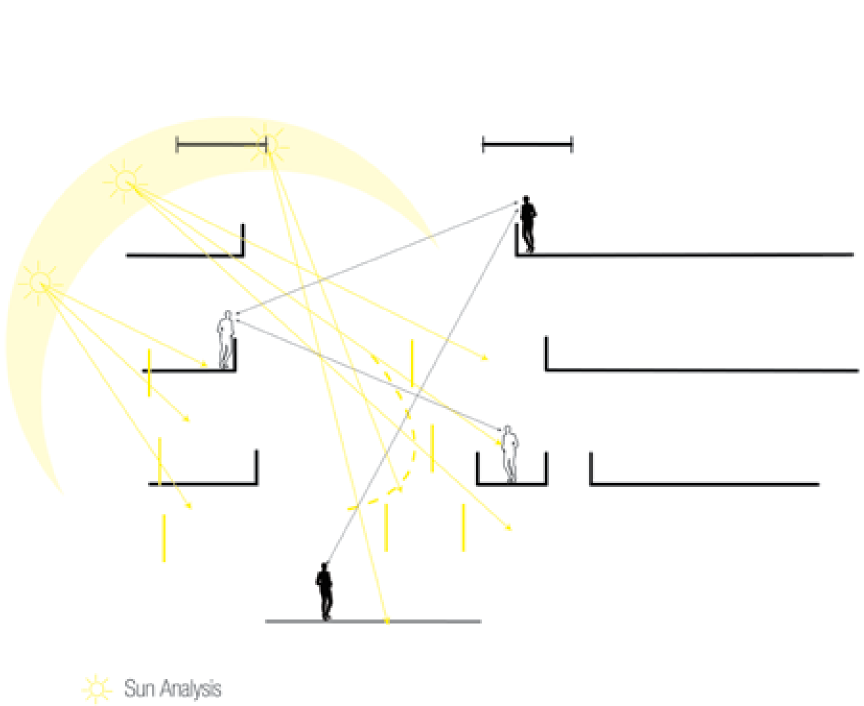
Our design seamlessly integrates high-performance structural systems, surveillance, access control, and open-space communication for enhanced adaptability and security. Sustainability is a core focus, utilizing smart technologies such as a computing cloud, power-efficient devices, and environmental controls to ensure efficient building management and reduced energy consumption.

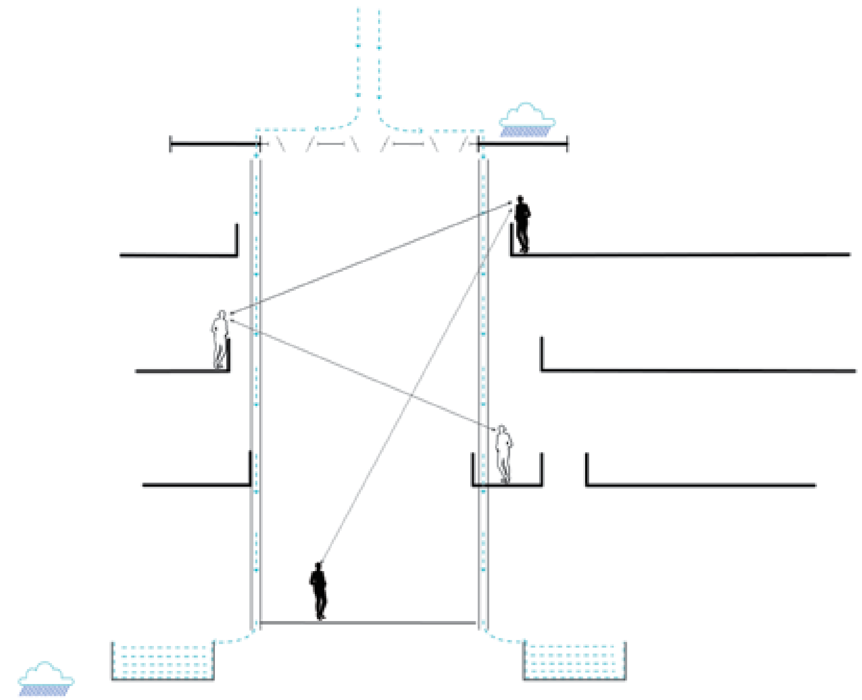
The project's essence lies in creating adaptable and eco-friendly spaces, exemplified by an inner courtyard promoting a dynamic environment with geothermal heating, solar panels, and water-based climate solautions. This commitment to cultural preservation, sustainable practices, and cutting-edge technologies reflects a transformative approach, transcending traditional spaces into modern marvels that prioritize decreased energy consumption, heightened space efficiency, and elevated resident comfort.

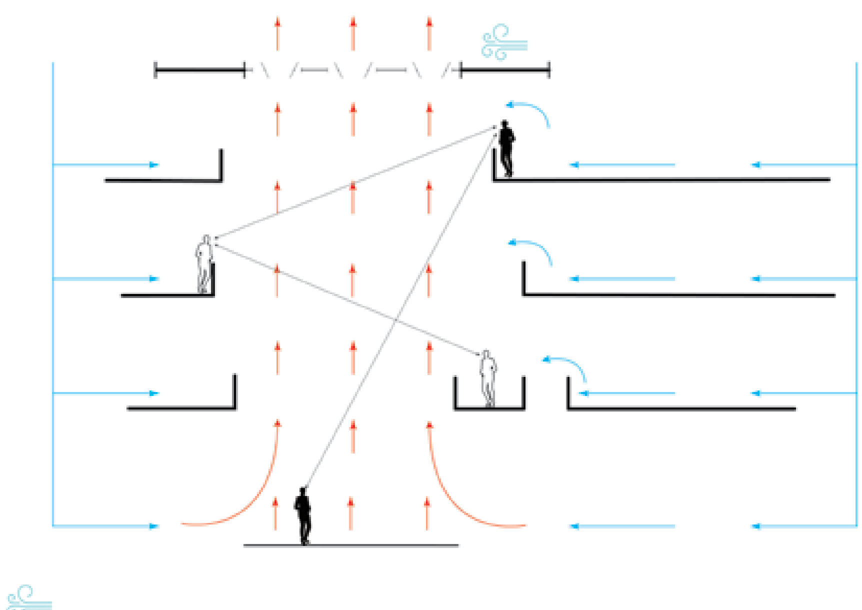

Powe Consuming Devices
Temperature Sensor
Air Conditioning
Computing Cloud
Smart Sensor
Control Network
Security
Access Control
Smart Lightning
Verstile Physical Layer Connectivity

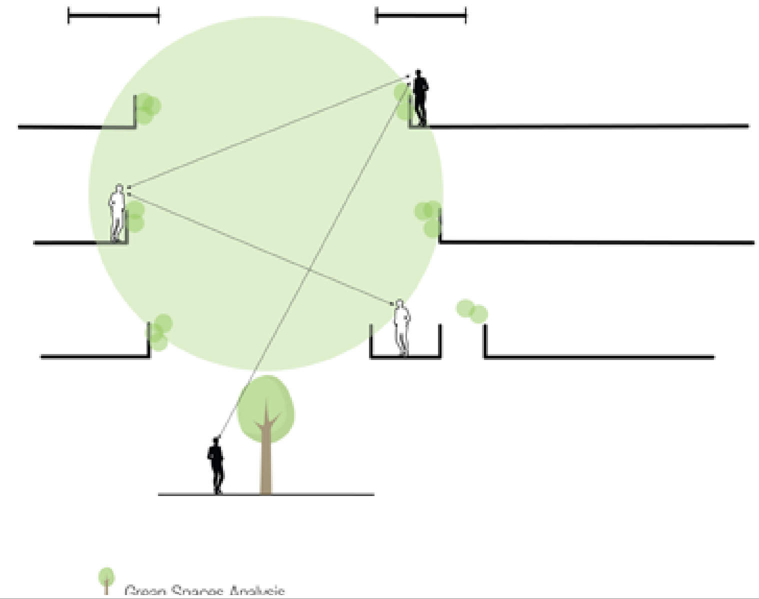

Light Limestone 3 cm
Low-E Double Glass
Kerto LVL Wood
Courtyard opening
Greenery
Atmospheric Water Fountains
Sustainable Solutions
Security,Safety and Access Control Smart System
Communication Network using Open Design and Internet of Things
Computing Cloud and Data Center

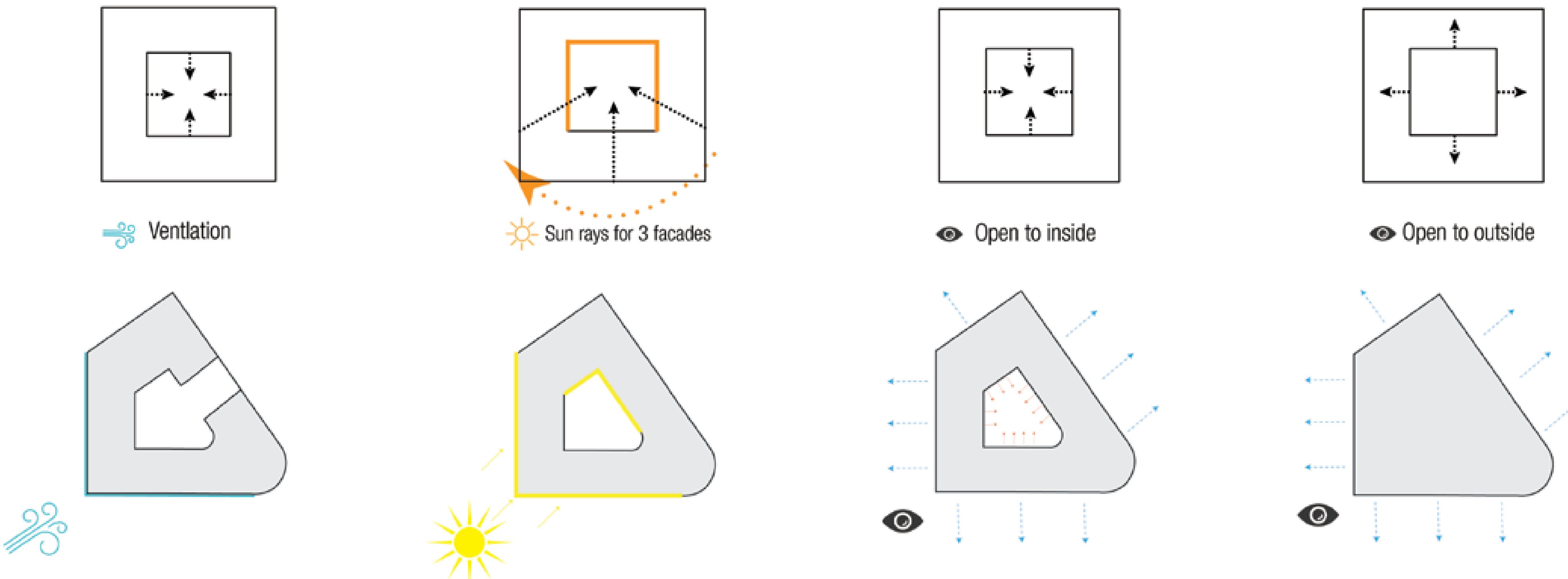

Main module
Extrude
Patterns
Sun
Pathes
Plants and view


Sun Analysis






Green Spaces Analysis



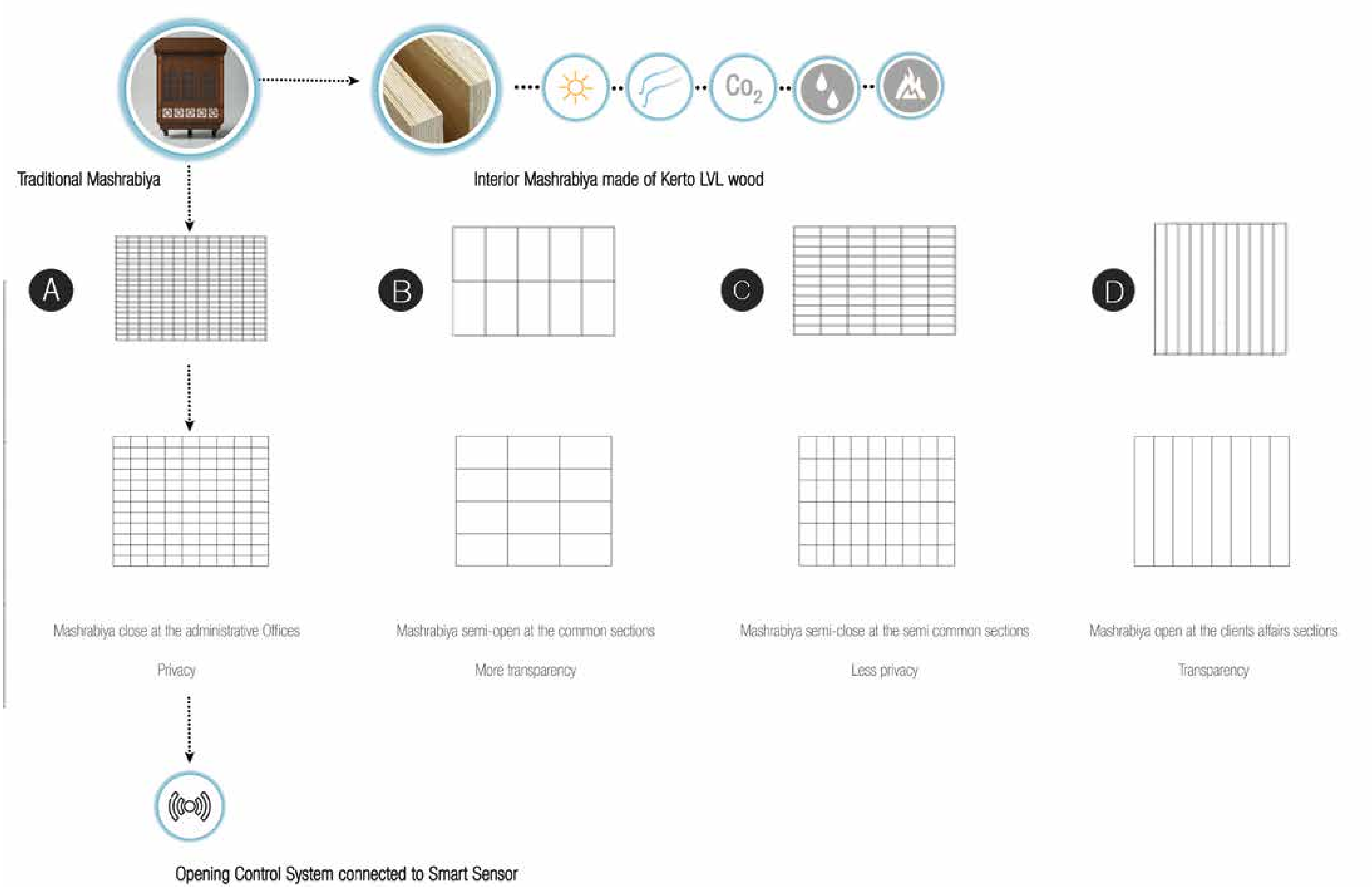
In addition, the vacuum designed to be opisite to the wind direction

The court yard in the old Damascus house played a role in heating exchange trade between the house sections

The court yard in old Damascus houses is to secure a suitable climate because of the permanet trees work on the temperature in the shade and temper

Modern houses are designed to be open to the inside

The facades conditions of Al-Cham Bank allowed for preservation, resulting in a reduction of approximately 30% in the CO2 footprint compared to constructing a new building. Sustainable practices in both demolition and construction lay the groundwork for an environmentally conscious development, addressing the challenges posed by the previously inaccessible structure and creating a unified workspace for the evolving workforce.



In our pursuit of a visionary transformation with the Al-Cham Bank Revitalization project in Damascus, Reparametrize Ateliers (RPA) has demonstrated a deep commitment to preserving the city's identity. To achieve this, we conscientiously developed the Damascus local pattern, incorporating indigenous materials such as solid wood and stone.

This deliberate choice not only pays homage to the traditional architecture of Damascus but also infuses a sense of locality into the project.

By seamlessly blending these local elements with our modern design, we have successfully revived the city's architectural legacy in the context of urban development.

Sonata Tower

Lahore ,Pakistan

Client: IAN Contracting

Size: 3,716 SQM./ 40,000 SFT.

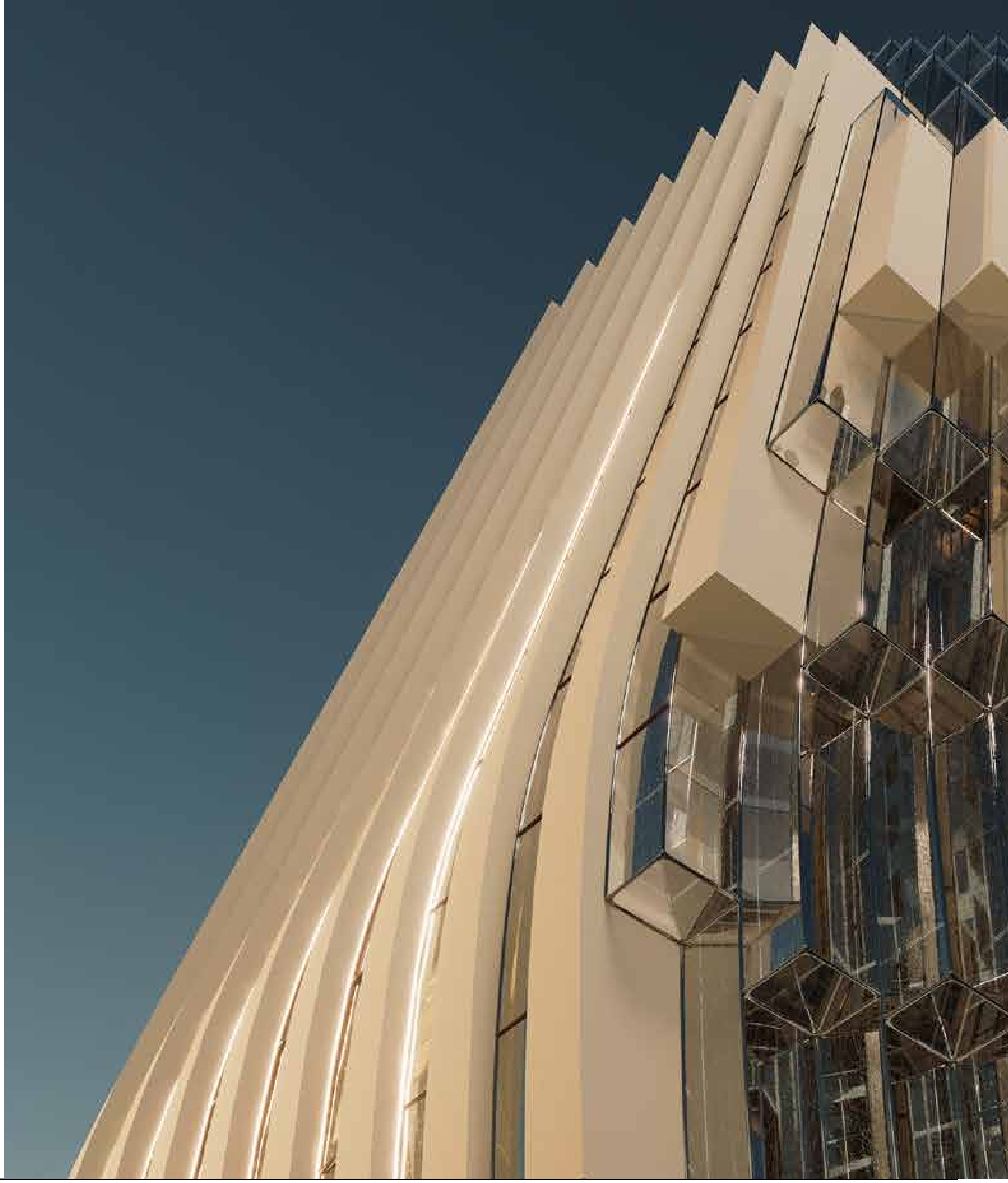
Status: Proposal

Typology: Office

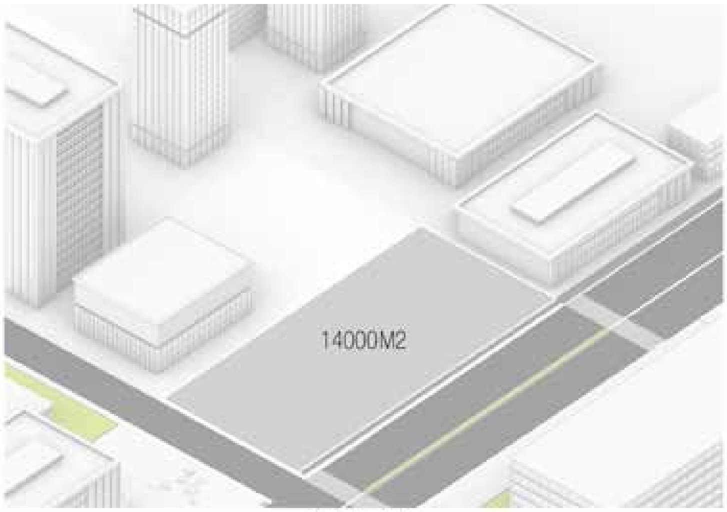
Year: 2022

A striking testament to contemporary design, Sonata Tower ascends from the heart of Lahore's bustling metropolis. This meticulously crafted high-rise embodies a seamless dialogue between form and functionality. The tower's conception transcended the mere addition of another structure to the cityscape. Instead, it represents a meticulously orchestrated symphony of urban design.

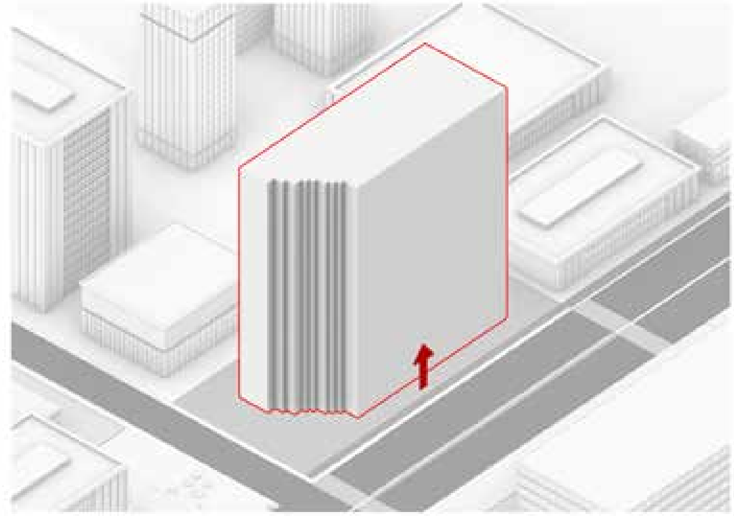
The interplay of steel, glass, and concrete resonates with the city's vibrant rhythm, creating a structure that is both aesthetically captivating and functionally exceptional. The Sonata Tower facade transcends the realm of the conventional, captivating the eye with a meticulously orchestrated interplay of geometric forms.

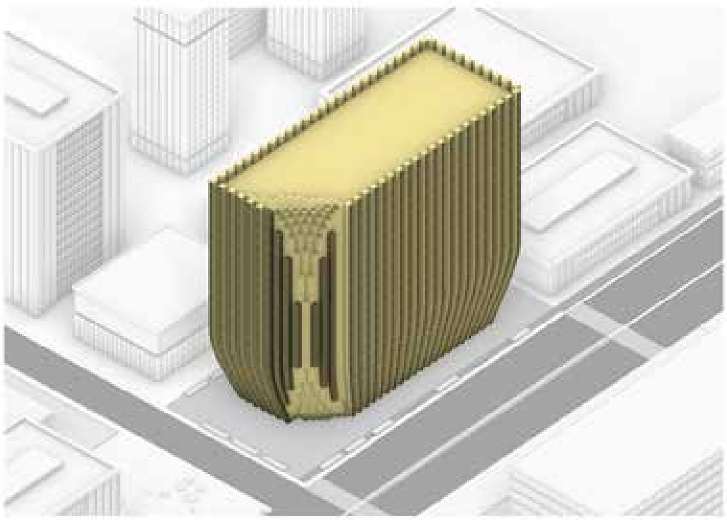


This innovative facade design represents a purposeful integration of form and function, exceeding mere aesthetics. The meticulously calculated twist optimizes energy efficiency through a two-pronged approach. By maximizing natural light penetration for select interior spaces, the design has the potential to significantly reduce reliance on artificial illumination. Additionally, the louver-inspired form may contribute to minimizing solar heat gain on specific elevations, depending on the tower's overall orientation. This exemplifies Sonata Tower's commitment to a holistic design philosophy, meticulously integrating form and function to create a captivating and demonstrably sustainable structure.



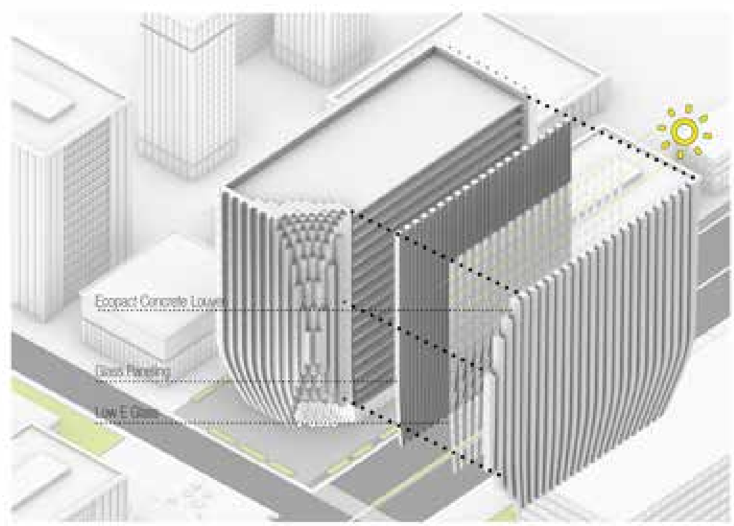
Plot Boundary


Main Volume


Glazing


louver


Adding Landscape



Twisted Facade Sun Simulation


HOTEL

Sonata Tower embodies a commit Borrowing inspiration from the louver's functional elegance, each floor subtly spirals outward. This creates a dynamic surface that engages in a choreographed ballet with the sun's rays throughout the day, transforming its visual character with every changing angle of light. ment to environmental responsibility through a meticulously crafted energy optimization strategy. By employing cutting-edge sun simulation software to model the solar path across the Lahore sky

throughout the year. This data-driven analysis informed the precise positioning of each glazing panel and precast concrete louver, ensuring optimal solar control.

The Sonata Tower exterior is adorned with a mesmerizing interplay of precast concrete louvers. These meticulously crafted elements transcend mere aesthetics, serving a dual purpose enhancing the building's visual character and optimizing its environmental performance. The louvers' rhythmic arrangement creates a captivating play of light and shadow throughout the day, imbuing the facade with a dynamic texture. **This interplay of light and dark adds a sculptural dimension to the building's exterior, fostering visual intrigue.** More importantly, the louvers play a critical role in the tower's energy optimization strategy. By strategically positioned to manage solar heat gain, they effectively shield the interior from harsh sunlight. This reduces reliance on mechanical cooling systems, creating a more comfortable and sustainable work environment for occupants.

Verdant Towers

Lahore ,Pakistan

Size: 287 Kanal

Status: Proposal

Typology: Residential , Commercial

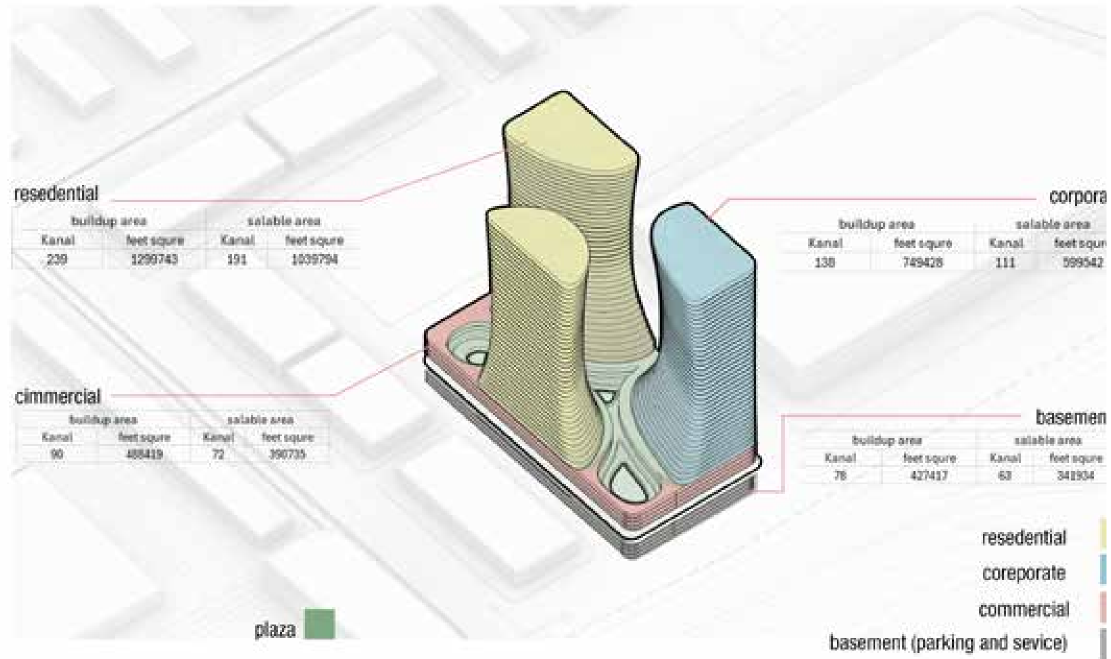
Year: 2024

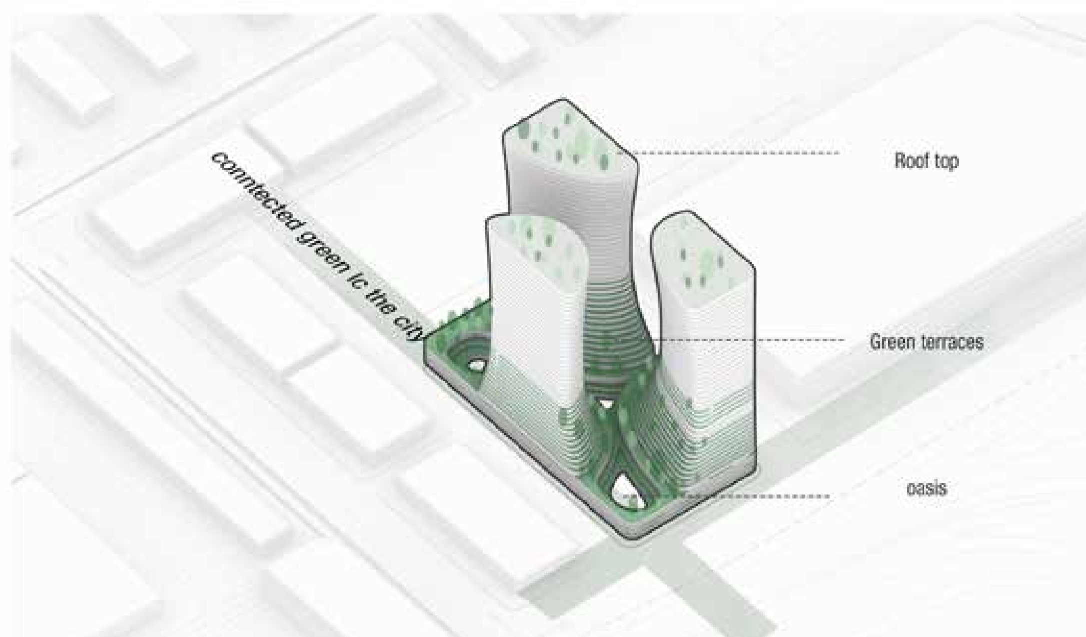
The Verdant Towers project envisions a mixed-use development in Lahore, Pakistan, encompassing commercial, residential, and corporate spaces across a sprawling 287 Kanal site. Strategically located near key urban nodes like Dolmen Mall and Main Boulevard, the project prioritizes connectivity and accessibility.

A central design tenet is the seamless integration of green spaces, featuring rooftop gardens, terraced landscapes, and a central oasis designed to foster a vibrant social environment and enhance urban biodiversity. The towers' form and orientation are carefully considered to maximize panoramic city views and optimize space utilization within the site's constraints.

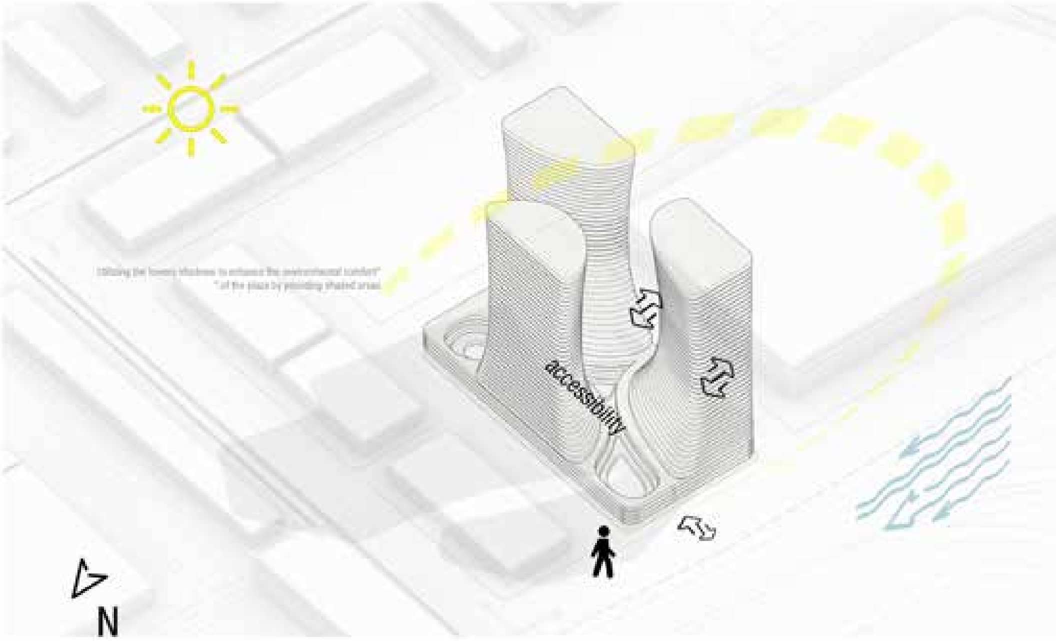
The Verdant Towers design process is grounded in a rigorous and iterative approach, prioritizing both aesthetic vision and performance-driven optimization. The process began with a thorough analysis of the site's context, including solar orientation, prevailing winds, and surrounding urban fabric. **This analysis informed crucial design decisions regarding the towers' orientation, massing, and the overall site strategy.**

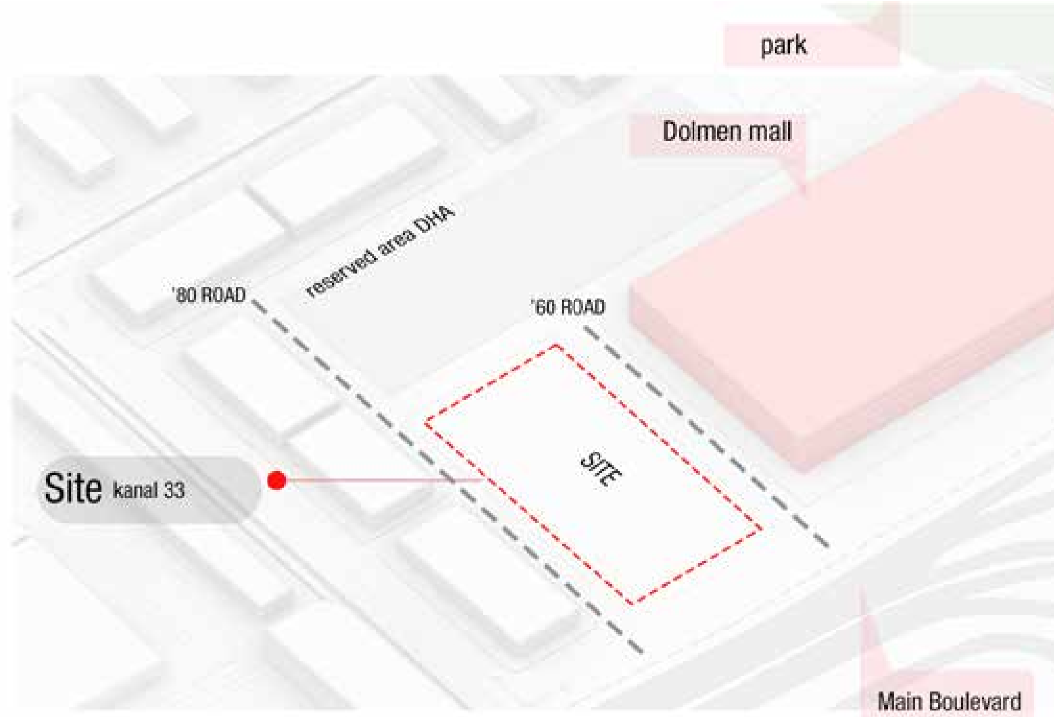
Parametric design tools played a central role in exploring and refining the facade's complex geometry, allowing for extensive experimentation and the seamless integration of performance criteria. The design process emphasized a dynamic interplay between form-finding, environmental responsiveness, and functional considerations, ultimately leading to a design that is both visually striking and highly performative.



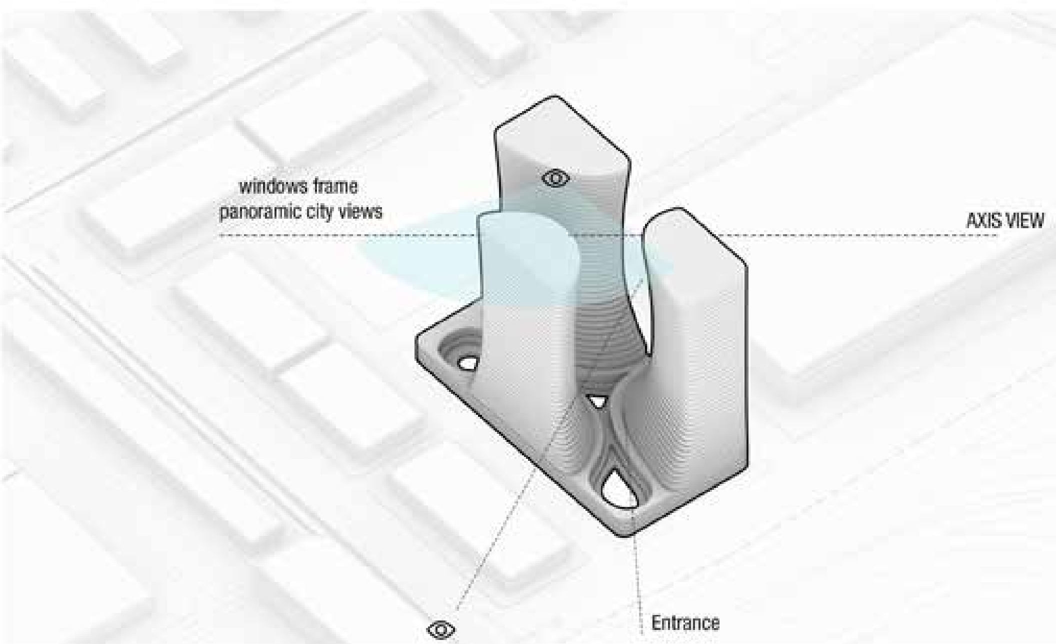


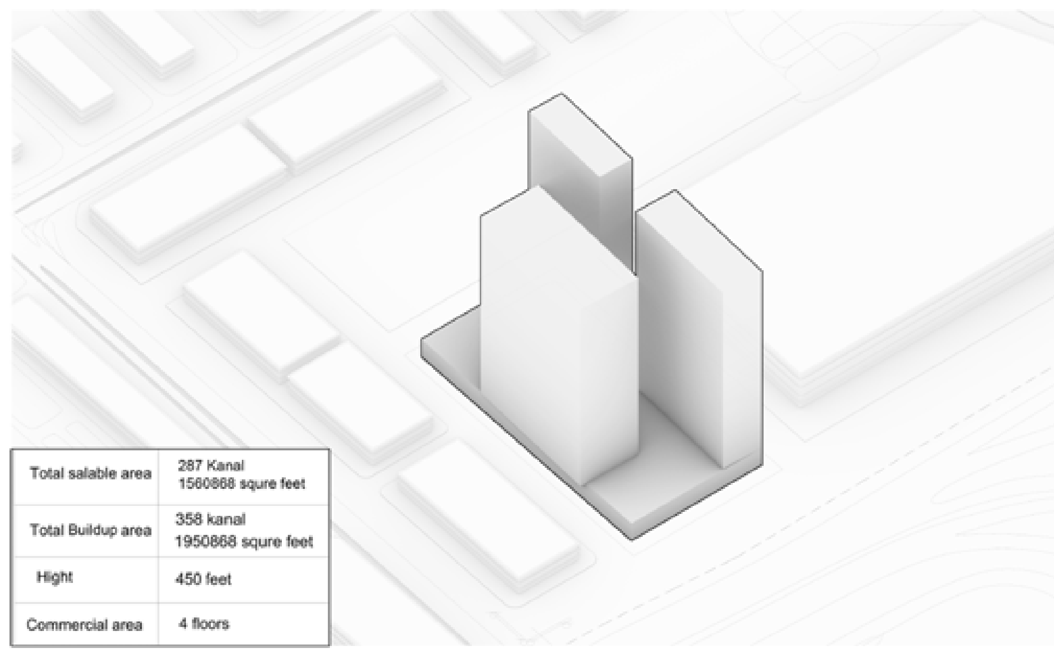
GREENARY





SITE

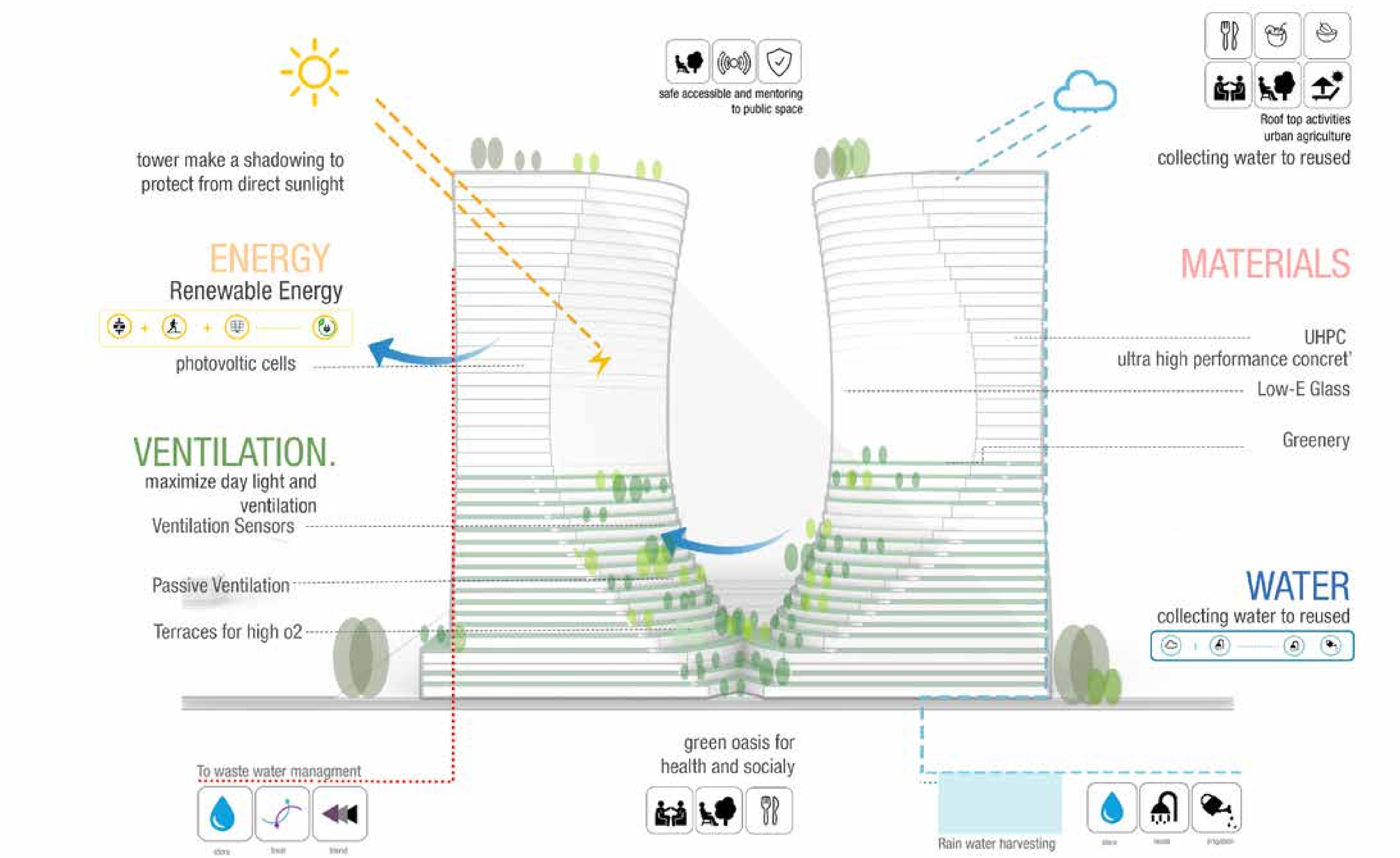




Total salable area	287 Kanal 1560868 squre feet
Total Buildup area	358 kanal 1950868 squre feet
Hight	450 feet
Commercial area	4 floors

The Verdant Towers Plaza, establishes itself as a vibrant, multi-level urban oasis meticulously designed to foster a thriving sense of community, recreation, and commerce. Its distinctive undulating form, echoing the dynamic architectural language of the towers above, creates a visually captivating and inviting landscape that seamlessly integrates lush greenery with thoughtfully designed built elements. The plaza's design prioritizes pedestrian movement and encourages social interaction through a network of gently sloping walkways, terraced gardens, and strategically placed open-air amphitheaters, providing ample opportunities for leisure, entertainment, and community gatherings. **The seamless integration of retail spaces within this flowing, organic landscape further activates the plaza, creating a bustling hub of activity throughout the day and into the evening.** Careful consideration of lighting design, landscaping elements, and high-quality materials enhances the plaza's overall ambiance, fostering a welcoming and engaging environment for residents, visitors, and the broader community. This meticulously crafted public realm elevates the Verdant Towers beyond a mere residential and commercial development, transforming it into a dynamic and sought-after destination that enriches the urban fabric of Lahore.

The diagrams illustrate the meticulous analysis undertaken to understand the site's microclimate. The solar orientation diagram showcases the sun's path throughout the year, informing the placement and angling of building elements to optimize daylighting and minimize solar heat gain. The wind analysis diagram maps prevailing wind patterns, guiding the design of outdoor spaces and the building's aerodynamic profile to maximize natural ventilation and occupant comfort.



MATERIALS Study

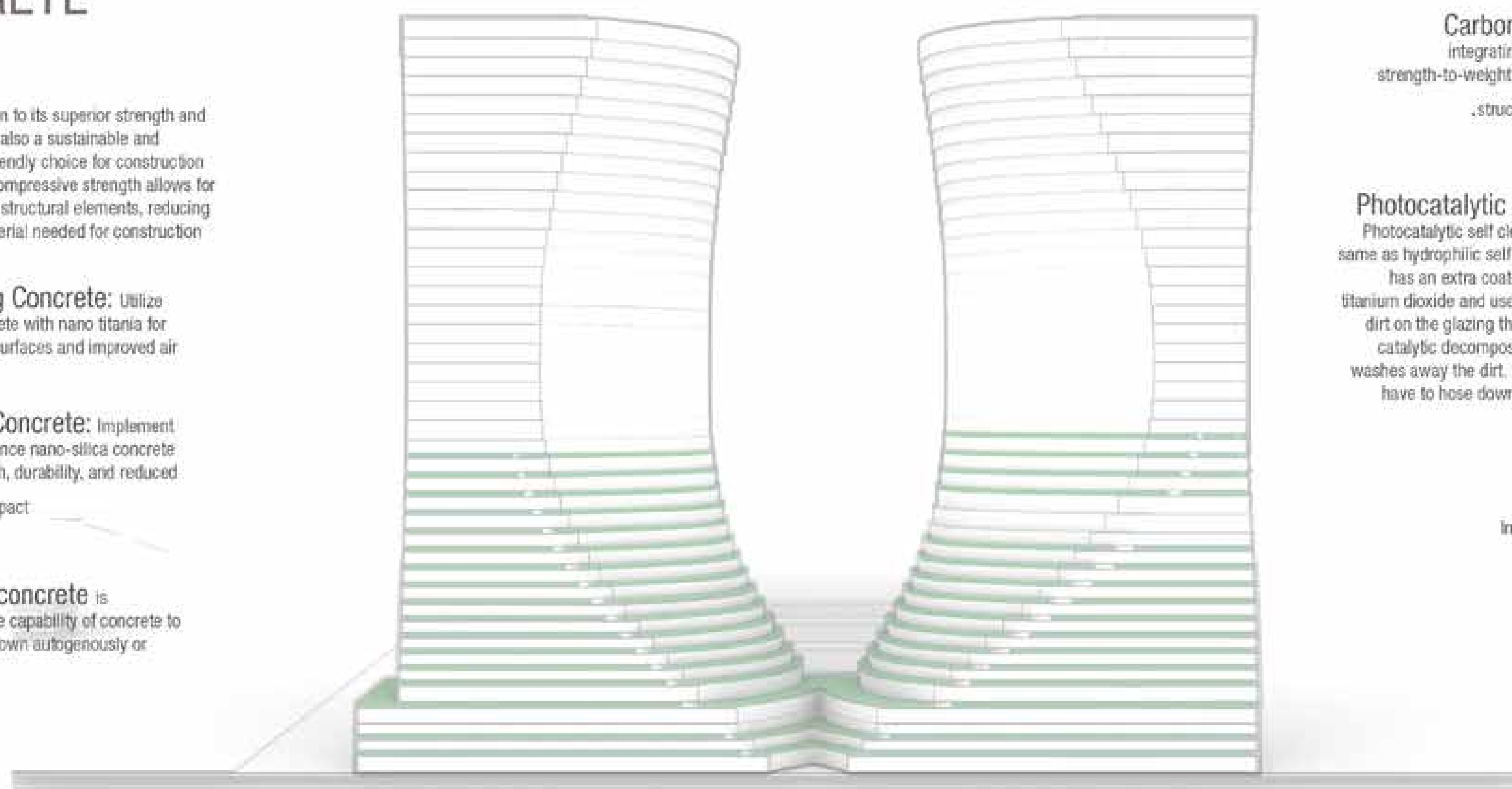
CONCRETE

UHPC: In addition to its superior strength and durability, UHPC is also a sustainable and environmentally friendly choice for construction projects. Its high compressive strength allows for thinner and lighter structural elements, reducing the amount of material needed for construction

Self-Cleaning Concrete: Utilize self-cleaning concrete with nano titania for maintenance-free surfaces and improved air .quality

Nano-Silica Concrete: Implement ultra-high performance nano-silica concrete for superior strength, durability, and reduced ..environmental impact

Self-healing concrete is characterized as the capability of concrete to fix its cracks on its own autogenously or autonomously. It



Carbon Nanotubes (CNT): integrating CNTs for their exceptional strength-to-weight ratio, making them ideal for .structural elements in the towers

Photocatalytic Self Cleaning Glass Photocatalytic self cleaning glass works much the same as hydrophilic self cleaning glass, except that it has an extra coating. This additional coating is titanium dioxide and uses the sunlight to break down dirt on the glazing through a process called photo catalytic decomposition. Once the rain comes, it washes away the dirt. If the weather is dry, you just have to hose down your windows to keep them ..clean

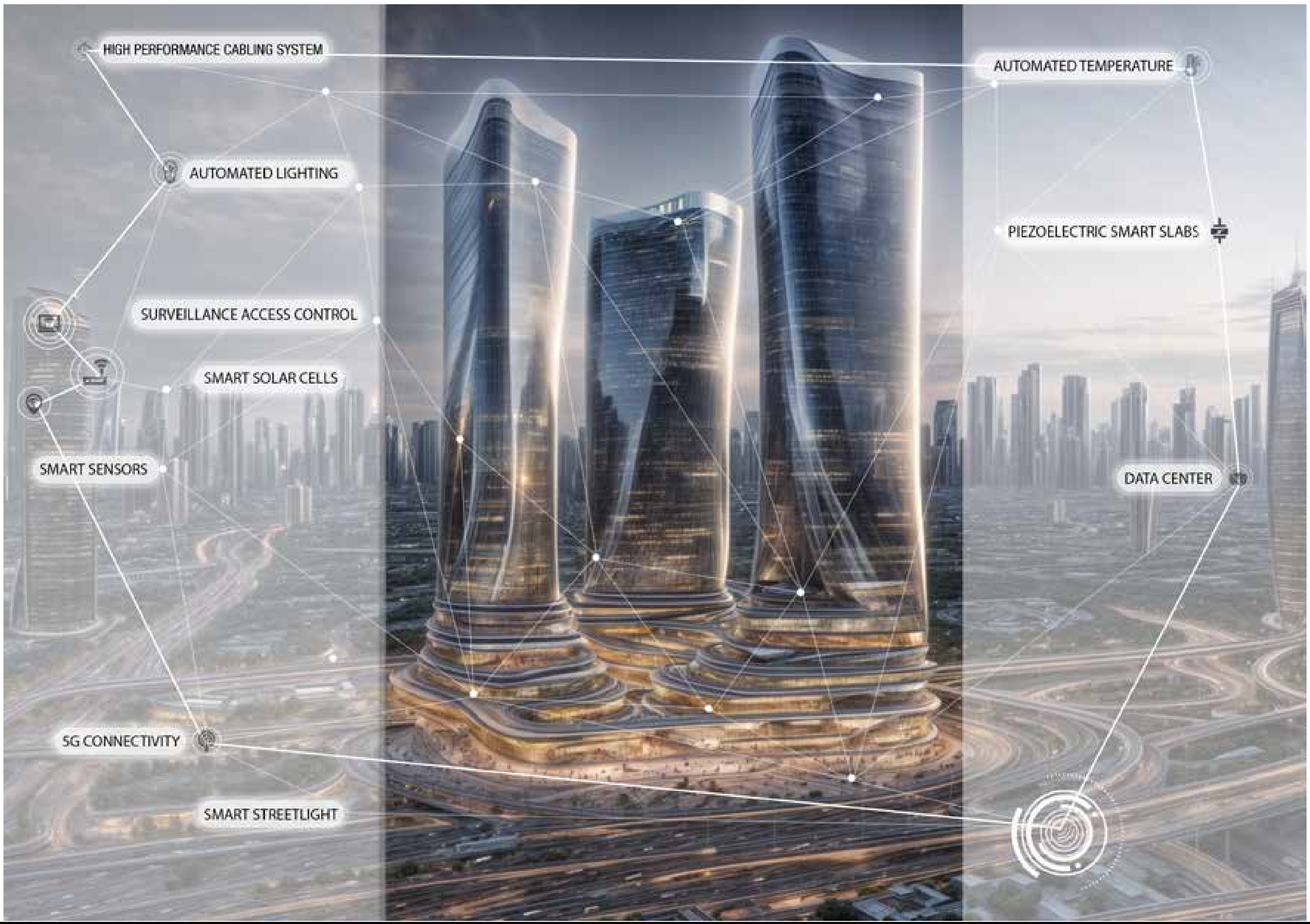
LOW E GLASS:
Improved Energy Efficiency. ...
Reduced UV Radiation. ...
Lower Cooling Costs. ...
Improved Comfort. ...
Reduced Condensation. ...
Better Sound Insulation. ...
Increased Security. ...

:PIEZOELECTRIC SLABS
Piezoelectric systems are an increasingly popular method of energy generation due to their ability to convert mechanical motion into electricity without the need for a power source. This type of system is highly efficient, with some estimates suggesting it can generate up :efficiencies in energy conversion %70 to

The diagrams visualize the exploration of various facade patterns using parametric design tools. They illustrate the iterative process of refining the facade's geometry, showcasing the range of design options considered. **The diagrams likely represent different iterations generated through computational scripts, exploring variations in panel size, orientation, and curvature.** These studies ultimately lead to the final, optimized facade design that balances aesthetics and performance.

The Verdant Towers' facade utilizes a sophisticated parametric design system to achieve its unique and dynamic form. Which allows for the creation of complex geometries through algorithmic processes. The system likely involves manipulating a base geometry—a grid of panels, for example—through a series of rules and parameters. Attractor points or curves could influence the deformation and articulation of the facade elements, creating the undulating patterns evident in the visualizations. This parametric approach allows for extensive design exploration, optimization, and the seamless integration of performance criteria into the design.

The project demonstrates a strong commitment to sustainability through the careful selection of high-performance materials and the integration of smart building technologies. Structurally, the use of Ultra-High-Performance Concrete (UHPC) offers exceptional strength and durability while minimizing material usage. **The facade incorporates advanced glazing systems, including Low-E glass and double glazing, to optimize thermal performance, reduce energy consumption, and enhance occupant comfort.** Photocatalytic self-cleaning glass reduces maintenance requirements and contributes to the building's long-term sustainability. Smart sensors, automated lighting and temperature control, and a robust cabling system contribute to the building's intelligence and responsiveness. Water management strategies, such as rainwater harvesting and greywater recycling, minimize the project's environmental footprint. The integration of extensive green spaces—rooftop gardens, green terraces, and the central oasis—promotes biodiversity, improves air quality, and enhances the overall quality of the urban environment.



DHA TOWER

Lahore ,Pakistan

Client: Daaem Group

Size: 840m² / 8,826f²

Status: Proposal

Typology: Hotel

Year: 2019

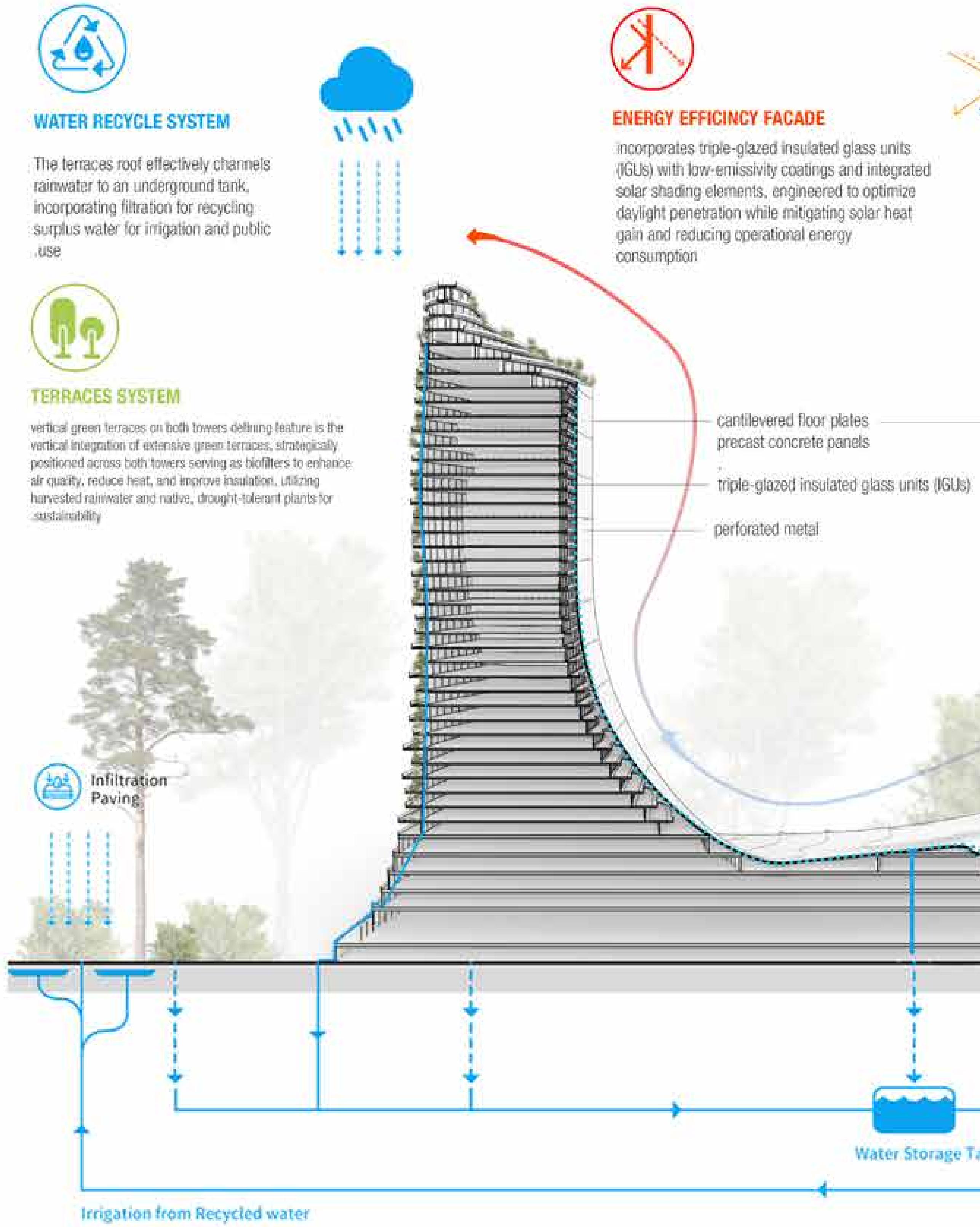
Located in the vibrant Mazzeh Street neighborhood of Damascus, Syria, a groundbreaking project is unfolding to transform an existing building into a hotel and commercial podium with a visually stunning facade inspired by Islamic architecture. Our team in RPA Studio worked together to design a skin that adapts carefully with the existing building.

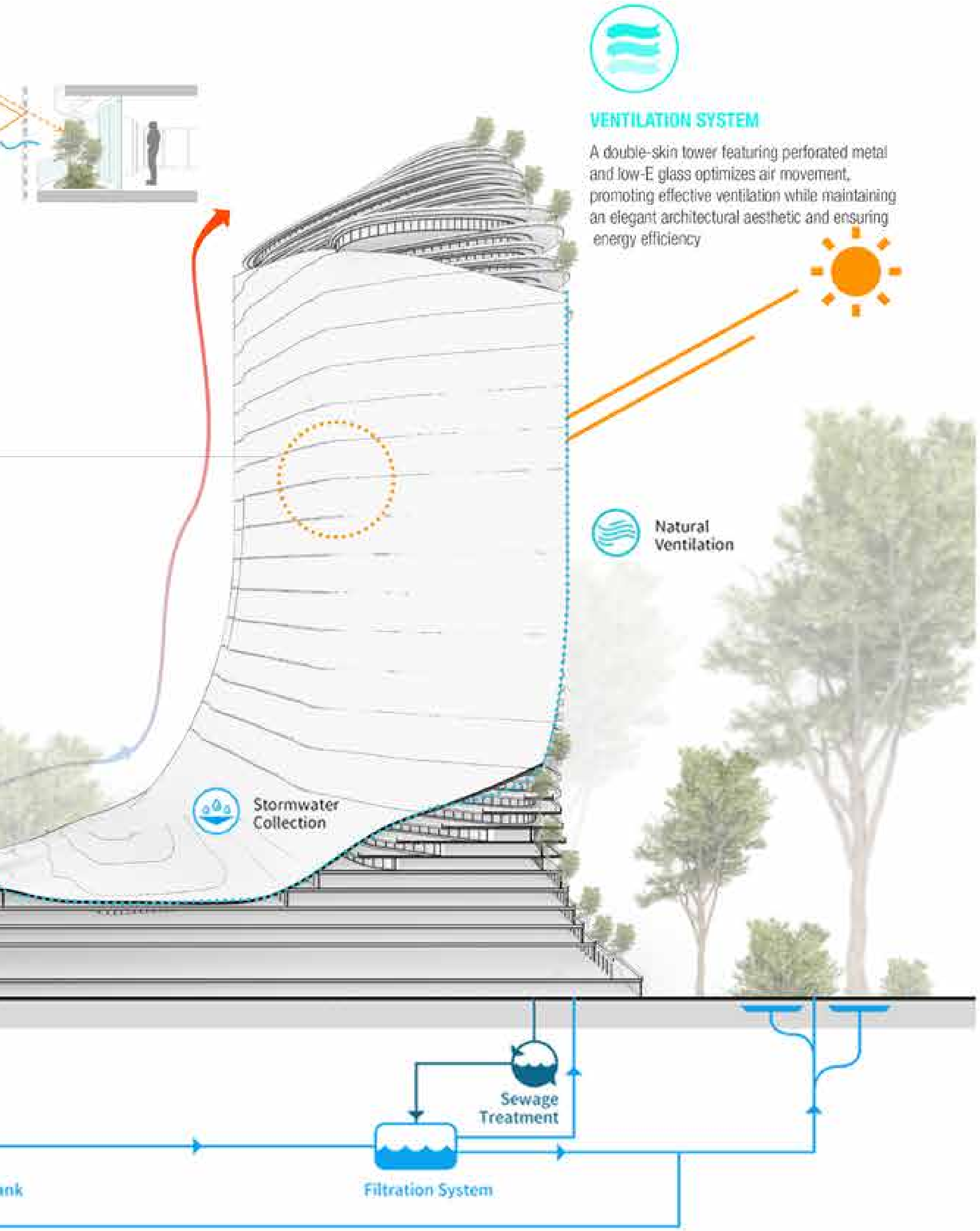
The innovative skin design, crafted through advanced computational design methods, seamlessly blends traditional Islamic motifs with contemporary aesthetics. This fusion of ancient design principles with cutting-edge technology not only pays homage to the rich Islamic architectural heritage but also ensures a harmonious integration with the surroundings of Mazzeh Street.

The commercial podium, accessible from Al Mazzeh Street, features a welcoming entrance and hosts a diverse mix of restaurants, cafes, and shops. Inspired by the Umayyad Mosque's architectural motifs, the podium seamlessly integrates with the surroundings.

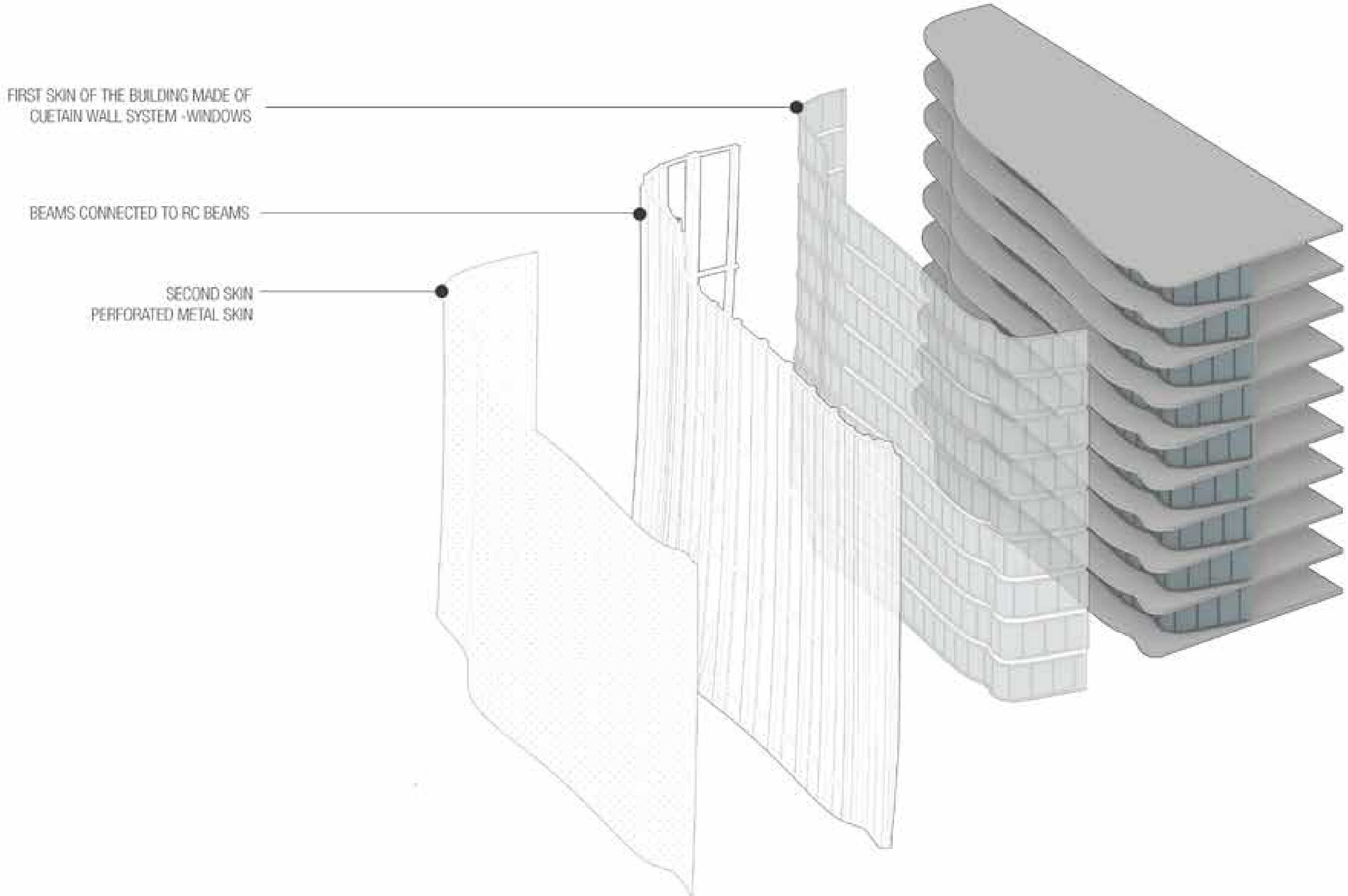
Its open layout encourages fluid interactions between indoor and outdoor spaces, fostering a vibrant community atmosphere. With a commitment to sustainability, the podium contributes to the economic vitality and cultural richness of Mazzeh Street, creating a dynamic urban experience.

Environmental sustainability constitutes a fundamental design driver, addressed via a holistic strategy documented in dedicated performance diagrams. A sophisticated hydrological cycle management system integrates rainwater harvesting from all horizontal surfaces (terraces, roofs), incorporates multi-stage filtration and treatment, provides substantial storage capacity, and facilitates greywater reuse for the extensive irrigation demands of the integrated vertical and horizontal landscaping, thereby significantly reducing reliance on municipal potable water sources.

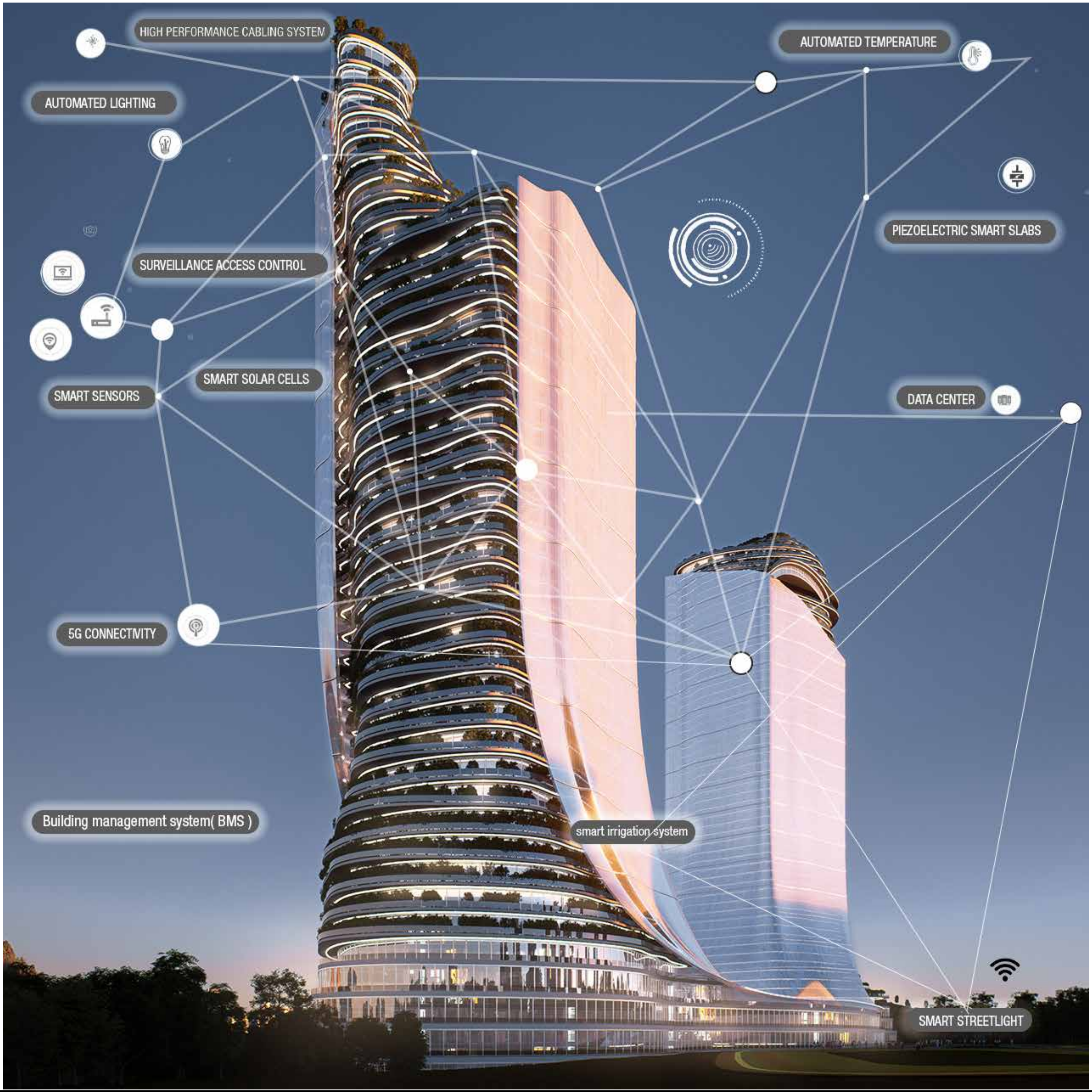




The facade assembly itself is optimized for thermal performance, specifying triple-glazed Insulated Glass Units (IGUs) with low-emissivity coatings to achieve target U-values. The substantial overhangs provided by the cantilevered floor plates, augmented by the solar-screening effect of the secondary facade veil, contribute significantly to passive thermal regulation, minimizing cooling energy demand. Furthermore, the interstitial space within the double-skin facade is engineered to potentially facilitate controlled natural ventilation strategies, reducing mechanical plant operation and enhancing indoor environmental quality (IEQ). Site-level stormwater management is integrated within the landscape design using sustainable urban drainage principles.

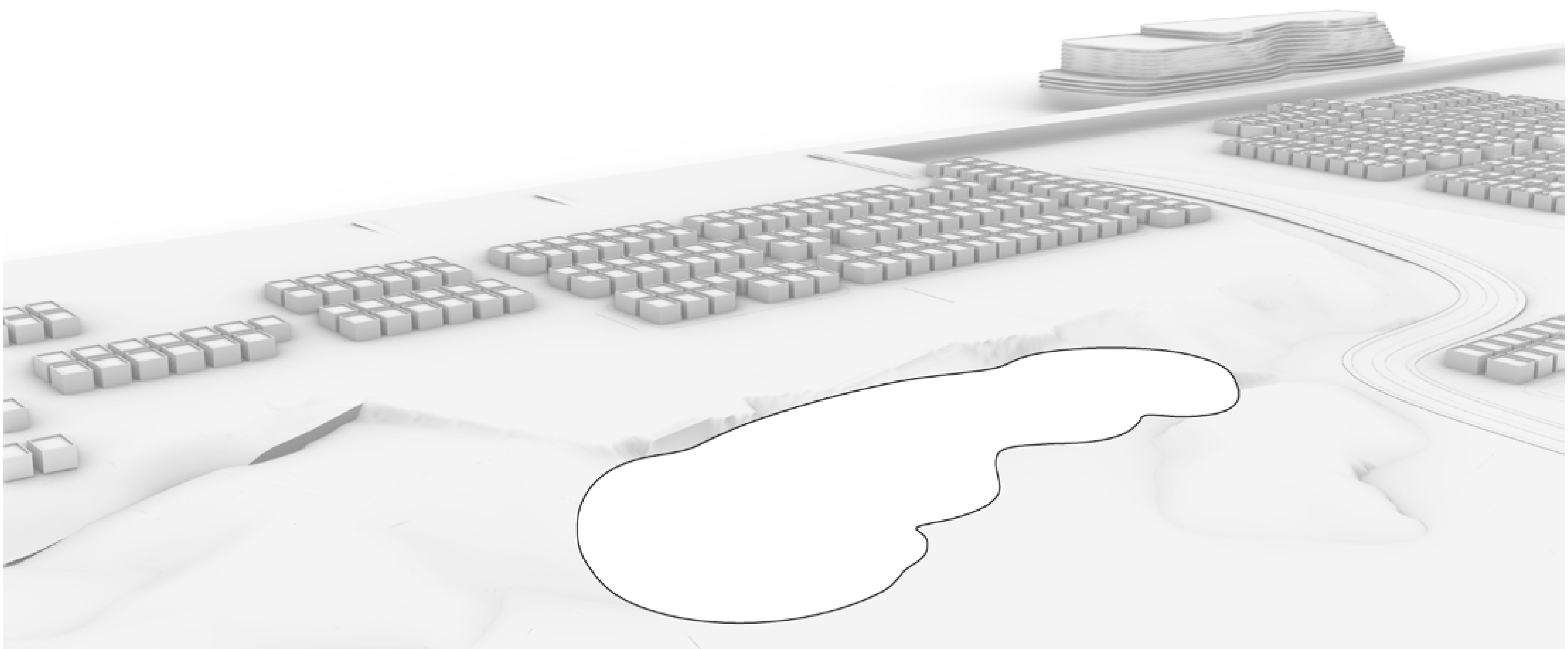


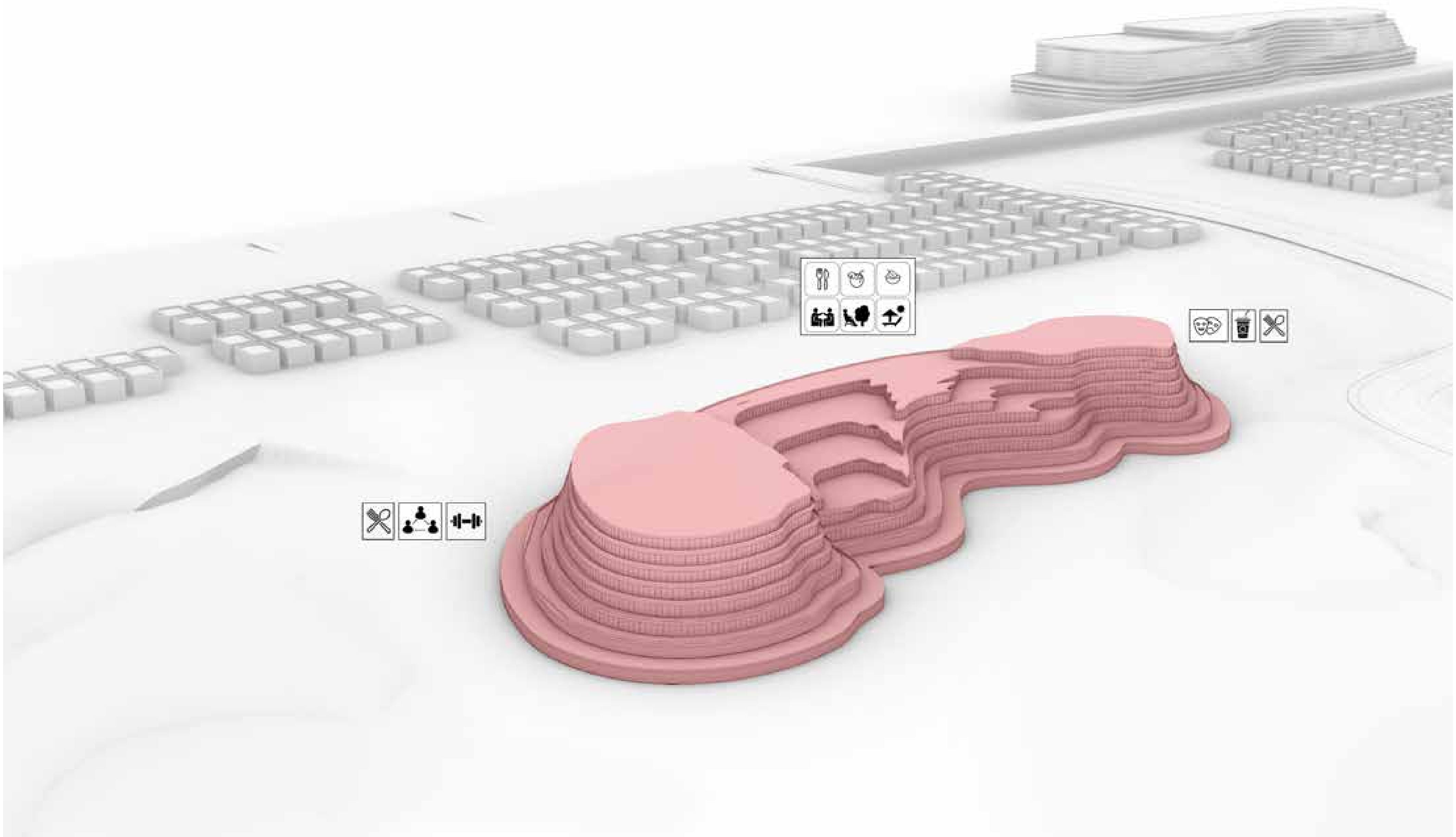
The architectural identity is significantly shaped by an innovative dual-envelope facade system. The primary thermal barrier comprises a high-performance glazed curtain wall, engineered to optimize interior daylighting and provide controlled visual porosity. Circumscribing this primary envelope at each floor level are continuous, generously proportioned horizontal terraces featuring integrated planters; these function concurrently as private amenity zones and effective passive solar shading devices (brise-soleils). A secondary, performative envelope partially overlays this inner system. Composed of vertically oriented, profiled elements—suggested as a light-hued, potentially perforated metallic material—this kinetic veil negotiates the building's fluid geometry. Its function is multivalent: selectively modulating solar gain, calibrating visual permeability, and generating a dynamic aesthetic through the interplay of perceived mass, surface texture, and transparency. Exploded axonometric diagrams meticulously detail this layered configuration and the structural interface methodology between the envelopes and the primary reinforced concrete (RC) beam structure.

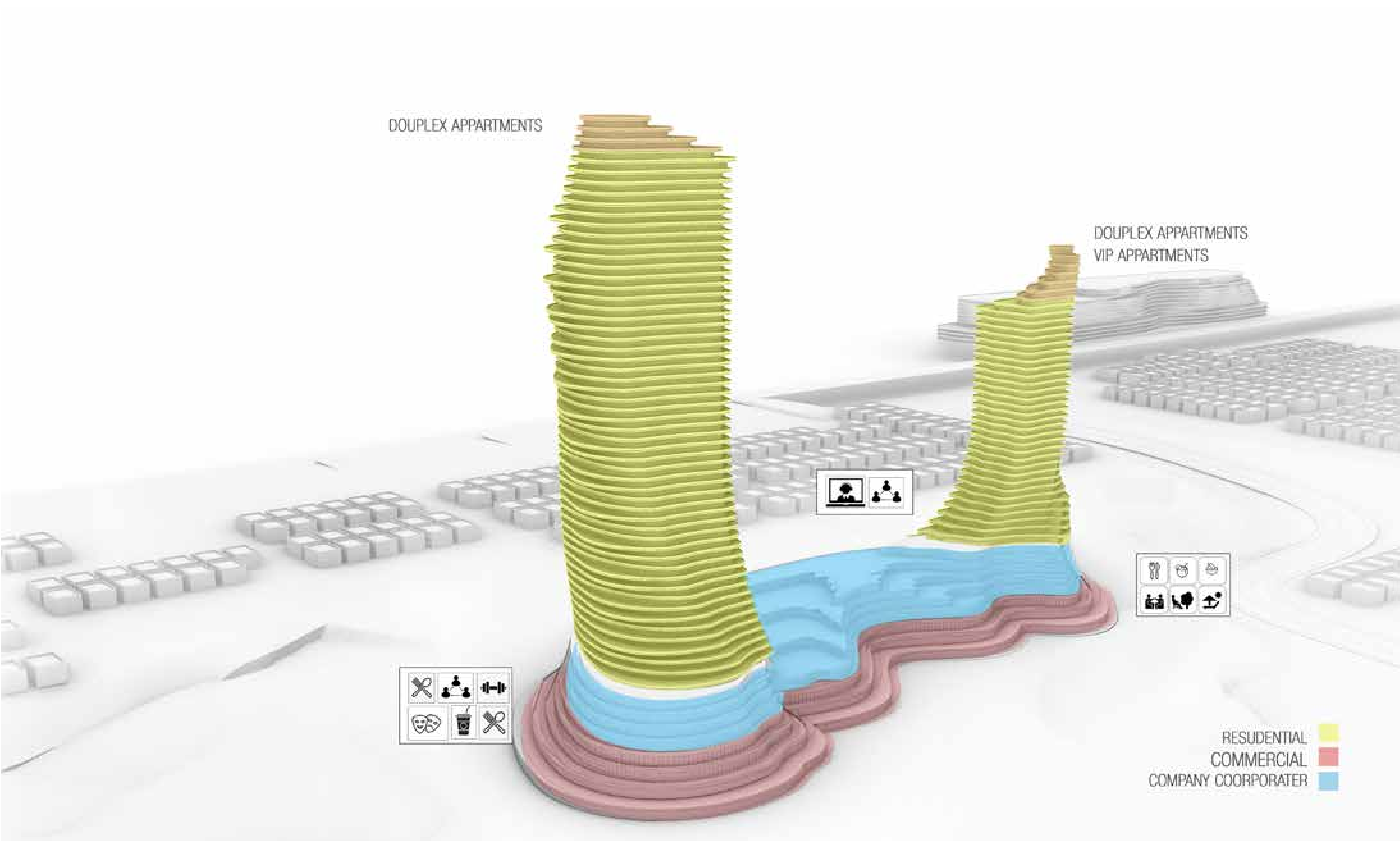

HIGH PERFORMANCE CABLING SYSTEM
AUTOMATED TEMPERATURE
AUTOMATED LIGHTING
PIEZOELECTRIC SMART SLABS
SURVEILLANCE ACCESS CONTROL
SMART SOLAR CELLS
SMART SENSORS
DATA CENTER
5G CONNECTIVITY
Building management system(BMS)
smart irrigation system
SMART STREETLIGHT

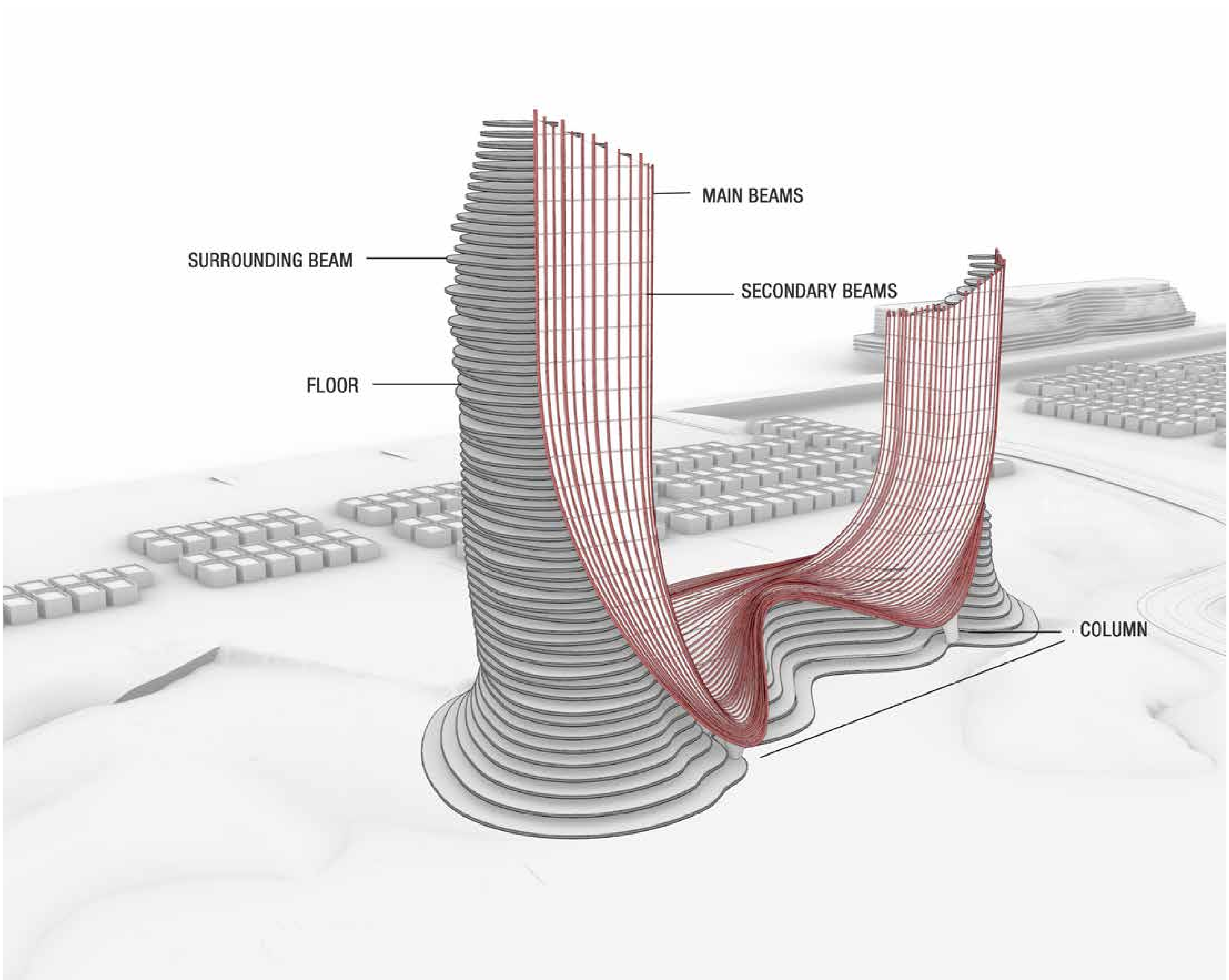
The hotel's rooftop serves as a sophisticated entertainment floor, featuring a swimming pool and upscale restaurants. The focal point is a meticulously designed pavilion inspired by Islamic patterns, providing both cultural resonance and functional shading. This architectural masterpiece enhances the rooftop experience, offering a harmonious integration of leisure, culinary excellence, and cultural immersion. The pavilion not only contributes to the aesthetic appeal but also establishes a distinctive identity for the rooftop, creating a refined and visually compelling space that aligns seamlessly with the overall architectural vision of the project.

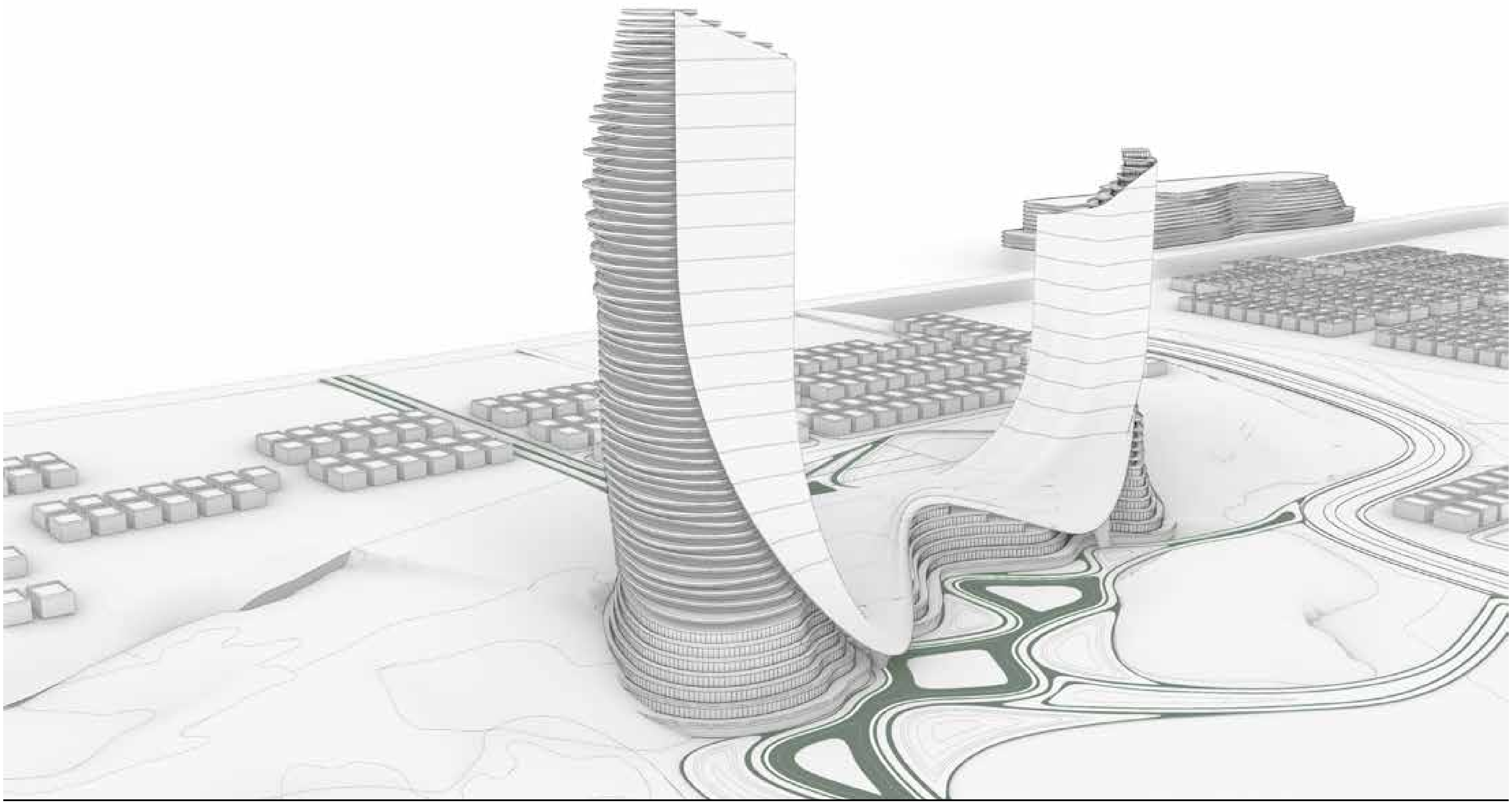
DESIGN PROSESS

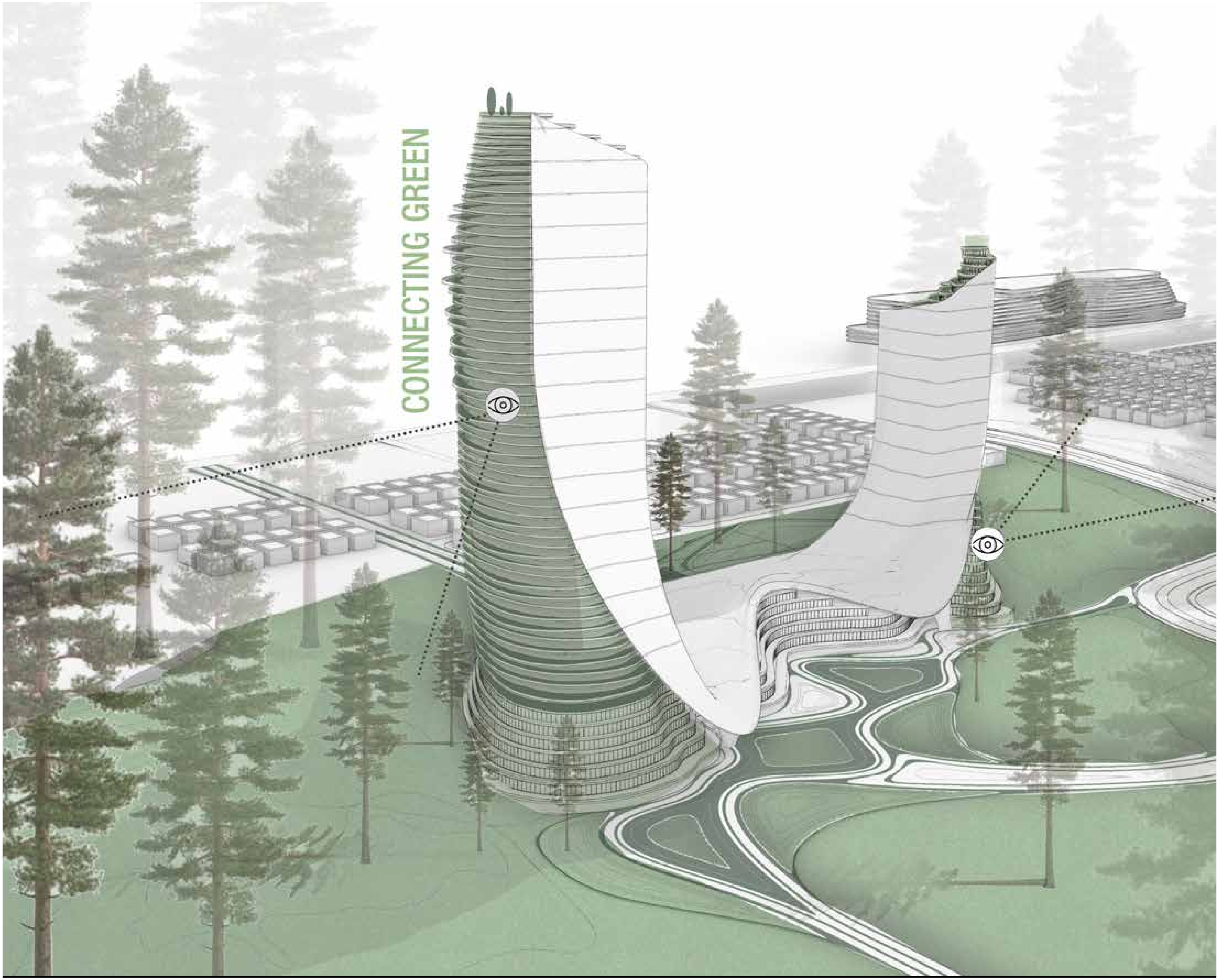




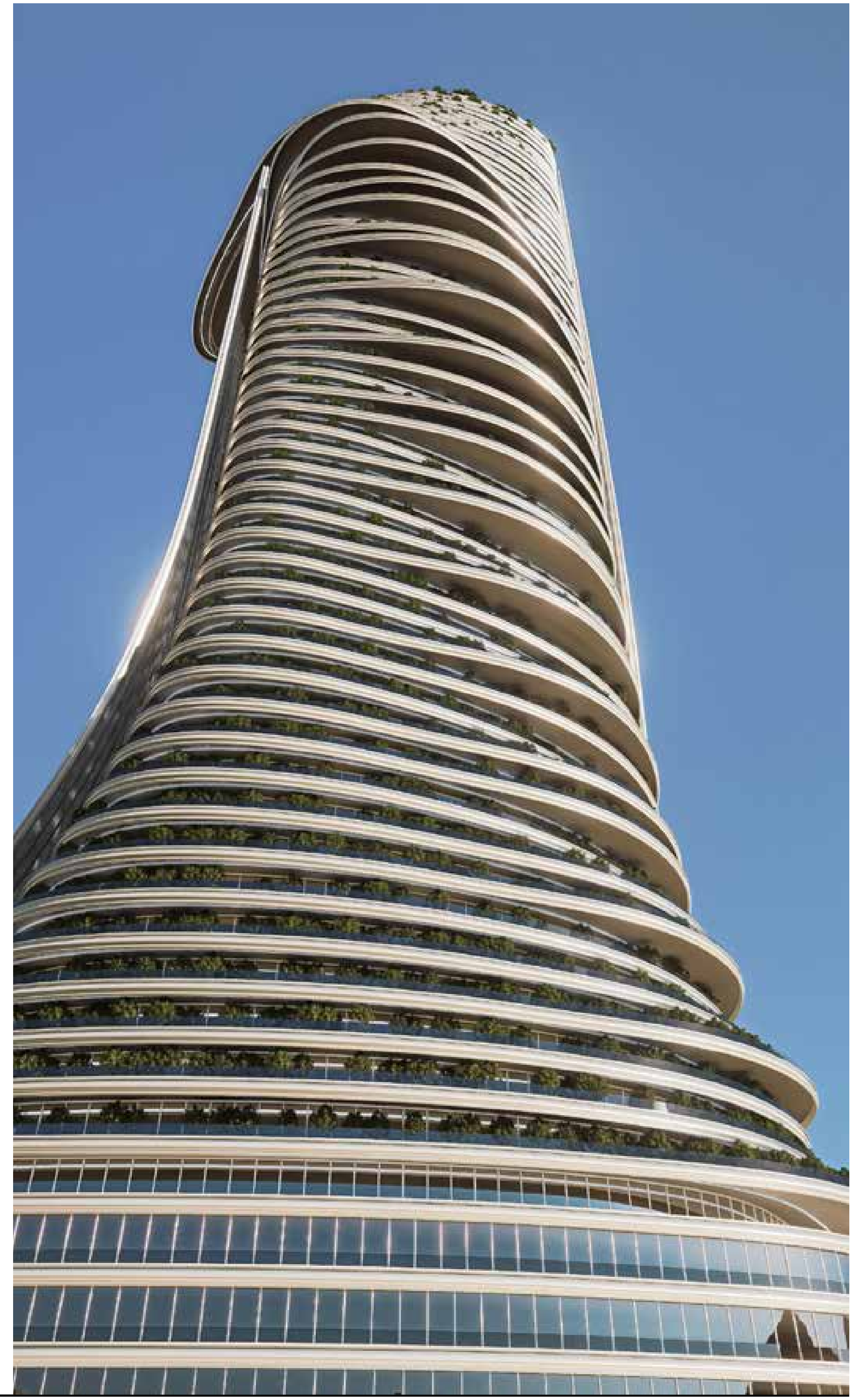

DOUPLEX APPARTMENTS
DOUPLEX APPARTMENTS
VIP APPARTMENTS
RESUDENTIAL
COMMERCIAL
COMPANY COORPORATER


MAIN BEAMS
SURROUNDING BEAM
SECONDARY BEAMS
FLOOR
COLUMN




CONNECTING GREEN

The hotel's rooftop serves as a sophisticated entertainment floor, featuring a swimming pool and upscale restaurants. The focal point is a meticulously designed pavilion inspired by Islamic patterns, providing both cultural resonance and functional shading. This architectural masterpiece enhances the rooftop experience, offering a harmonious integration of leisure, culinary excellence, and cultural immersion. The pavilion not only contributes to the aesthetic appeal but also establishes a distinctive identity for the rooftop, creating a refined and visually compelling space that aligns seamlessly with the overall architectural vision of the project.



Iqbal Garden Busienss Bay

Lahore ,Pakistan

Client: IAN Contracting

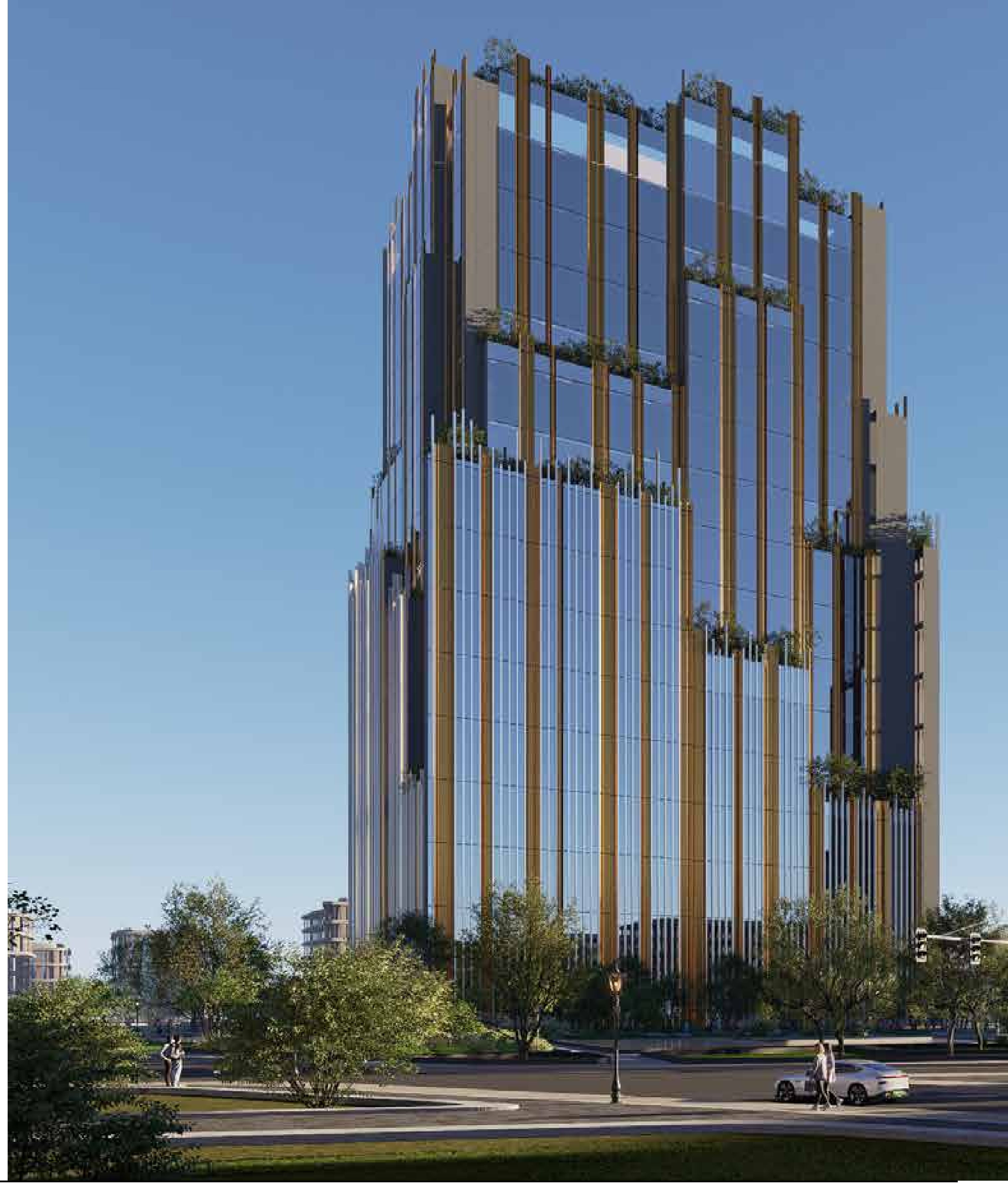
Size: 22 Hectares

Status: Proposal

Typology: Office , Residential , Retail

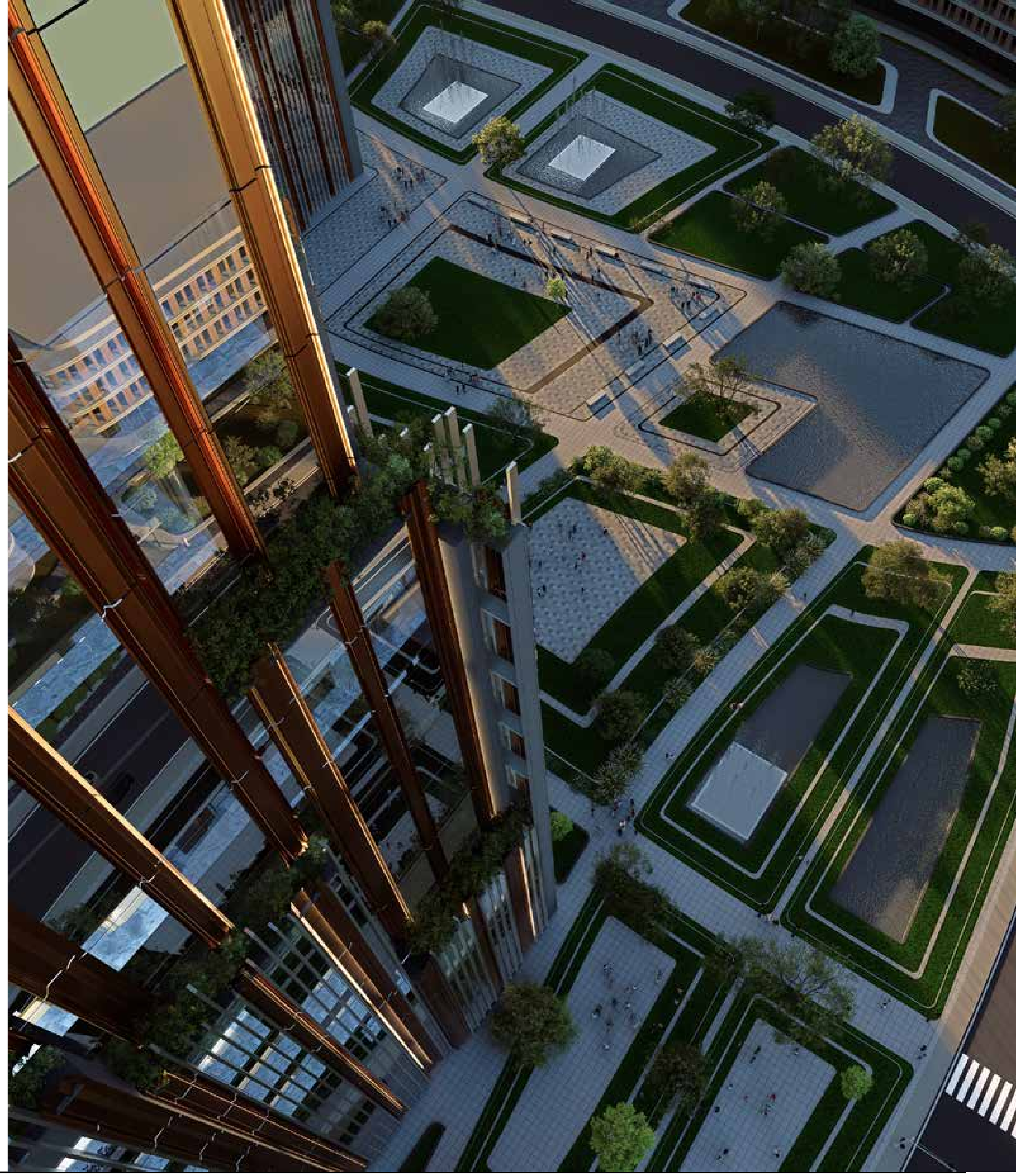
Year: 2022

The road network serves as the foundational framework and connective tissue of the Sialkot master plan, seamlessly integrating all programmatic elements and facilitating efficient multi-modal circulation. Designed to accommodate future growth and evolving transportation needs, the network establishes a clear hierarchy of roadways, from primary boulevards to secondary streets, residential access ways, and dedicated pedestrian and bicycle paths. This hierarchical approach ensures efficient vehicular access to key destinations while prioritizing pedestrian safety and promoting sustainable mobility.

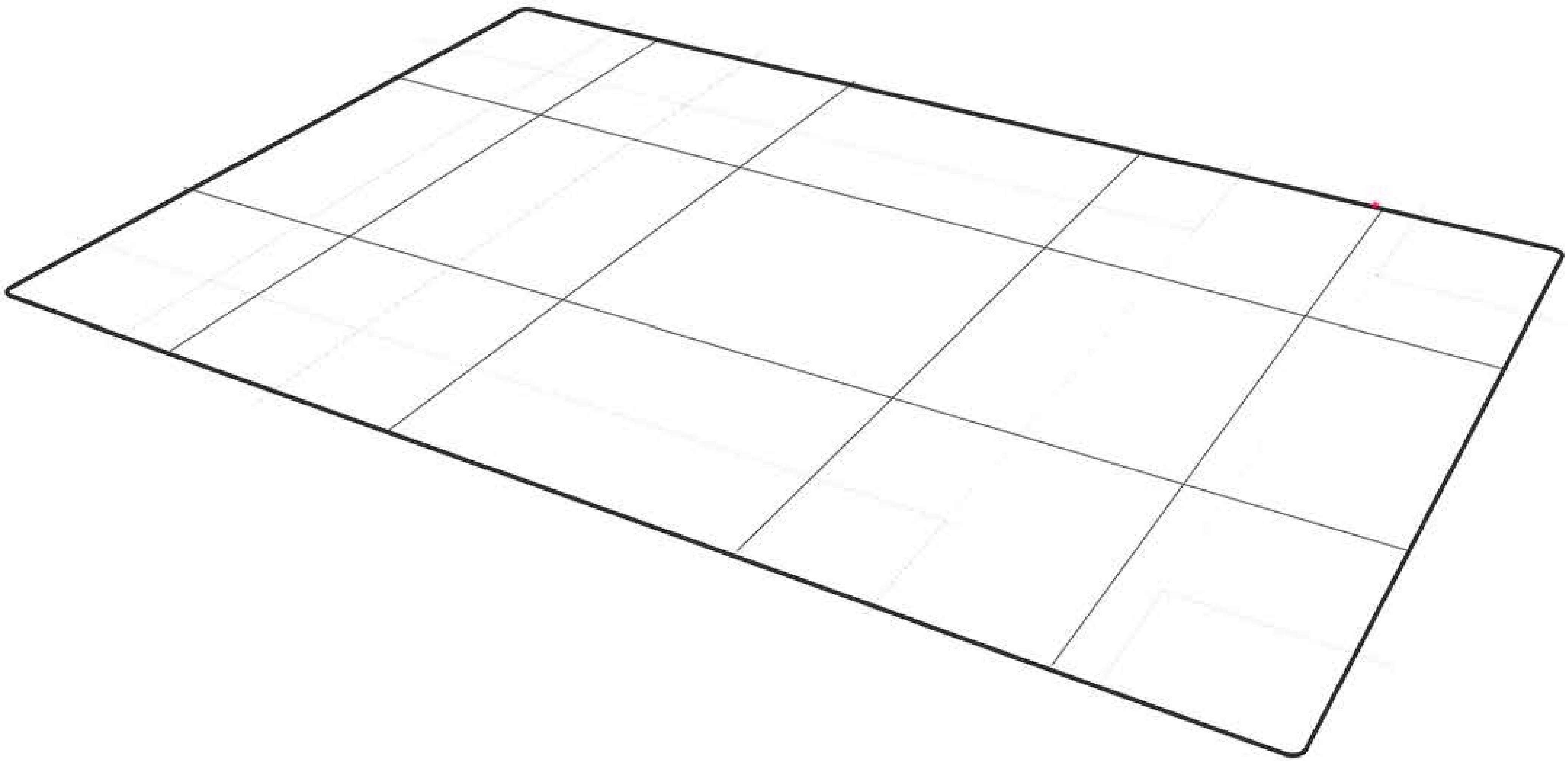


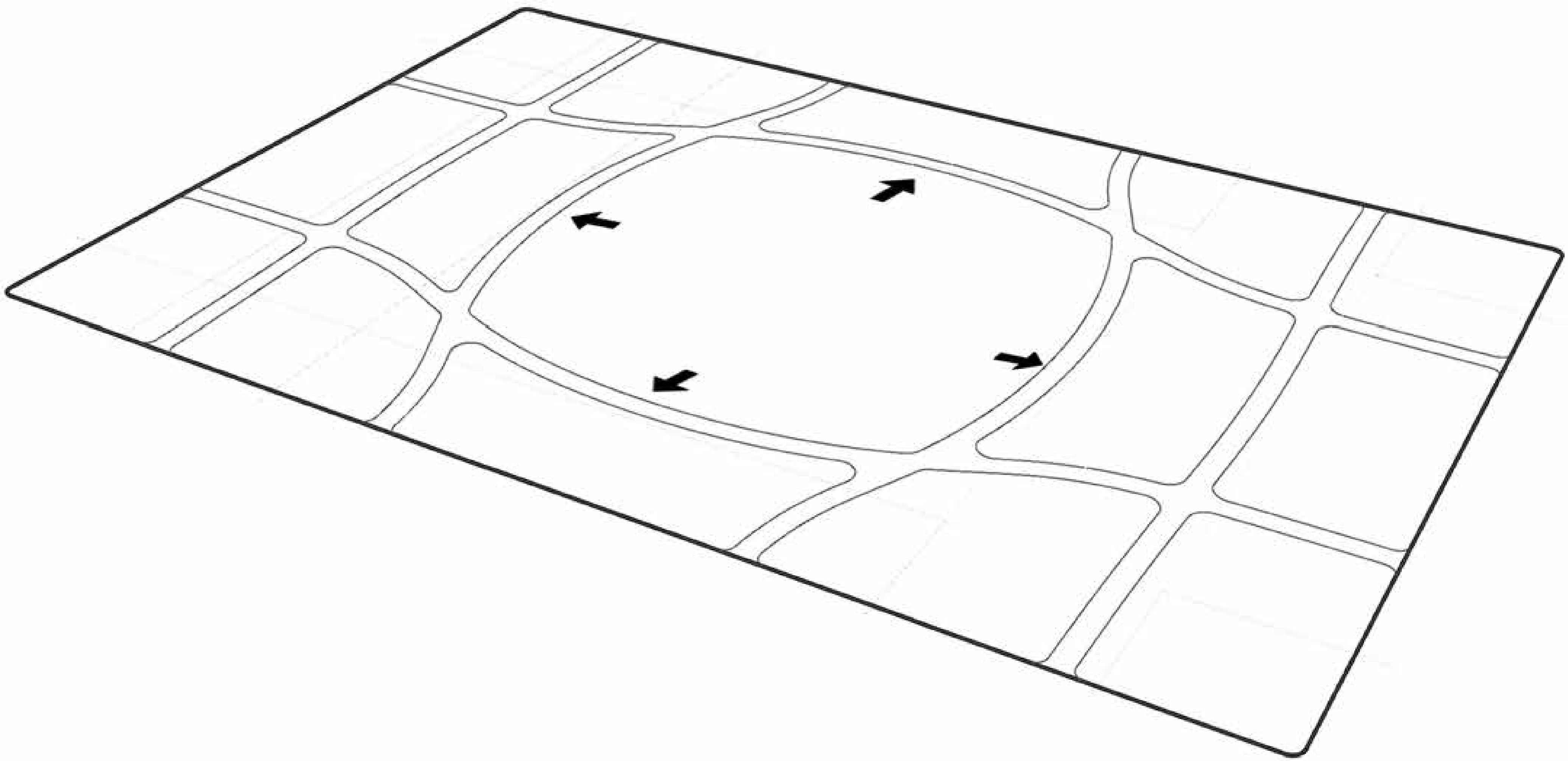
Primary boulevards provide high-capacity vehicular movement, distributing traffic to secondary streets that serve residential and commercial areas. Dedicated pedestrian walkways and bicycle paths, strategically separated from vehicular traffic by landscaped buffers and green infrastructure, prioritize non-motorized transportation options, encouraging residents to walk or cycle and fostering a healthy, active lifestyle. **The design of intersections, crosswalks, and pedestrian crossings prioritizes universal accessibility and minimizes traffic congestion,** ensuring safe and efficient movement for all users. Landscaped medians and tree-lined streets enhance the aesthetic character of the road network while mitigating the urban heat island effect and managing stormwater runoff.

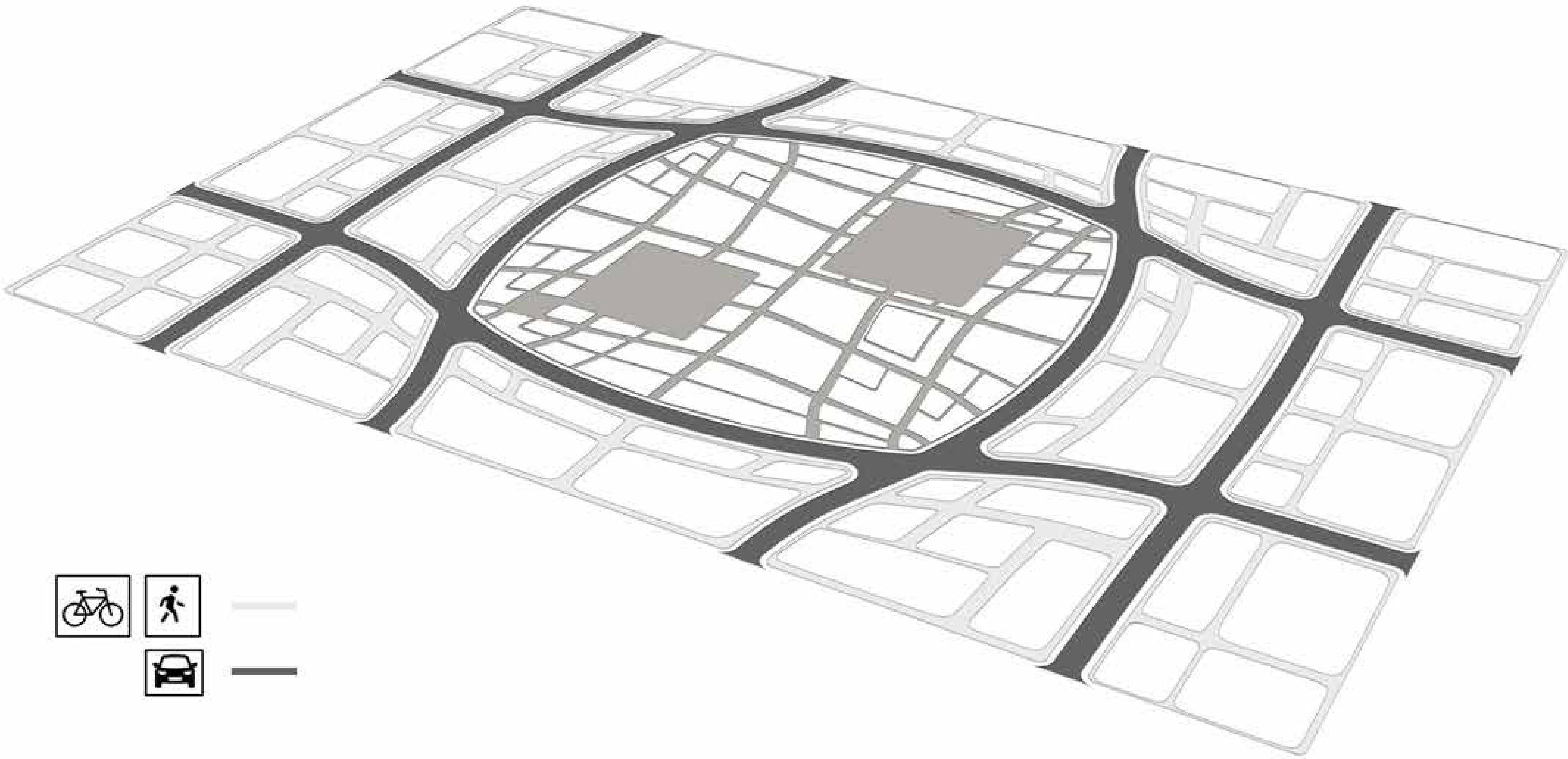
The Hospital, envisioned as a patient-centered healing environment, seamlessly integrates advanced medical technologies with a focus on promoting emotional well-being. Its dynamic, curvilinear massing and terraced floor plates decompose the monolithic scale often associated with institutional architecture, fostering a sense of tranquility and human scale. Strategically integrated biophilic elements, such as green roofs and façade-integrated planters, blur the boundaries between the built environment and the natural world, contributing to improved air quality and enhanced thermal performance. High-performance glazing systems maximize daylight harvesting while offering restorative views of the surrounding landscape, and the interior layout is optimized for efficient patient flow and operational efficacy. Evidence-based design principles inform the configuration of therapeutic spaces, prioritizing patient comfort, privacy, and access to natural light and ventilation.

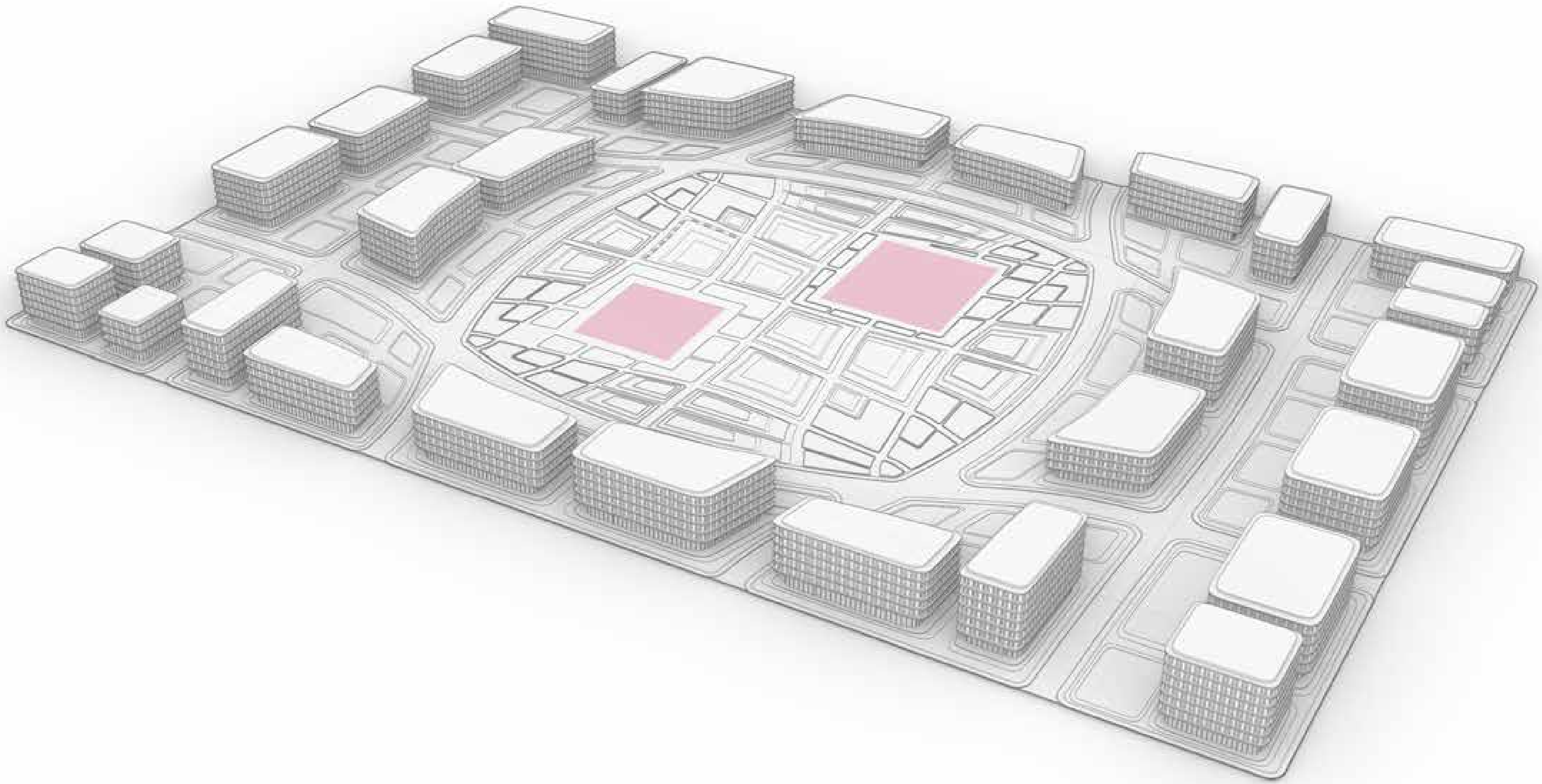


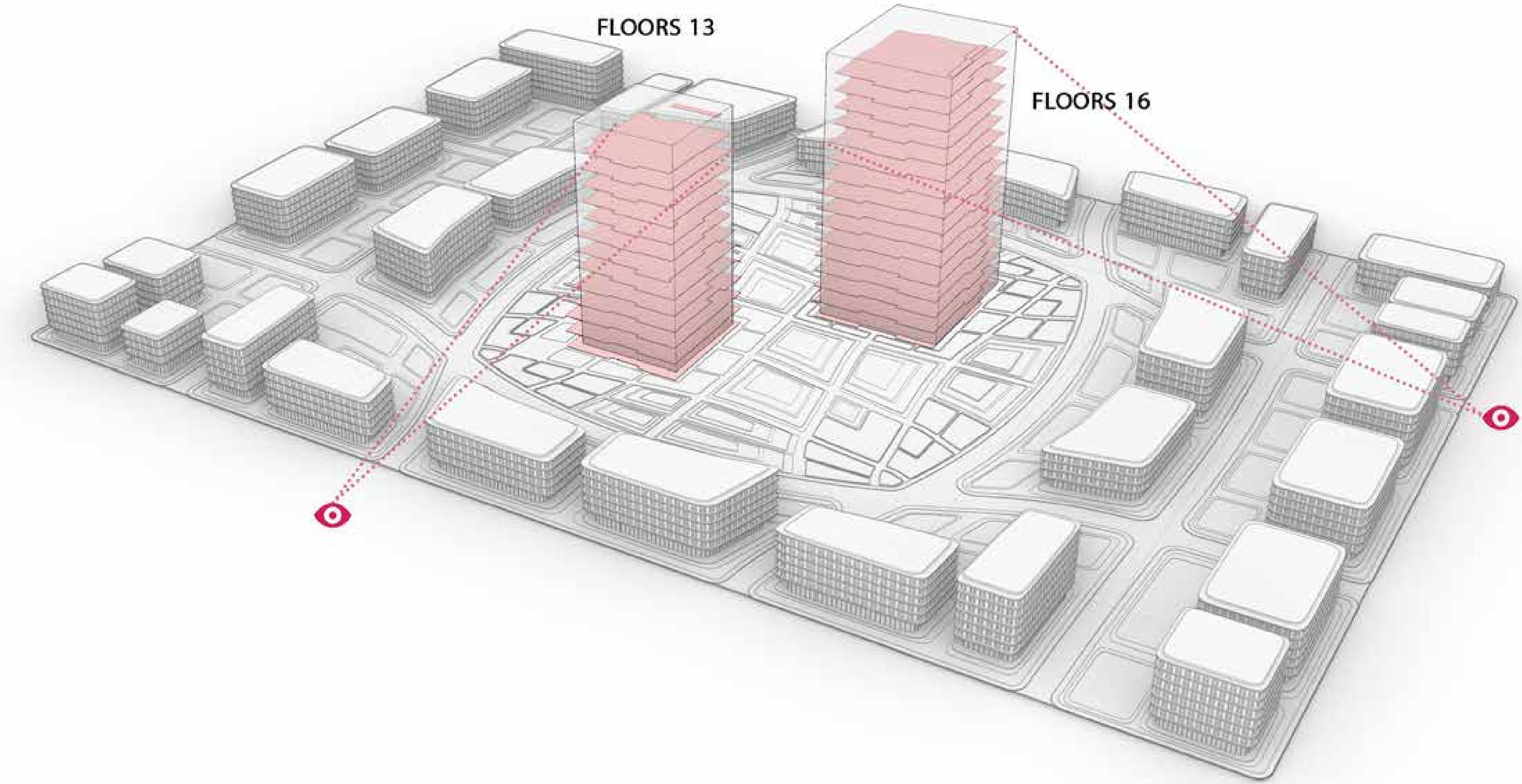
DESIGN PROSESS

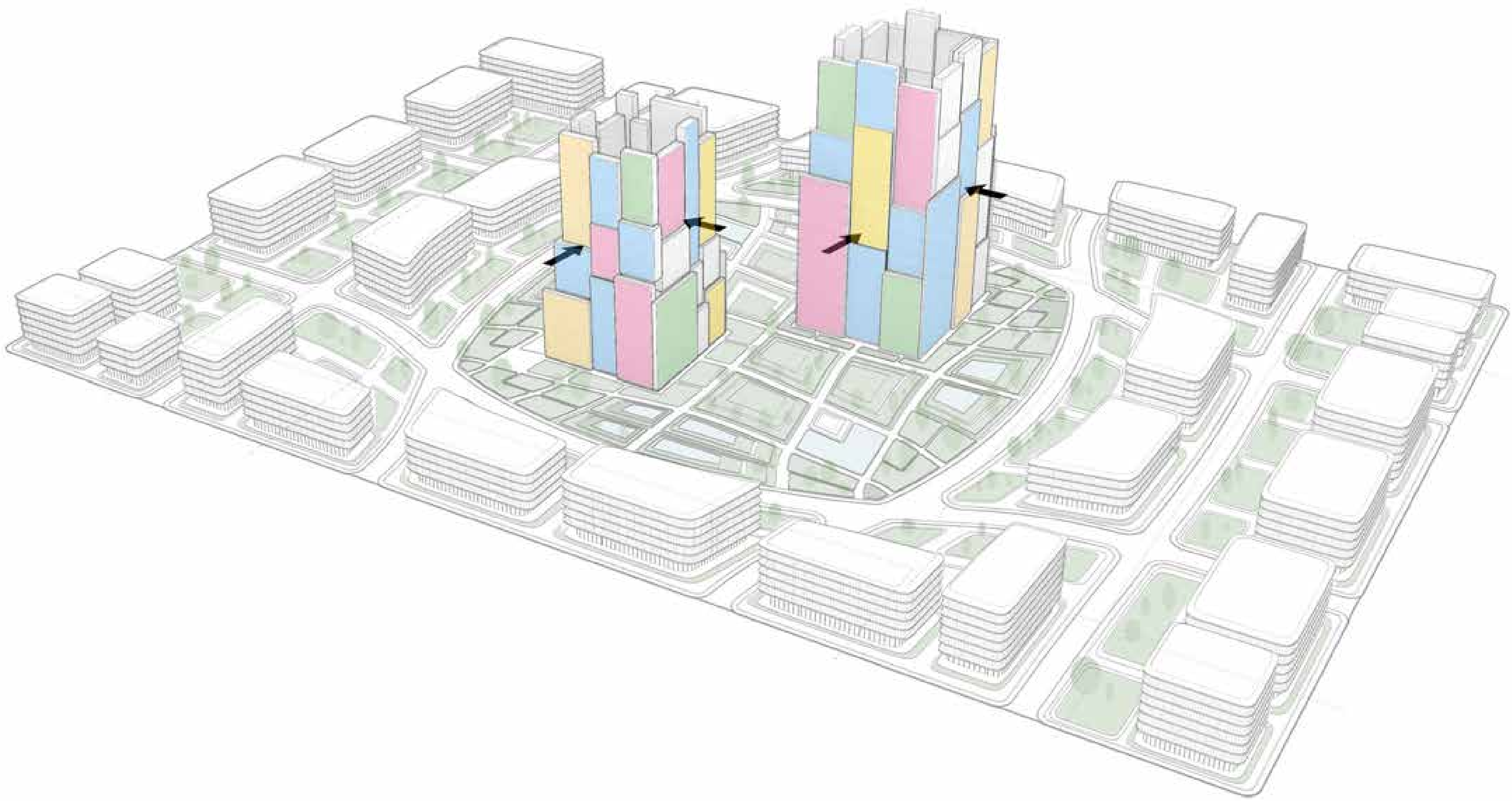






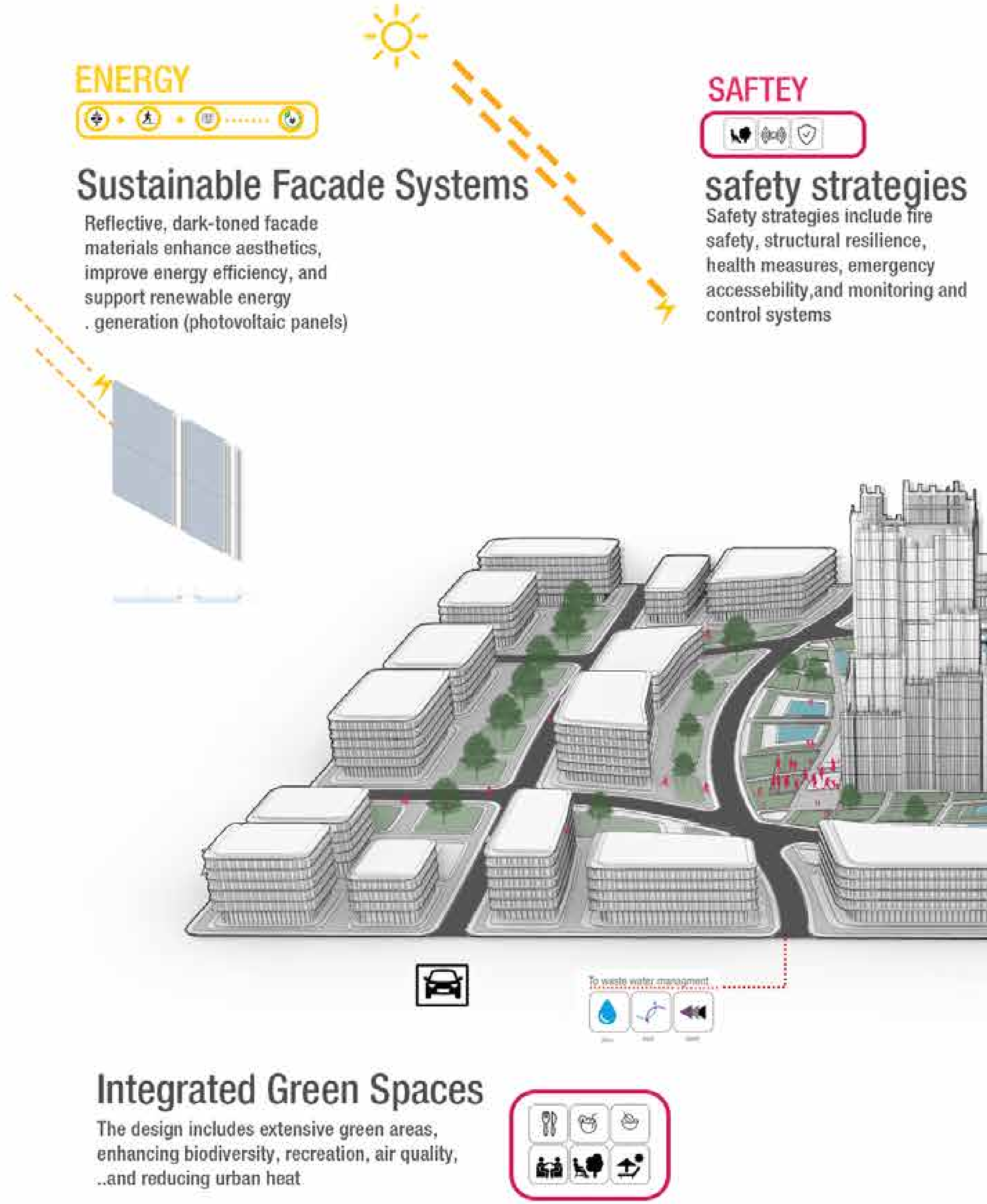



FLOORS 13
FLOORS 16



The school's architecture promotes social interaction, experiential learning, and a strong sense of community. The building's curvilinear volume and extensive glazing create a dynamic interplay of light and space, visually connecting occupants with the surrounding landscape context. Flexible and adaptable learning environments are strategically configured to support evolving pedagogical approaches and interdisciplinary exploration, while a carefully curated material palette featuring natural materials such as timber and brick establishes a warm and inviting atmosphere conducive to focused study and creative discovery. Universal accessibility and inclusivity are paramount design considerations, ensuring equitable access to resources and facilities for all students.

A fundamental principle underpinning the Iqbal Garden Business Bay project is environmental sustainability, addressed through a holistic approach incorporating multiple integrated strategies. Key performance domains are delineated in the diagrams: Energy, Safety, Water, and Integrated Green Spaces. Energy optimization strategies include the specification of facade materials with high Solar Reflectance Index (SRI) values to mitigate solar gain,



WATER

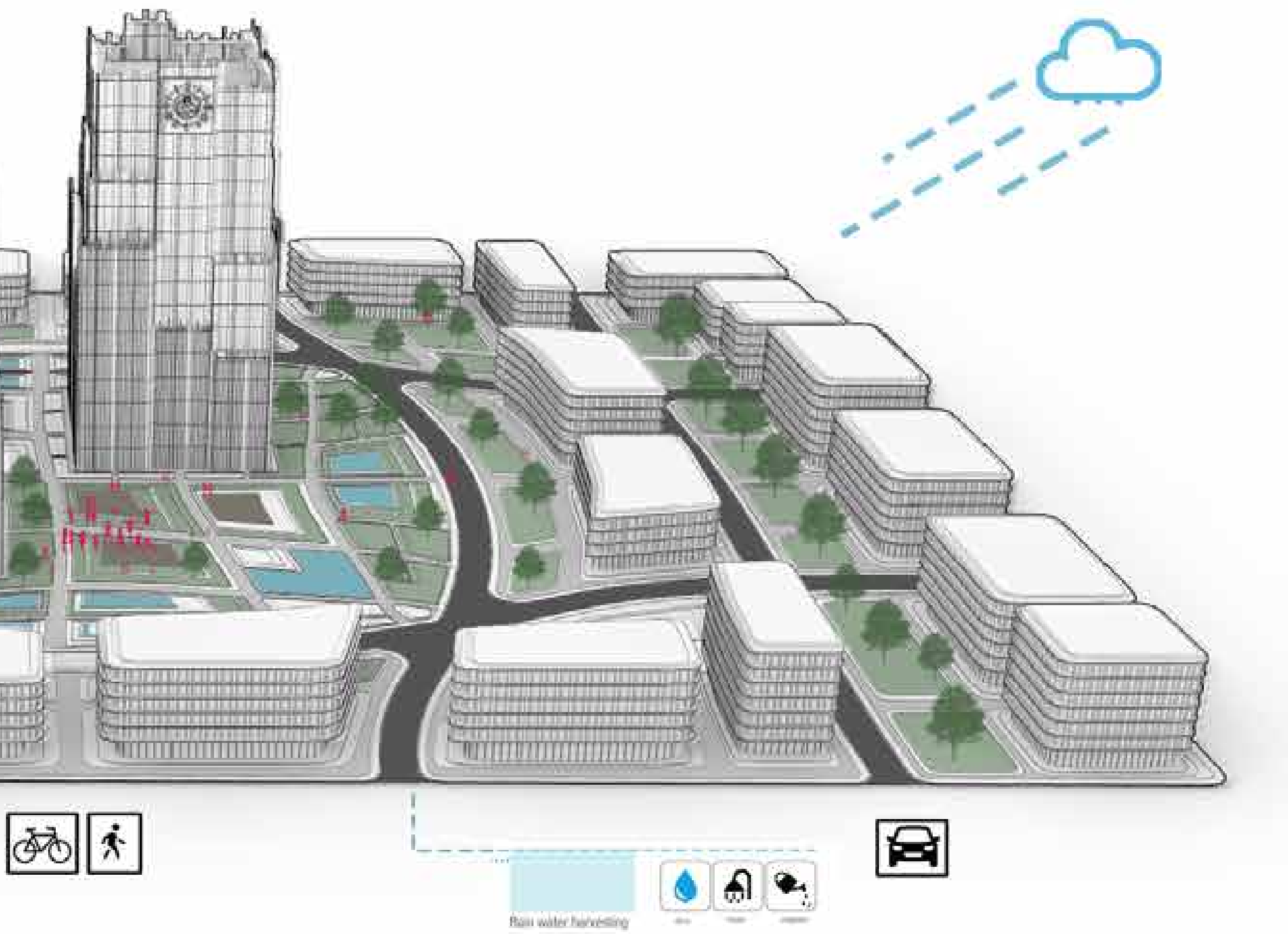
collecting water to reusec

Smart Urban Infrastructure

The project incorporates smart grids, energy monitoring, and automated systems to optimize .energy and sustainability

water management

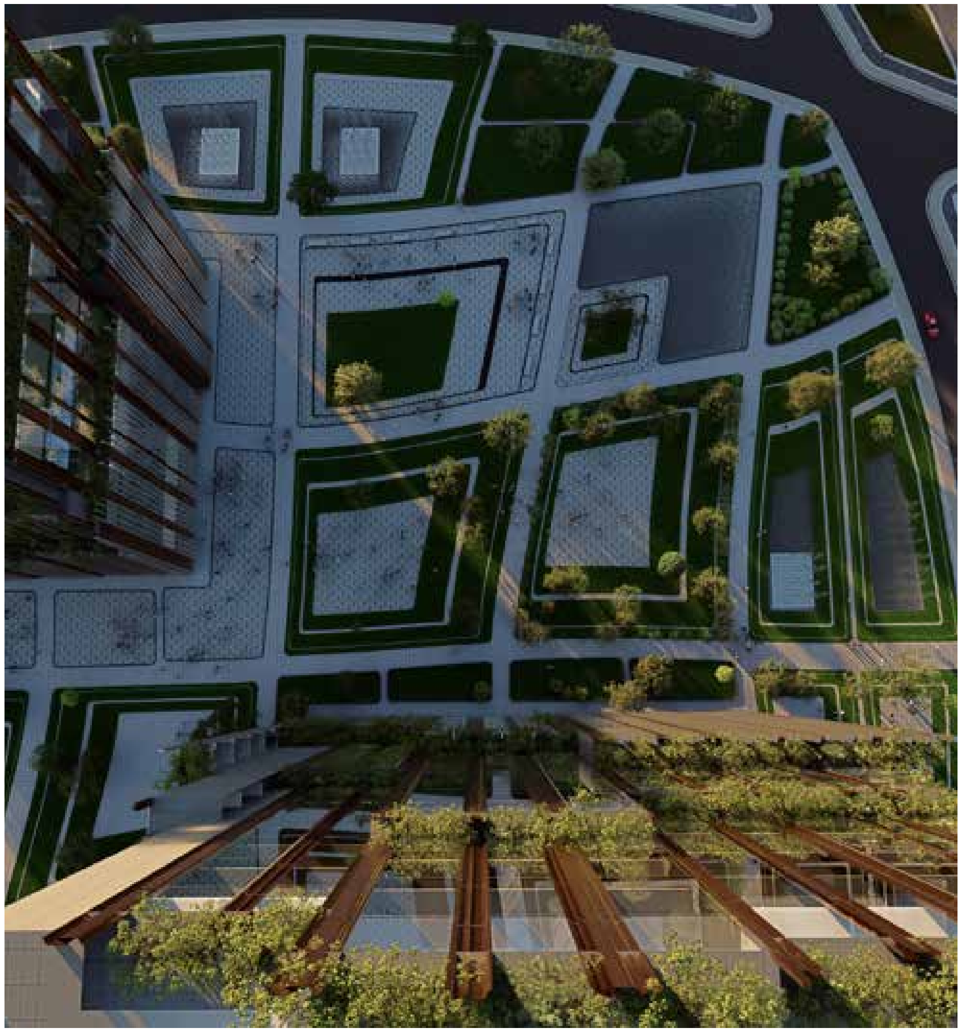
rainwater harvesting, green infrastructure, water recycling, efficient irrigation, low-flow fixtures, and integrated resource management to .conserve water and promote resilience



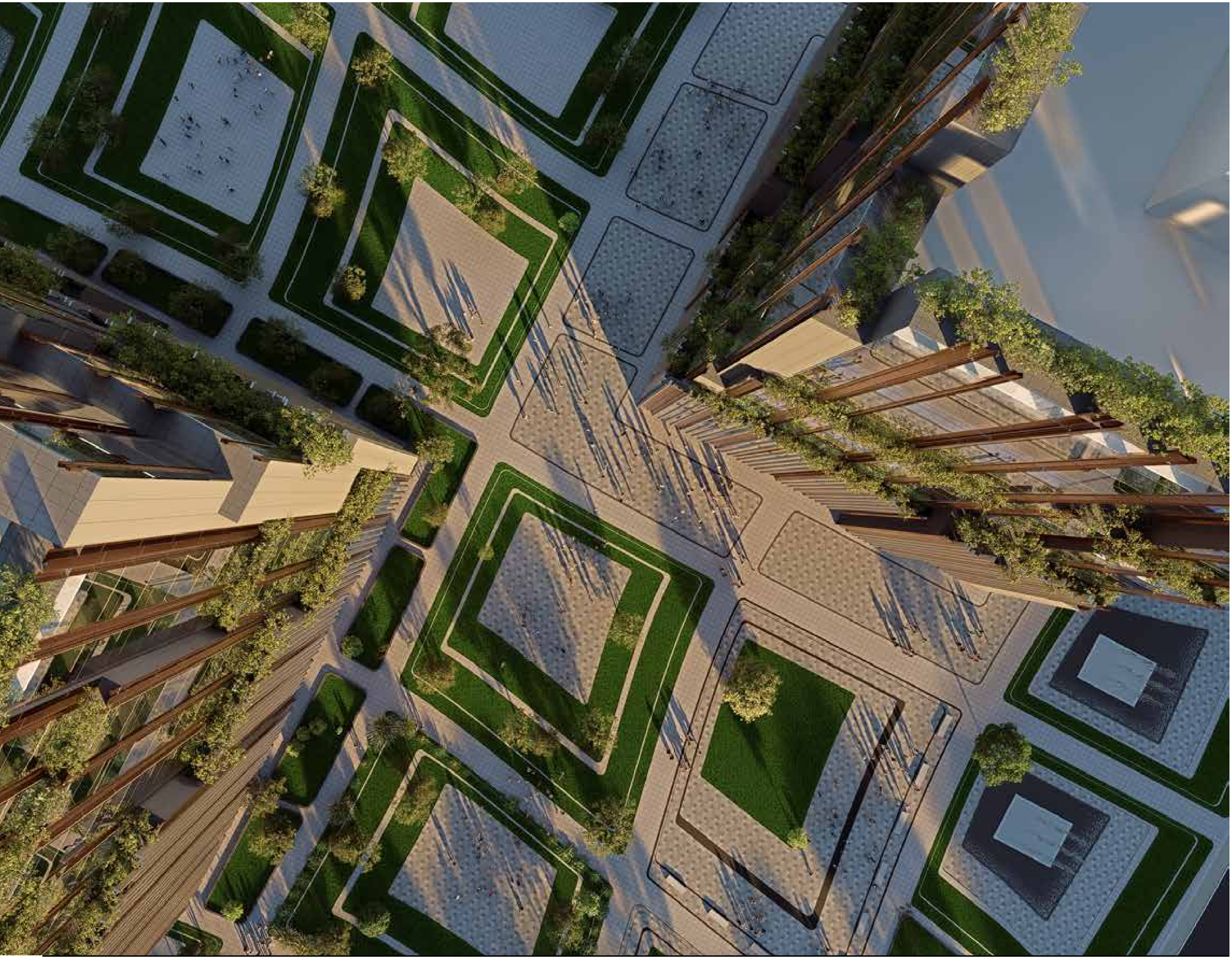
Site Plan and Pedestrian Circulation

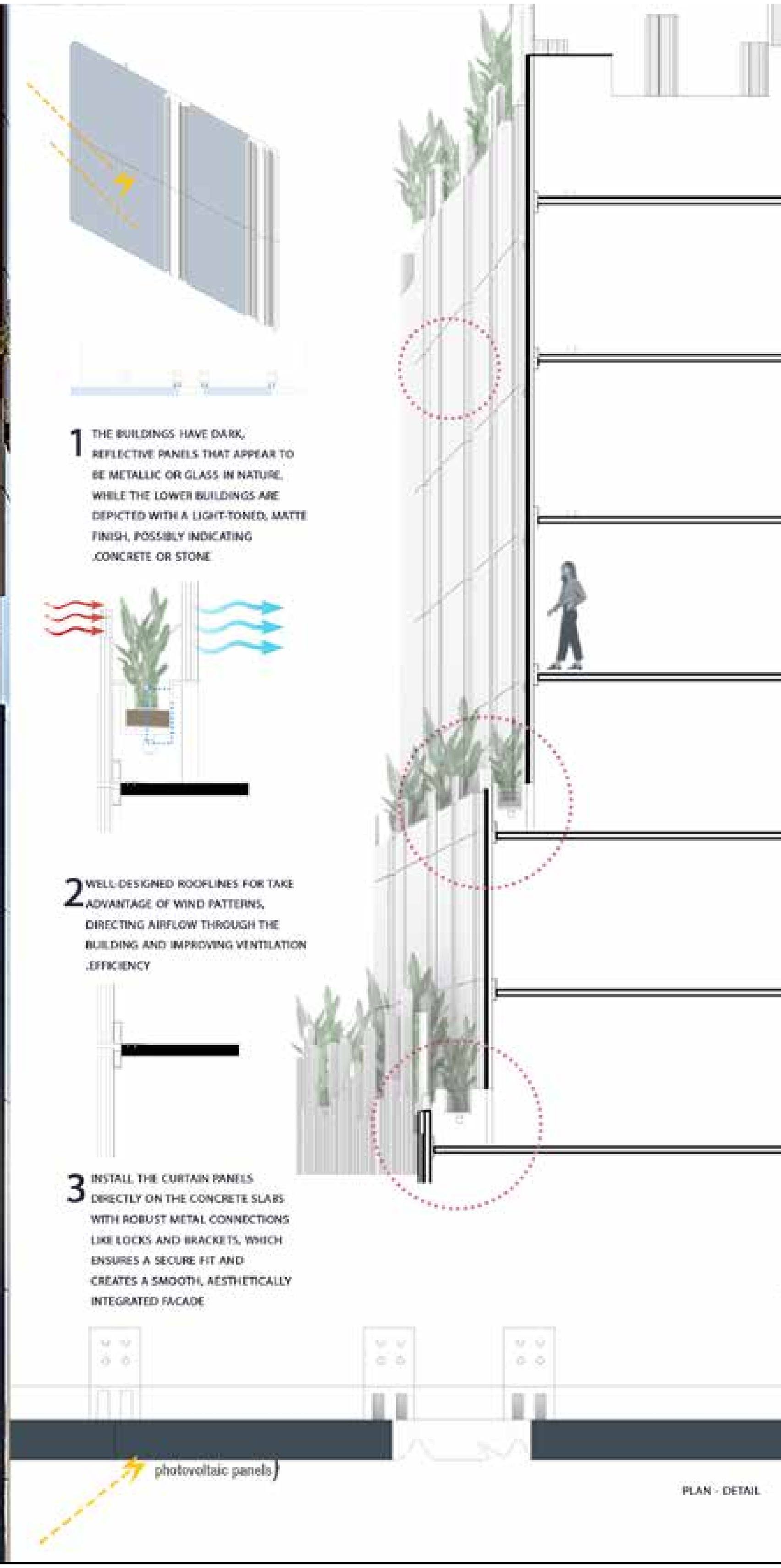
The site plan features a radial network, central open space, and distinct pedestrian-vehicular .separation for accessibility

the exploration of passive ventilation strategies potentially leveraging stack effect or cross-ventilation (enabled by building form and potentially operable facade components), and the incorporation of on-site renewable energy generation systems, notably photovoltaic panels. Integrated water cycle management encompasses rainwater harvesting, potential greywater reclamation systems, high-efficiency irrigation for the extensive integrated green spaces, and the implementation of Low-Impact Development (LID) strategies such as permeable paving within the landscape design. These extensive green areas, including vertical greening systems on the building facades, are designed to enhance local ecological value, improve microclimatic conditions, and contribute to the mitigation of the Urban Heat Island (UHI) effect.



Conceived as a dynamic commercial node, this retail complex draws inspiration from the traditional Islamic souq typology, organizing itself around a central courtyard flanked by retail units. This configuration fosters a sense of community and encourages social interaction while maximizing commercial visibility and optimizing pedestrian flow. The façade integrates a high-performance, parametrically generated louver system, mitigating solar heat gain and contributing a unique architectural expression. This passive solar shading strategy minimizes reliance on active cooling systems, thereby reducing energy consumption and promoting environmental stewardship. The building's sinuous roofline provides supplemental passive shading for pedestrian circulation areas and the central courtyard, creating a microclimate conducive to social activity and commercial engagement. Internally, the retail units offer flexible and adaptable floor plates, accommodating a diverse range of tenant requirements and promoting economic resilience. Extensive glazing throughout the complex maximizes daylight harvesting, reducing artificial lighting demands while creating a bright and welcoming internal ambiance.





The building envelope is articulated through a sophisticated, high-performance facade system, meticulously documented in both visual renders and technical diagrams. A unitized or stick-built curtain wall system constitutes the primary enclosure, featuring extensive glazing optimized for daylight autonomy and facilitating visual connection with the surrounding urban environment. This glazed system is modulated by prominent, vertically oriented brise-soleil elements, specified with a metallic bronze or copper finish. These elements serve critical functions in mitigating solar gain, imparting a distinct visual rhythm to the facade, and emphasizing the vertical proportions of the towers. Contrasting spandrel panels or solid cladding elements, potentially utilizing stone, precast concrete, or high-performance composite materials with a matte finish, are strategically integrated to confer textural contrast and compositional depth.

The project incorporates an advanced suite of smart building and urban technologies aimed at enhancing operational efficiency, resource management, and occupant well-being. The diagrams illustrate the deployment of an integrated digital infrastructure encompassing smart grid connectivity, granular energy monitoring, Building Management Systems (BMS) for automated control of HVAC and lighting systems, intelligent safety and security protocols (including surveillance and access control), and high-bandwidth digital connectivity (5G). Notable technological integrations comprise extensive IoT sensor networks for environmental monitoring, potential energy harvesting via piezoelectric transducers embedded within paving elements, smart street lighting infrastructure, and automated, data-driven irrigation systems.


ARCHITECTURE

Residental

Jasmin Tower

Dubai ,United Arab Emirates

City: Dubai ,United Arab Emirates

Client: Bank Albaraka

Size: 25,000m²/ 269,000f²

Status: Proposal

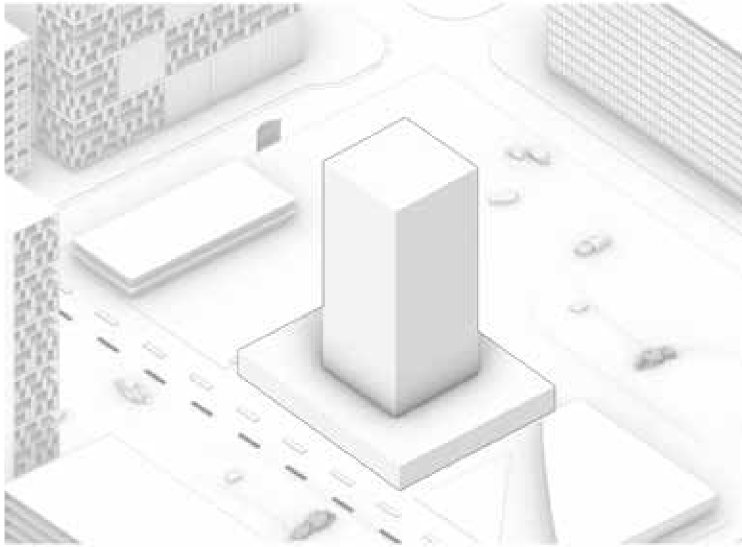
Typology: Residential, Retail

Year: 2017

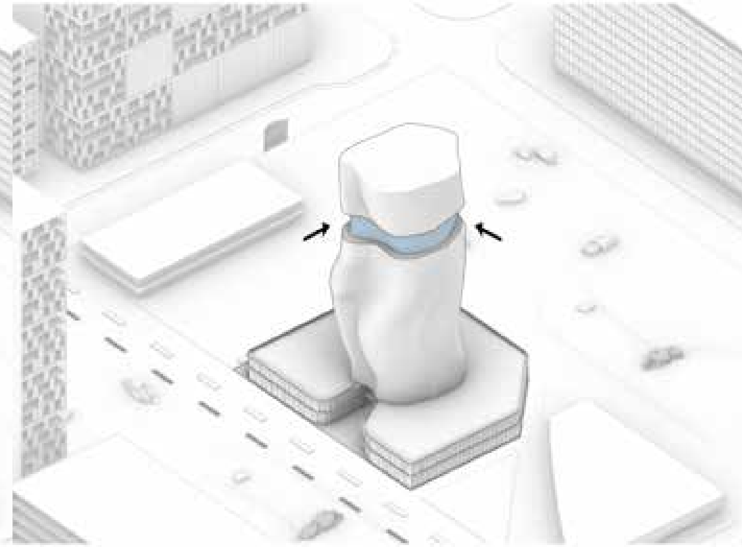
Jasmine Tower spans 790 m^2, standing prominently at 60 meters with 22 above-ground floors and an additional 3 underground, redefines architectural inspiration by drawing from the intricate design of the jasmine leaf.

The external facade reflects the mid-rib and veins of the leaf, gracefully twisting and rotating as it ascends, influencing the corresponding rotation of the floors within. This organic design is more than an aesthetic choice; it's a structural intelligent supporting system.

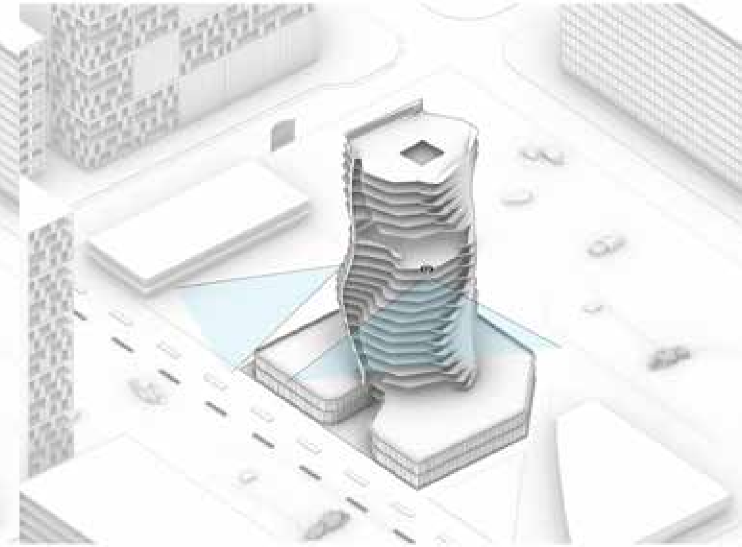
Inspired by the central vein's role in nutrient transportation within a leaf, the tower's midrib is a vital element enhanced by a high-performance cabling system. This system connects each level and integrates smart building technologies, creating an intelligent and responsive architectural marvel. The decision to twist the main cube adds a layer of complexity to the design. This architectural element provides a unique visual identity and serves functional purposes.



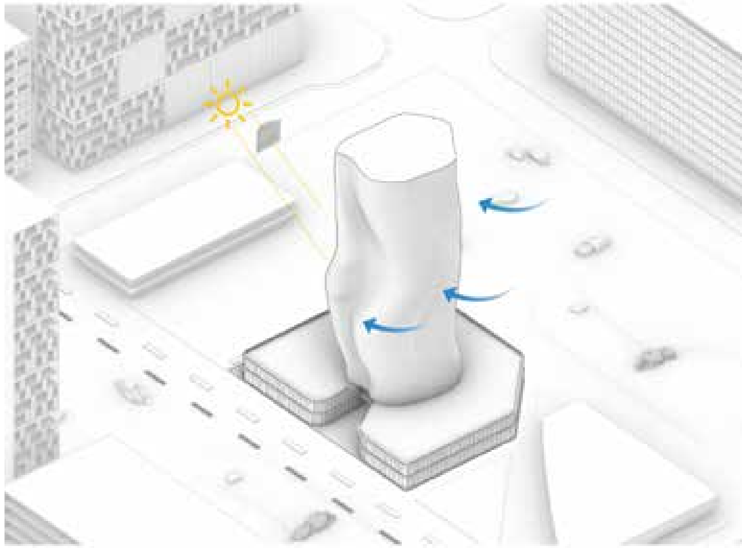
1-Maximum Volume



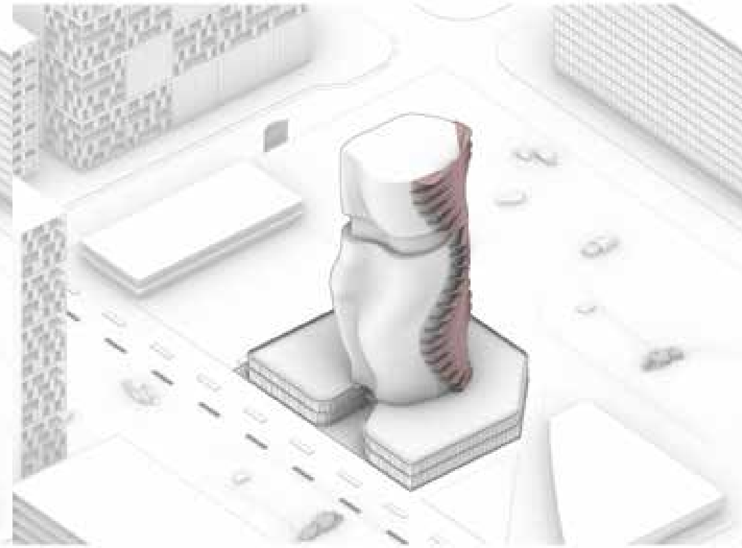
4-HOLLOW OUT



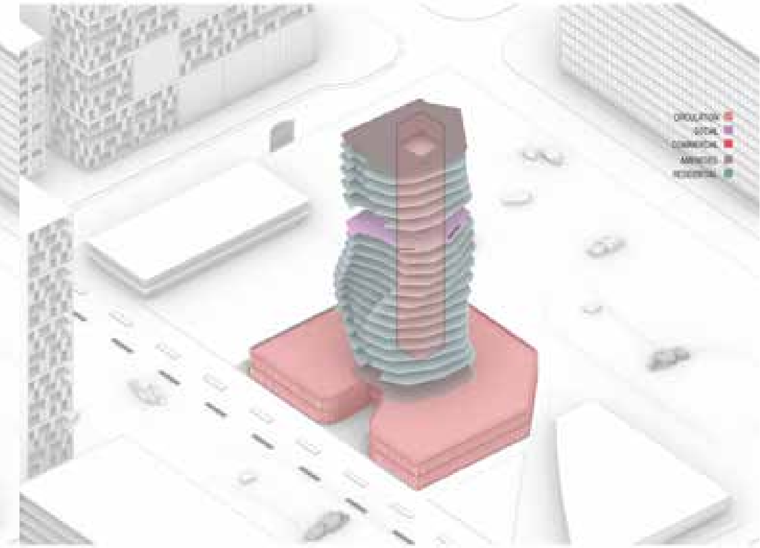
7-VIEW



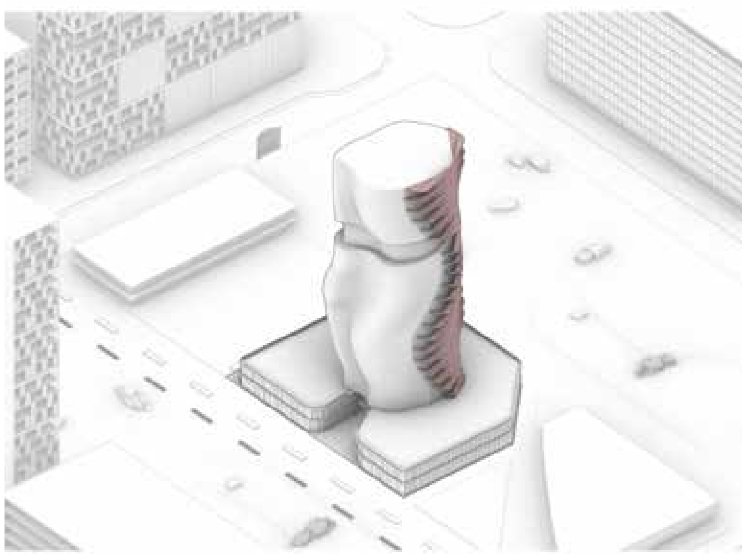
3-CARVE



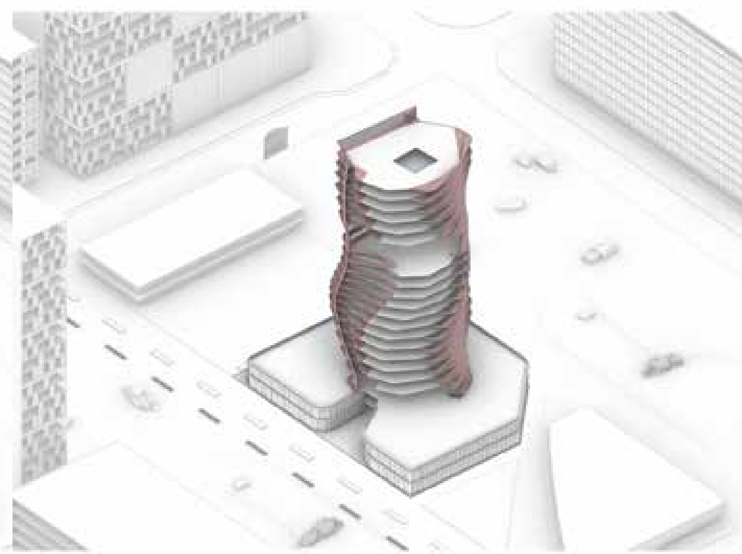
5-ADDING MIDRIB



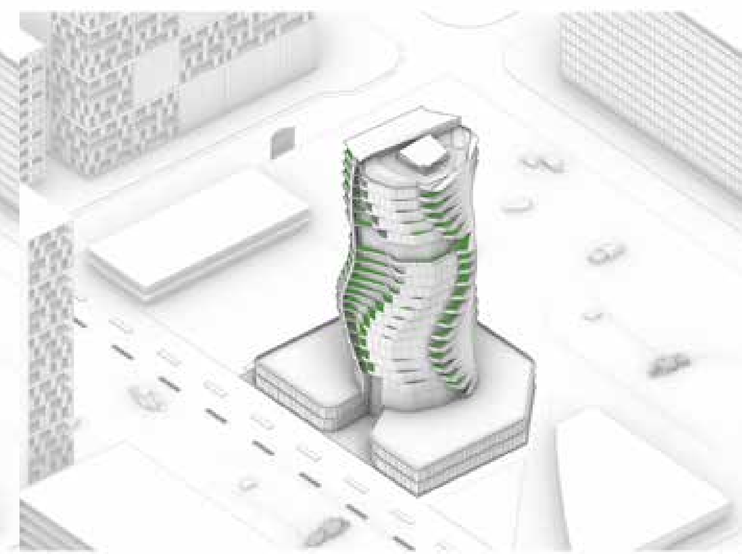
8-SPACE DISTRIBUTION



5-ADDING MIDRIB

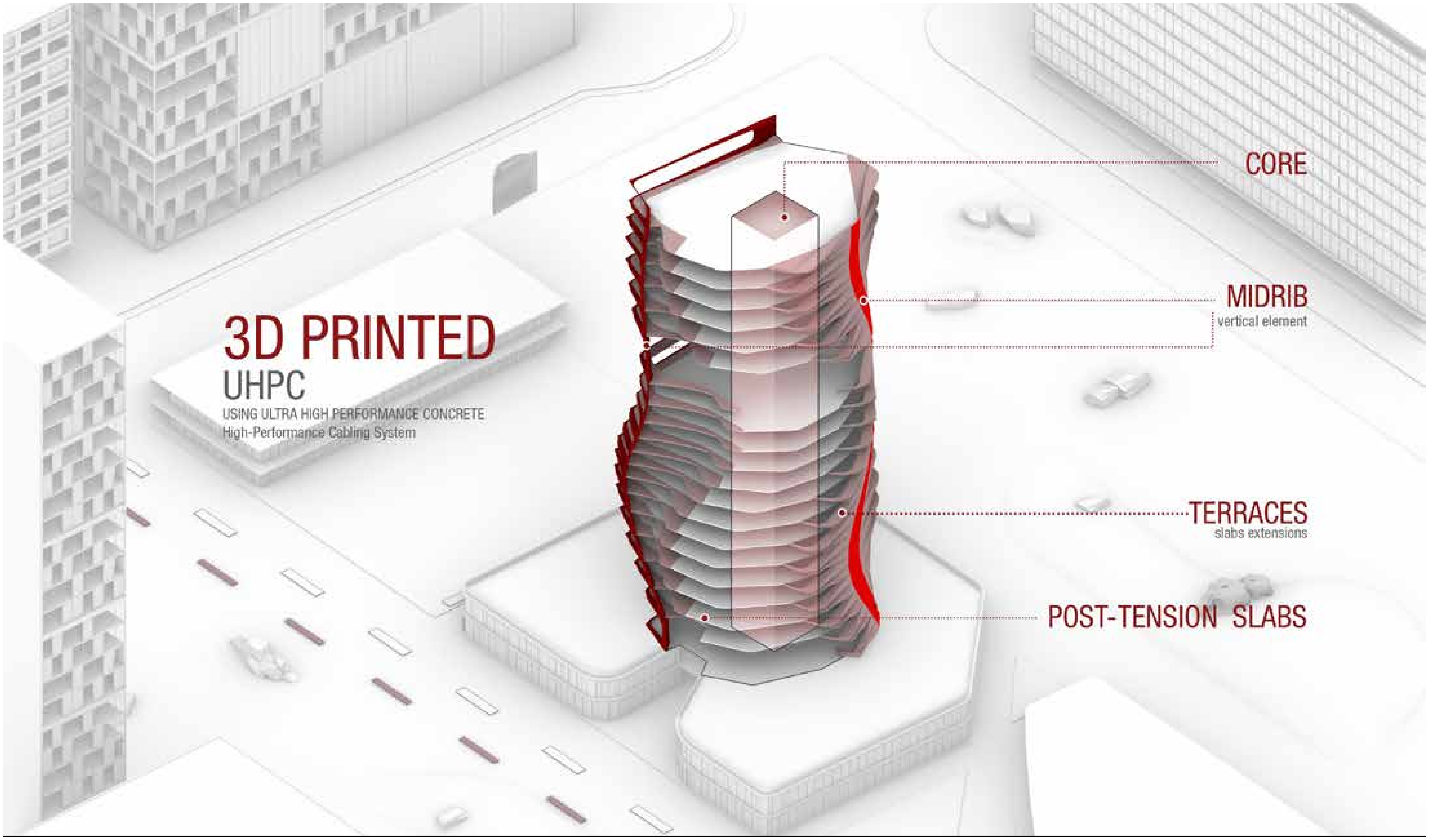


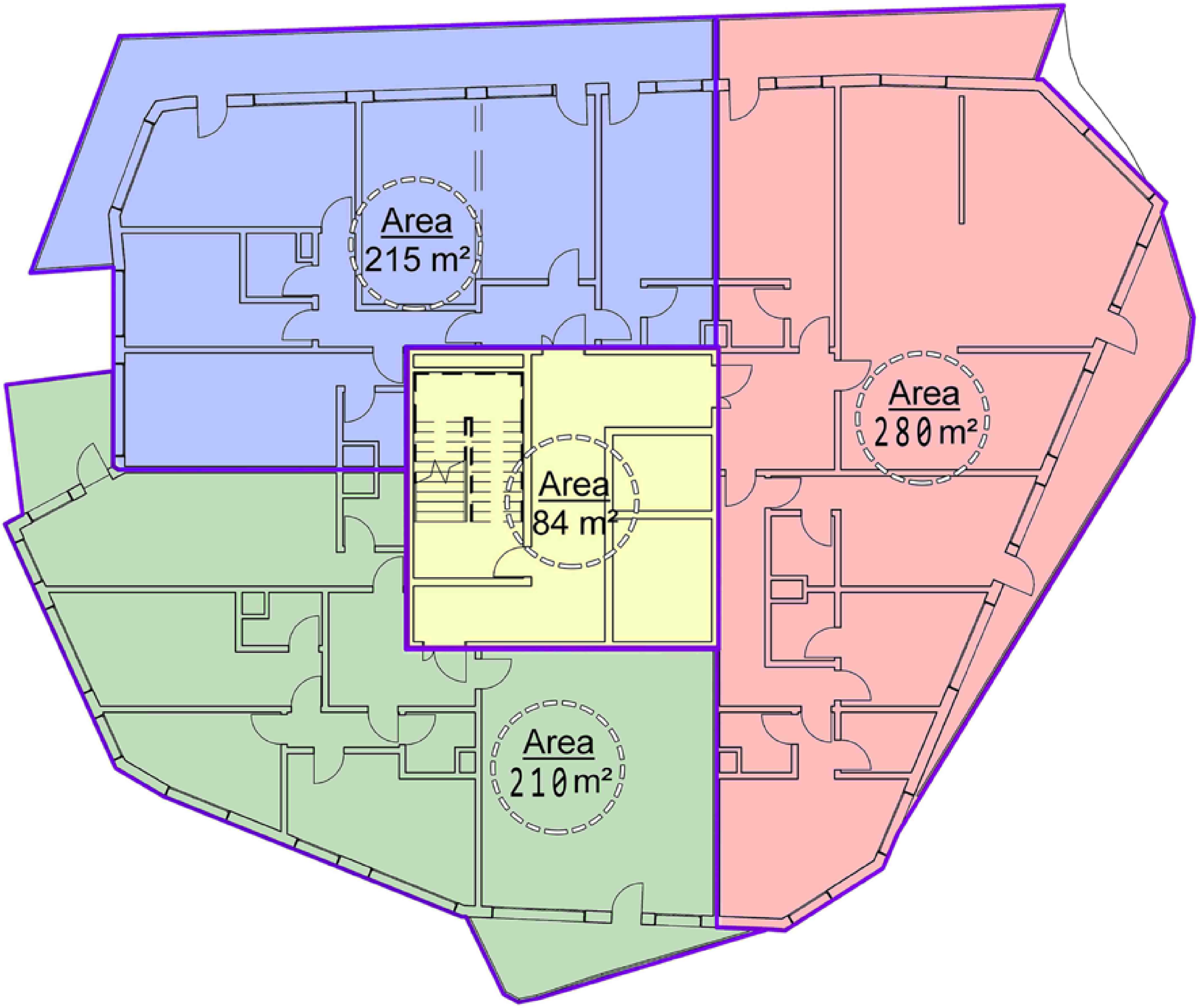
6-ADDED TERRACES



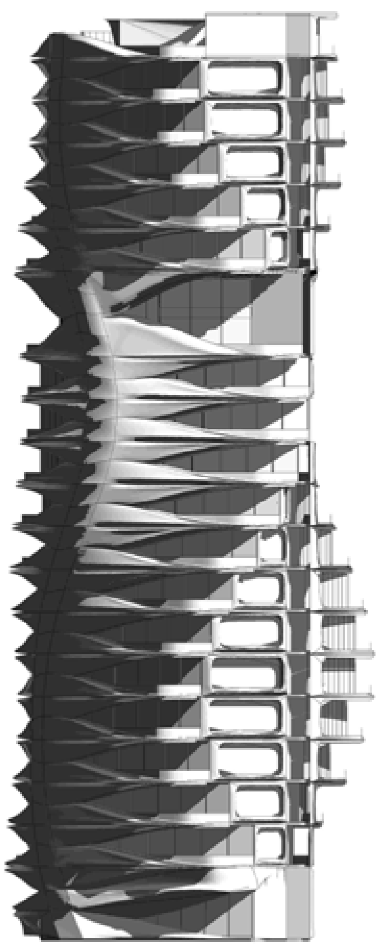
9-VEGETATION

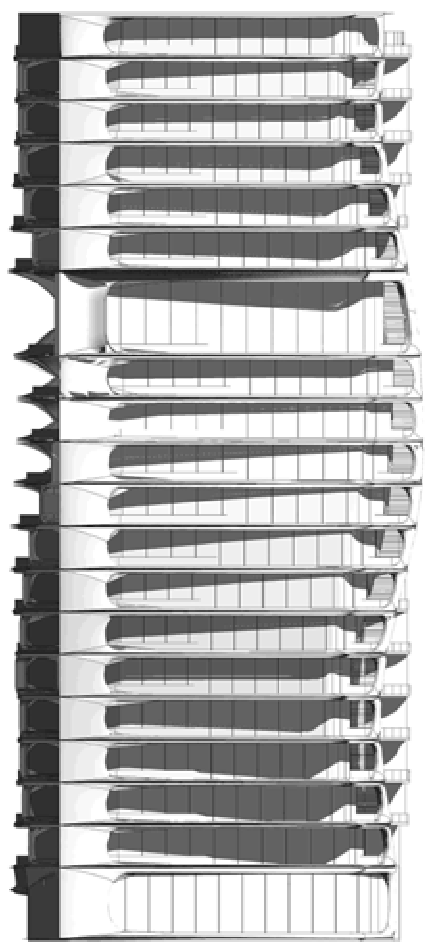
The tower's structural system employs post-tension slabs, a key feature facilitating the creation of expansive terraces. This innovative construction method optimizes the use of space and enhances the building's aesthetic appeal. The midrib, a vital element in the tower's design, is fortified by a high-performance cabling system. This technology not only reinforces structural integrity but also allows for the realization of the twisting design while ensuring the overall stability of the building. The combination of post-tension slabs and a robust cabling system reflects a thoughtful approach to structural engineering, enabling the seamless integration of architectural creativity with engineering precision.

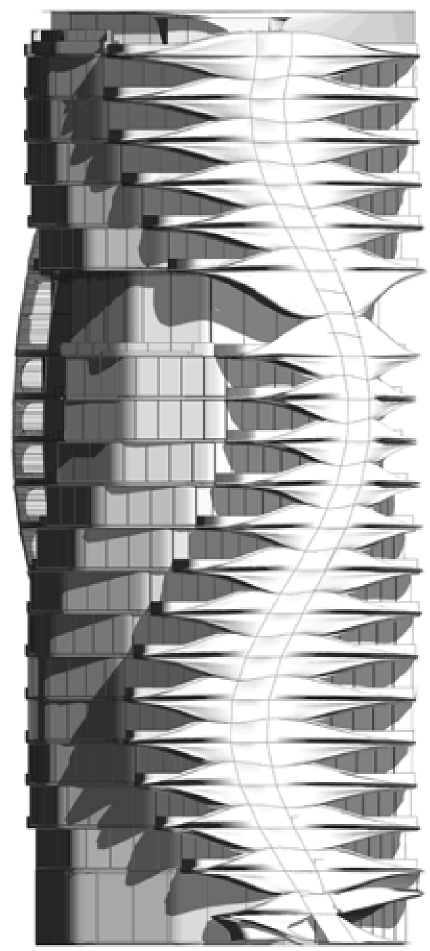


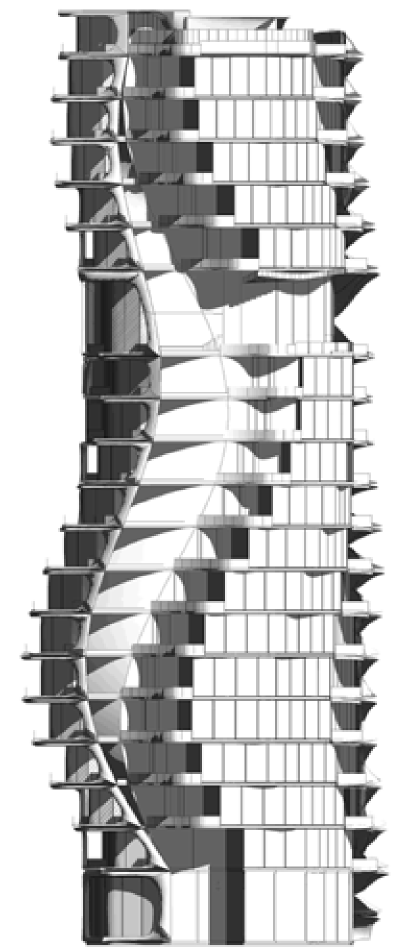

Area
215 m²
Area
280 m²
Area
84 m²
Area
210 m²

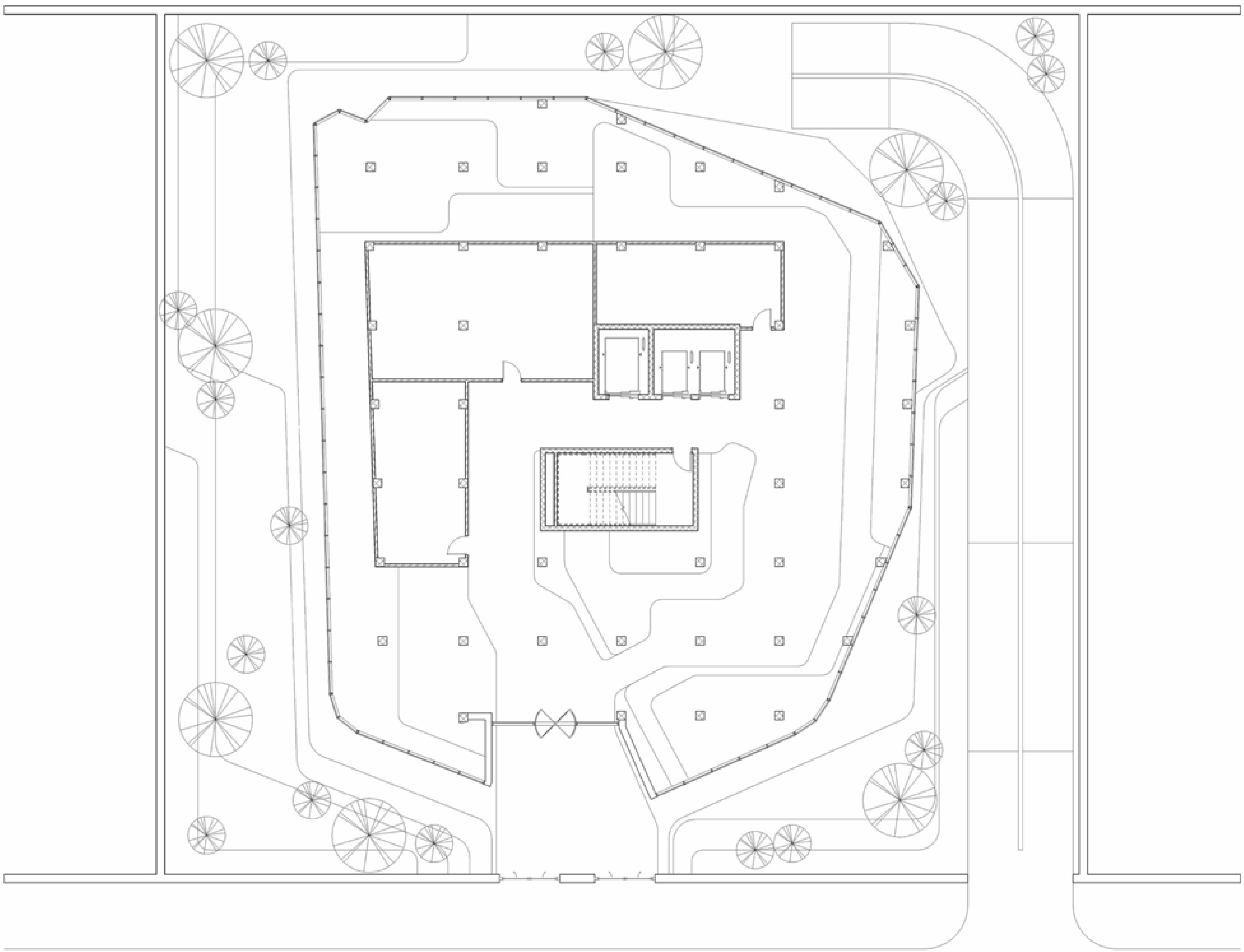
Housing 64 luxurious residential flats, each floor is uniquely positioned between the branching veins of the central midrib, providing breathtaking views and an intimate connection with the exterior environment. The tower stands on a 2-storey high commercial podium, featuring retail shops and a restaurant on the third level with terraces that capitalize on the rooftop space. Residential floors span from the 4th to the 14th, while the 15th floor boasts a double-height space dedicated to a spa and its amenities. On The rooftop another restaurant, a pool, and lush greenery in the form of planting beds. This carefully crafted layout ensures a seamless blend of commercial, residential, and recreational functionalities.

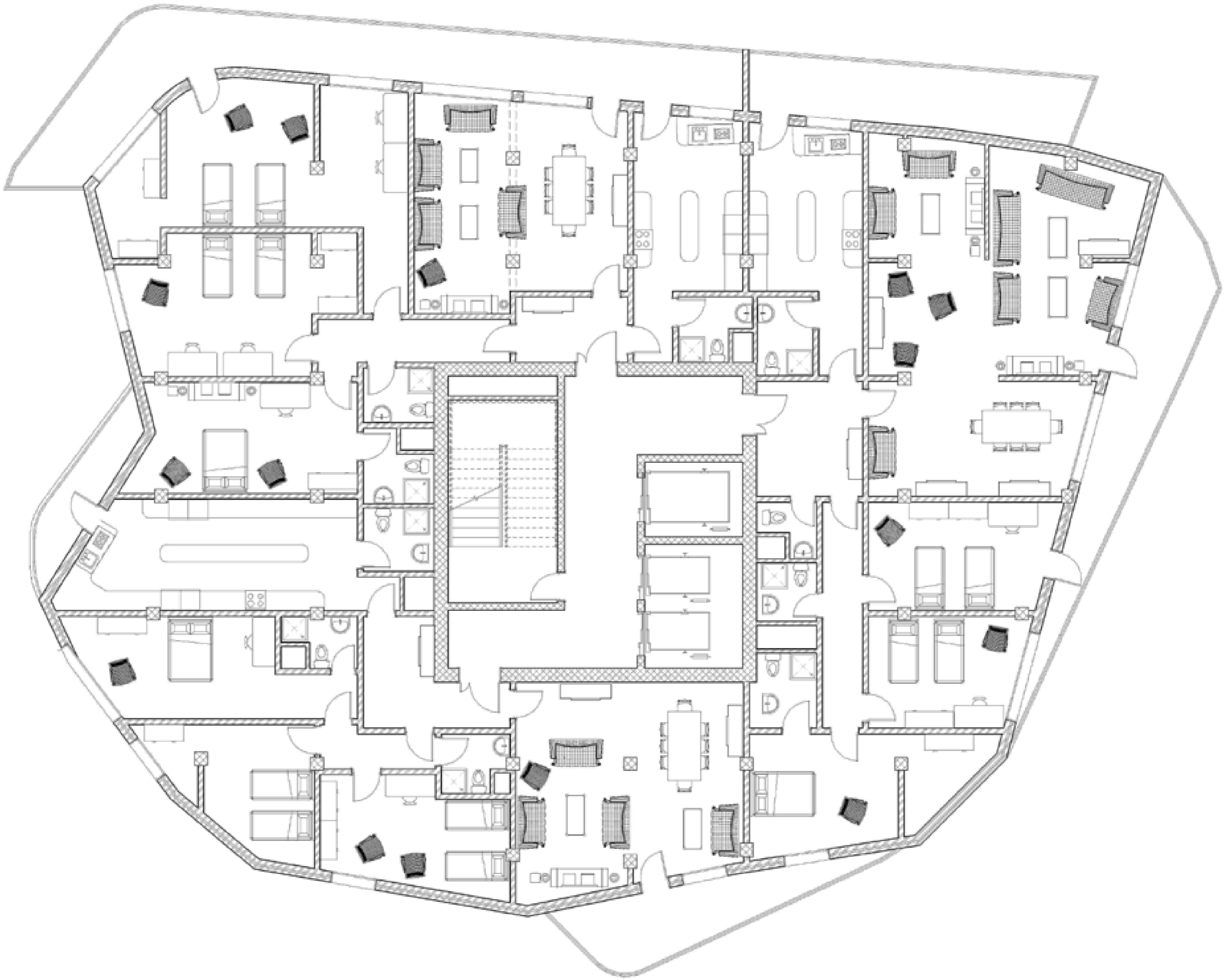

northern elevation


eastern elevation


western elevation


southern elevation





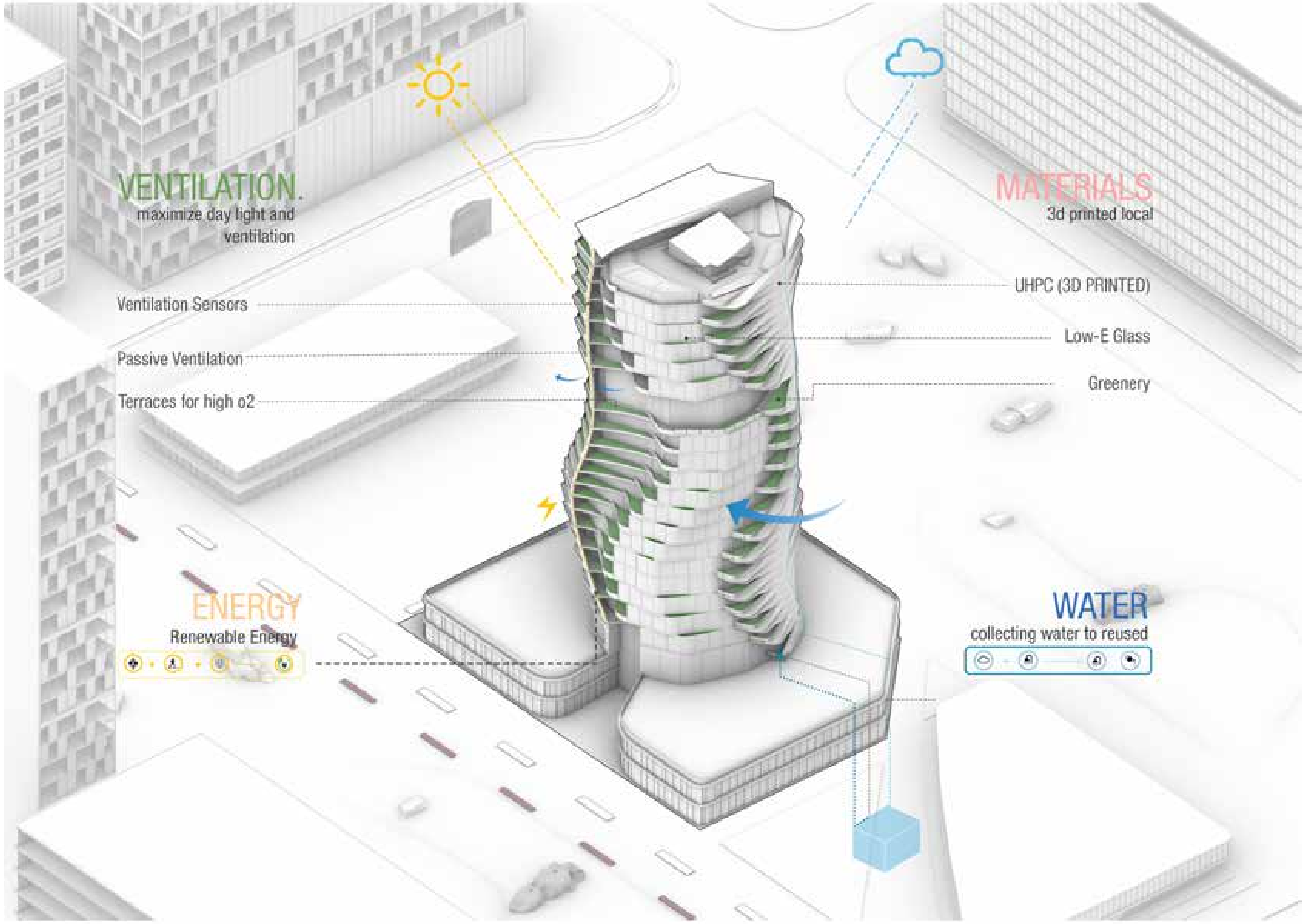
5m
3m
1m

The commercial podium of Jasmine Tower serves as a vibrant hub for retail and dining experiences, spanning two stories beneath the residential floors. Designed with meticulous attention to detail, the podium features an array of upscale retail shops and a sophisticated restaurant on its third level, complete with inviting terraces that capitalize on the rooftop space.

This carefully curated mix of offerings not only caters to the needs of residents but also attracts visitors seeking a blend of luxury and convenience. With its contemporary design and strategic layout, the podium exudes elegance and functionality, seamlessly integrating commercial functionalities into the architectural vision of Jasmine Tower.


363

The tower integrates piezoelectric technology within its floor slabs, transforming vibrations caused by foot traffic and structural movements into electrical energy. This not only contributes to energy efficiency but also monitors the structural health of the building. The use of low-emissivity (low-e) double glass enhances insulation, and smart solar panels are strategically incorporated to harness renewable energy. The AI-driven optimization system further reduces resource consumption and waste, fostering eco-friendly practices.



The tower prioritizes sustainability through various features. Rainwater harvesting systems are integrated to promote water conservation. The twisting design enhances natural lighting and ventilation, reducing reliance on artificial sources and energy consumption. Green terraces aesthetically enhance the surroundings and contribute to environmental well-being, acting as green spaces that absorb carbon dioxide and support biodiversity. Overall, the design seeks to minimize the environmental footprint, creating a harmonious balance between modern architecture and ecological responsibility.

Jasmine veins, known for their intricate patterns, may be translated into the layout of the terraces. This not only adds an artistic dimension to the architecture but also creates unique spaces for residents to enjoy.

The strategic placement of terraces serve to optimize sightlines, allowing residents to enjoy panoramic views of the cityscape or natural surroundings.

The 15th floor, a double-height space carved out from the mass, serves as a captivating entertainment floor for residents. This unique design incorporates a Sauna pool, a trendy café, and external sitting areas, creating a luxurious retreat within the building.

The double-height feature adds a sense of grandeur, enhancing the overall aesthetic appeal of the entertainment space

The rooftop of the building is conceived as a welcoming space that embodies hospitality. Featuring a pool, cafe, and restaurant, it serves as a multifunctional oasis in the sky. The pool provides a refreshing escape, while the cafe and restaurant offer diverse culinary experiences.

The strategic placement and design of these amenities maximize panoramic views, creating a captivating atmosphere for residents and visitors. This communal space fosters a sense of community, relaxation, and conviviality, elevating the overall living experience and reflecting the building's commitment to hospitality and social engagement.

Alhafeez Square

Lahore ,Pakistan

Client: Alhafez Group

Size: 1,000m²/ 10,700f²

Status: In Construction

Typology: Residential, Retail

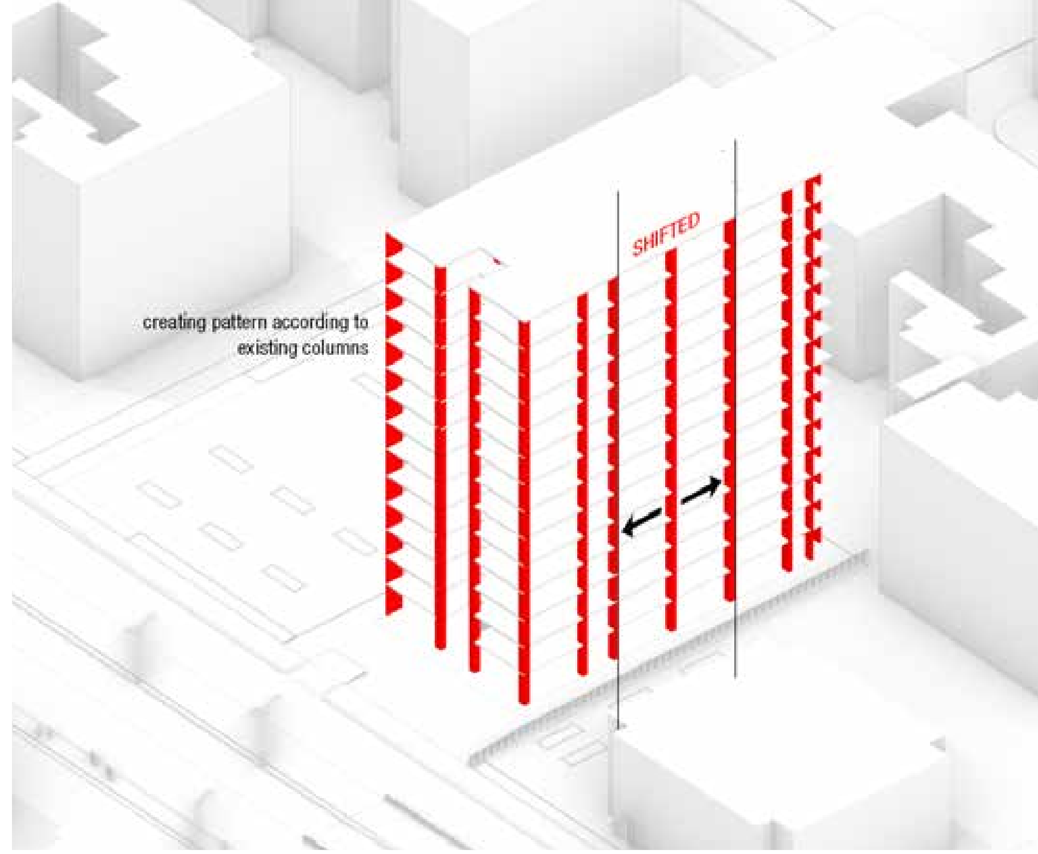
Year: 2024

Located in Gulberg, Lahore, this mixed-use tower proposal emerged in response to the challenge posed by the current state of the tower, which was at its superstructure phase, with floors and structural elements like columns and beams already constructed.

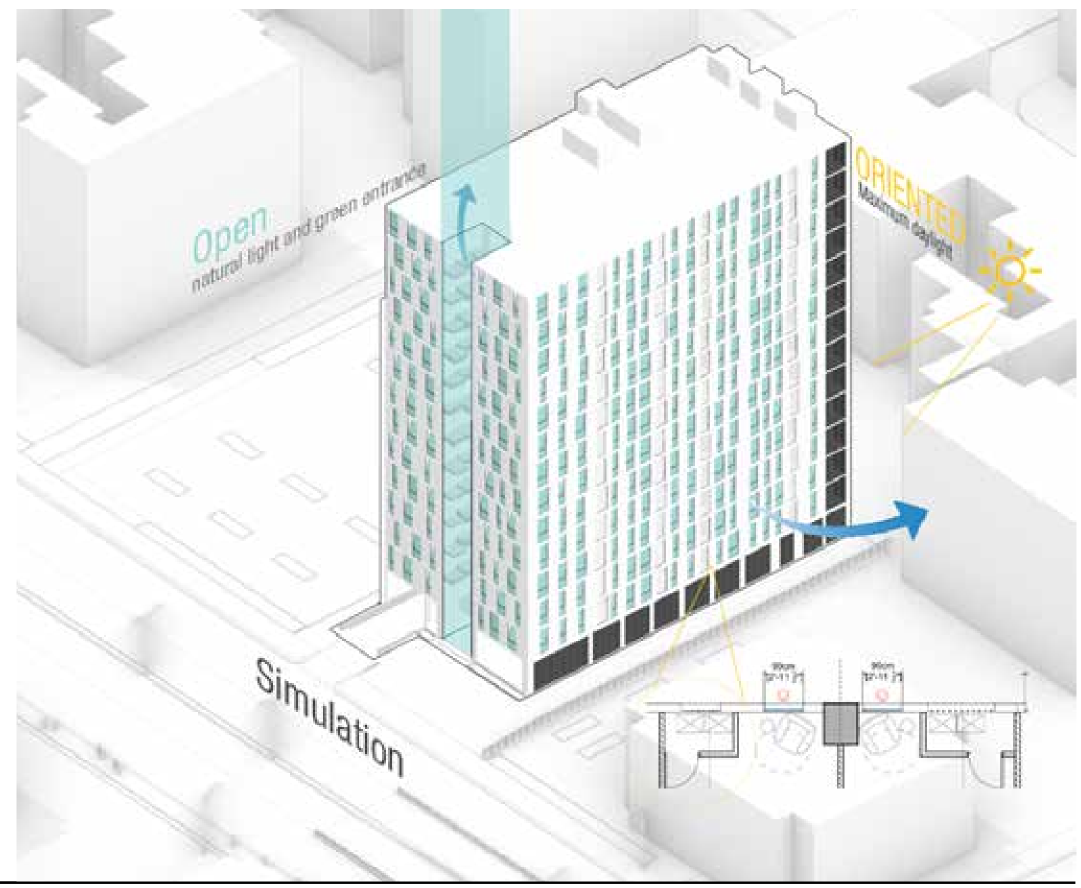
This presented an opportunity for us to showcase creativity and adaptability in working with an existing structure. Following assessment, evaluation, wind and solar path simulations, and consideration of client requirements and vision, the design approach for the façade aimed to work around the existing load-bearing columns.

Within our building, expansive bay windows and balconies within the apartments are strategically positioned to forge visual connections between indoor and outdoor spaces, granting residents vistas of the vibrant streetscape and nearby verdant surroundings. These architectural elements not only serve to enhance the building's unique aesthetic but also create a sculptural facade that captures attention. Across all the floors, meticulous attention has been paid to crafting living areas that optimize panoramic views of the cityscape while safeguarding residents' privacy. This deliberate design fosters an unparalleled living experience, seamlessly blending the allure of urban living with the tranquility of private retreats.


Existing Situation


creating pattern according to existing columns
SHIFTED

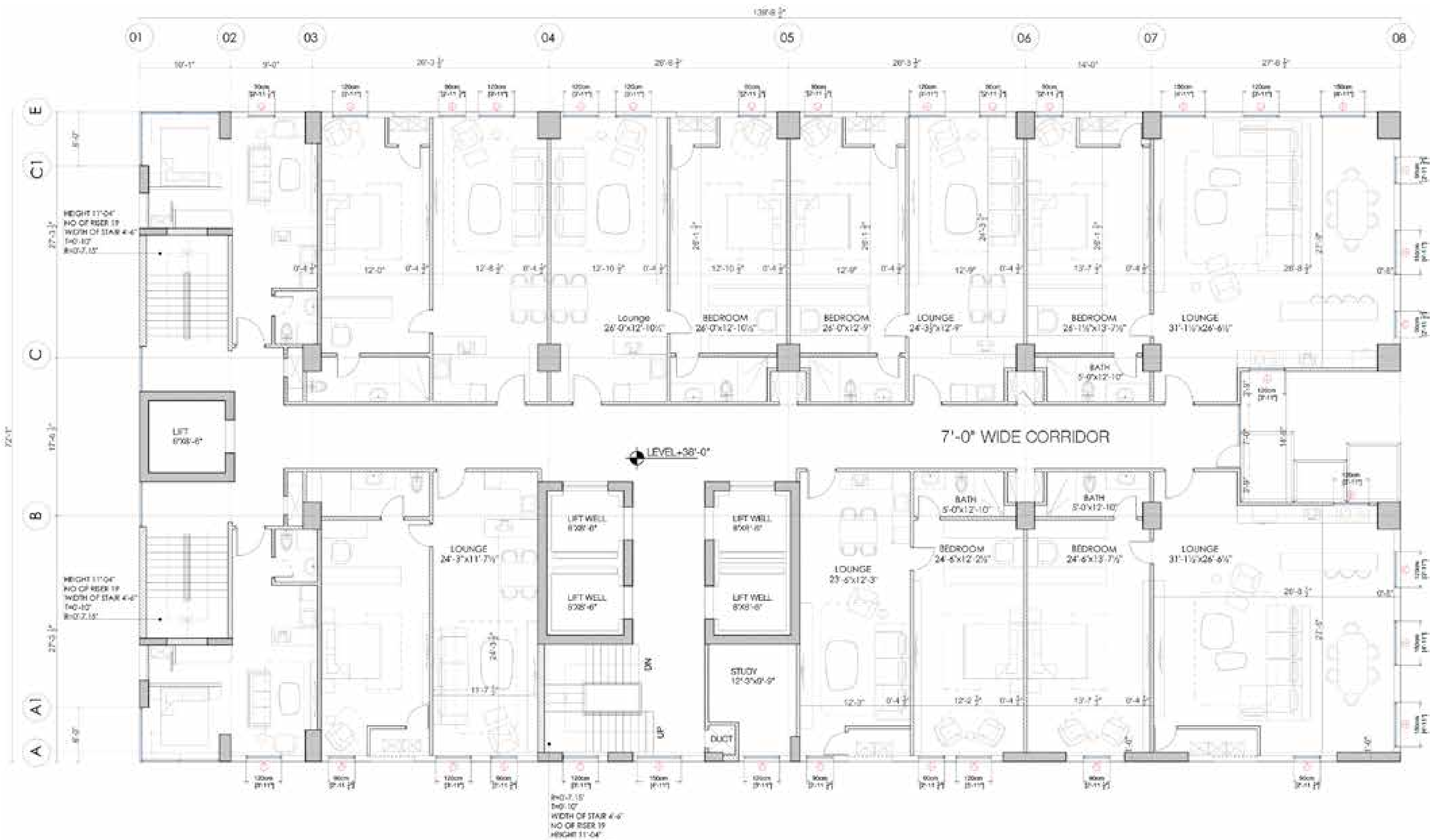

creating pattern according to existing columns
SHIFTED


Open
natural light and green entrance
ORIENTED
Maximum daylight
Simulation

By manipulating the solid and void, we created an aesthetically balanced pattern between the negative (openings) and the positive (walls), resembling a shifted checkerboard pattern, which provides a sense of movement and deviation from the regular grid, offering a visually dynamic and distinctive facade.

Entrance of this tower design is adorned with vertical green terraces, contributing to its green footprint and enhancing its environmental sustainability. These terraces serve as a welcoming and visually striking feature, creating a natural transition from the exterior to the interior spaces. The incorporation of greenery not only adds aesthetic appeal but also promotes environmental benefits such as improved air quality, temperature regulation, and stormwater management. Furthermore, these green terraces contribute to biodiversity support, reduce the urban heat island effect, and enhance energy efficiency. Overall, they embody the commitment to sustainability inherent in the design, creating a harmonious fusion of nature and architecture that inspires sustainable living.

The ground floor offers premium office spaces, and from the 1st to the 13th floor, the tower houses a collection of 130 well-designed apartments categorized into three types based on the area size: 35m^2, 80m^2, and 120m^2. The interior layout was devised seeking to optimize the given available space, ensuring functionality, flow, and adherence to the client's and user's needs.




01
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C1
C
B
A1
A
LIFT
LIFT WELL
LIFT WELL
LIFT WELL
LIFT WELL

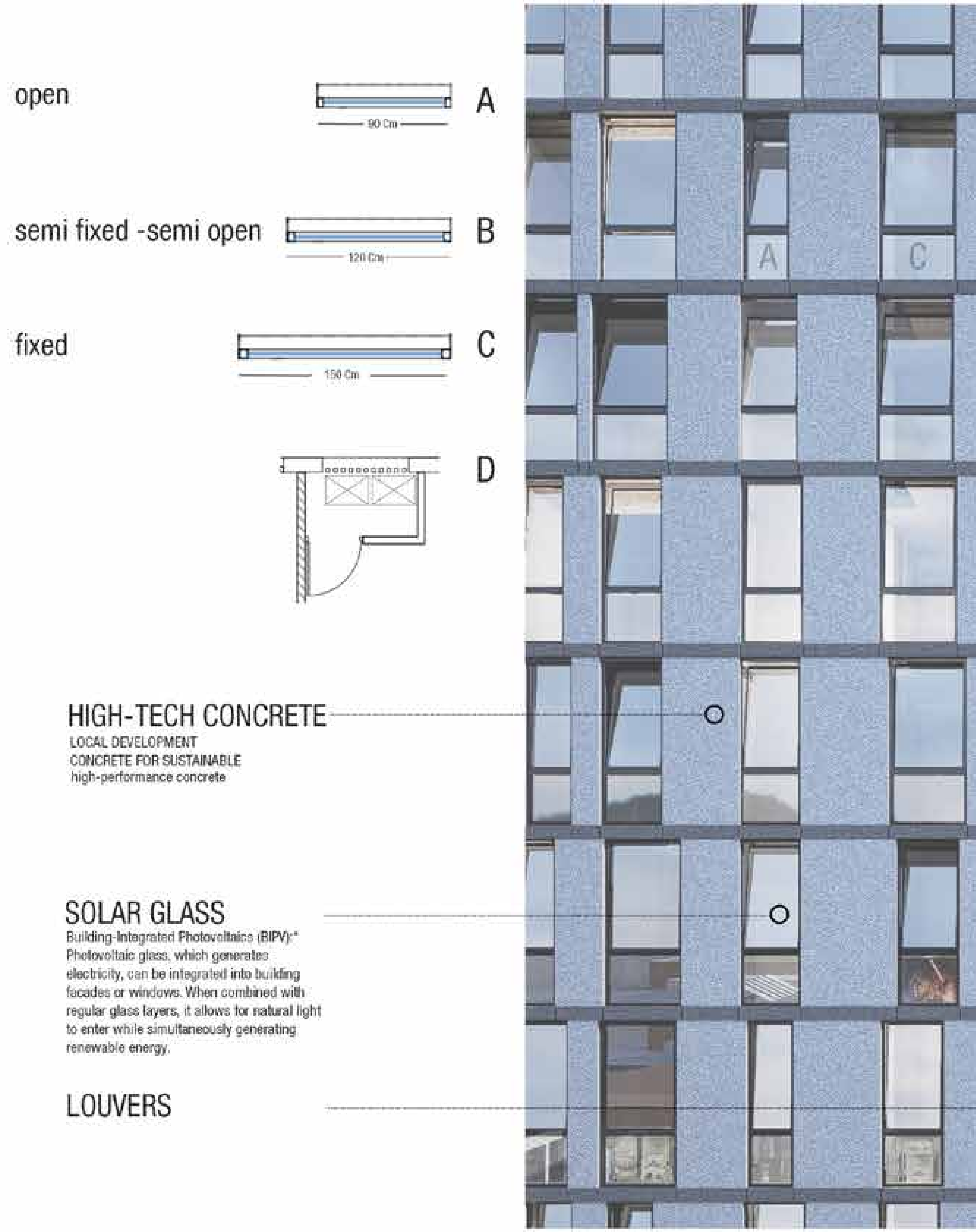
By incorporating this geometric motif into our facade design, we pay homage to the rich heritage of Lahore while also infusing a sense of order and symmetry into the architectural composition. The rectangular pattern not only adds visual interest but also creates a cohesive and harmonious aesthetic that resonates with the historic context of the city. It serves as a reminder of the enduring legacy of Mughal architecture and its influence on contemporary urban design, blending tradition with modernity in a seamless fusion of past and present.

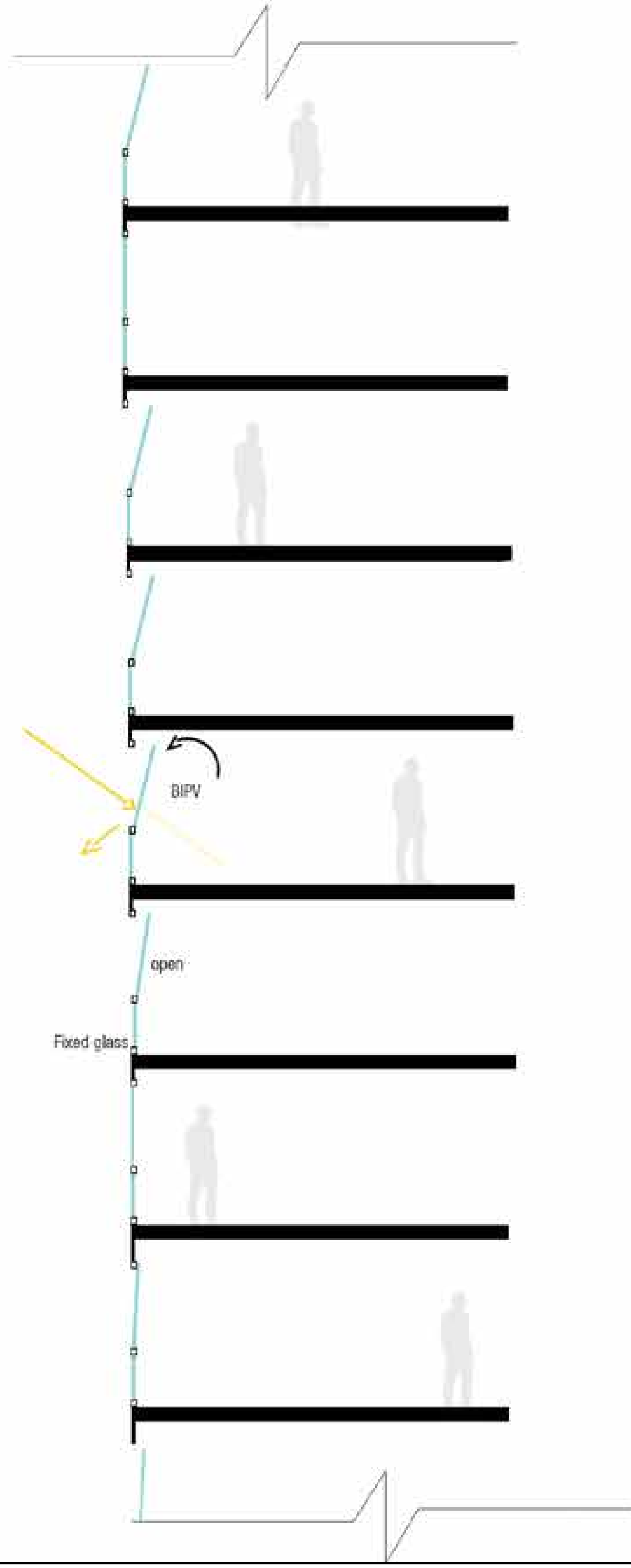
By harnessing the transformative power of silt lighting, our tower undergoes a captivating metamorphosis from day to night, leaving a lasting impression on the cityscape. In the daylight hours, the tower stands as a beacon of modernity, with sunlight streaming through the windows, casting intricate patterns and shadows that dance across its facade.

As dusk falls and darkness envelops the city, the tower comes alive with a luminous glow. Sill lights delicately illuminate the windows' openings, creating a mesmerizing interplay of light and shadow that adds depth and drama to the architectural silhouette.

This dynamic variation in lighting not only enhances the tower's visual impact but also contributes to the overall ambiance of the city, infusing it with an aura of sophistication and allure that captivates both residents and visitors alike.

As for the material selection for the façade, factors like durability, weather resistance, maintenance, and sustainability were taken into consideration. Therefore, double-glazed windows that combine both photovoltaic glass and regular glass were chosen for their ability to allow natural light to enter while simultaneously generating renewable energy.





High-tech concrete was chosen for the façade panels due to its high strength, durability, self-healing properties, sustainability, and the possibility of incorporating sensors or embedded technologies to monitor structural health.

Cactus Tower

Damascus ,Syria

Client: Atox Engineering

Size: 820m² / 8,826f²

Status: Proposal

Typology: Residential

Year: 2018

Cactus Tower, an elegant 12-story apartment building in Mezzeh, Damascus, stands as a striking testament to thoughtful design and integration into the urban context. Comprising 64 apartments, this 60-meter-tall structure seamlessly blends with the surrounding urban fabric while commanding attention with its distinctive spiky outline, earning it the fitting name "Cactus."

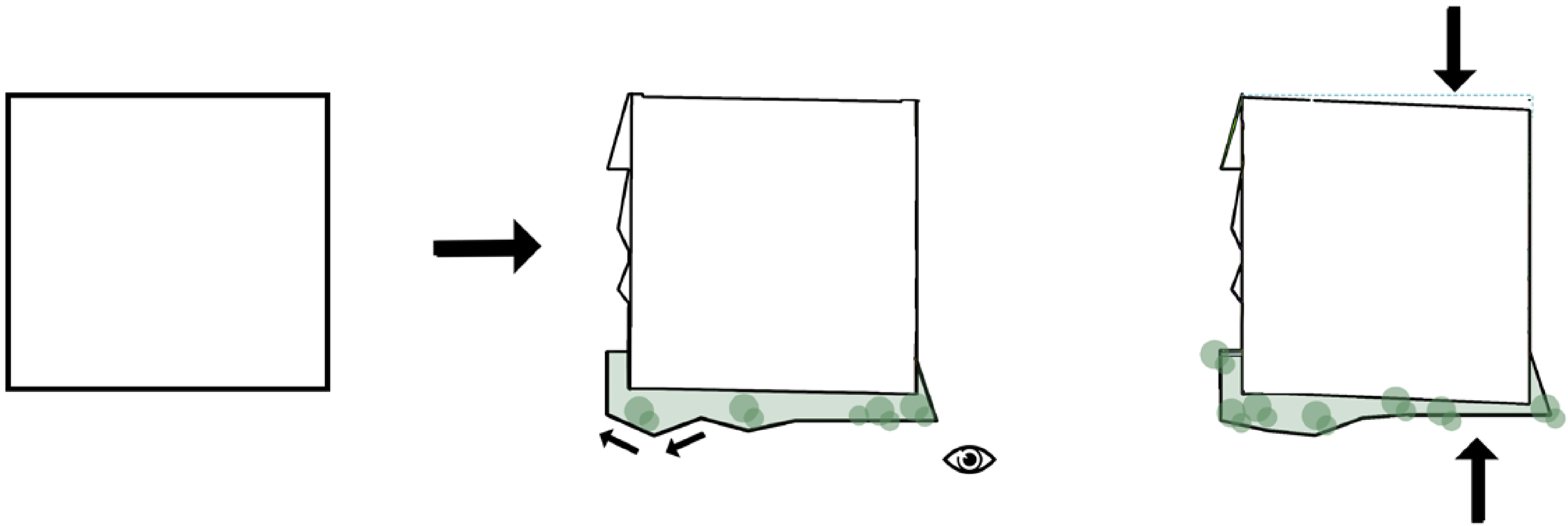
The north-facing facade, adorned with balconies inspired by the cactus's form, not only adds a touch of uniqueness but also serves functional and aesthetic purposes. Overlooking a vibrant plaza, the building creates a sense of community engagement. The contemporary design, marked by clean lines, simplicity, and modern aesthetics, ensures Cactus Tower's visual identity is both timeless and captivating, contributing to the architectural richness of Mezzeh.

The entrance pavilion is thoughtfully designed to create a warm and inviting environment while incorporating effective sun shading strategies, the pavilion blends aesthetic appeal with functionality.

Large overhangs and strategically placed elements provide shading, shielding visitors from harsh sunlight while creating a comfortable arrival experience. The play of light and shadow, influenced by the intricate design, enhances the visual interest of the entrance.

Functionality lies at the core of Cactus Tower's design, enhancing the living experience for its residents. The 64 apartments are thoughtfully distributed across the 12 stories, optimizing space utilization and offering residents panoramic views of the surroundings.

The spiky balconies on the north-facing facade provide private outdoor spaces, fostering a connection with nature.

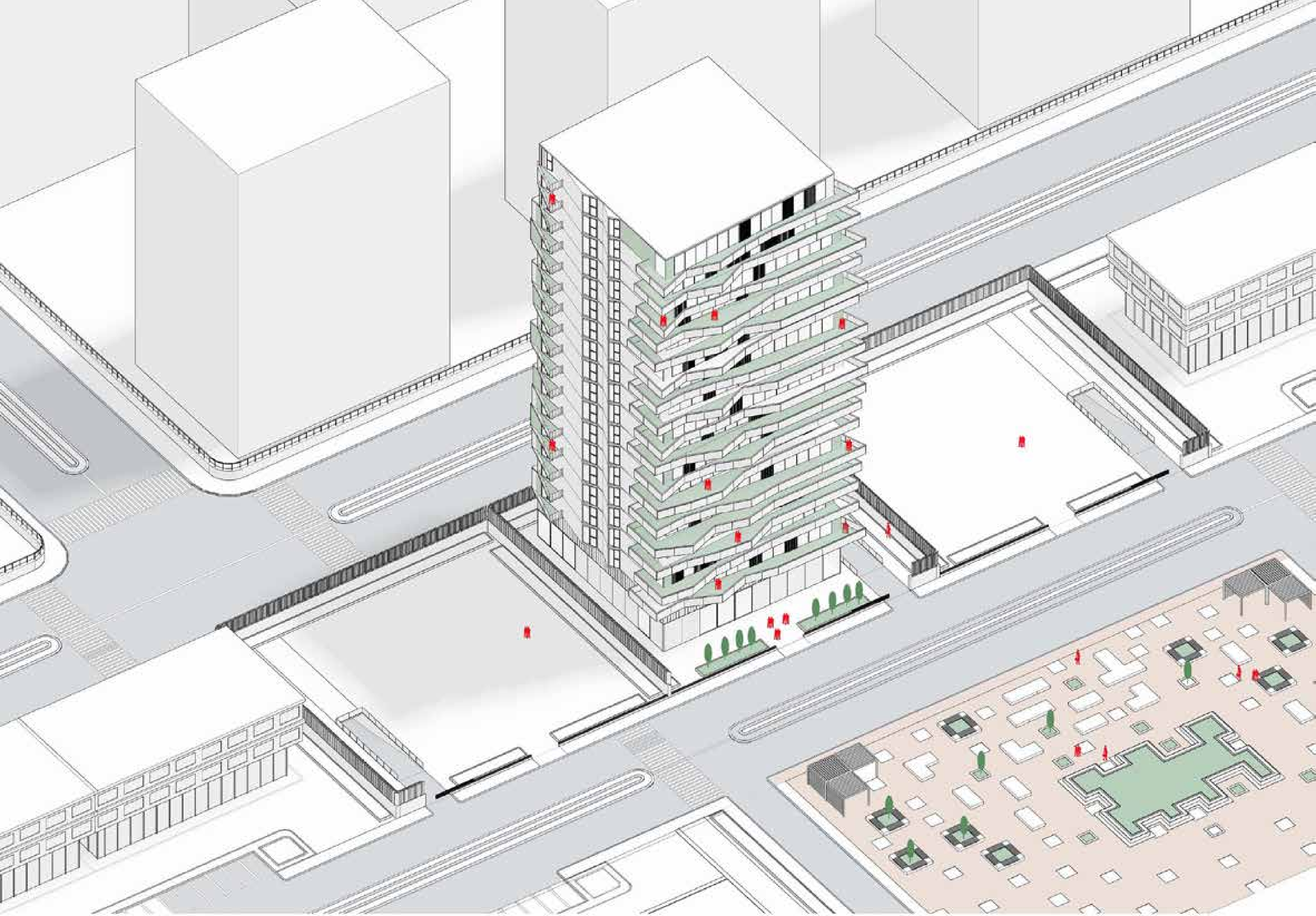


SQUARE SHAPE
860M^2

BETTER VIEW
BETTER PRIVECY

MORE SUNLIGHT
MORE NATURE
BETTER VIEW
BETTER PRIVECY

ENVELOPE PROCESS DESIGN



662 ESSENTIAL IN THE DESIGN OF 662 MAZZEH IS THE RELATIONSHIP OF THE INSIDE TO THE OUTSIDE. AN INDOOR-OUTDOOR FLOW IS ACTIVATED BY CREATING CONNECTIONS BETWEEN PEOPLE AND THE OUTDOORS, AND USING OUTDOOR SPACE AS AN EXTENSION OF THE LIVING .SPACES

Cactus Tower embraces sustainability through innovative design choices. The manipulation of the building volume on the south-facing facade not only enhances aesthetics but also contributes to the building's energy efficiency.

The introduction of fixed timber louvers serves a dual purpose, managing sunlight entering the building and reducing glare, thereby minimizing the reliance on artificial cooling systems. These sustainable features align with environmental consciousness, creating a building that harmonizes with its surroundings while minimizing its ecological footprint.

Marissa Villas

Dammam City ,Saudi Arabia

Client: Alsalimi Company

Size: 5280m² / 56,833f²

Status: Competition

Typology: Residential

Year: 2020

Dammam's burgeoning cityscape welcomes a new architectural statement: Marissa Villas. This exceptional residential development embodies a meticulous fusion of design excellence, unparalleled comfort, and unwavering environmental stewardship.

Immaculately white facades create a striking visual harmony with the sun-drenched Arabian landscape, each villa bathed in the warm glow of the rising sun. Marissa Villas caters to a discerning clientele seeking a lifestyle that transcends the conventional, offering a haven of tranquility within the vibrant heart of the city.

Marissa Villas captivates with a pristine white façade, its minimalist elegance echoing the purity of the surrounding desert landscape. Arcuate openings and curvilinear elements merged across the exterior, a timeless design language that transcends fleeting trends. This orchestration of graceful lines embodies meticulous craftsmanship, celebrating both dynamic movement and a sense of visual equilibrium.

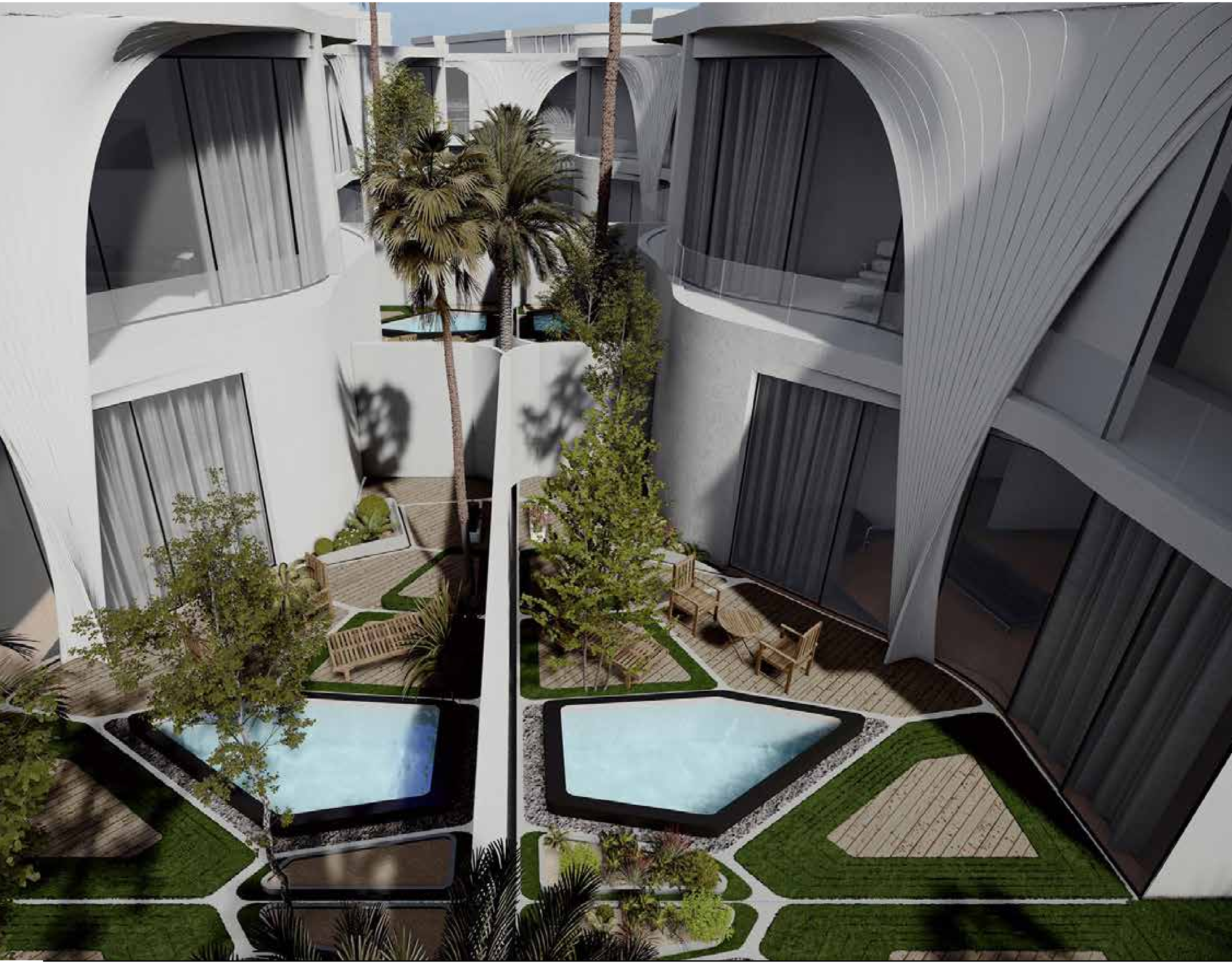
Expansive, strategically placed windows serve as a seamless conduit, blurring the boundaries between the meticulously designed interior spaces and the sun-drenched courtyards. Natural light floods the elegant living areas, creating a sense of openness and fostering a connection with the surrounding environment.

Stepping outside, residents encounter a sanctuary of tranquility. Mature palm trees gently sway in the breeze, their verdant fronds casting delicate filigree patterns on the pathways below. This juxtaposition of nature's soft rhythms with the architectural flourishes creates a harmonious counterpoint, a testament to the thoughtful integration of design and its environment.

At the heart of each Marissa Villa lies a meticulously landscaped private enclave. This haven of tranquility prioritizes resident privacy, fostering a space for intimate gatherings and the creation of lasting memories. Gentle conversations flow freely beneath the shade of mature palm trees, their leaves whispering tales of time.

Marissa Villas boasts twin, infinity-edge swimming pools that flawlessly mirror the cerulean expanse of the sky above. These inviting pools, with their crystalline waters, beckon residents to indulge in a refreshing escape. The symmetrical design of the pools evokes a sense of perfect balance and harmony, while the vanishing edges create a seamless visual connection between water and sky, extending the feeling of boundless serenity.

Impeccably maintained lawns provide a plush and inviting surface beneath residents' feet. Children can engage in playful pursuits on this verdant expanse, while elders find a haven for relaxation on strategically placed benches. Fragrant flora perfumes the air with an intoxicating aroma, and vibrant butterflies flit between blossoming flowers, adding a touch of life and color to this meticulously curated outdoor haven.

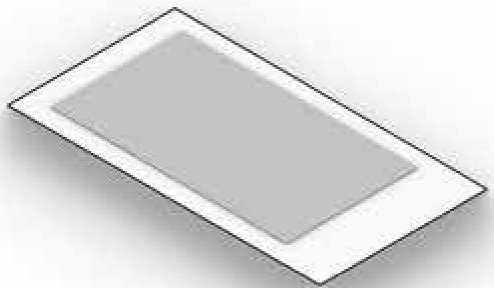


Discreetly integrated solar panels grace the rooftops, silently capturing the abundant energy of the Saudi sun. This renewable energy source efficiently powers the villas, significantly reducing their environmental footprint and ensuring a commitment to a greener future. A network of sophisticated rainwater collection systems operates beneath the surface. These systems capture precious raindrops, channeling them into strategically placed underground reservoirs to nourish the meticulously designed landscape, minimizing reliance on municipal water supplies.

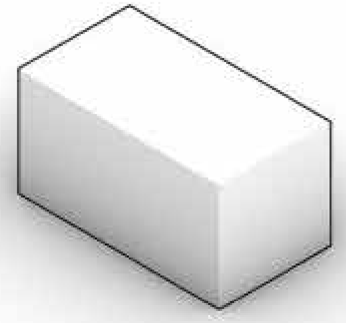
“Marissa Villas transcends the concept of a mere residential development; it embodies a vibrant tapestry woven from design excellence and a commitment to fostering a thriving community. Thoughtful architectural elements, characterized by minimalist elegance and curvilinear flourishes, create a timeless aesthetic. Expansive windows seamlessly blur the boundaries between meticulously designed interiors and sun-drenched courtyards, fostering a connection with the surrounding environment.

This meticulous attention to detail extends beyond the villas themselves, with private enclaves offering a haven of tranquility and strategically placed amenities fostering a sense of connection within the broader community.”

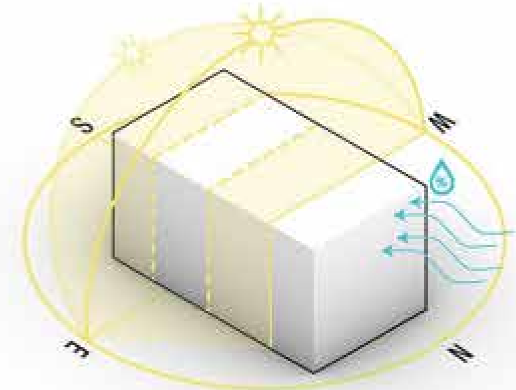
Plot Area



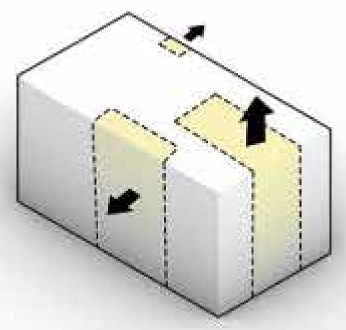
Maximum Volume



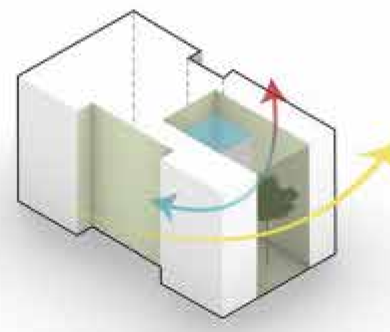
Analysis



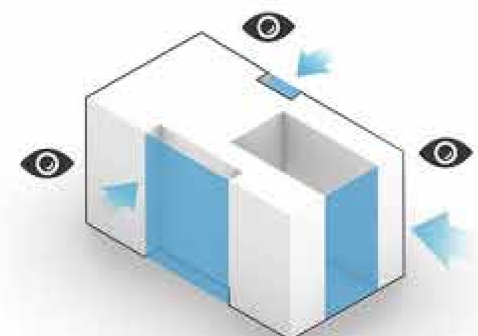
Exclude Thermal Mass



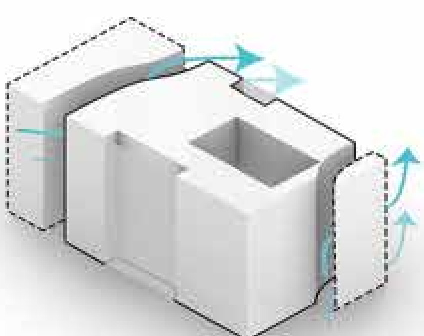
Breath



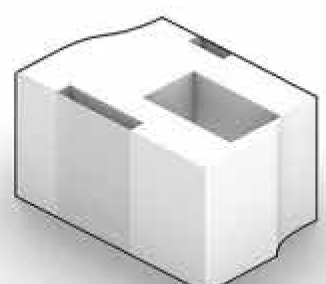
Blocked Views



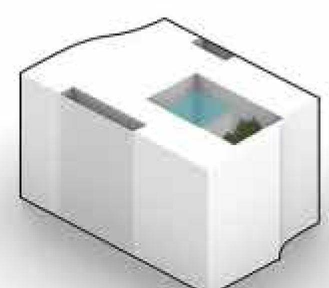
Shaded Facades



Carving Privacy



House Unit



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Recoding Smart Building

Zamalka ,Syria

Client: Hybrid City Challenge

Size: 510m² / 5489sqf

Status: Proposal

Typology: Competition

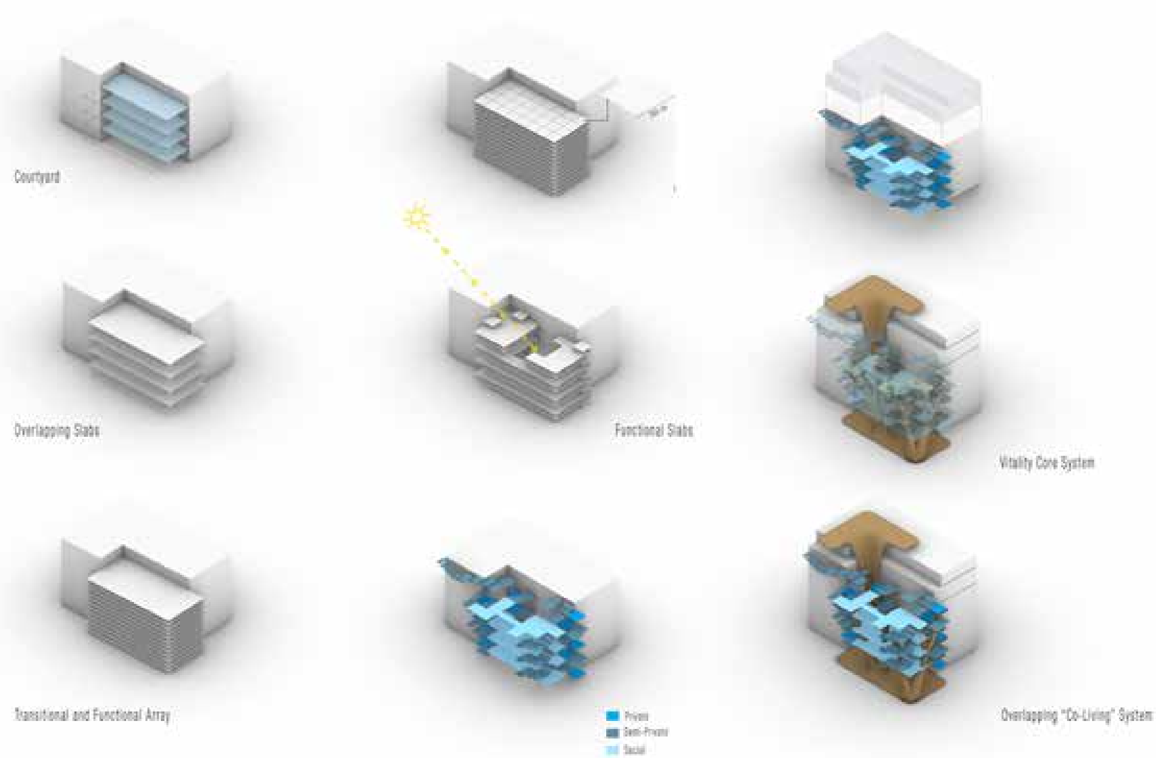
Year: 2020

Nestled within the heart of a Damascus suburb, the Smart Tree Building emerges as a pioneering architectural intervention. This transformative project exemplifies a holistic approach to urban design, seamlessly integrating cutting-edge smart technologies with a resolute commitment to sustainable practices and ecological awareness.

The Smart Tree Building serves as a testament to Damascus' unwavering spirit of innovation, fostering a vision for a thriving and environmentally responsible future.

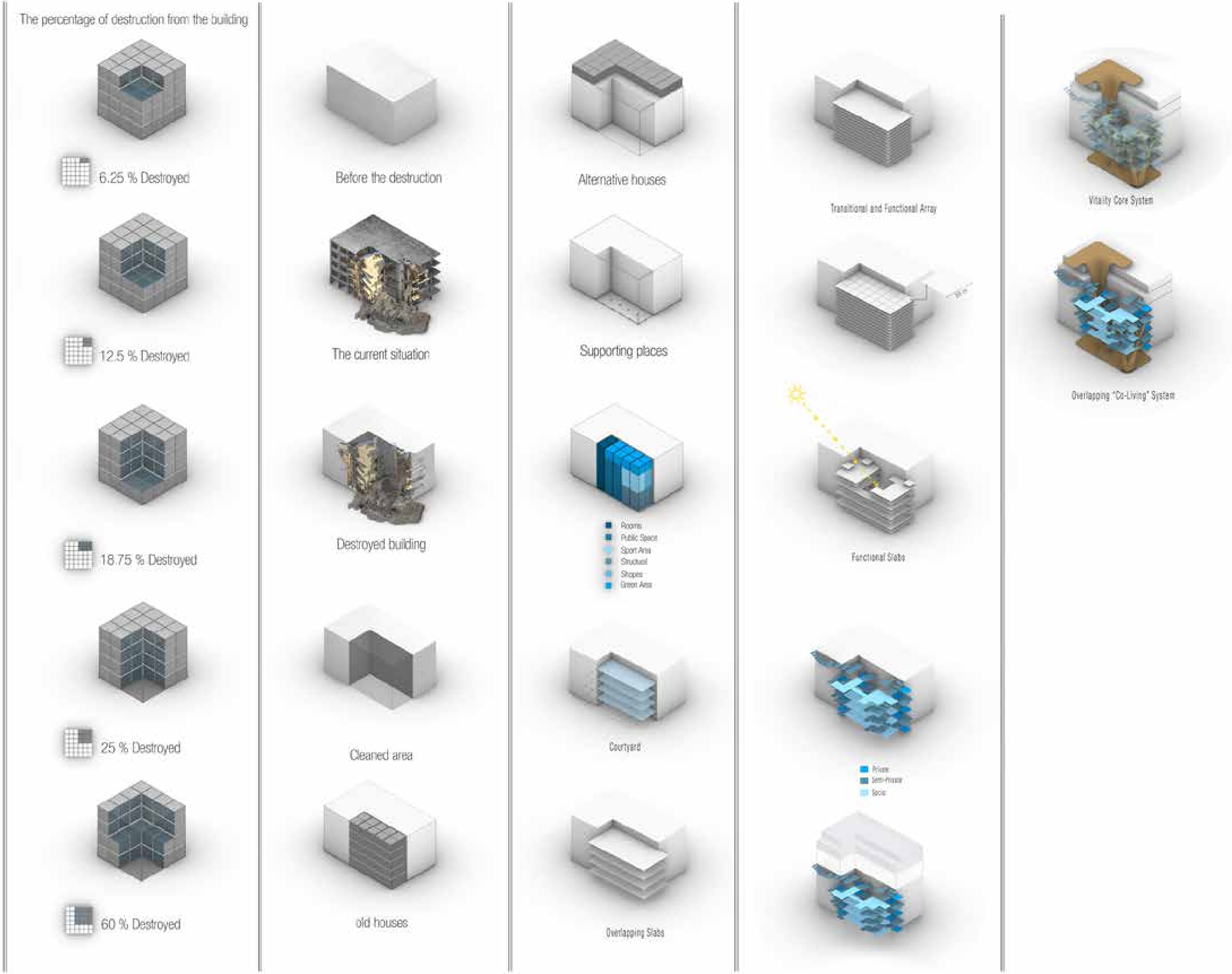
The Smart Tree Building exemplifies a paradigm shift beyond mere renovation, transitioning into a visionary architectural intervention. Our meticulous approach involved the revitalization of a four-story structure, fostering a narravtive of resil-ience and rebirth. Destructed structural elements – columns, floors, and stairs – were meticulously salvaged and rein-tegrated into the design with a focus on sustainability.

This innovative strategy prioritizes environmental responsibility, harmoniz-ing existing elements with cutting-edge eco-friendly materials. The strategic incorporation of Kerto LVL for structural reinforcement, alongside meticulously chosen brick and Low-E glass for the facade, minimizes environmental impact while ensuring a robust and revitalized structure.



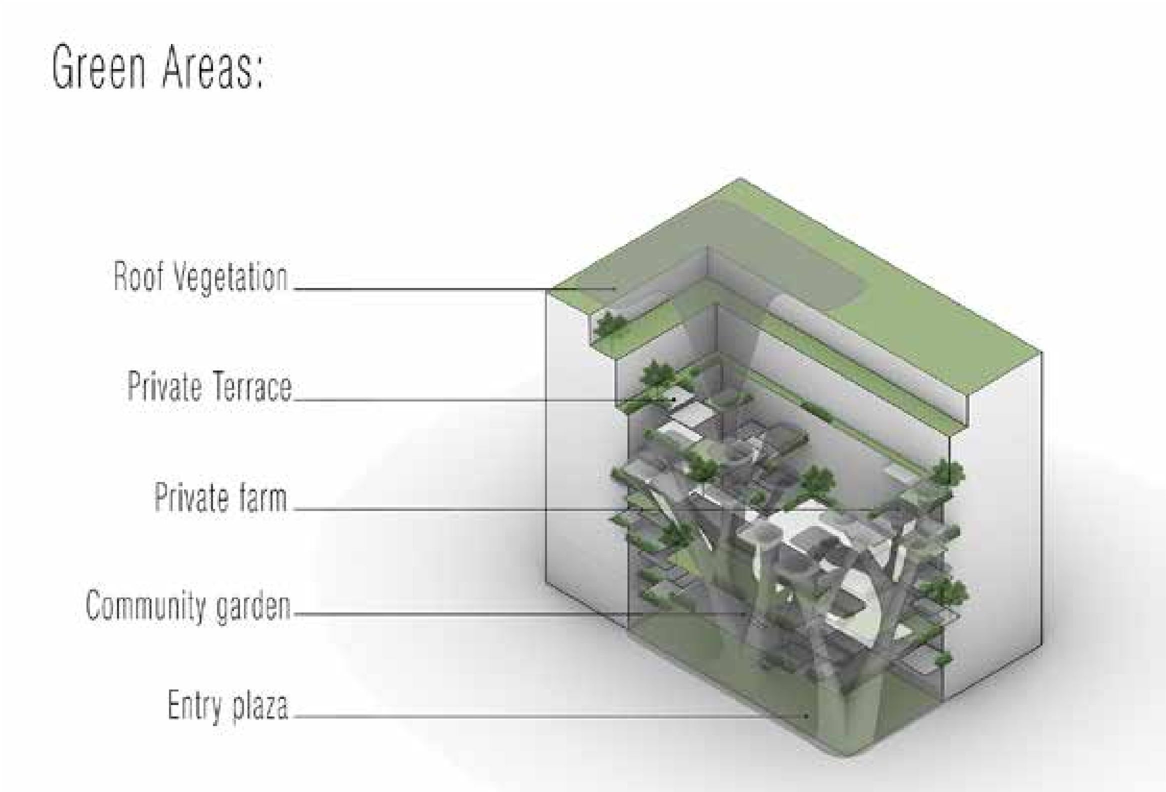
The Smart Tree Building embodies a groundbreaking fusion of structural ingenuity and environmental responsibility. Nearly half of the building's original columns, compromised by significant damage, were not simply replaced, but strategically reimagined. Employing Kerto-S LVL – a state-of-the-art engineered wood product – the project prioritizes a sustainable approach. These advanced timber elements not only restore the building's structural integrity, ensuring seismic and load-bearing capacity, but also demonstrably contribute to carbon sequestration.

This innovative strategy minimizes the project's environmental footprint while simultaneously enhancing its structural performance. The Smart Tree Building stands as a testament to the transformative potential of sustainable construction practices, pioneering a new chapter in responsible urban development.

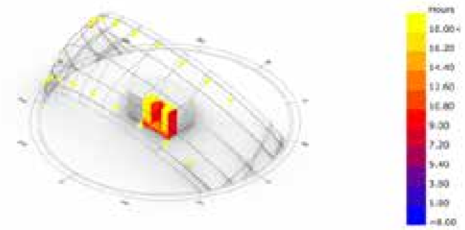


The percentage of destruction from the building
6.25 % Destroyed
12.5 % Destroyed
18.75 % Destroyed
25 % Destroyed
60 % Destroyed
Before the destruction
The current situation
Destroyed building
Cleaned area
old houses
Alternative houses
Supporting places
Rooms
Public Space
Sport Area
Structural
Shopes
Green Area
Courtyard
Overlapping Slabs
Transitional and Functional Array
Functional Slabs
Vitality Core System
Overlapping "Co-Living" System

Green Areas:



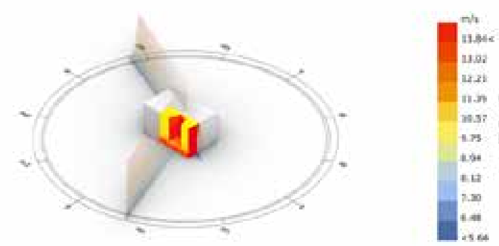
Site Analysis



Sun profile -
Average
Damascus Dimashq Ap_DI_SYR
- city Terrain
1 FEB 8:00 - 1 FEB 17:00
1 AUG 8:00 - 1 AUG 17:00

Open View

An open view from the west and northwest

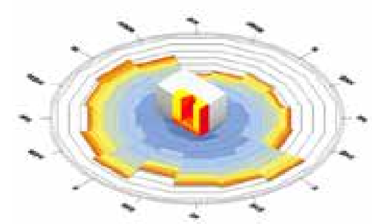


wind speed (m/s)

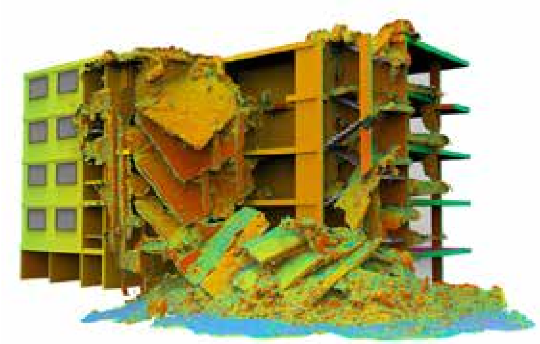
Wind profile - prevailing wind
Average Velocity
Damascus Dimashq Ap_DI_SYR
- city Terrain
1 FEB 8:00 - 1 FEB 17:00

wind speed (m/s)

Wind profile - prevailing wind
Average Velocity
Damascus Dimashq Ap_DI_SYR
- city Terrain
1 AUG 8:00 - 1 AUG 17:00

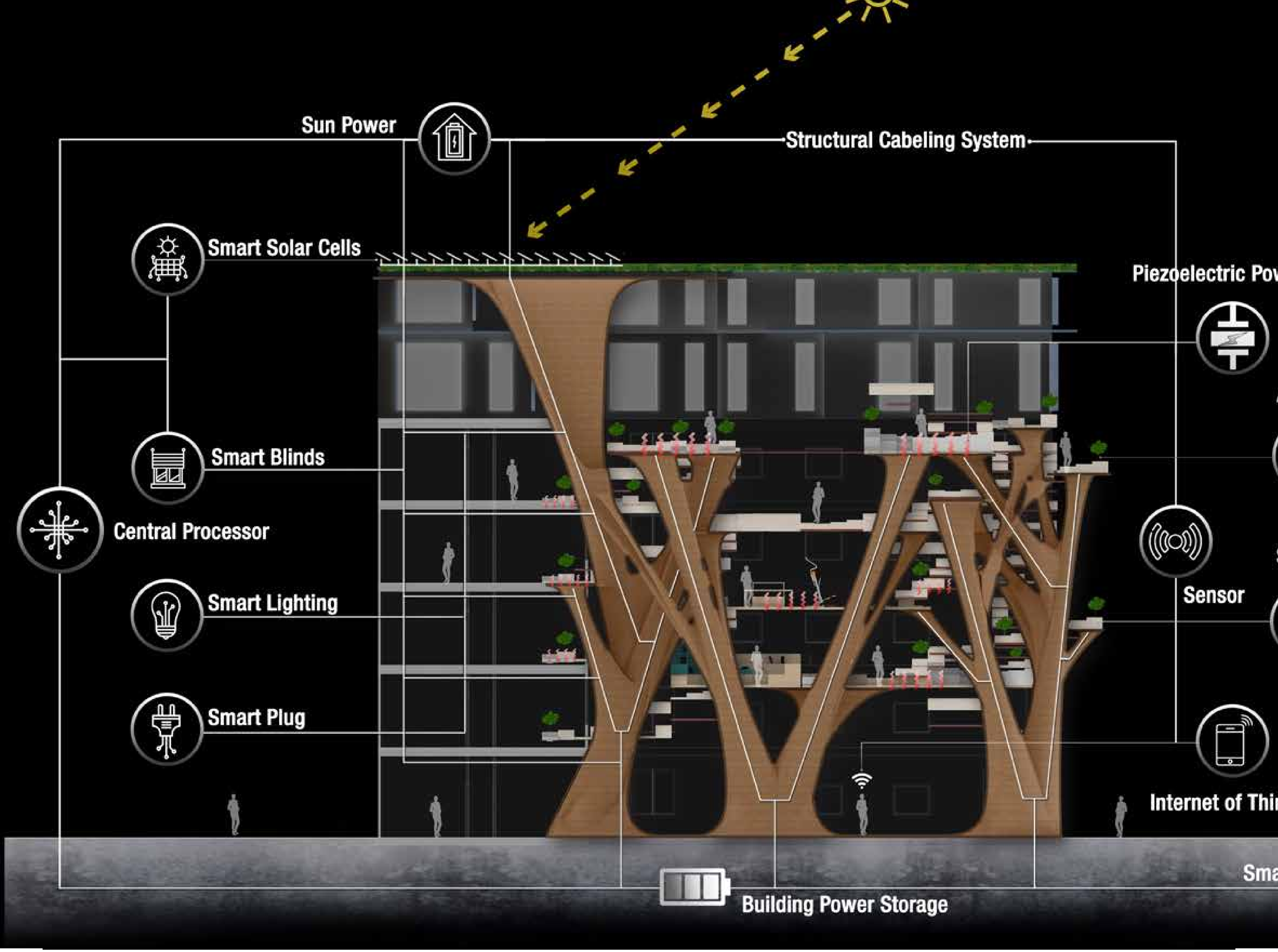


Wind-Rose
Damascus Dimashq AP_DI_SYR
1 JAN 8:00 - 1 OCT 19:00
Hourly Data : Wind speed (m/s)
Clam for 6.11% of the time = 401 Hours
Each closed polyline shows frequency of 0.3% = 22 Hours



Emerging from the scars of war, the Smart Tree Building prioritizes the well-being of its residents through the creation of a vibrant social space – the Courtyard Oasis. This semi-private haven, aptly named the "lungs" of the building, serves a vital function in fostering a sense of community and shared experience. Constructed with Kerto LVL, a sustainable wood product, the Courtyard Oasis exemplifies a commitment to both social responsibility and environmental consciousness. The space boasts a remarkable level of flexibility, facilitated by prefabricated slabs known as "mastabas." These ingeniously designed elements, crafted with Kerto-T and supported by the innovative Kerto LVL L-System, transform seamlessly from private terraces to communal gathering areas. Furthermore, the mastabas integrate natural ventilation systems and even function as energy production and recycling sources, contributing to the building's overall sustainability. This innovative design fosters a sense of shared responsibility and empowers residents to engage in a more sustainable lifestyle. The Courtyard Oasis transcends conventional boundaries, blurring the lines between private and public spaces, fostering a dynamic and vibrant hub that caters to the diverse needs of the community.

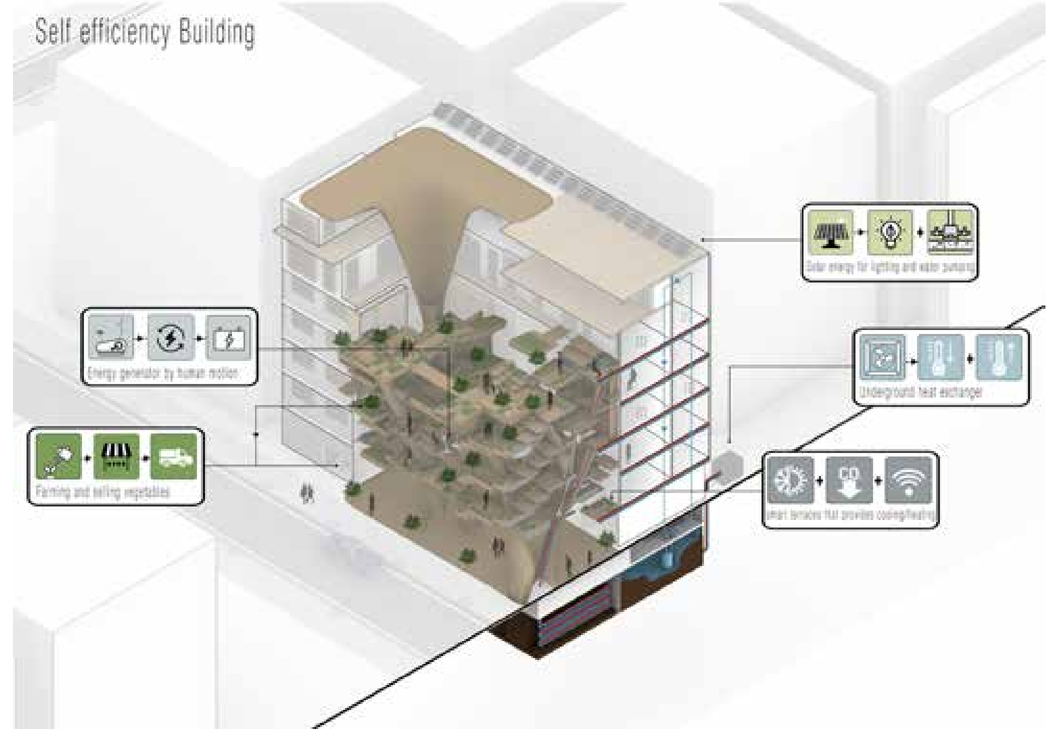
Future Smart Section



Transcending its physical form, the Smart Tree Building emerges as a champion of ecological responsibility. By meticulously integrating low-energy building techniques and utilizing Kerto LVL, a sustainable wood product with demonstrably lower embodied carbon emissions, the project significantly reduces its environmental footprint.

This unwavering commitment to environmental stewardship minimizes the building's impact on the surrounding ecosystem. Furthermore, the Smart Tree Building prioritizes the well-being of its residents through the incorporation of a meticulously designed outdoor ecological system. This innovative strategy fosters a healthy indoor environment, ensuring a harmonious connection with the natural world and enhancing the overall well-being of the building's inhabitants.


Grand mosque
Roman Bathroom
Main Plaza
Mud Houses
Sorrunding Area
Paths
Physical status
N


Self efficiency Building
Energy generator by human motion
Farming and selling vegetables
Underground heat exchanger


Sun Path
Wind Direction
Views
N


local Farming procces
providing neihborhood
needs for vegetables

Soaring beyond the confines of a mere renovation, the Smart Tree Building exemplifies the burgeoning concept of the hybrid city. In this project, a captivating narrative unfolds, where the venerated language of the past seamlessly merges with the dynamism of the present. Sustainability and innovation exist in a state of harmonious co-existence, prioritizing environmental stewardship alongside cutting-edge design principles. The building stands as a testament to our meticulous material selection. The strategic incorporation of Kerto-S frames a vanguard sustainable wood product – alongside the enduring beauty of classic red brick and the technologically advanced Low-E glass for the facade, fosters a symphony of textures and elements. This thoughtful orchestration ensures the building's enduring relevance, transcending fleeting trends to establish itself as a timeless architectural landmark.

House Recoding

Damascus ,Syria

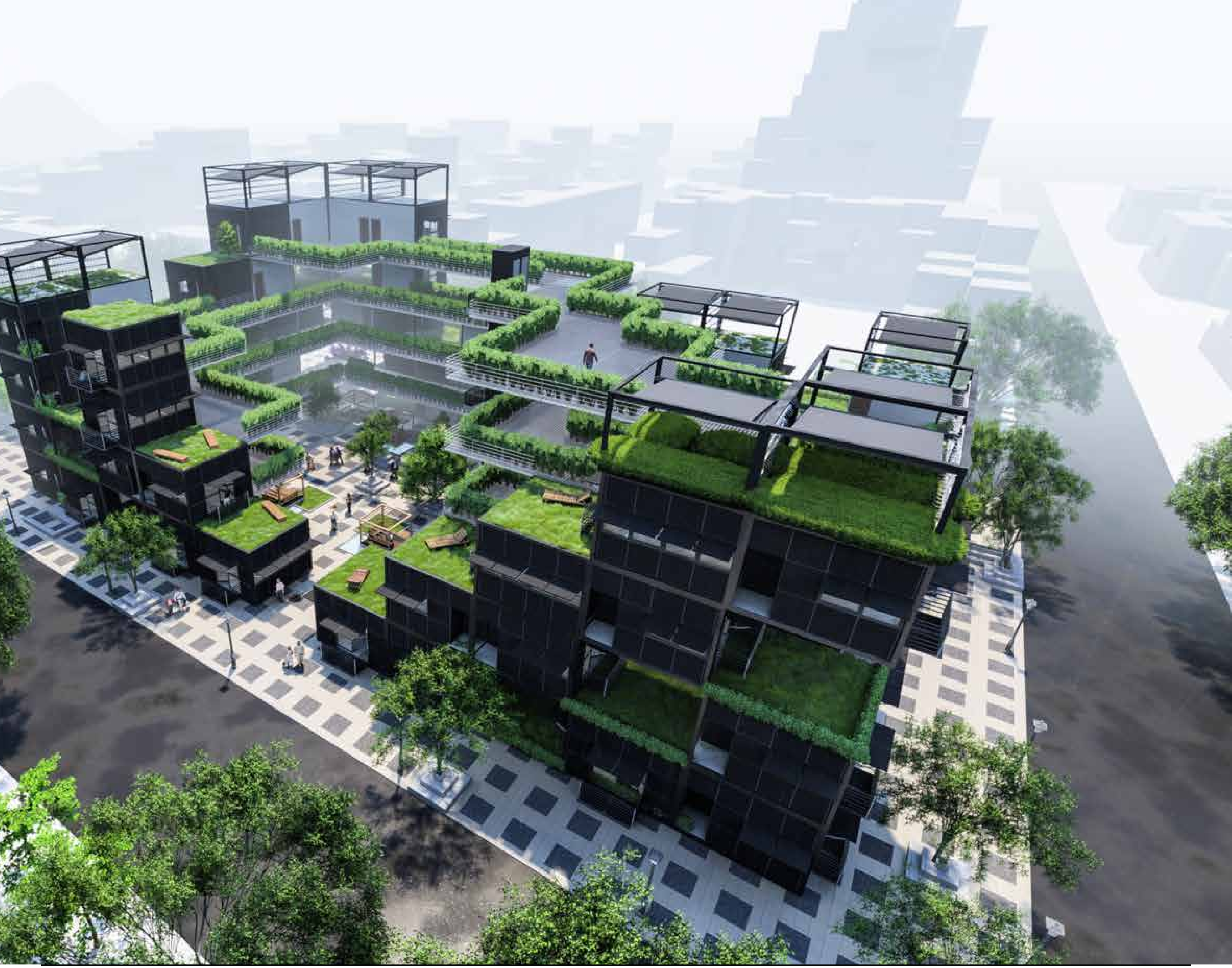
Client: Sky City

Size: 43055.64 SQM./ 4000 SFT.

Status: Proposal

Typology: Residential

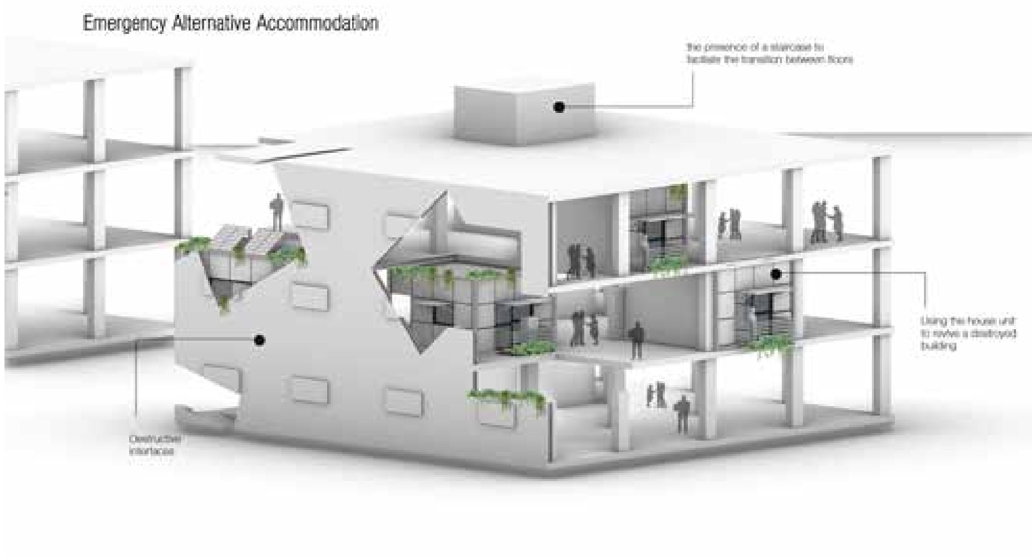
Year: 2019



Sky City represents a ground-breaking approach to urban living. It introduces a pioneering frame box structure meticulously engineered for exceptional adaptability within existing environments. Guided by stringent Multi Comfort criteria, Sky City prioritizes sustainability, inclusivity, and resident well-being.
At its core, the project seamlessly integrates with its surroundings, demonstrating remarkable adaptability. Whether situated in bustling cities or challenging contexts like Syria, Sky City thrives.

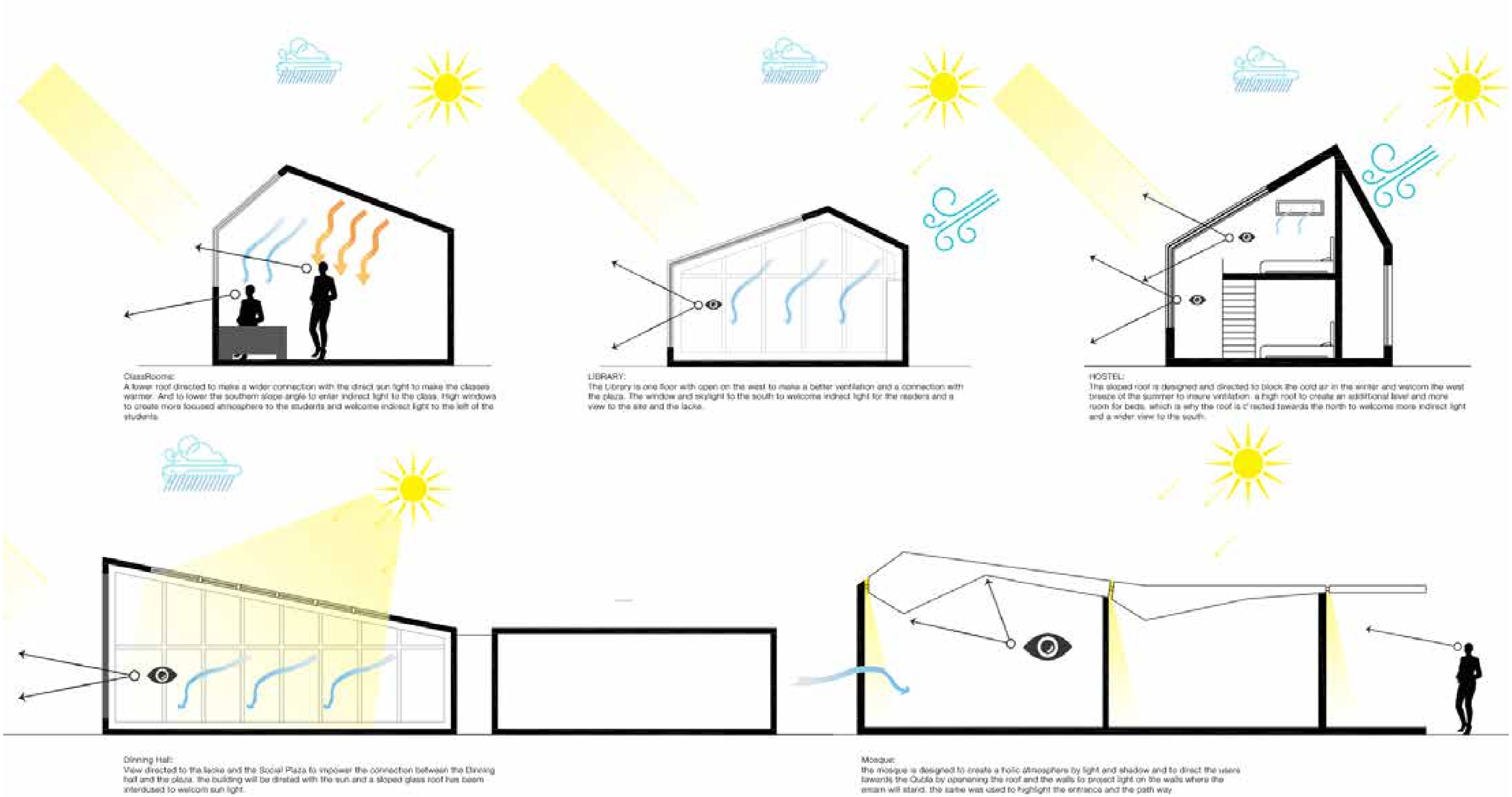
The innovative design fosters a vibrant sense of community through its “Social Rooftop” an interconnected network of plazas that facilitates shared resources and amenities, encouraging interaction among residents.

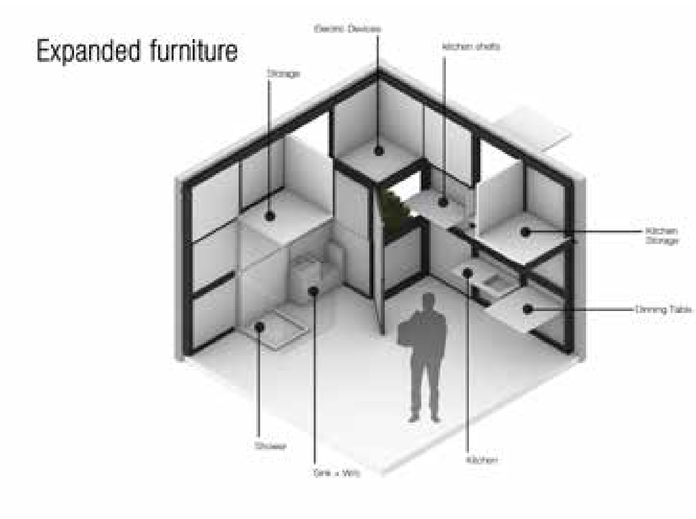
Sky City designs Adaptive Living Solutions redefine the concept of housing through a focus on global applicability, affordability, and rapid deployment. These units cater to a wide range of needs, providing comfortable and functional living spaces for students, displaced families, and those seeking a convenient lifestyle. Furthermore, the system's inherent adaptability allows it to excel as an alternative emergency housing solution, demonstrably thriving in diverse environments like Syria. This project introduces a groundbreaking frame box structure, exhibiting remarkable adaptability to pre-existing building deformations. Rather than simply providing housing, it establishes a complete living system capable of evolving alongside its residents and the passage of time. The design meticulously balances the need for privacy with opportunities for public interaction, ultimately culminating in a dynamic "Social Rooftop." This rooftop space seamlessly connects buildings, fostering a strong sense of community while offering residents shared resources and amenities.

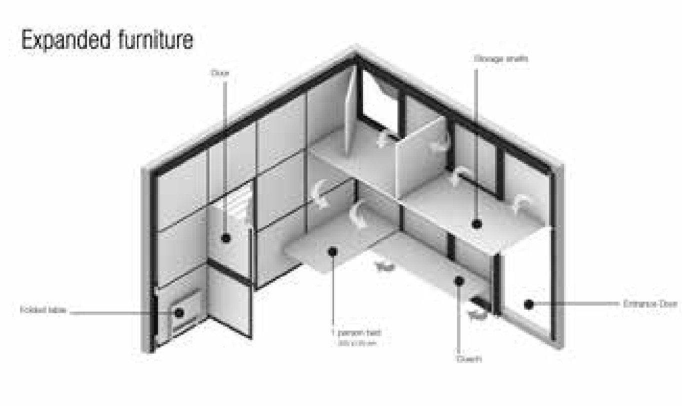


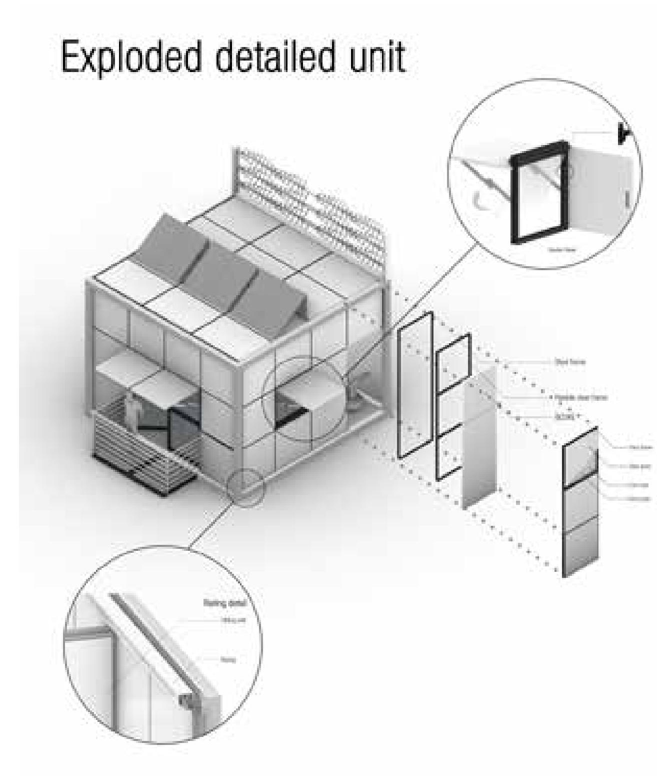
Sky City extends beyond basic sheltering, pioneering a fully integrated live-work system. Engineered for global applicability and functionality, it effectively addresses housing challenges in diverse climates and locations, functioning seamlessly as both a standalone unit and within a thriving community.

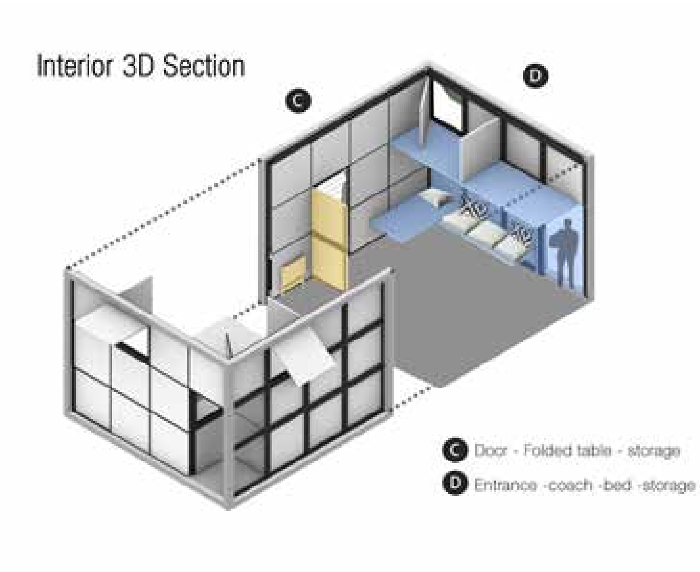
The design prioritizes resident well-being by fostering a strong sense of community. Strategic integration of green spaces and plantings enriches both the interior and exterior environments, creating a harmonious and restorative living experience.

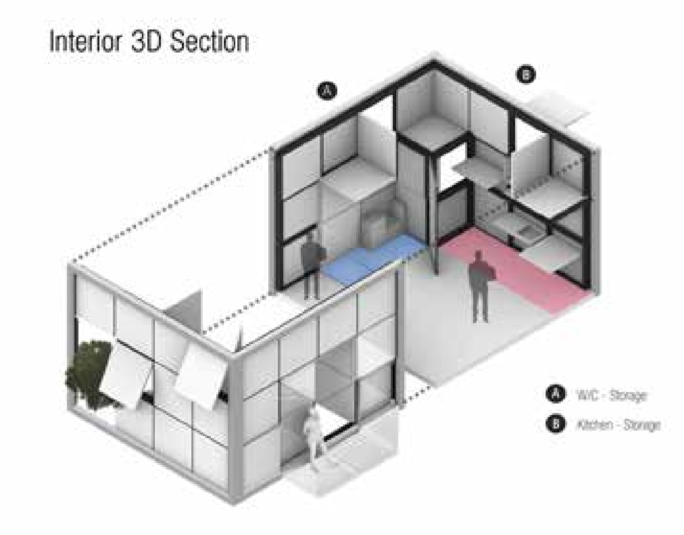


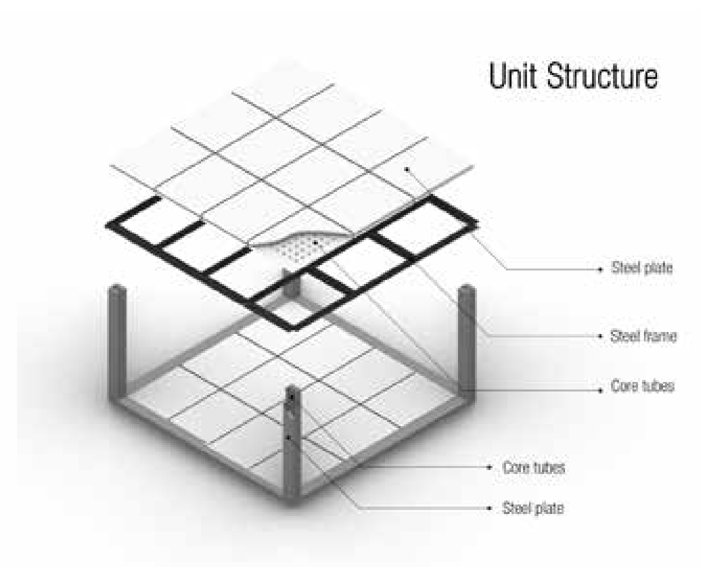

Expanded furniture


Expanded furniture


Exploded detailed unit


Interior 3D Section
C
D
C Door - Folded table - storage
D Entrance -coach -bed -storage


Interior 3D Section
A
B
A W/C - Storage
B Kitchen - Storage


Unit Structure
Steel plate
Steel frame
Core tubes
Core tubes
Steel plate

“Sky City redefines the urban landscape. This pioneering project goes beyond mere housing, establishing a fully integrated live-work system. Engineered for global applicability and meticulous in its adherence to Multi-Comfort criteria, Sky City prioritizes resident well-being and fosters a thriving sense of community.”

Zamalka Into The Future

Damascus ,Syria

Size: 32,2917/30,000

Status: Proposal

Typology: Residential

Year: 2020

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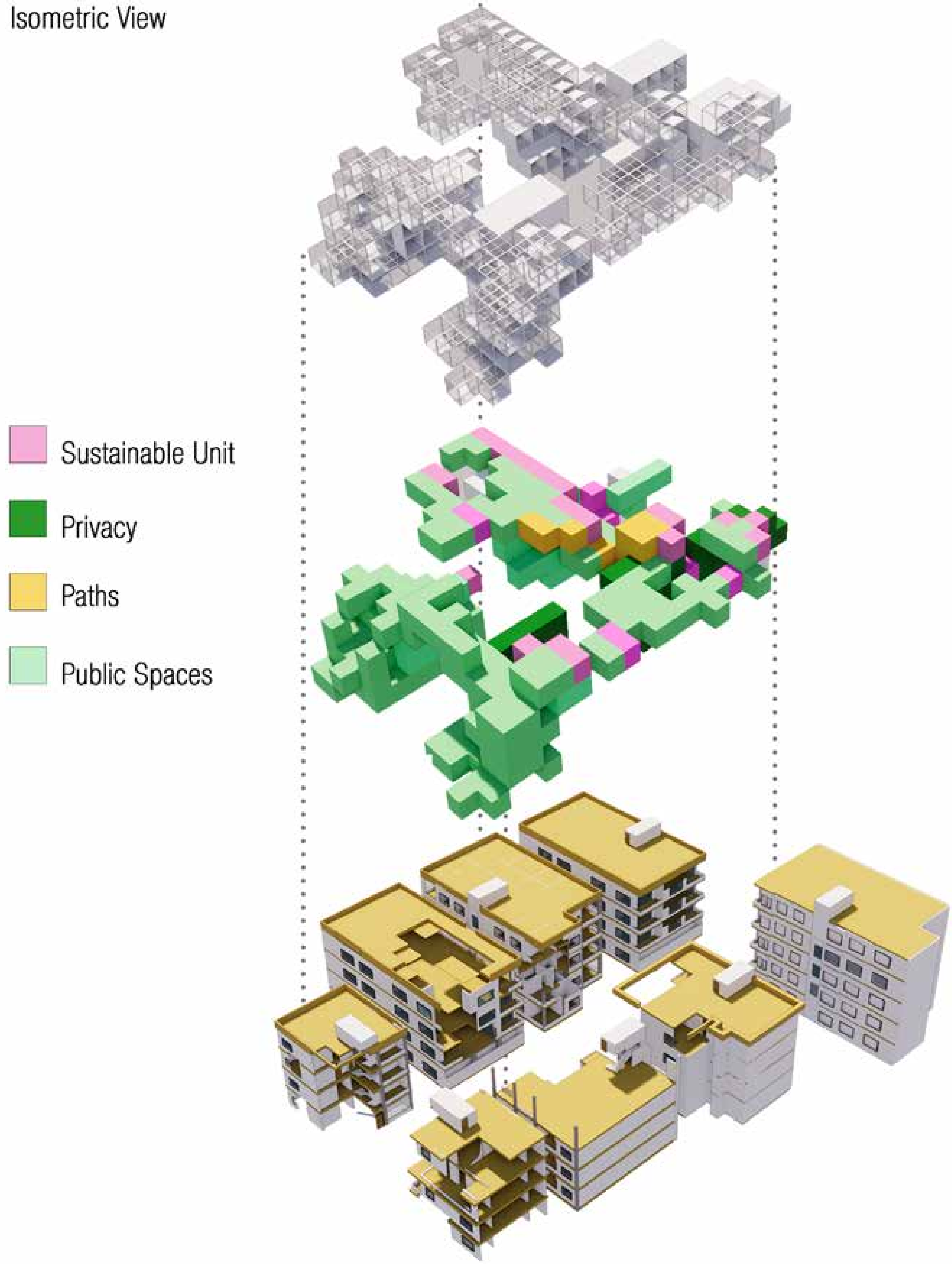
At its core, the project seamlessly integrates with its surroundings, demonstrating remarkable adaptability.

Whether situated in bustling cities or challenging contexts like Syria, Sky City thrives. The innovative design fosters a vibrant sense of community through its “Social Rooftop” an interconnected network of plazas that facilitates shared resources and amenities, encouraging interaction among residents.

Green spaces, meticulously planned and thoughtfully integrated, permeate both the interior and exterior of Sky City. These green elements create a harmonious living experience, making the project suitable for students, families, and anyone seeking a convenient lifestyle. Sky City designs Adaptive Living Solutions redefine the concept of housing through a focus on global applicability, affordability, and rapid deployment.

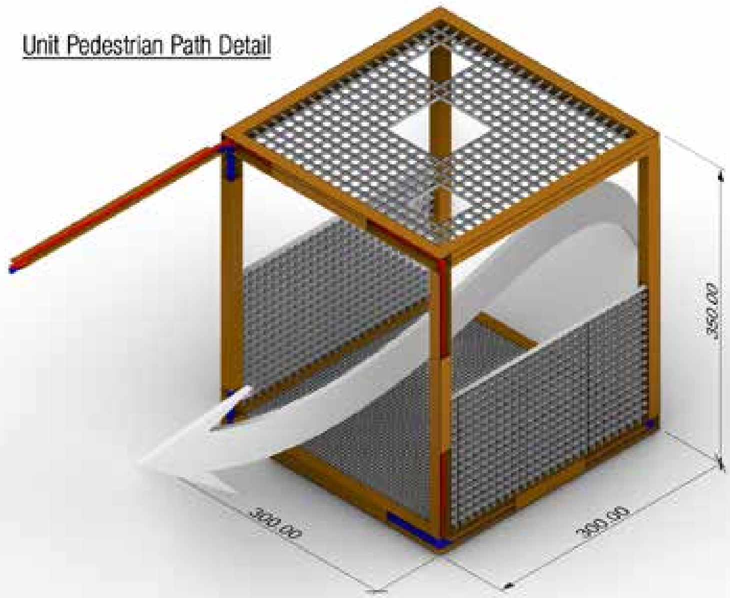
These units cater to a wide range of needs, providing comfortable and functional living spaces for students, displaced families, and those seeking a convenient lifestyle. Furthermore, the system's inherent adaptability allows it to excel as an alternative emergency housing solution, demonstrably thriving in diverse environments like Syria.

Isometric View

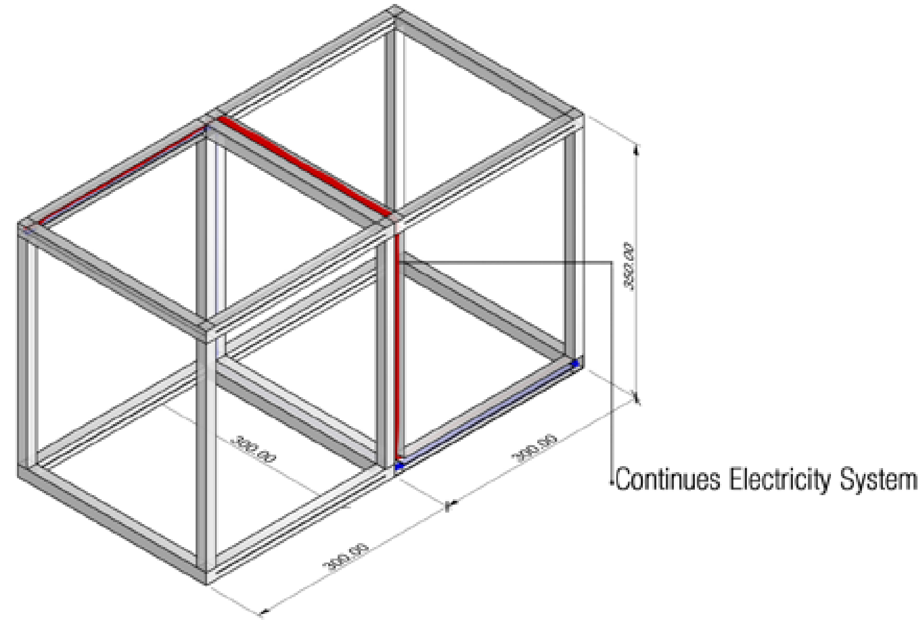


This project introduces a groundbreaking frame box structure, exhibiting remarkable adaptability to pre-existing building deformations. Rather than simply providing housing, it establishes a complete living system capable of evolving alongside its residents and the passage of time. The design meticulously balances the need for privacy with opportunities for public interaction, ultimately culminating in a dynamic "Social Rooftop." **This rooftop space seamlessly connects buildings, fostering a strong sense of community while offering residents shared resources and amenities.** Sky City extends beyond basic sheltering, pioneering a fully integrated live-work system. Engineered for global applicability and functionality, it effectively addresses housing challenges in diverse climates and locations, functioning seamlessly as both a standalone unit and within a thriving community. The design prioritizes resident well-being by fostering a strong sense of community. Strategic integration of green spaces and plantings enriches both the interior and exterior environments, creating a harmonious and restorative living experience.

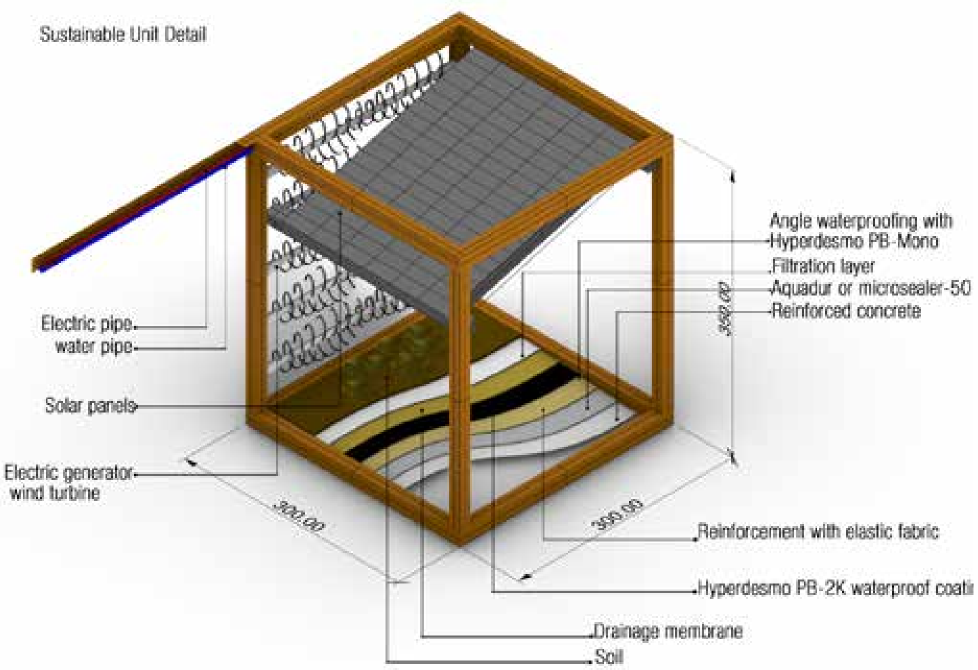
Unit Pedestrian Path Detail



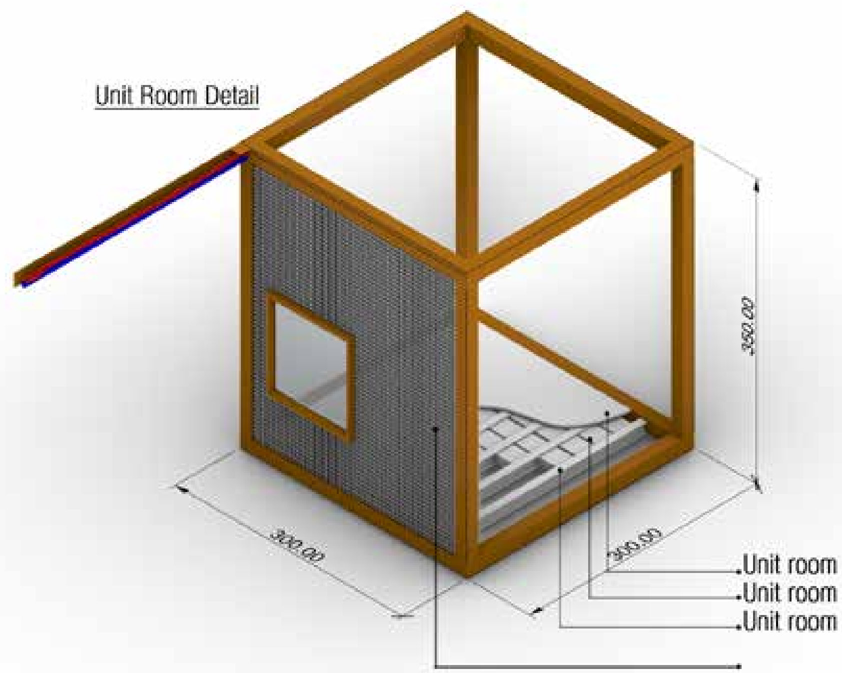
Unit Connection Detail



Sustainable Unit Detail



Unit Room Detail



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Future City Residental Tower

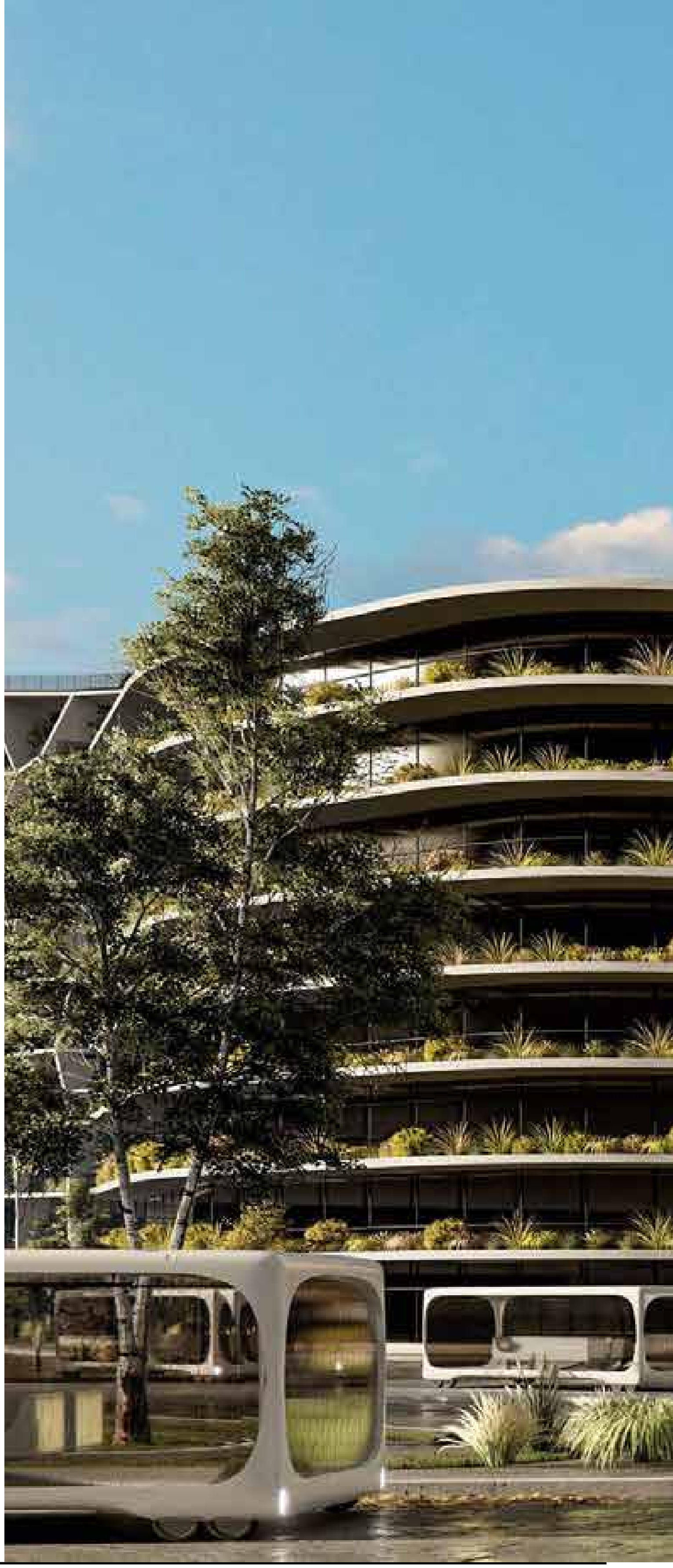
Damascus ,Syria

Size: 32,2917/30,000

Status: Proposal

Typology: Residential

Year: 2020



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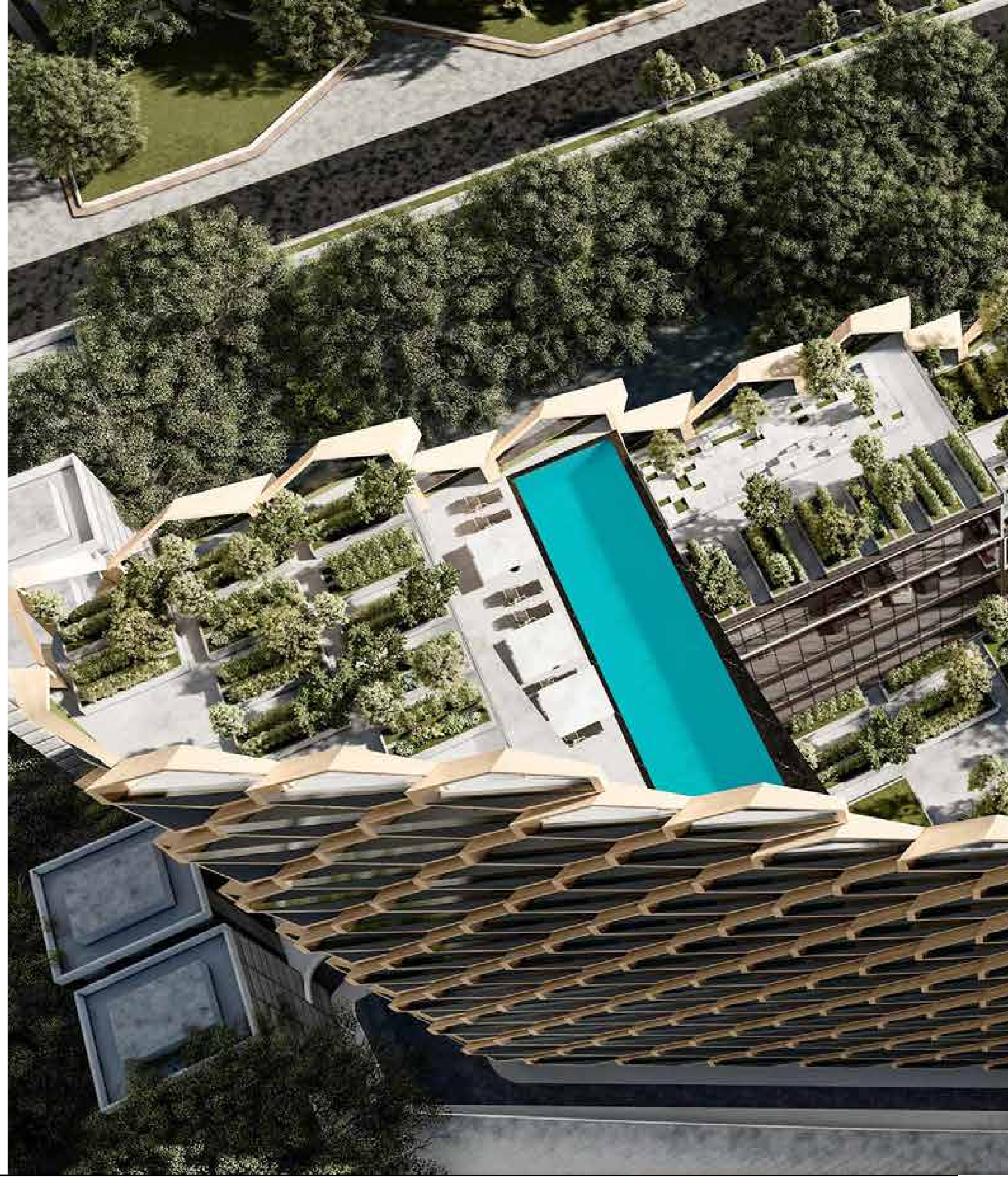

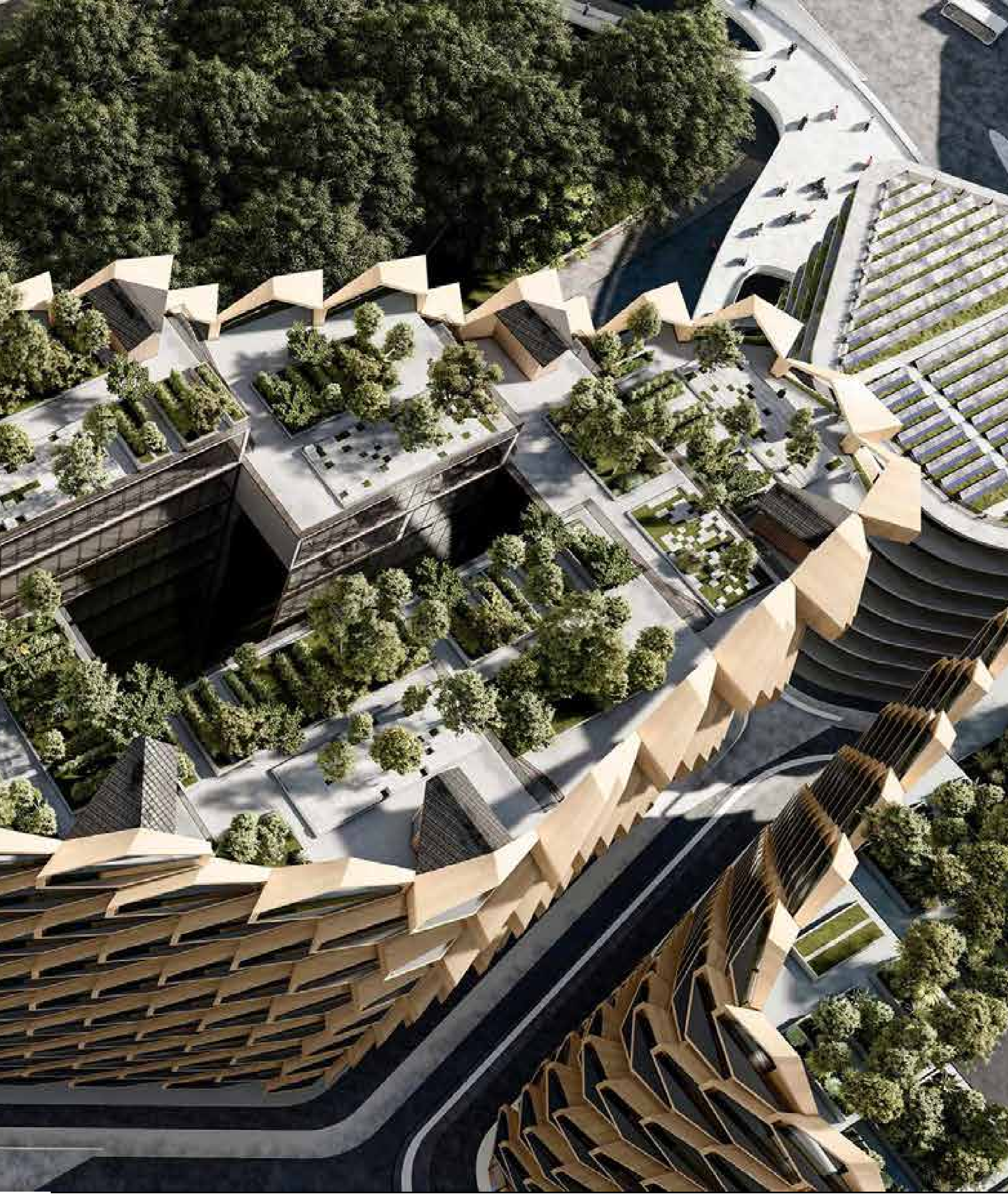

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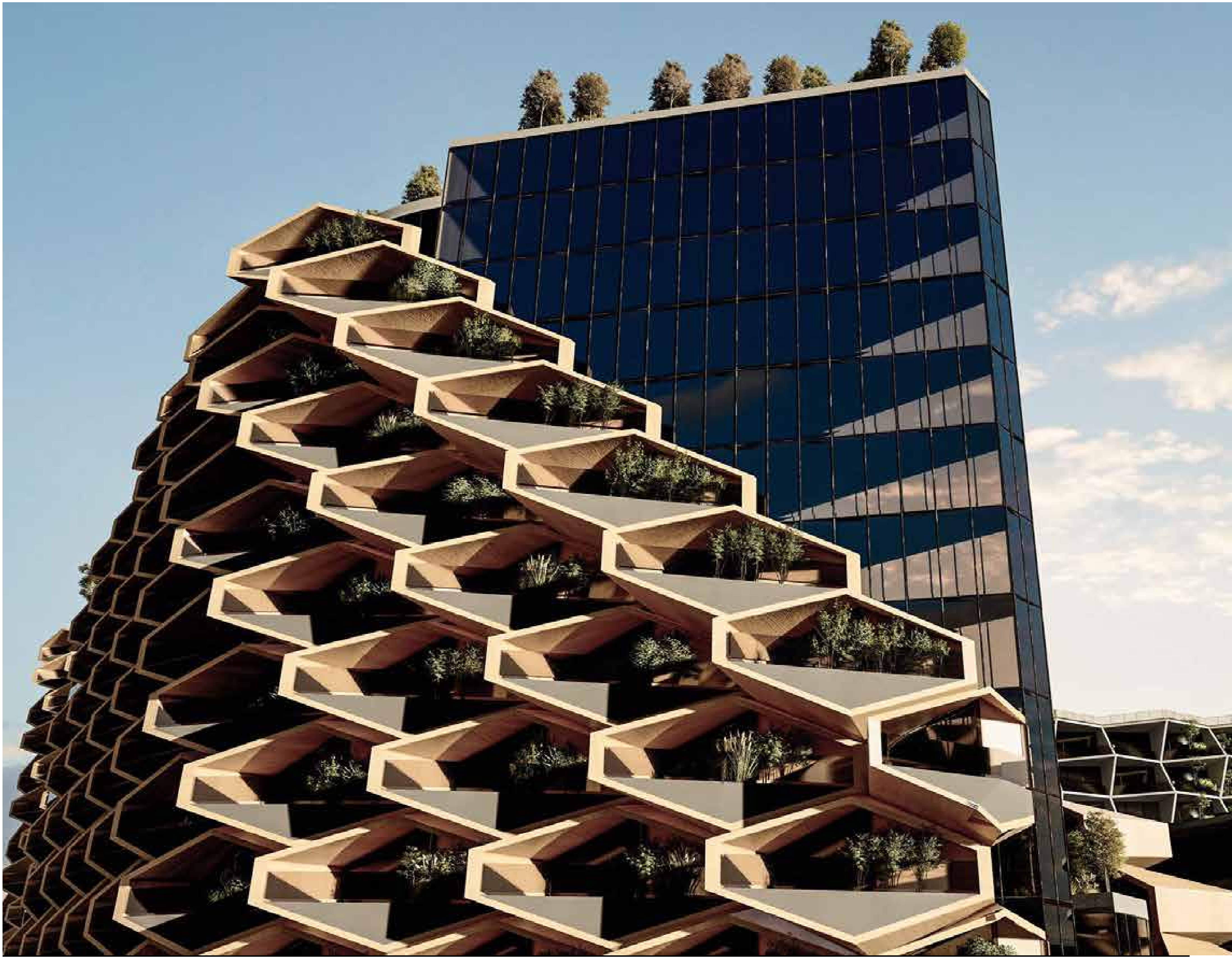
MONITORING
SMART SOLAR CELLS
PIEZOELECTRIC SMART SLABS
CLOUD
SURVEILLANCE ACCESS CONTROL
SMART SENSORS
AUTOMATED LIGHTING
AUTOMATED TEMPERATURE
DATA CENTER
5G CONNECTIVITY
communcation network using internet of things
security saftey and access smart system
sustainable solution
user device mobility

This project introduces a groundbreaking frame box structure, exhibiting remarkable adaptability to pre-existing building deformations. Rather than simply providing housing, it establishes a complete living system capable of evolving alongside its residents and the passage of time. The design meticulously balances the need for privacy with opportunities for public interaction, ultimately culminating in a dynamic "Social Rooftop." **This rooftop space seamlessly connects buildings, fostering a strong sense of community while offering residents shared resources and amenities.** Sky City extends beyond basic sheltering, pioneering a fully integrated live-work system.



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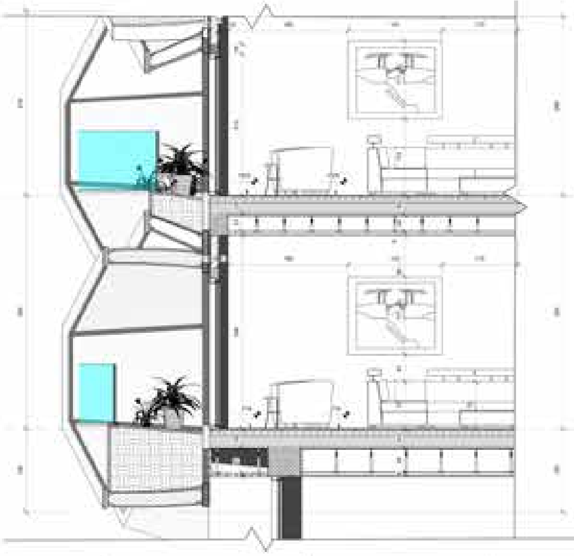

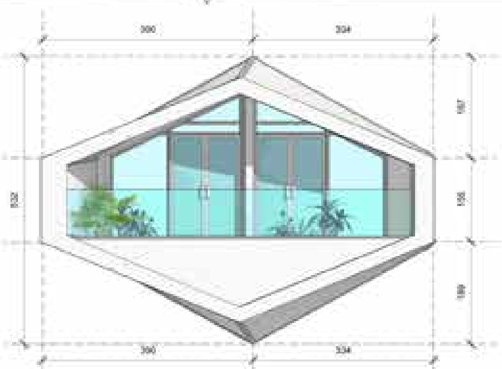

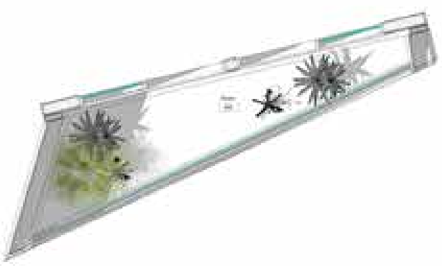

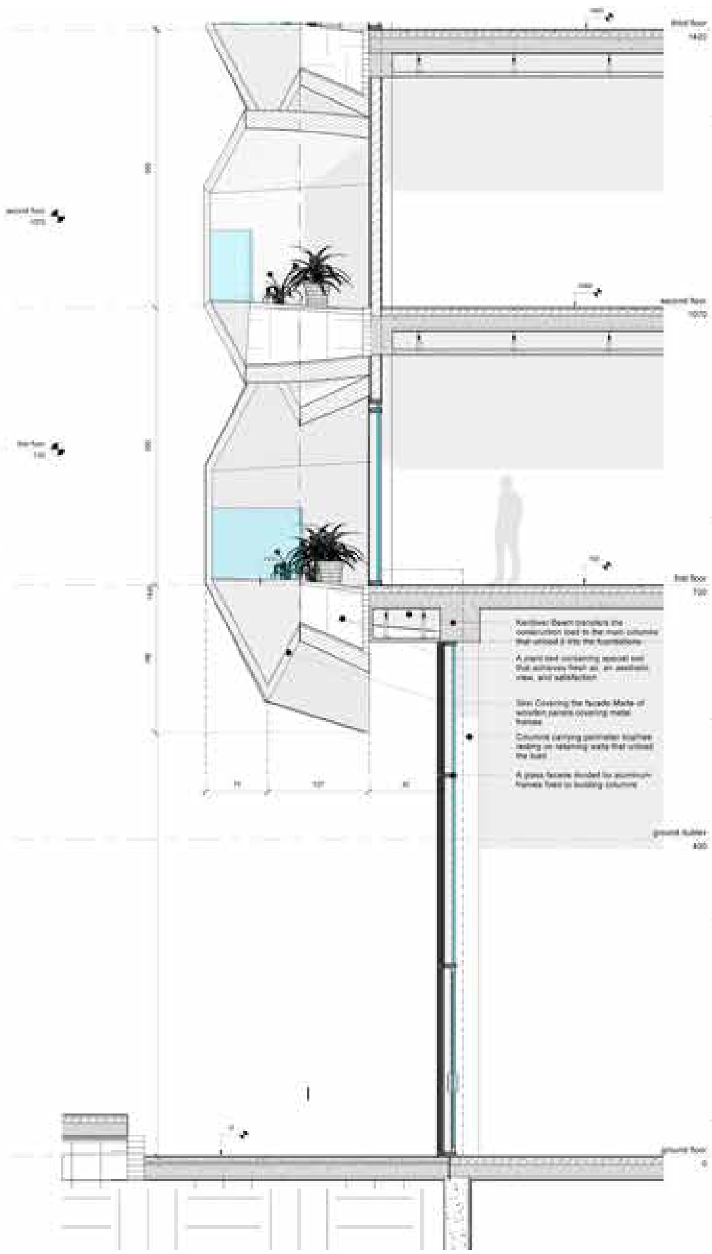

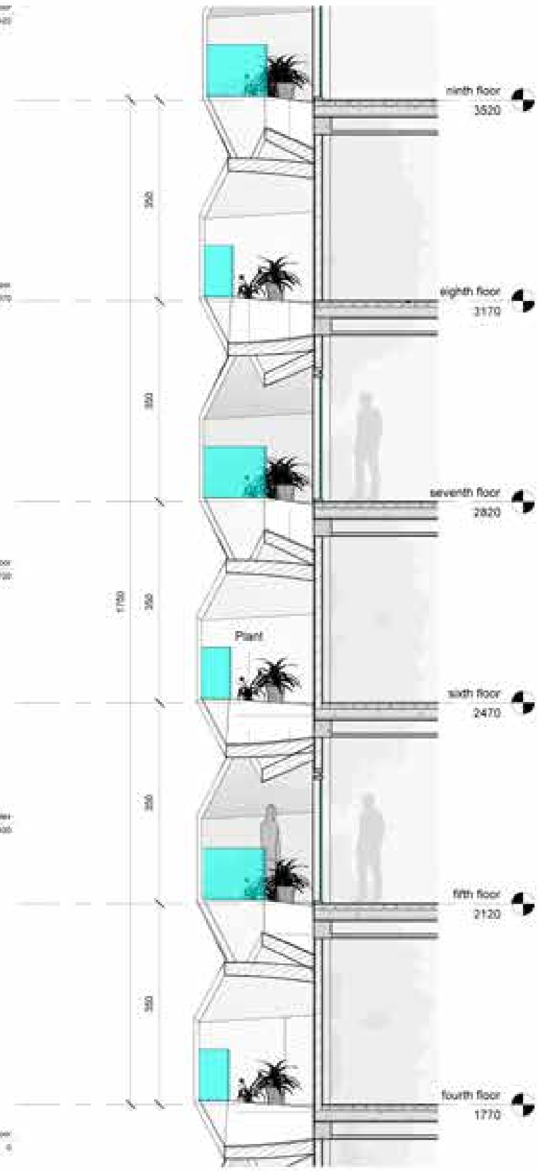

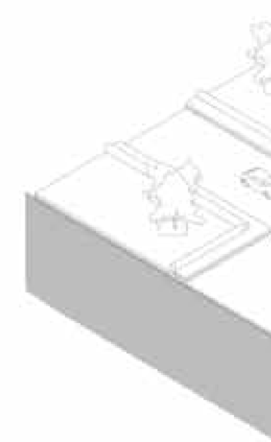

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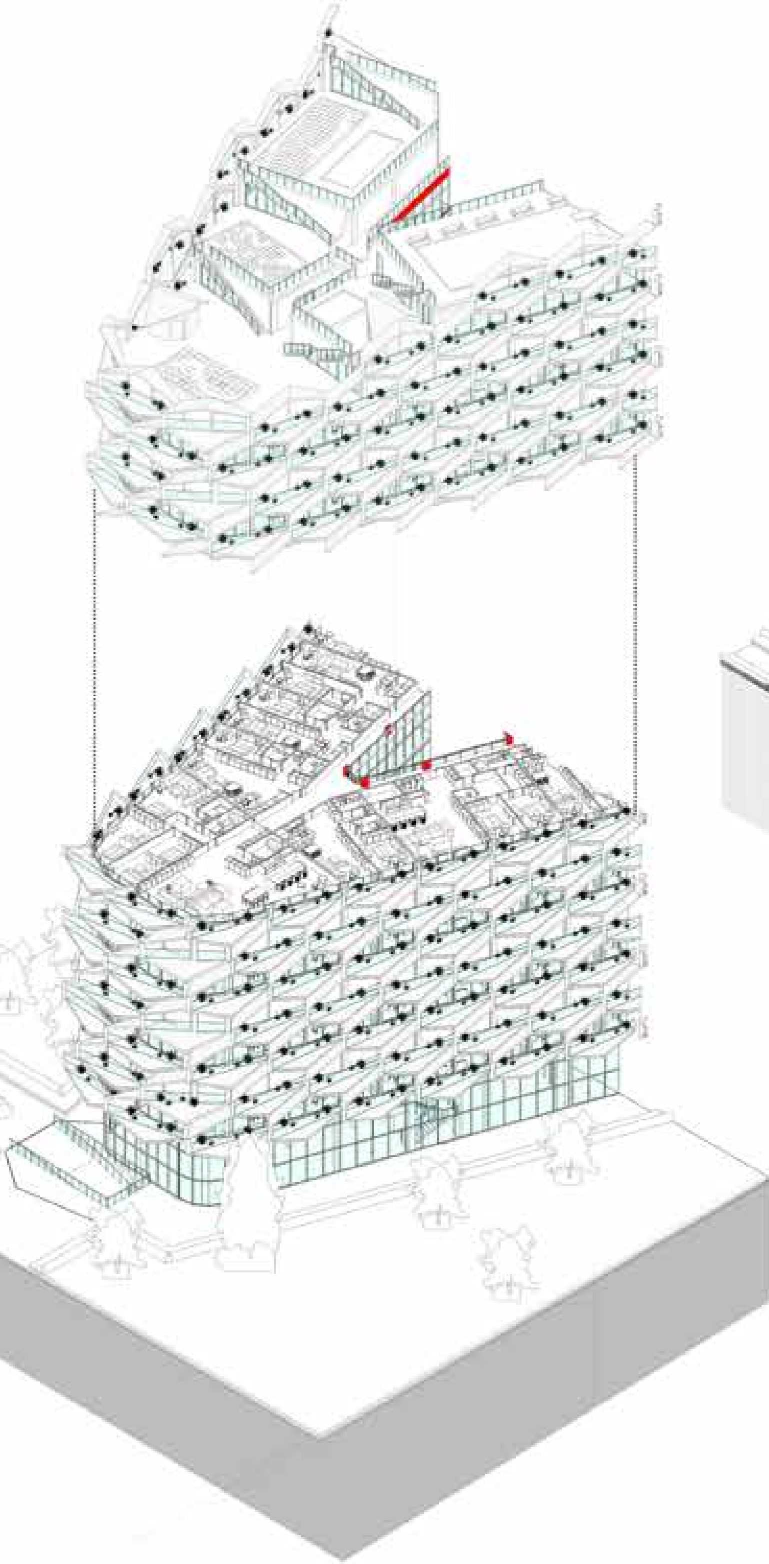
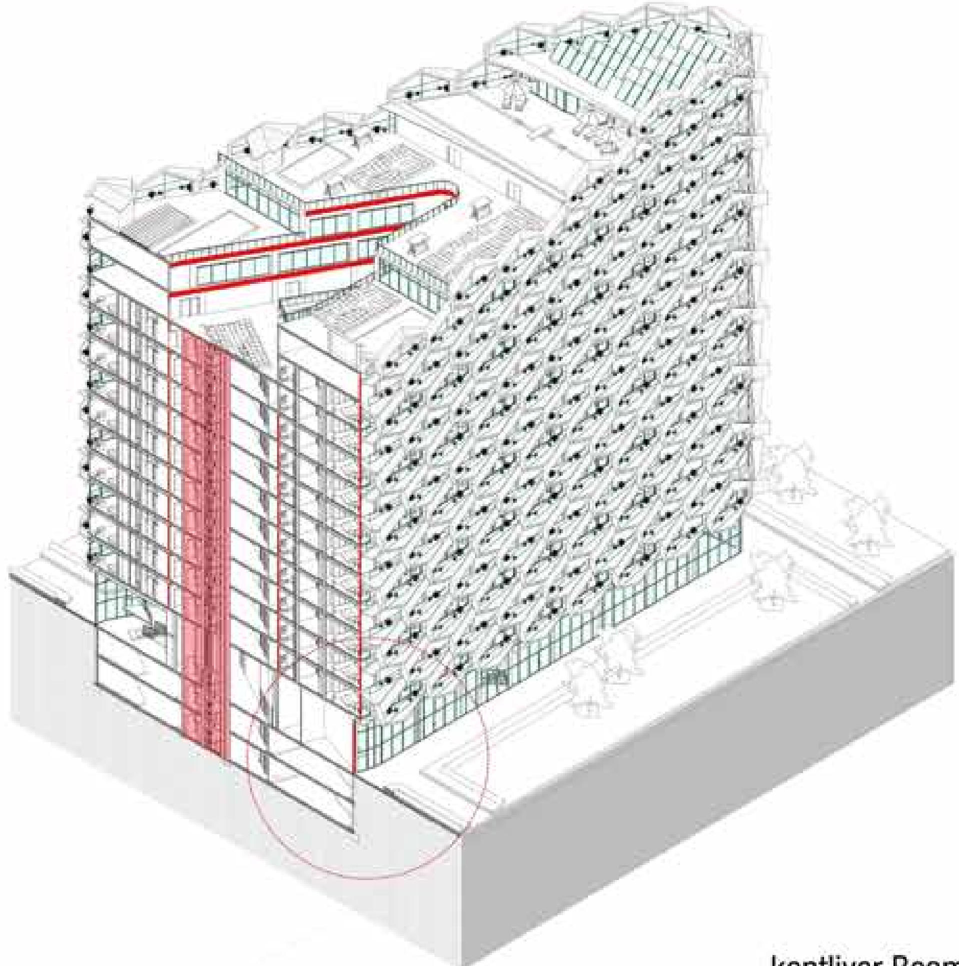
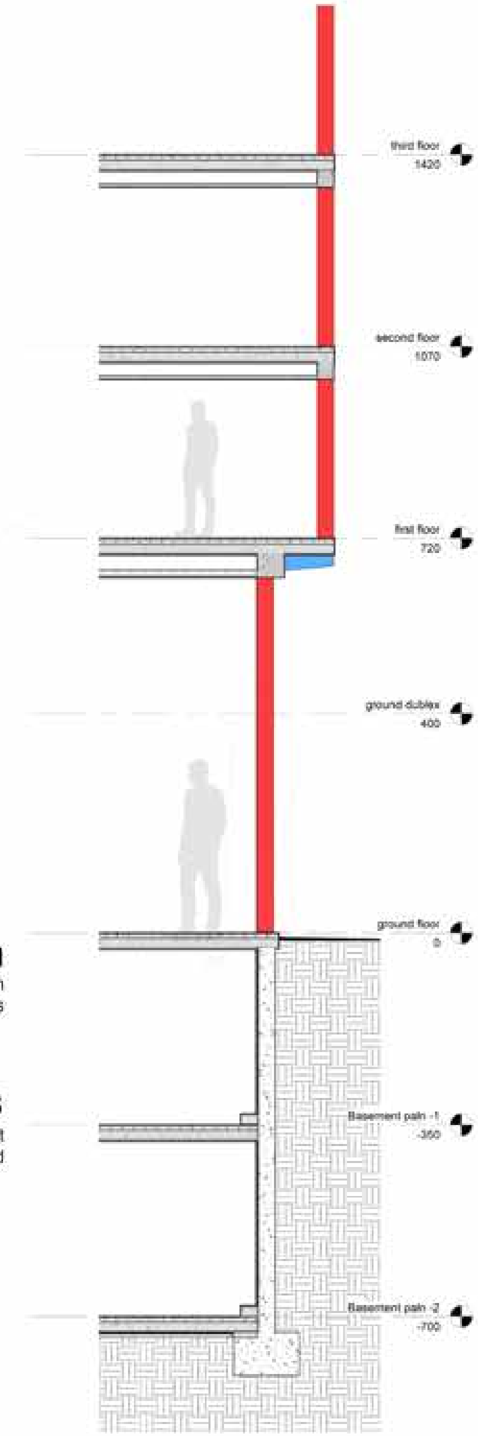






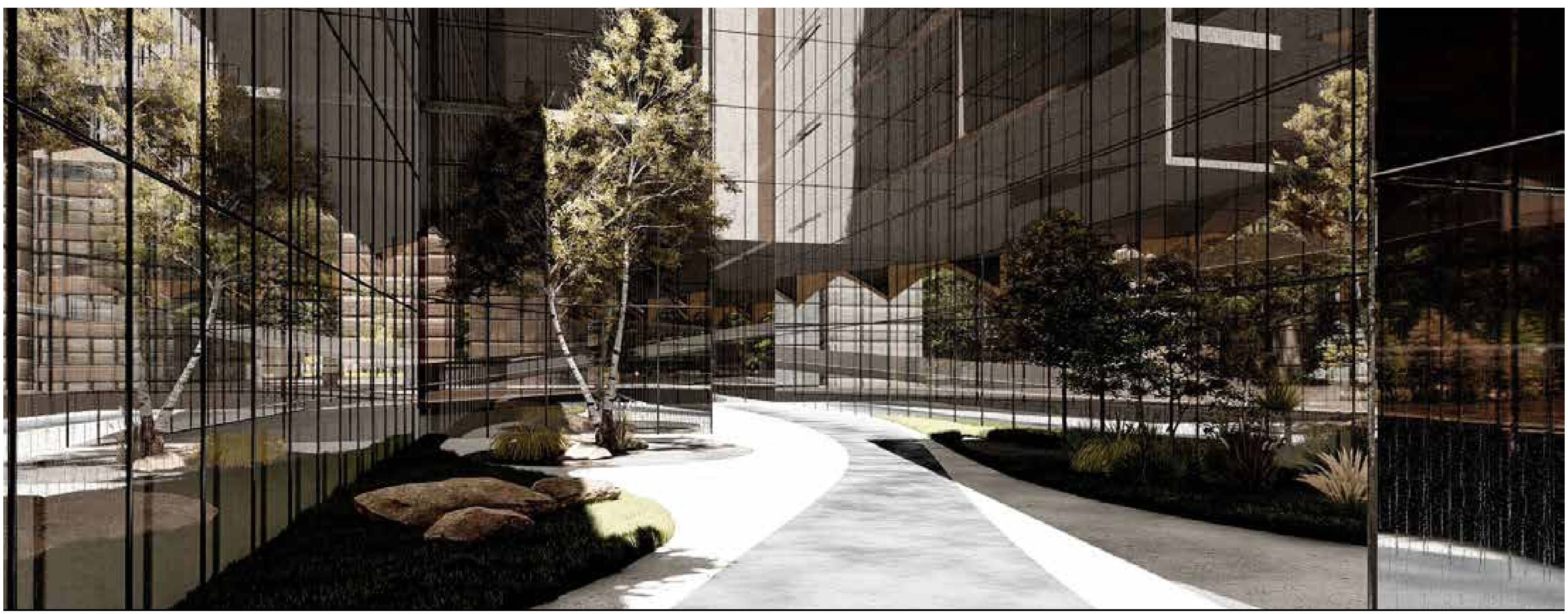
kentliver Beam

cantilever beam transfers the construction load to the main columns that unload into the foundations

Columns

carryingperimeter trophies resting on retaining walls that unload the load

Emerging from the scars of war, the Smart Tree Building prioritizes the well-being of its residents through the creation of a vibrant social space – the Courtyard Oasis. This semi-private haven, aptly named the "lungs" of the building, serves a vital function in fostering a sense of community and shared experience. Constructed with Kerto LVL, a sustainable wood product, the Courtyard Oasis exemplifies a commitment to both social responsibility and environmental consciousness. The space boasts a remarkable level of flexibility, facilitated by prefabricated slabs known as "mastabas." These ingeniously designed elements, crafted with Kerto-T and supported by the innovative Kerto LVL L-System, transform seamlessly from private terraces to communal gathering areas. Furthermore, the mastabas integrate natural ventilation systems and even function as energy production and recycling sources, contributing to the building's overall sustainability. This innovative design fosters a sense of shared responsibility and empowers residents to engage in a more sustainable lifestyle. The Courtyard Oasis transcends conventional boundaries, blurring the lines between private and public spaces, fostering a dynamic and vibrant hub that caters to the diverse needs of the community.



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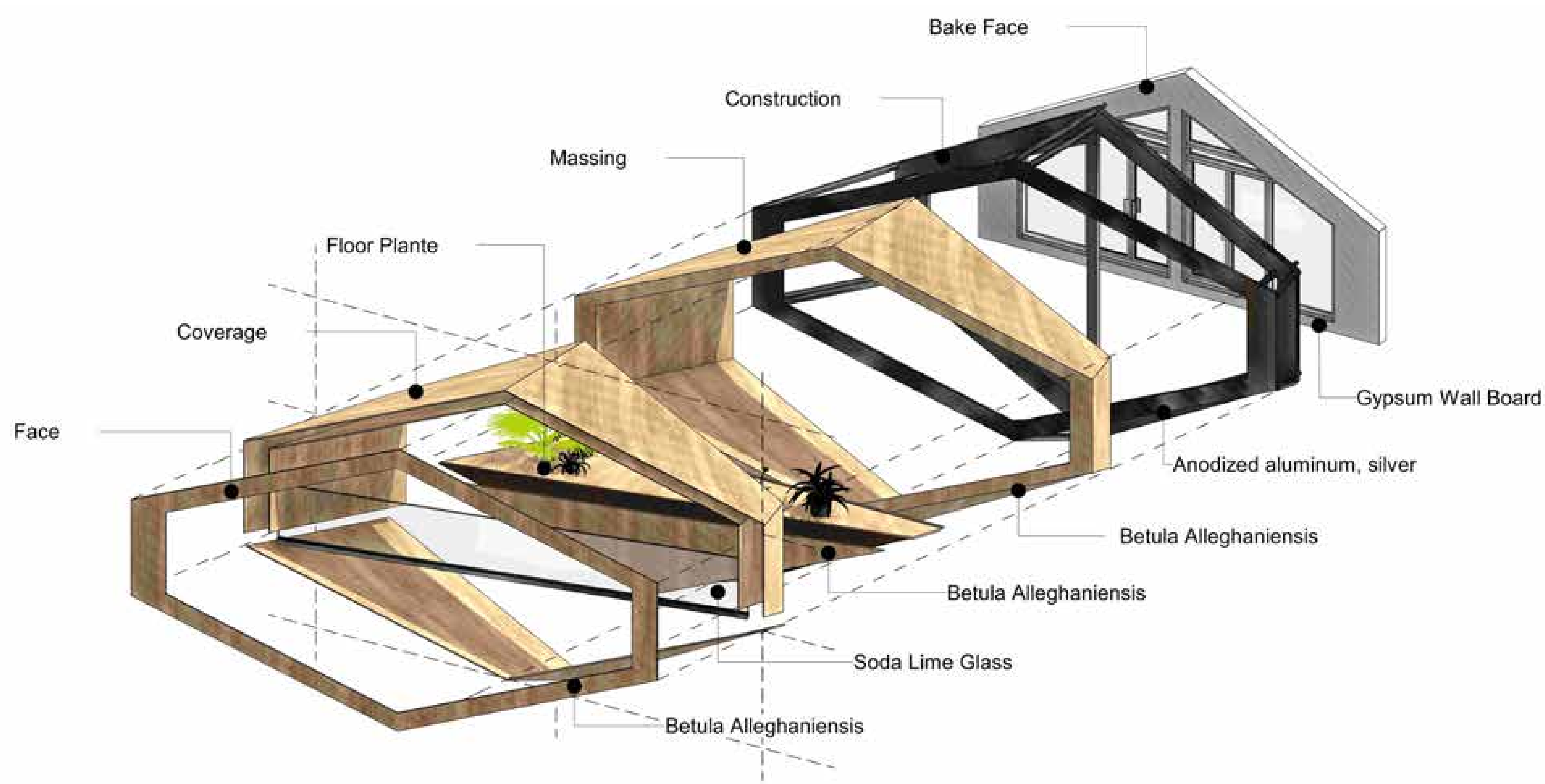
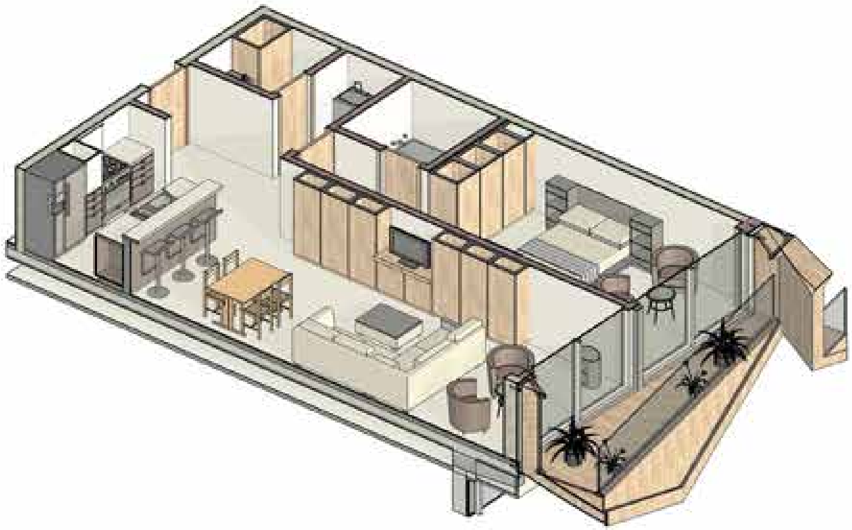
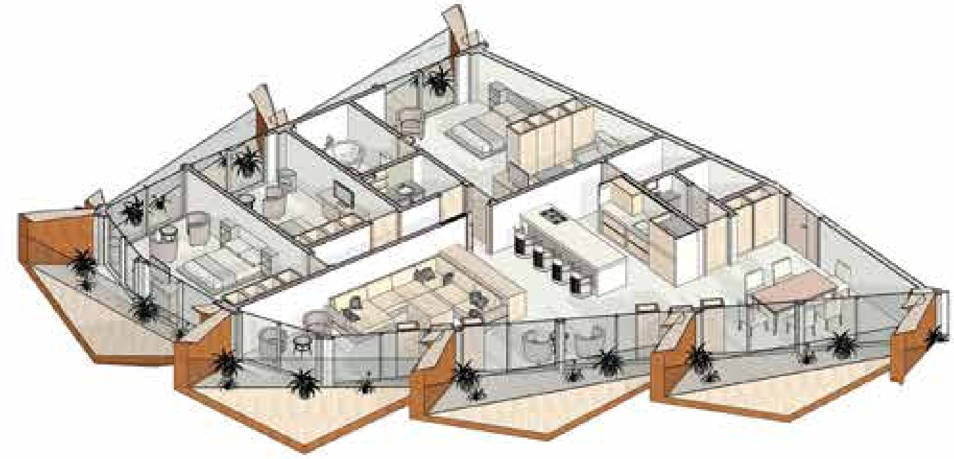


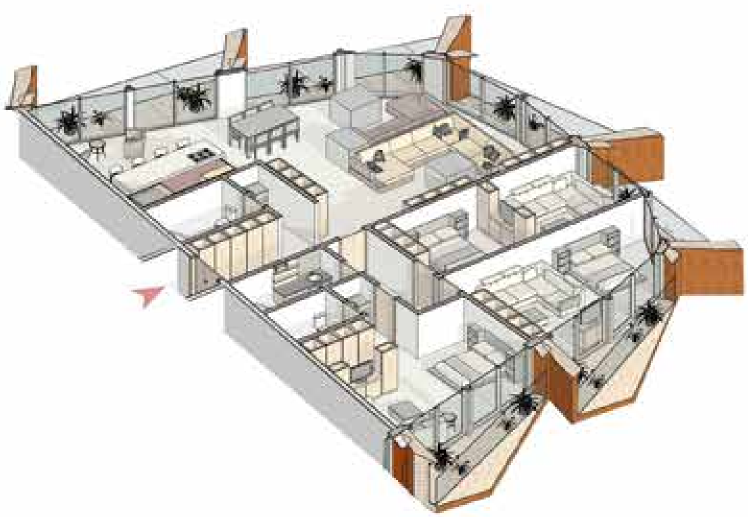
SKIN EXPLODED



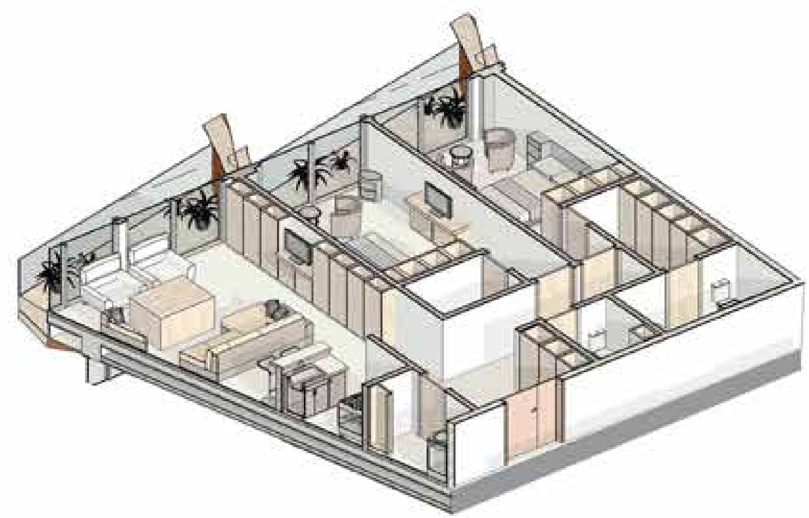
60 m²



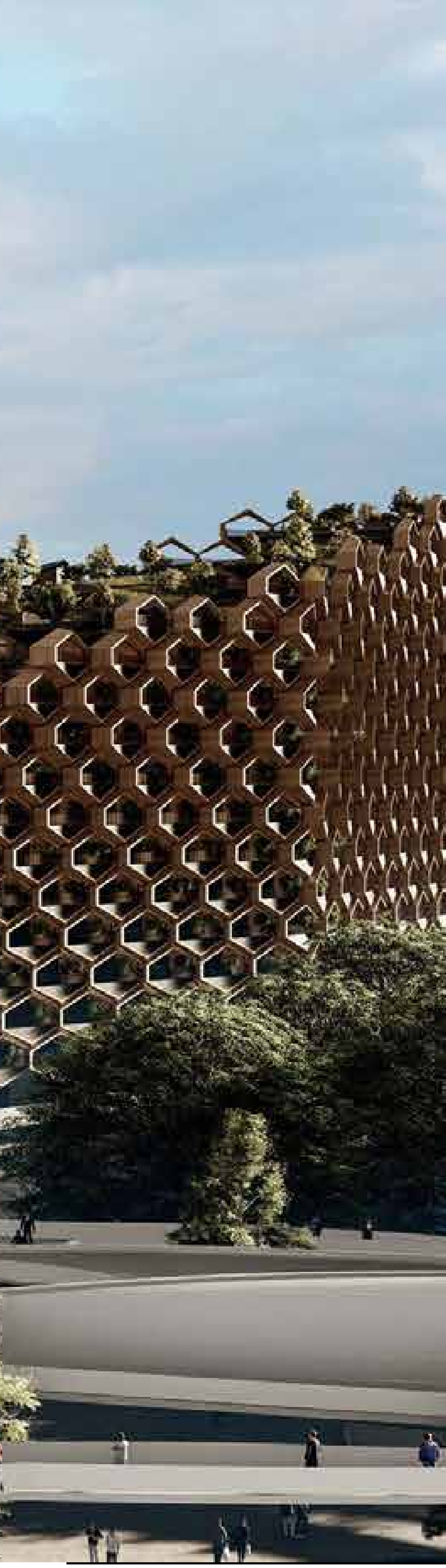
186 m²



220 m²



124 m²



ARCHITECTURE

Infrastructure

01

Ecoscape Station

P_386

02

Ecoscape Station

Sheikhupura ,Pakistan

Client: Mr. IK

Size: 2,023m² / 21,780f²

Status: In Design

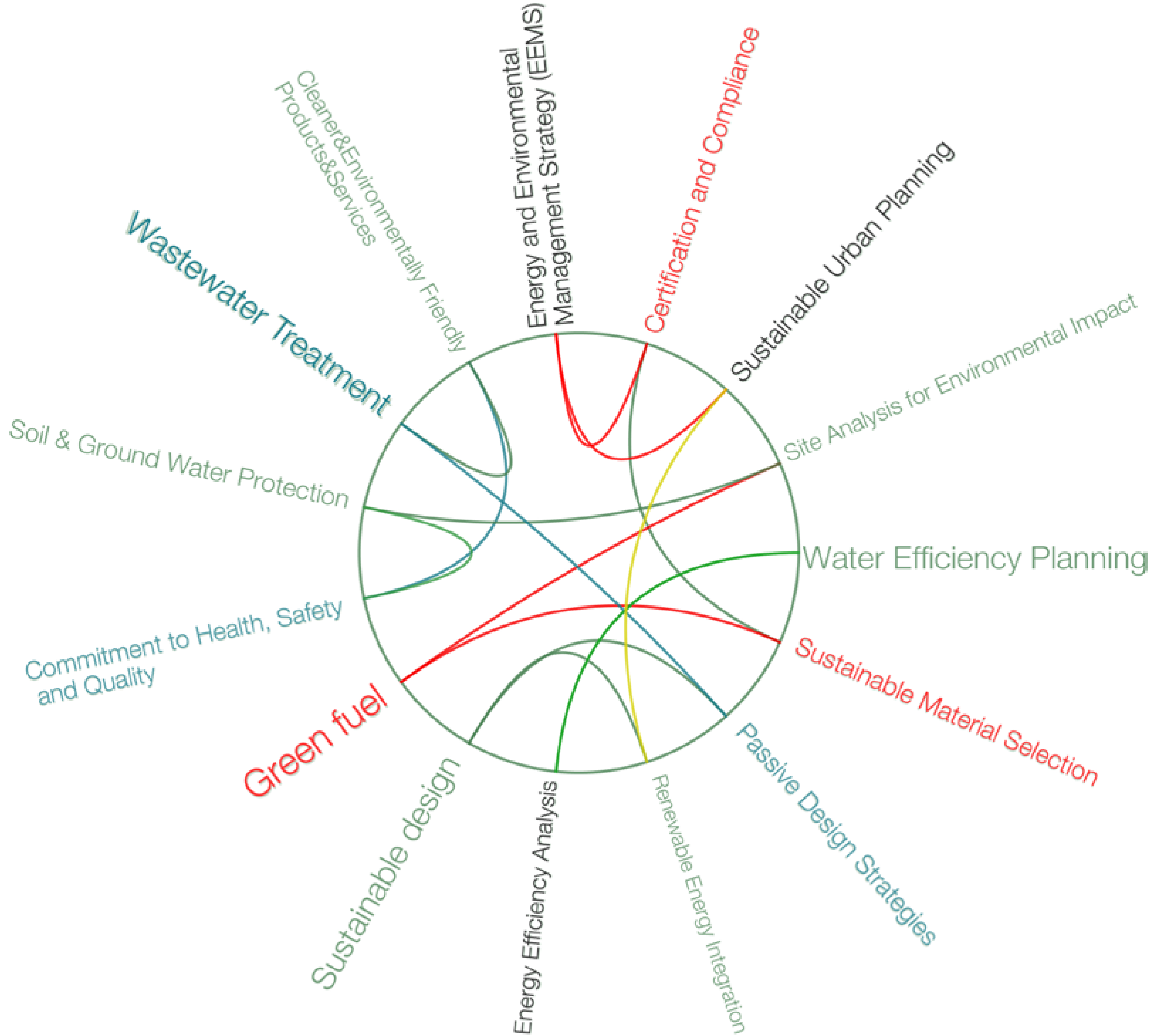
Typology: Infrastructure

Year: 2023

Located in Sheikhupura, Pakistan the design approach was to divide the designated plot into a grid, which would then be manipulated by the U-shaped curve naturally formed by the circulation path of vehicles through the plot, with entrance and exit points positioned at opposite ends.

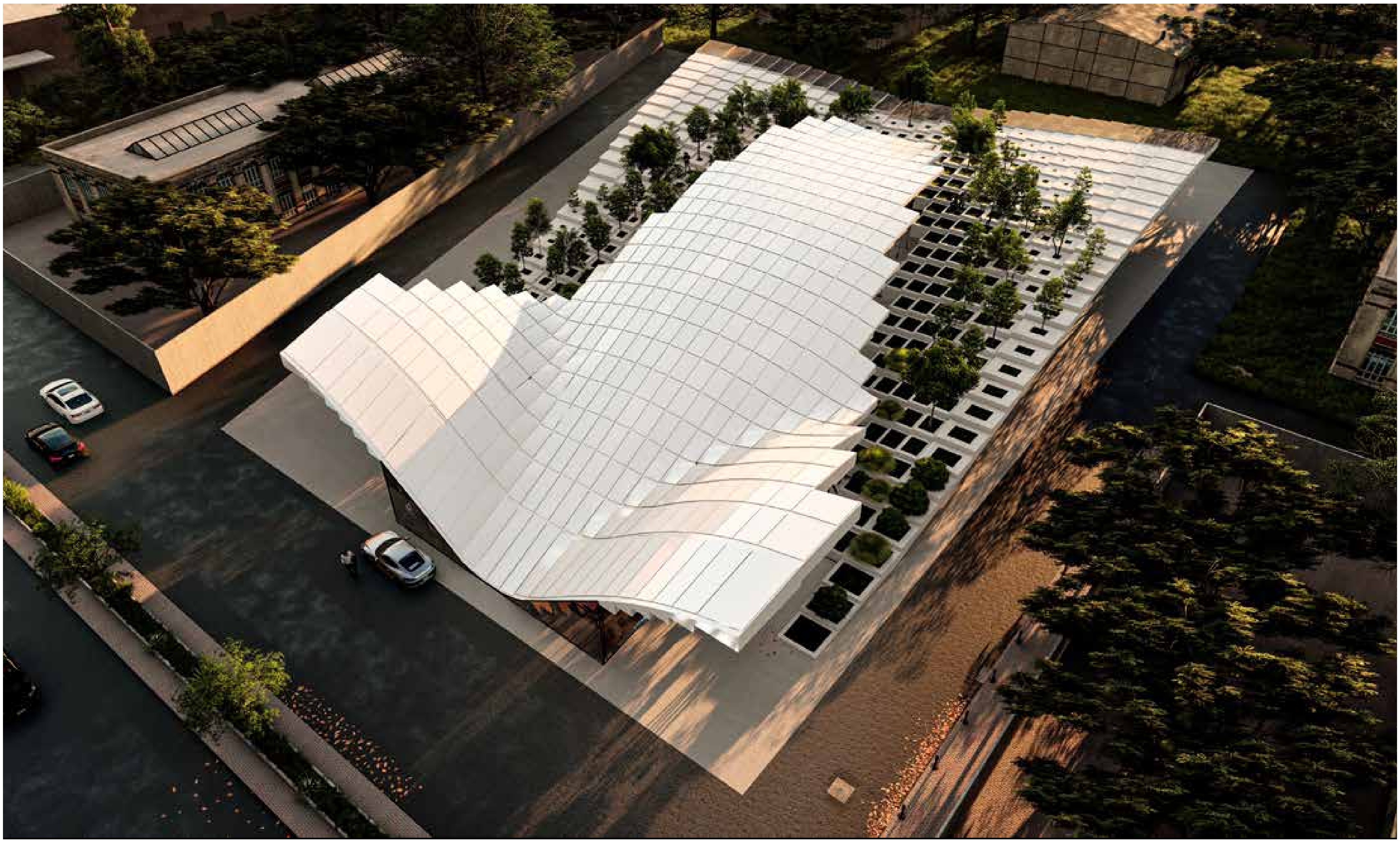
This U-shaped curve was utilized in the parametric design process as an input, acting as both an attractor and a repellor to influence the parameters of the grid's modules. This included factors like the distance of extrusions and their altitude, resulting in a distinctive pixelated stepped effect visible on the canopy and surrounding structures, giving the design its unique identity.

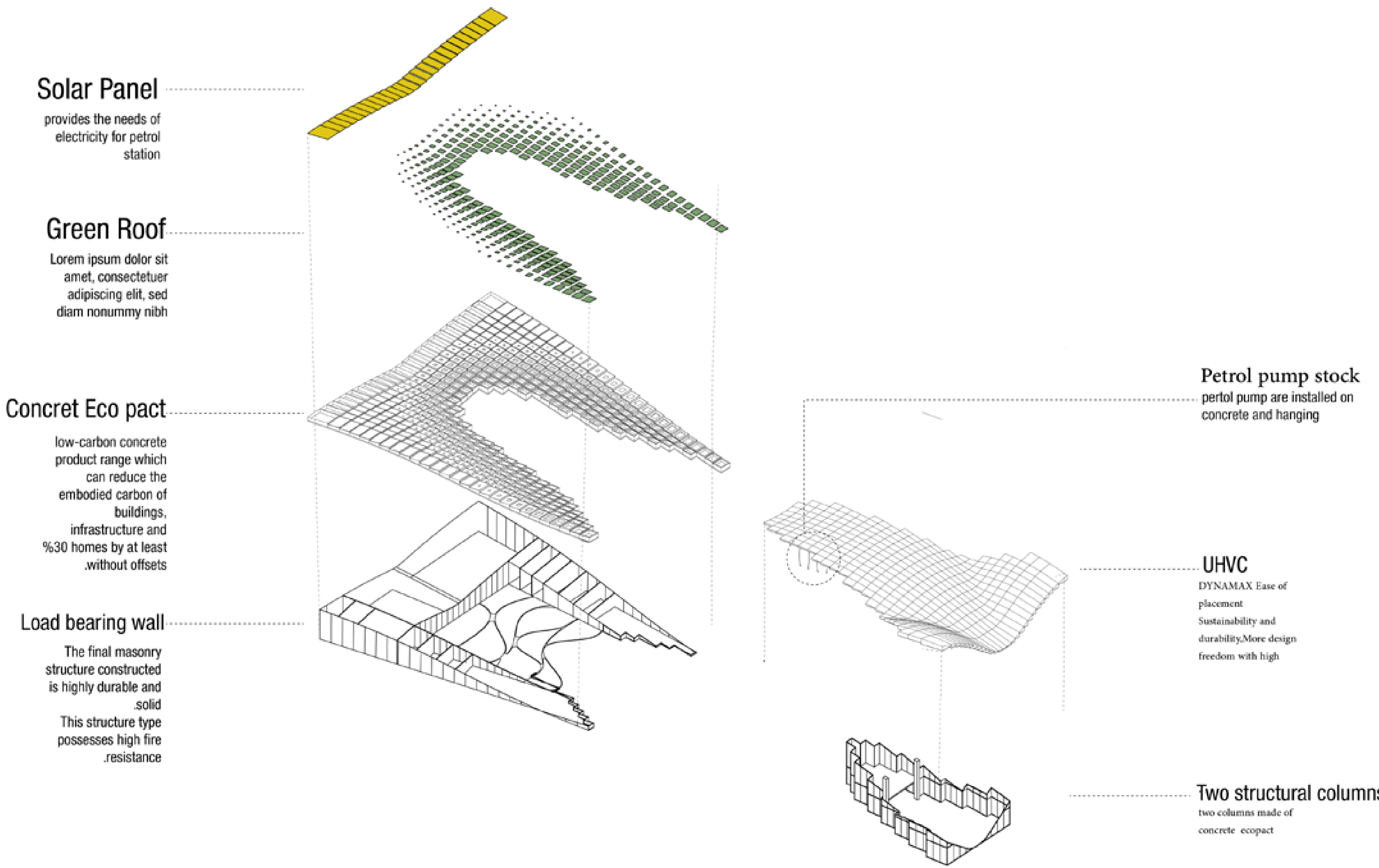
Ecoscape Station breaks traditional norms by transforming into a multi-functional complex that goes beyond its conventional role. Offering not only fuel services but also housing a restaurant, mosque, garage, offices, a market, and motel rooms, it becomes a versatile hub catering to various needs within a single space.

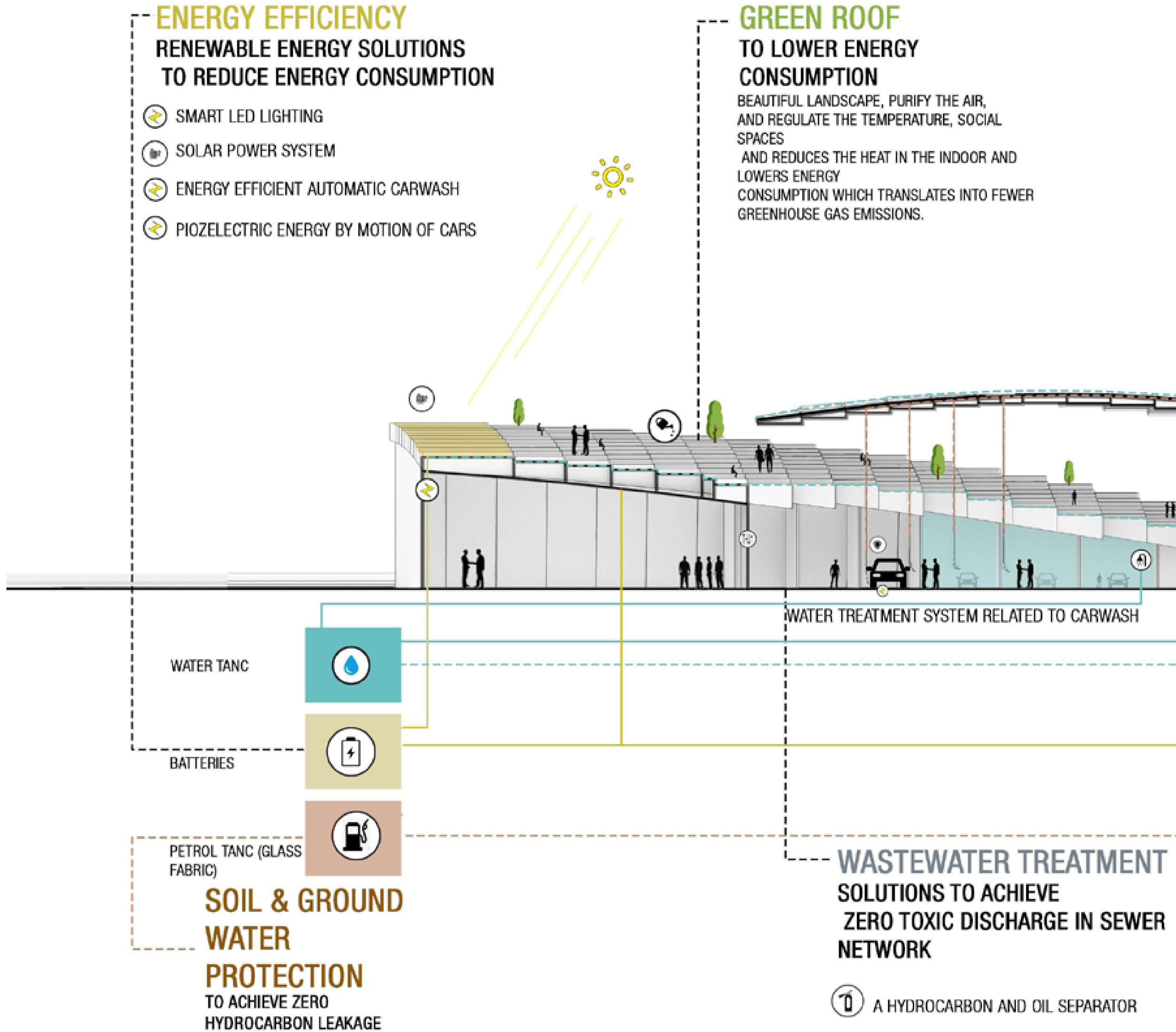


SUSTAINABLE DESIGN PRINCIPLES

Incorporating cutting-edge smart building technologies, the Ecoscape Station embraces advancements that enhance user experience and operational efficiency. Smart lighting systems and Building Automation Systems contribute to a seamlessly managed environment, ensuring optimized energy use and improved safety. The overhead fuel dispensing system further adds convenience, facilitating better space utilization and streamlined vehicle maneuverability during refueling. By integrating these technologies, the gas station not only modernizes its operations but also sets a precedent for efficiency in the industry.




Solar Panel
provides the needs of electricity for petrol station
Green Roof
Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh
Concret Eco pact
low-carbon concrete product range which can reduce the embodied carbon of buildings, infrastructure and %30 homes by at least .without offsets
Load bearing wall
The final masonry structure constructed is highly durable and .solid
This structure type possesses high fire .resistance
Petrol pump stock
pertol pump are installed on concrete and hanging
UHVC
DYNAMAX Ease of placement
Sustainability and durability,More design freedom with high
Two structural columns
two columns made of concrete ecopact


ENERGY EFFICIENCY
RENEWABLE ENERGY SOLUTIONS
TO REDUCE ENERGY CONSUMPTION
SMART LED LIGHTING
SOLAR POWER SYSTEM
ENERGY EFFICIENT AUTOMATIC CARWASH
PIOZELECTRIC ENERGY BY MOTION OF CARS
GREEN ROOF
TO LOWER ENERGY
CONSUMPTION
BEAUTIFUL LANDSCAPE, PURIFY THE AIR,
AND REGULATE THE TEMPERATURE, SOCIAL
SPACES
AND REDUCES THE HEAT IN THE INDOOR AND
LOWERS ENERGY
CONSUMPTION WHICH TRANSLATES INTO FEWER
GREENHOUSE GAS EMISSIONS.
WATER TREATMENT SYSTEM RELATED TO CARWASH
WATER TANC
BATTERIES
PETROL TANC (GLASS
FABRIC)
SOIL & GROUND
WATER
PROTECTION
TO ACHIEVE ZERO
HYDROCARBON LEAKAGE
WASTEWATER TREATMENT
SOLUTIONS TO ACHIEVE
ZERO TOXIC DISCHARGE IN SEWER
NETWORK
A HYDROCARBON AND OIL SEPARATOR

GREEN FUEL CLEANER & ENVIRONMENTALLY FRIENDLY PRODUCTS & SERVICES

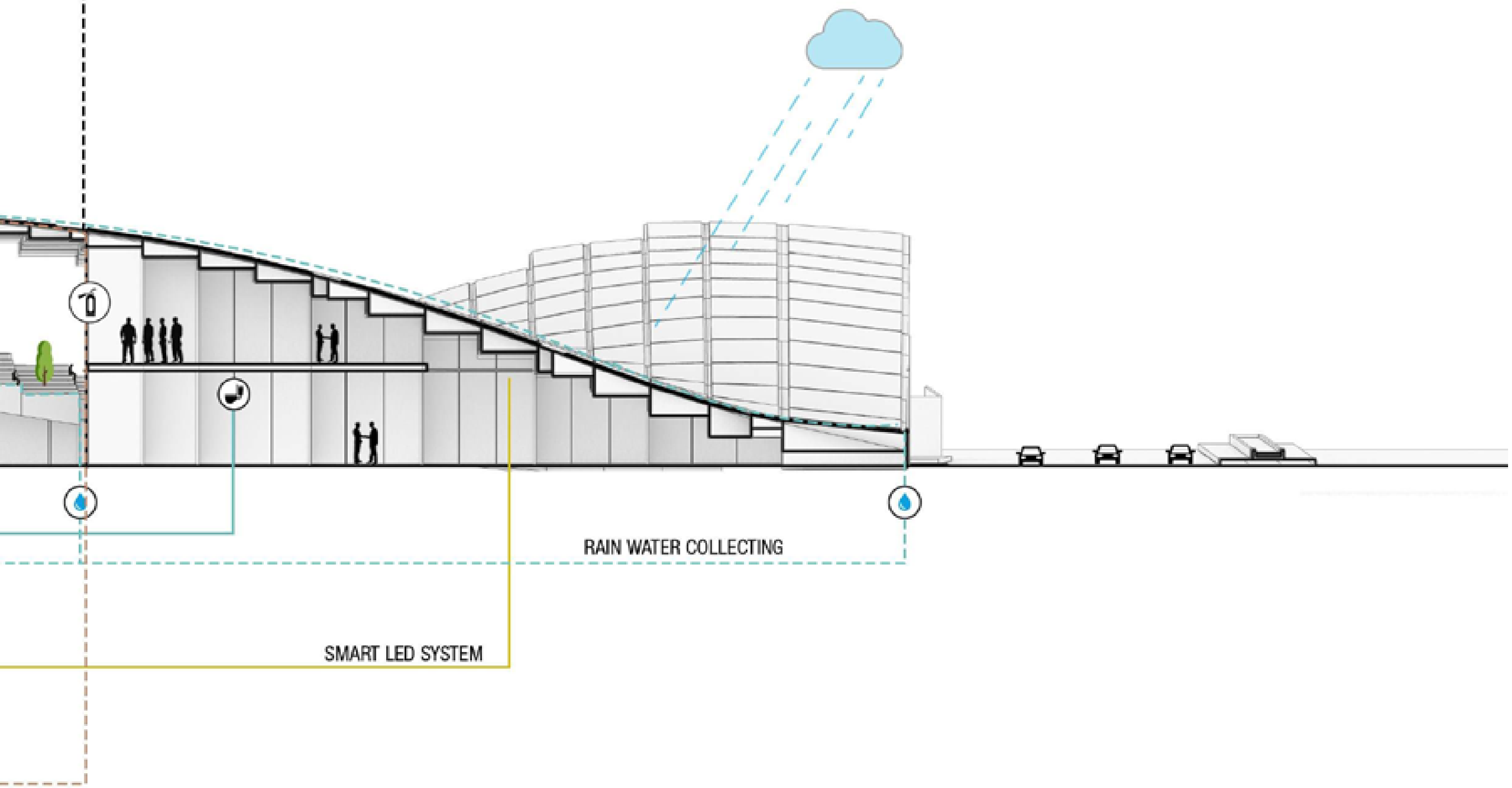
- BIODIESEL PRODUCED FROM WASTE COOKING OIL
- QUANTUM, THE CLEAN FUEL FROM IPT
- SOLAR POWERED ELECTRIC VEHICLE CHARGER
- NITROGEN TIRES INFLATOR

WATER CONSERVATION

SOLUTIONS TO REDUCE WATER CONSUMPTION

RAINWATER COLLECTION

TYPICALLY, 60% TO 85% OF THE USED WATER CAN BE RECLAIMED AND RE-USED IN CAR WASH.



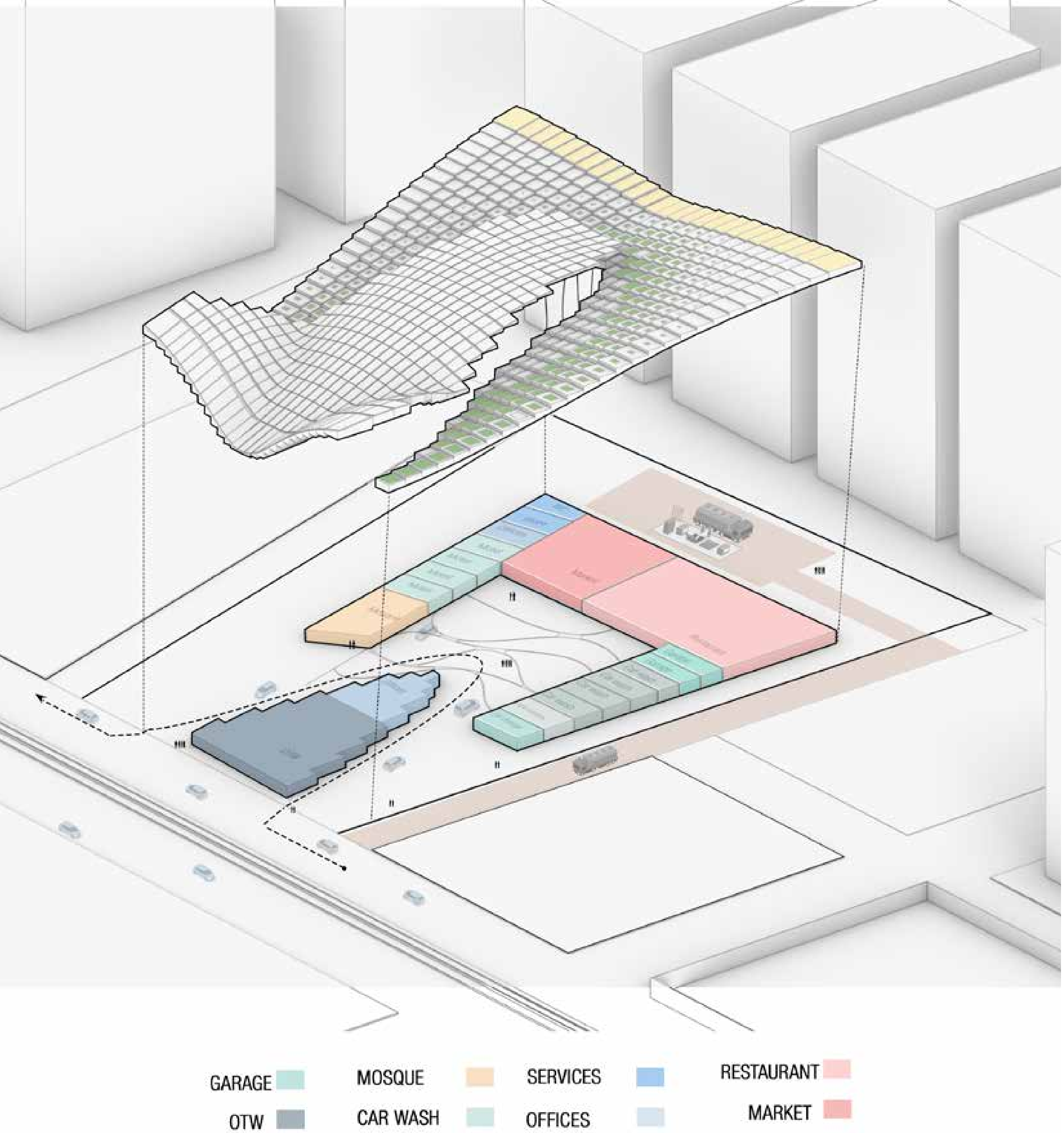
COMMITMENT TO HEALTH, SAFETY AND QUALITY

FIRE EXTINGUISHERS, SANDBOX AND SAFETY

SIGNS EMERGENCY PUSH BUTTON WHICH IS A SAFE CONTROL SWITCH TO
IMMEDIATELY STOP A MACHINE IN CASE OF EMERGENCY.

CENTRAL MONITORING AND CONTROL SYSTEM

AUTOMATIC VEHICLE RECOGNITION SYSTEM



GARAGE
OTW
MOSQUE
CAR WASH
SERVICES
OFFICES
RESTAURANT
MARKET

Sustainability takes center stage at the Ecoscape, showcasing a commitment to environmental responsibility. Green roofs are implemented for air purification and temperature regulation, contributing to the local microclimate. The installation of solar panels harnesses clean energy, while rainwater collection systems and wastewater treatment underline water conservation efforts.

The use of eco-friendly materials like ECOPact concrete emphasizes the station's dedication to minimizing its ecological footprint. By providing green fuel options, this forward-thinking gas station stands as a beacon of sustainability, illustrating how environmental consciousness can be seamlessly integrated into everyday infrastructure.

ARCHITECTURE

Education

Quran Memorizing Institute

Al Ladhiqiyah ,Syria

Client: Quran Govt. of Damascus

Size: 250 SQM./ 2,691 SFT.

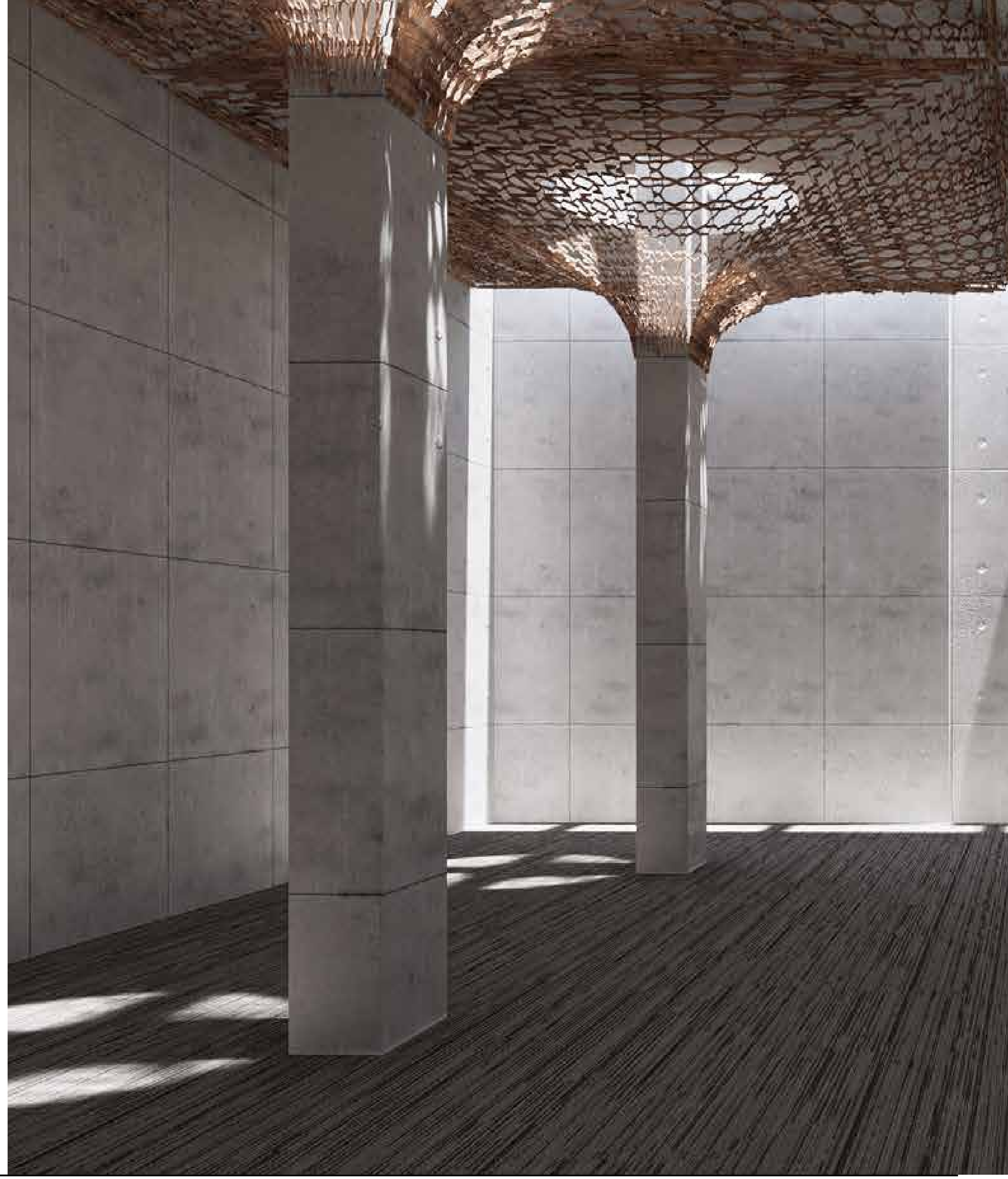
Status: Proposal

Typology: Education, Culture

Year: 2017

Situated in the Countryside of Latakia, Syria, this Institute of Quran memorization presents a refreshing departure from contemporary religious architecture's preoccupation with form. Here, the focus shifts inward, prioritizing the essence of sacred space. Defined by robust cast concrete walls and a prayer hall distinguished by a mesmerizing fretwork-like ceiling, the Institute transcends the urban fabric to become a sanctuary for spiritual exploration. A deliberate blurring of boundaries occurs between the built and natural environments.

The Institute seamlessly integrates with its surrounding garden, fostering a sense of harmony. Trees and columns interweave, creating an informal vertical landscape that extends the experience of prayers beyond the building's walls, fostering a connection with the natural world and a sense of community.



Trees and columns stand in harmonious dialogue, fostering a sense of tranquility. The prayer hall extends outward during Friday prayers, allowing worshippers to experience moments of devotion under the open sky. This connection with nature reinforces the institute's commitment to environmental responsibility.

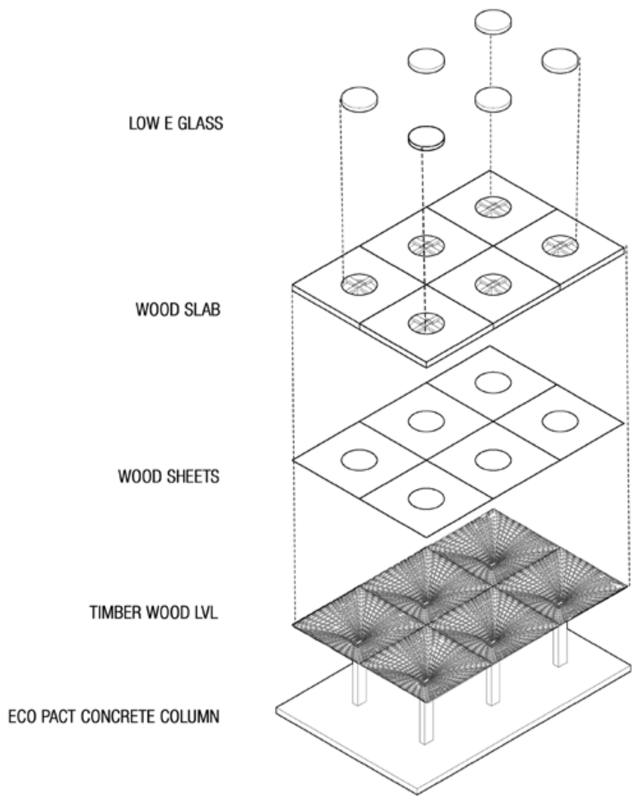
The Institute of Quranic Memorization exemplifies the harmonious integration of spirituality and environmental stewardship.

Embracing smart lighting solutions and natural illumination, the design fosters an environmentally conscious space. The innovative use of light control minimizes reliance on artificial lighting, while the seamless connection with nature reinforces a sense of environmental stewardship.

The heart of the institute lies in the prayer hall, a space distinguished by its intricate fretwork ceiling, supported by slender columns. This captivating design is the product of a bespoke computer script that meticulously controls the flow of natural light.

The perforations, inspired by traditional Islamic geometric patterns, create a dynamic interplay of light and shadow. This innovative approach not only illuminates the space in a sustainable manner but also serves as a contemporary interpretation of Islamic tradition, revealing its timeless beauty.

The institute reveres Islamic architectural traditions through its geometric patterns and focus on natural light. However, it also embraces cutting-edge technology to optimize design and functionality. This fusion creates a sanctuary where the essence of spirituality is preserved while incorporating contemporary advancements. This approach sets a new standard for sustainable religious architecture. ed by traditional Islamic geometric patterns, create a dynamic interplay of light and shadow. This innovative approach not only illuminates the space in a sustainable manner but also serves as a contemporary interpretation of Islamic tradition, revealing its timeless beauty.



PRAY HALL STRUCTURE

SUSTAINABLE MATERIAL

PRAYER HALL

THE PRAYER HALL HAS BEEN CREATED AS A GREAT UNIFIED SPACE WITH NATURAL LIGHT COMING FROM THE ROOF, MADE OF A SHAPE OF TIMBER COLUMNS AND MAKES THE LIGHT COME INTO THE .PRAYER HALL IN A DRAMATIC WAY INVITING TO THE MEDITATION

“The Institute of Quran Memorization stands as a testament to the power of architecture to elevate the human spirit. It invites all who enter to embark on a transformative journey, one that transcends the physical realm

and elevates the soul. Here, worshippers find solace in the continuity of tradition while embracing sustainable design and innovative solutions.”

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● ECOPACT CONCRETE

ECOPACT IS A LOW-CARBON CONCRETE PRODUCT RANGE WHICH CAN REDUCE THE EMBODIED CARBON OF BUILDINGS, INFRASTRUCTURE AND HOMES BY AT LEAST 30% WITHOUT OFFSETS.

● LOW E GLASS

LOW E APPLIED TO WINDOWS HELPS BLOCK INFRARED LIGHT FROM PENETRATING THE GLASS FROM THE OUTSIDE. IN ADDITION, LOW E HELPS KEEP .IN YOUR HEATING/COOLING ENERGY

● TIMBER WOOD

T HAS UNIFORM COLOUR. ITS LIGHT COLOUR USUALLY INDICATES TIMBER WITH LOW STRENGTH. IT IS DURABLE..IT IS CAPABLE OF RETAINING ITS SHAPE DURING .CONVERSION OR SEASONING
IT PROVIDES GOOD INSULATION FROM THE COLD..A GOOD TIMBER IS FREE FROM SERIOUS DEFECTS LIKE KNOTS, SHAKES, FLAWS AND CRACKS.I

This project represents a harmonious fusion of ancient wisdom and modern ingenuity. The institute pays homage to Islamic architectural traditions through its geometric patterns and emphasis on natural light, while simultaneously embracing cutting-edge technology to optimize design and functionality. The result is a sanctuary that preserves the essence of spirituality while pioneering sustainable architectural practices. This visionary approach sets a new benchmark for contemporary religious architecture.

The Institute of Quran Memorization embodies a profound respect for both humanity and the environment. By prioritizing smart lighting solutions and maximizing natural illumination, the design fosters a sustainable and eco-conscious space. The innovative light control system minimizes energy consumption, while the seamless integration with nature reinforces a deep-rooted commitment to environmental stewardship.

Timeabu Kindergarten

Ashanti ,Ghana

Client: Radefoundation And Madanfo

Size: 1,185m²/ 12,755f²

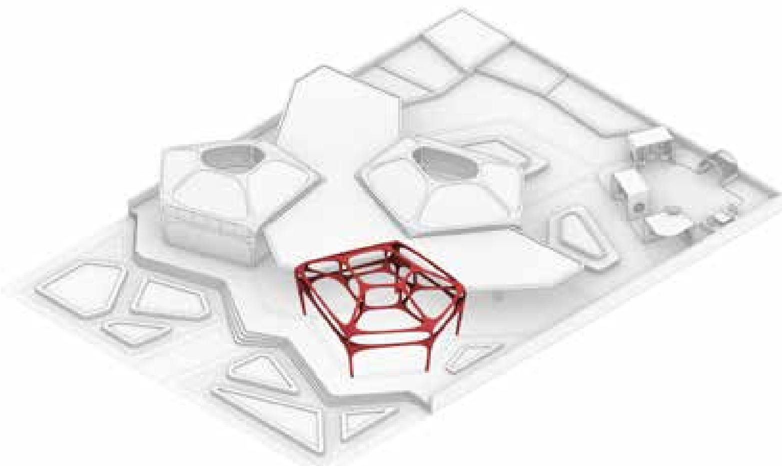
Status: Proposal

Typology: Education

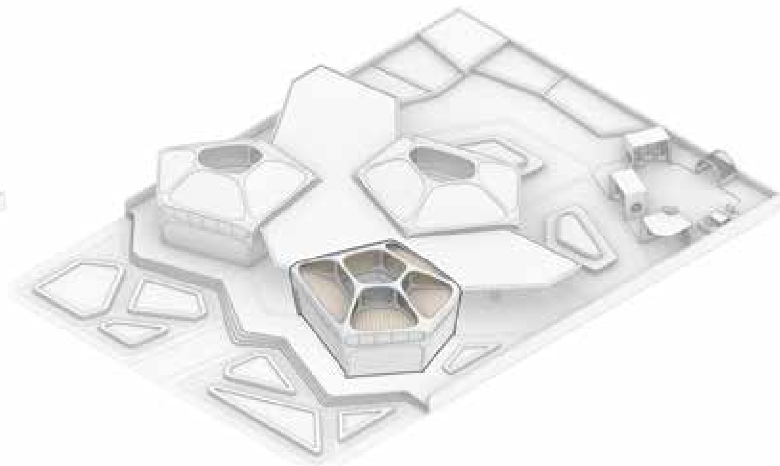
Year: 2019

This innovative architectural project in Ghana utilizes bamboo, a locally abundant material, inspired by the Baobab tree's branching design. Incorporating traditional techniques such as wood shutters, cob walls, and earth bricks, the structures blend natural materials for both cultural resonance and structural integrity.

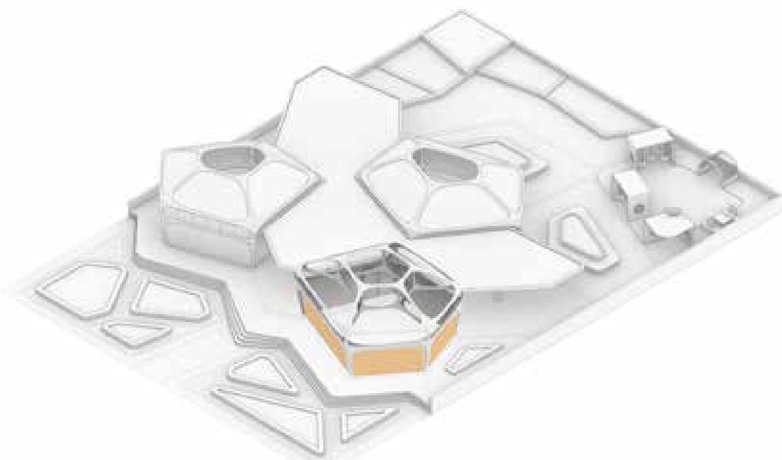
The interior design prioritizes natural light through strategically placed openings and wood shutters, creating a warm and inviting atmosphere. Additionally, the bamboo's unique branching design enhances the play of light and shadow. The project emphasizes eco-friendly practices and local identity, integrating natural ventilation for a sustainable and comfortable living environment.



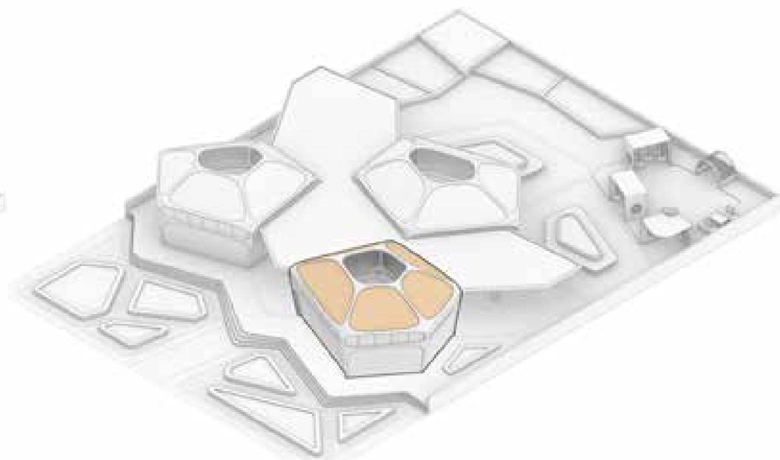
WOOD STRUCTURE



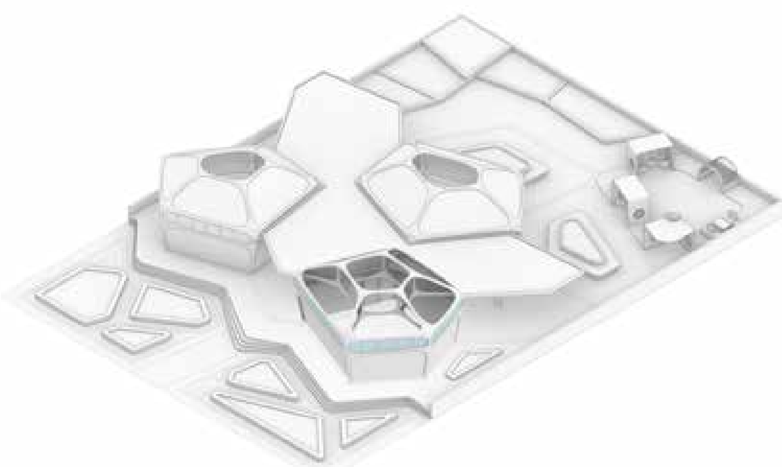
BAMBOO SUPPORTED



COB WALLS



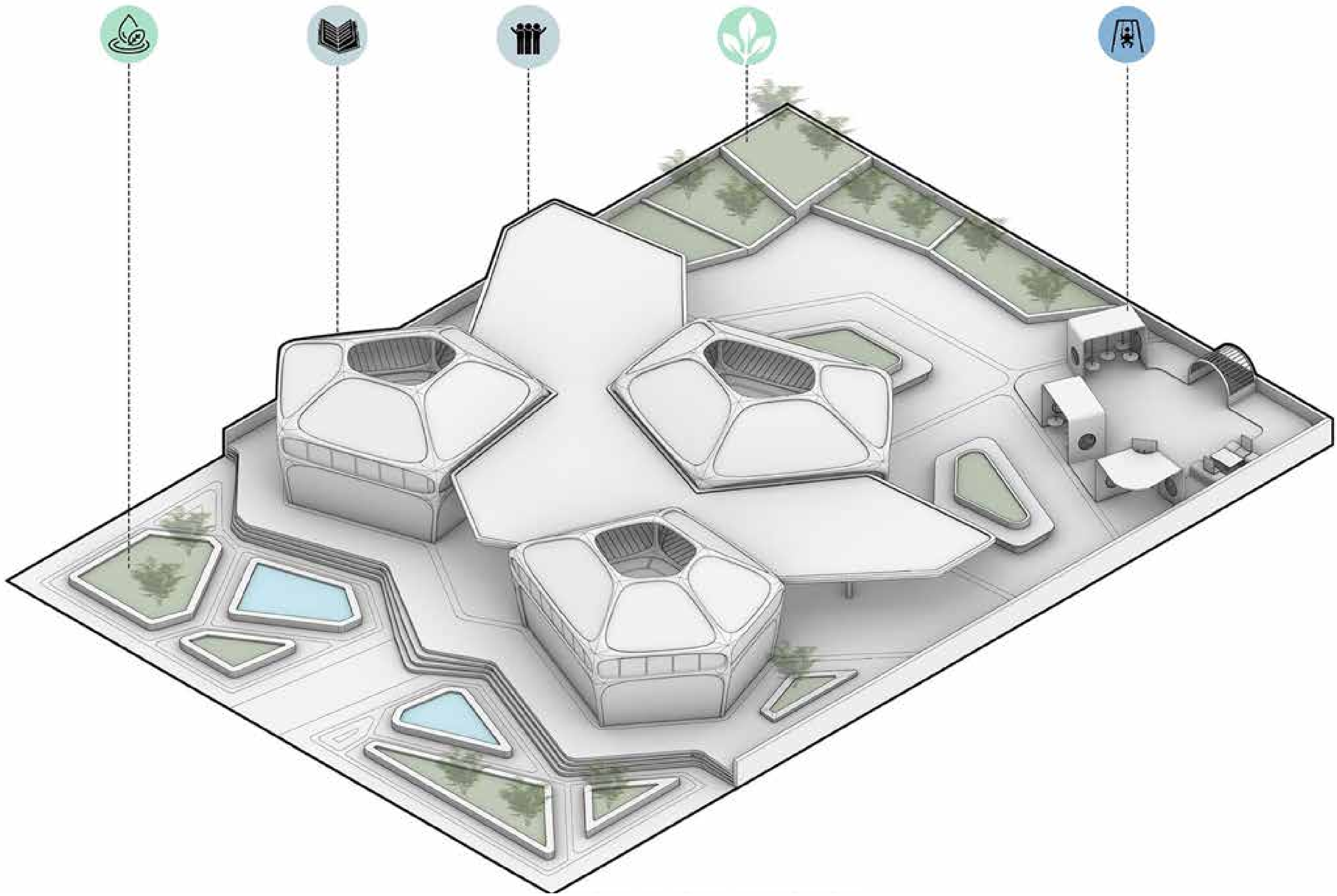
WOOD SHEET



GLASSING

LAND SCAPE

The units are structured with bamboo, a common material abundant in Ghana. Inspired by the Baobab tree, bamboo columns and beams, joists, and studs form a unique branching design. Wood shutters, cob walls, and earth bricks create a blend of natural materials, ensuring structural integrity and cultural resonance. This design harmonizes traditional aesthetics with eco-friendly practices, promoting both local identity and environmental sustainability.



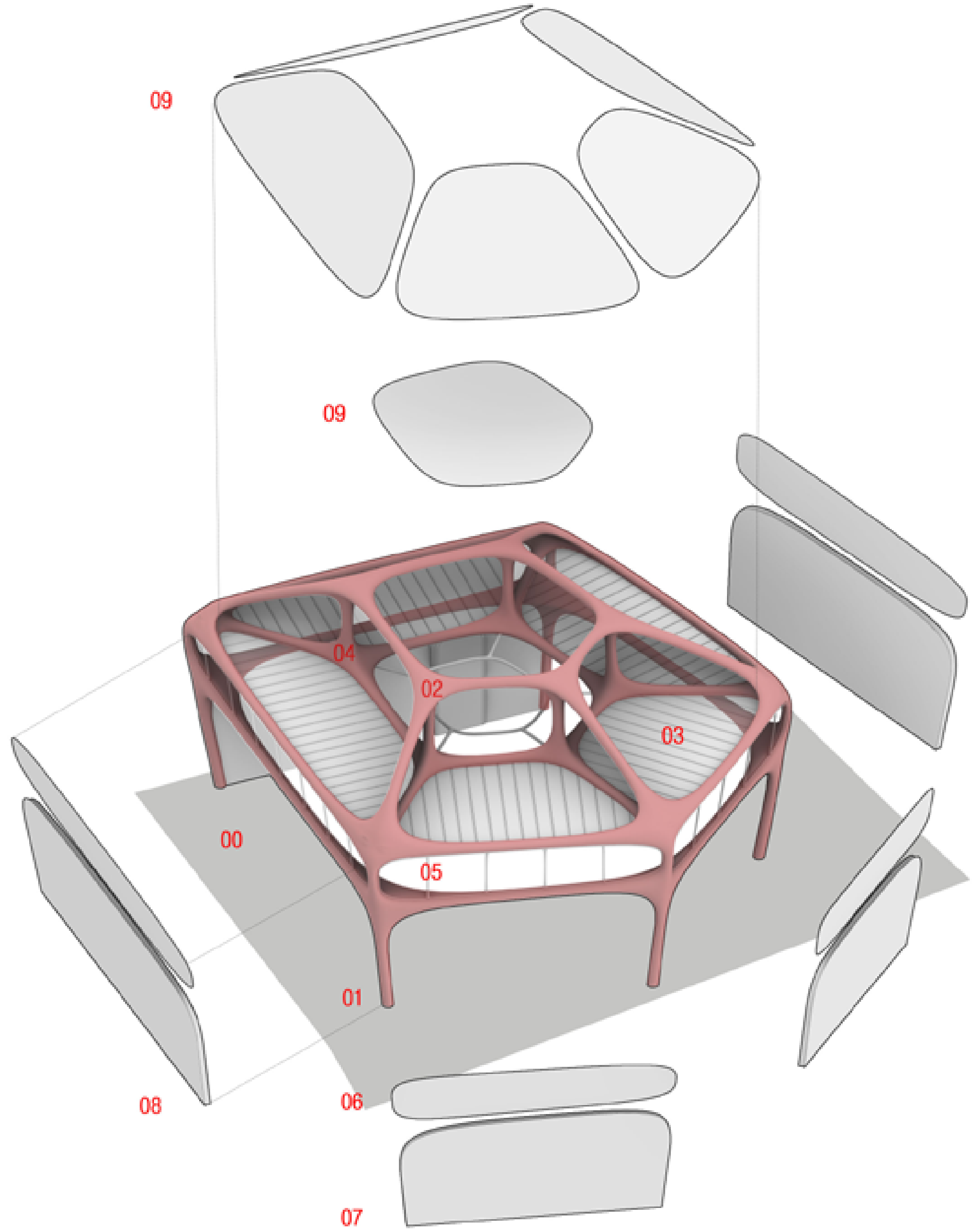
Timeabu Kindergarten, situated in the heart of rural Ghana, in a small village called Timeabu, which is in the Ashanti region in the center of Ghana, is our visionary architectural project that redefines the kindergarten concept. It transcends mere infrastructure to create an eco-conscious haven for early childhood development.

Spanning on 1185m², the design seamlessly integrates three classrooms with sustainable features, harmonizing with vibrant recreational spaces. A playground, gardening areas, and a shaded pavilion showcase our commitment to multifaceted learning experiences, blending education with environmental responsibility. Rooted in community and sustainability, this kindergarten blueprint aspires to cultivate holistic growth and creativity while exemplifying our dedication to a greener future for the village's youngest minds.

The project consists of playground, gardening areas, and three units, each one resembling the traditional Ghanaian village house, with a pavilion permeating through them.

The pavilion features three central supporting columns branching out, like the Baobab tree that is often referred to as the 'tree of life,' holding great cultural significance in Ghanaian culture.

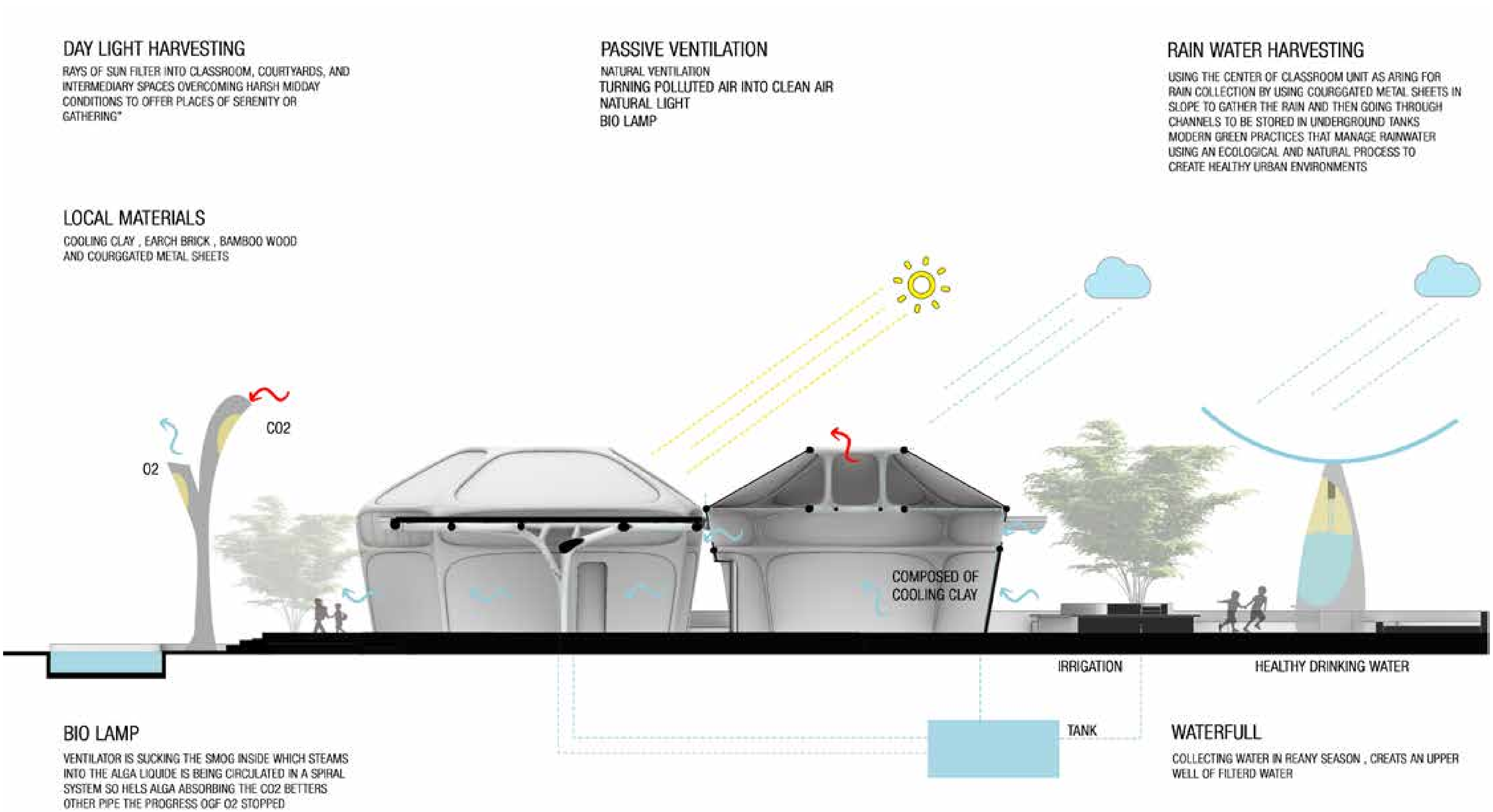
00 FOUNDATION CASTING
01 BAMBOO COLUMN
02 BMBOO STRUCTURE
03 BAMBOO JOIST
04 BAMBOO STUD
05 WOOD SHUTTERS
06 GLASS
07 COP WALLS
08 EARTH BRICK
09 COURGGATED METAL SHEETS



STRUCTURAL ANALYSIS

AFRICAN TRADITION, ESPECIALLY THE PRACTICE OF "COMMUNING UNDER A SACRED TREE TO EXCHANGE IDEAS, NARRATE STORIES, CELEBRATE AND ASSEMBLE"A STRUCTURE THAT TAKES ITS SHAPE FROM A TREE, WITH A DETACHED ROOF AND DISCONNECTED YET CURVED WALLS FORMED BY HEXAGON MODULES, THE COLOR REPRESENTING STRENGTH IN HIS CULTURE , BY USING NATURAL AND TRADITIONAL MATERIALS WITH MORE QUALITY AND QUALIIED STYLE

Proposal adopts sustainable approaches, incorporating elements like green spaces, eco-friendly architecture, and employing strategies for sustainability such as the use of locally sourced materials such as bamboo wood, corrugated metal sheets, and compressed earth brick. Additionally, passive ventilation, achieved through the implementation of stack effect ventilation across all three units, is a key feature. The overarching goal of these initiatives is to advance environmental, social, and economic well-being, with a commitment to diminishing resource depletion and nurturing a more robust environment for present and future generations.



ARCHITECTURE

Interior

DK Restaurant

Lahore ,Pakistan

Client: Swiss Royal Hotels

Size: 800m^2 / 8611sqf

Status: In Construction

Typology: Interior

Year: 2024

DK Restaurant takes center stage within the esteemed Royal Swiss Hotel, Lahore. This meticulously designed space transcends the traditional dining experience, offering a confluence of contemporary design and culinary artistry. Discerning patrons are invited to embark on a multi-sensory journey, where meticulously crafted ambiance seamlessly complements a curated menu. All the architectural elements, serves to elevate the art of fine dining.

DK Restaurant's reception area welcomes guests with a warm and sophisticated ambience, setting the tone for the culinary journey ahead. The space utilizes a carefully curated material palette of crisp white walls and metallic elements to create a visually engaging composition. A strategically positioned concierge desk greets guests, while glimpses of the open kitchen, sculptural ceiling, and vibrant Beverage Wall pique their curiosity. Lighting and curated design elements, elevate the space into a canvas for artistic expression, priming guests for an unforgettable dining experience.

The Hot Island takes center stage, designed as an open kitchen bathed in warm, task-specific lighting. This zone prioritizes functionality, with polished stainless steel counters reflecting the dynamic movements of the chefs. Gleaming copper hoods rise above, ensuring optimal temperature control and ventilation. Strategic counter positioning allows guests to engage with the culinary artistry at an intimate level, fostering a sense of connection with the food preparation process. Juxtaposed to the energetic Hot Island lies the Cold Island, a study in spatial counterpoint. Clad in cool, polished marble, this island bar transforms into a platform for the meticulous display of chilled seafood, vibrant salads, and plated desserts.

A discreet climate control system maintains a crisp and refreshing atmosphere, complementing the vibrant colors of the ingredients against the neutral backdrop. The bar's design adopts clean, minimalist lines, offering a visual and thermal counterpoint to the dynamic energy of the Hot Island. Patrons can linger here, selecting from a curated array of culinary delights in a relaxed and uncluttered environment.

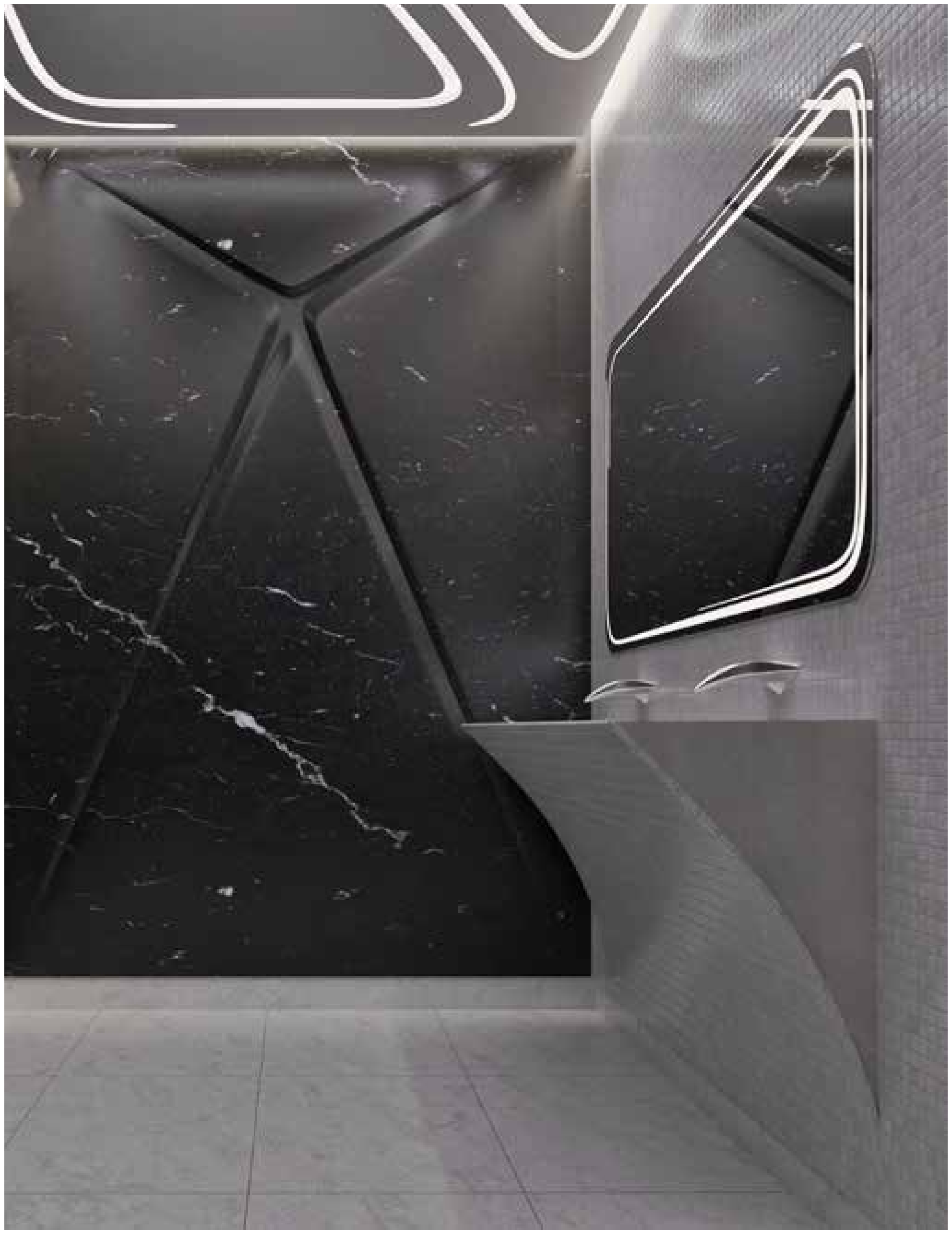
DK Restaurant's Live Kitchen showcases the art of Pakistani cooking in a meticulously designed open space. Expansive Bars offer unobstructed views of chefs expertly preparing dishes, while multi-tiered counters ensure clear sightlines for all guests. Here, the rhythmic show of knife work, aromatic spices, and the glow of traditional tandoor ovens transform food preparation into a captivating performance. The Live Kitchen fosters a transparent and engaging dining experience, celebrating Pakistani culinary heritage for every guest.

Spanning a prominent wall, the Beverage Wall showcases an impressive collection of juices, coffee, and handcrafted cocktails. Backlit shelves illuminate each Drink, creating a visual symphony of libations. **The design itself transcends mere function, becoming a work of art that fosters an atmosphere of sophisticated indulgence.**

DK Restaurant's ceiling pushes the boundaries of architectural design, transforming into a captivating composition of light and movement. Utilizing a network of triangular cells, it transcends the traditional notion of a static ceiling. **These meticulously designed elements seamlessly integrate with one another, forming a dynamic lattice that appears to breathe with the energy of the space.** Natural light filters through this innovative structure, casting a mesmerizing play of geometric shadows on the floor below. This interplay of light and darkness adds a subtle yet sophisticated layer of drama to the dining experience. Throughout the day, the patterns shift and evolve, creating a captivating visual dialogue that enhances conversation and elevates the ambiance. The effect transcends mere aesthetics, transforming the space into a truly immersive and dynamic environment for discerning diners.

The space adheres to a meticulously chosen color palette, dominated by crisp white for a sense of purity and sophisticated elegance. Warm wood accents, strategically incorporated, ground the environment with a touch of comfort. Metallic elements, including subtle brass fixtures and stainless steel accents, introduce a touch of contemporary flair. The design thrives on a thoughtful juxtaposition of textures, employing smooth marble tabletops, rich wood grains in select furniture pieces, and sleek metal accents to create a visually engaging composition.

The furniture embodies a philosophy of clean lines, contemporary aesthetics, and unwavering functionality. The chairs with inviting curves surround tables, encouraging guests to linger and enjoy their meals. Booths positioned along the perimeter offer a sense of privacy and intimacy, while strategically placed communal tables foster a convivial atmosphere. Each seat is meticulously positioned to optimize the dining experience. This ensures captivating views of both the culinary theater in the Live Kitchen and the mesmerizing, sculptural ceiling above.



DK Restaurant's washrooms offer a respite of tranquility, extending the restaurant's commitment to a holistic guest experience. Rich materials like marble establish a luxurious yet calming ambience. Designed for both functionality and privacy, the washrooms feature spacious layouts, high-quality fixtures with a touchless operation for enhanced hygiene, and ample amenities. Sustainable elements are seamlessly integrated, reflecting DK Restaurant's dedication to responsible design. This meticulous attention to detail ensures each guest's comfort and well-being throughout their visit.

Morphic Design

Lahore ,Pakistan

Client: STOND Company

Size: 202m^2 / 2,178sqf

Status: In Construction

Typology: Retail

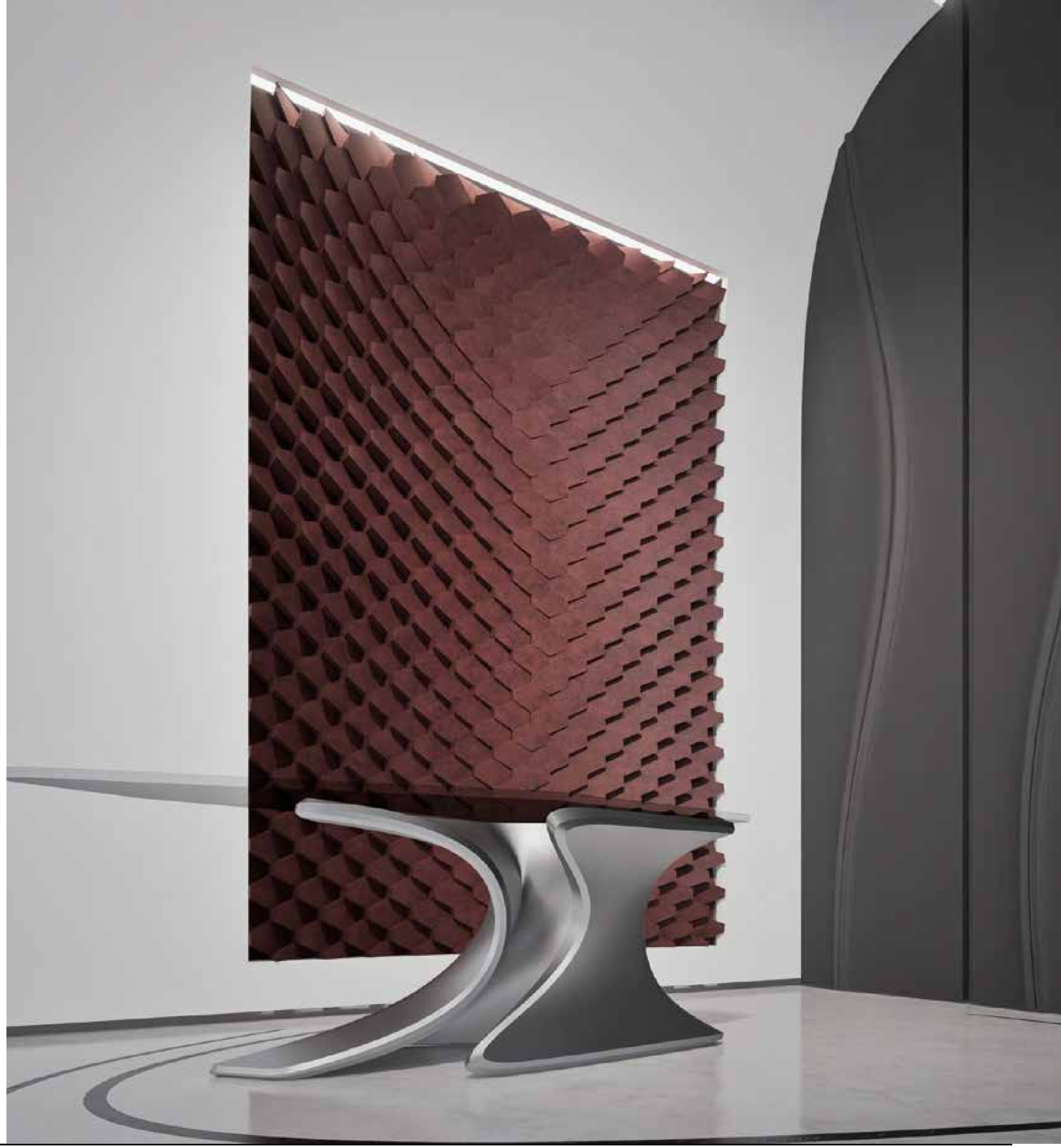
Year: 2024

OND
EET THE NATURAL ART

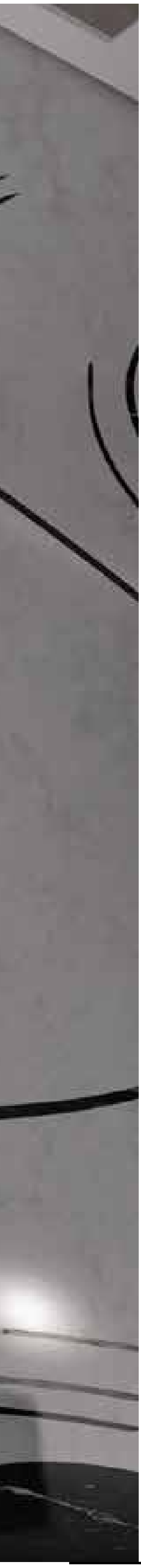
RPD Showroom redefines the boundaries of the traditional showroom experience. This meticulously curated space transcends mere functionality. Here, visitors embark on a professional exploration, encountering a symphony of innovation, elegance, and purpose. Every detail whispers of meticulous craftsmanship, inviting a deeper appreciation for the design process.


STOND
MEET THE NATURAL ART

RPD Showroom employs a meticulously crafted color palette to showcase the curated furniture collection. A dominant white scheme creates a neutral backdrop, allowing the design and materiality of each piece to take center stage. Strategic accents in darker tones add depth and sophistication, echoing the contrasting elements within the furniture itself. Beyond the color scheme, the showroom prioritizes the interplay of light and form. Furniture pieces with fluid lines suggest movement and artistry, softening the space with their smooth curves. Each element serves as a testament to Reparametrize Ateliers' commitment to pushing design boundaries.



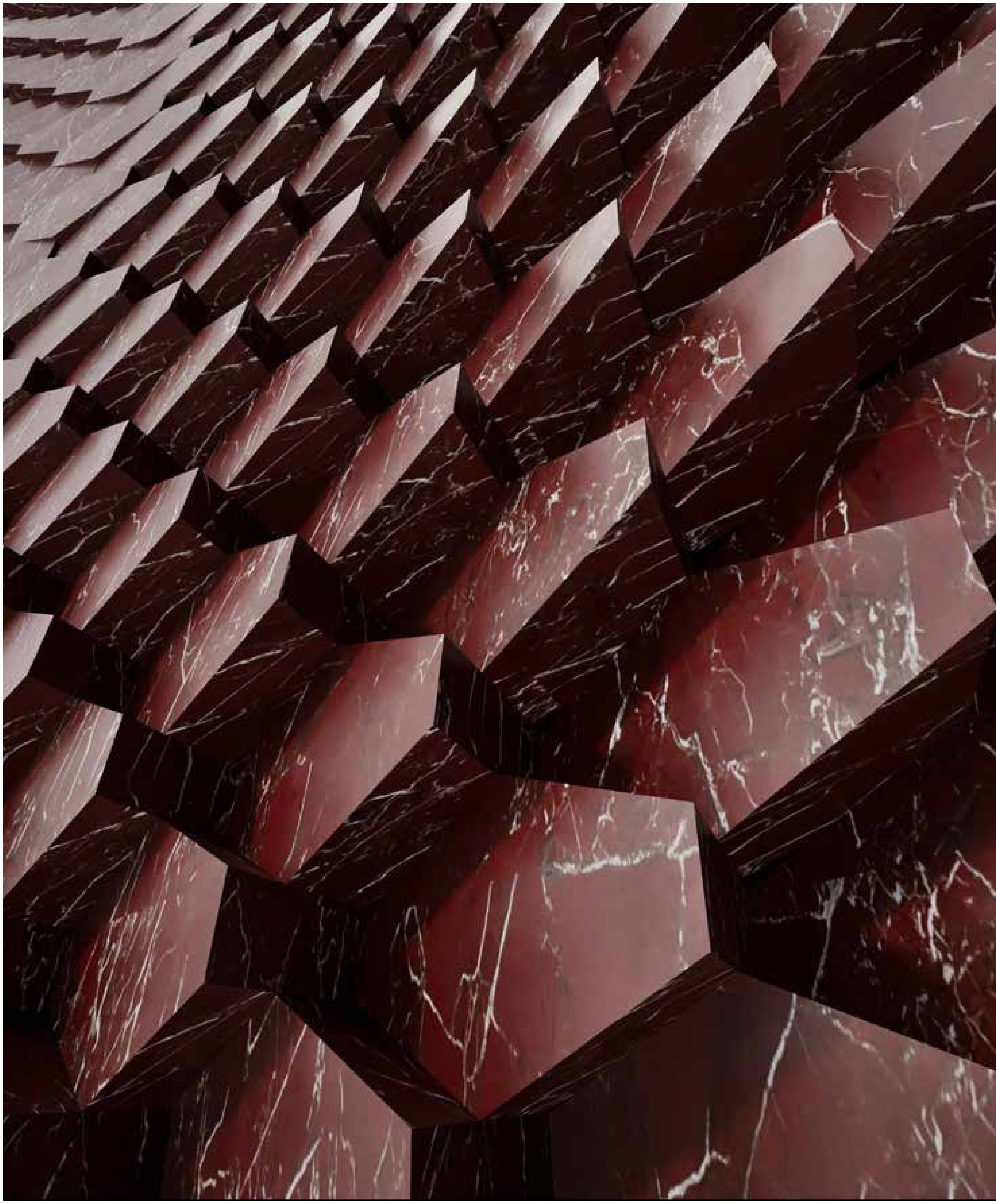
The interaction of light and shadow animates the space, emphasizing its inherent dynamism. Even with limited natural light, the showroom maintains a luminous character, providing a welcoming environment for visitors. Utilizing polished marble to create a sophisticated foundation for showcasing the brand's curated furniture collections. Optimized for visitor flow, the layout employs a grid-like pathway defined by neutral-toned marble inlays. **This intuitive design guides visitors on a carefully planned journey through the furniture displays, while ample negative space surrounding each piece allows for uncluttered appreciation of the individual designs.**

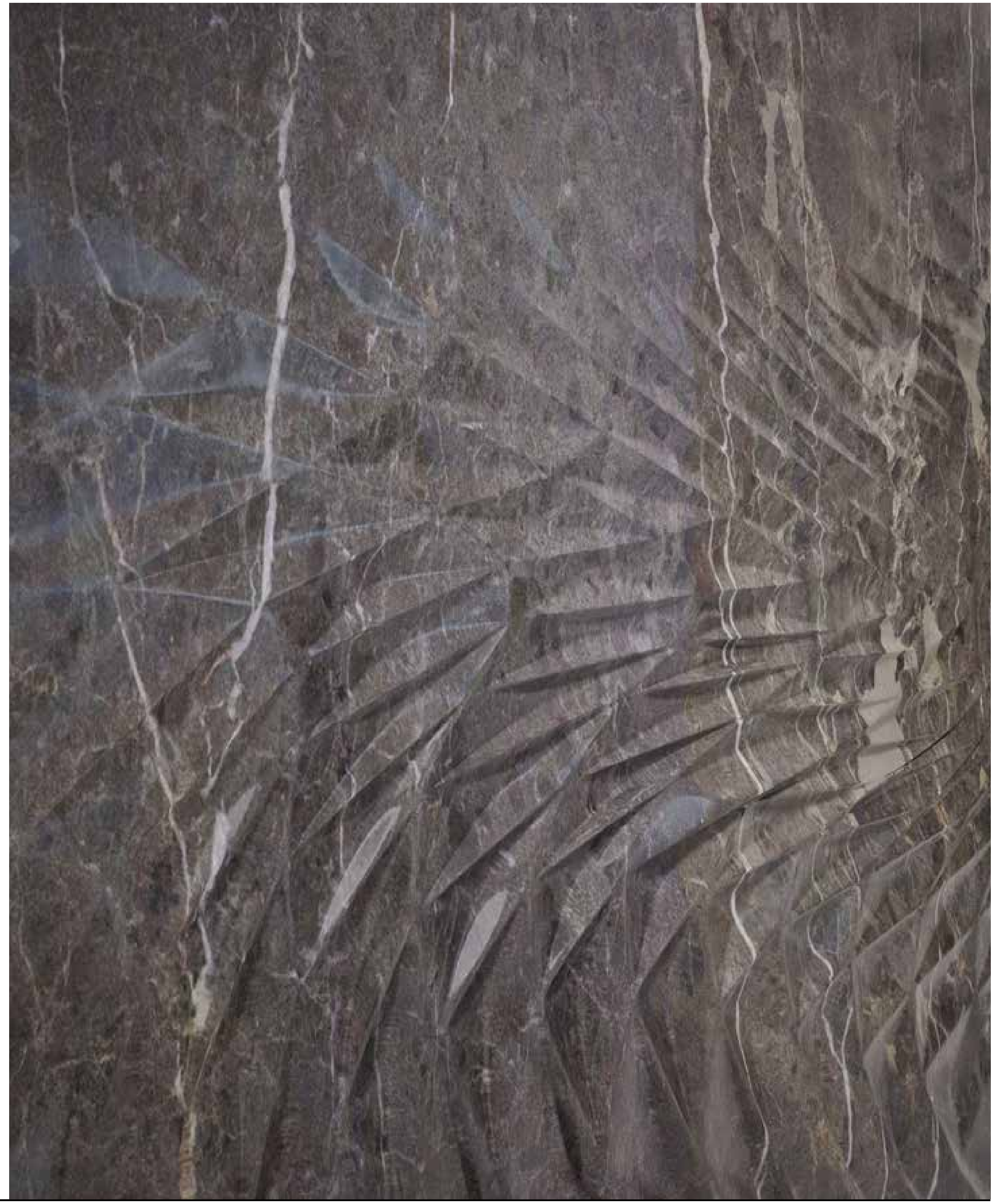


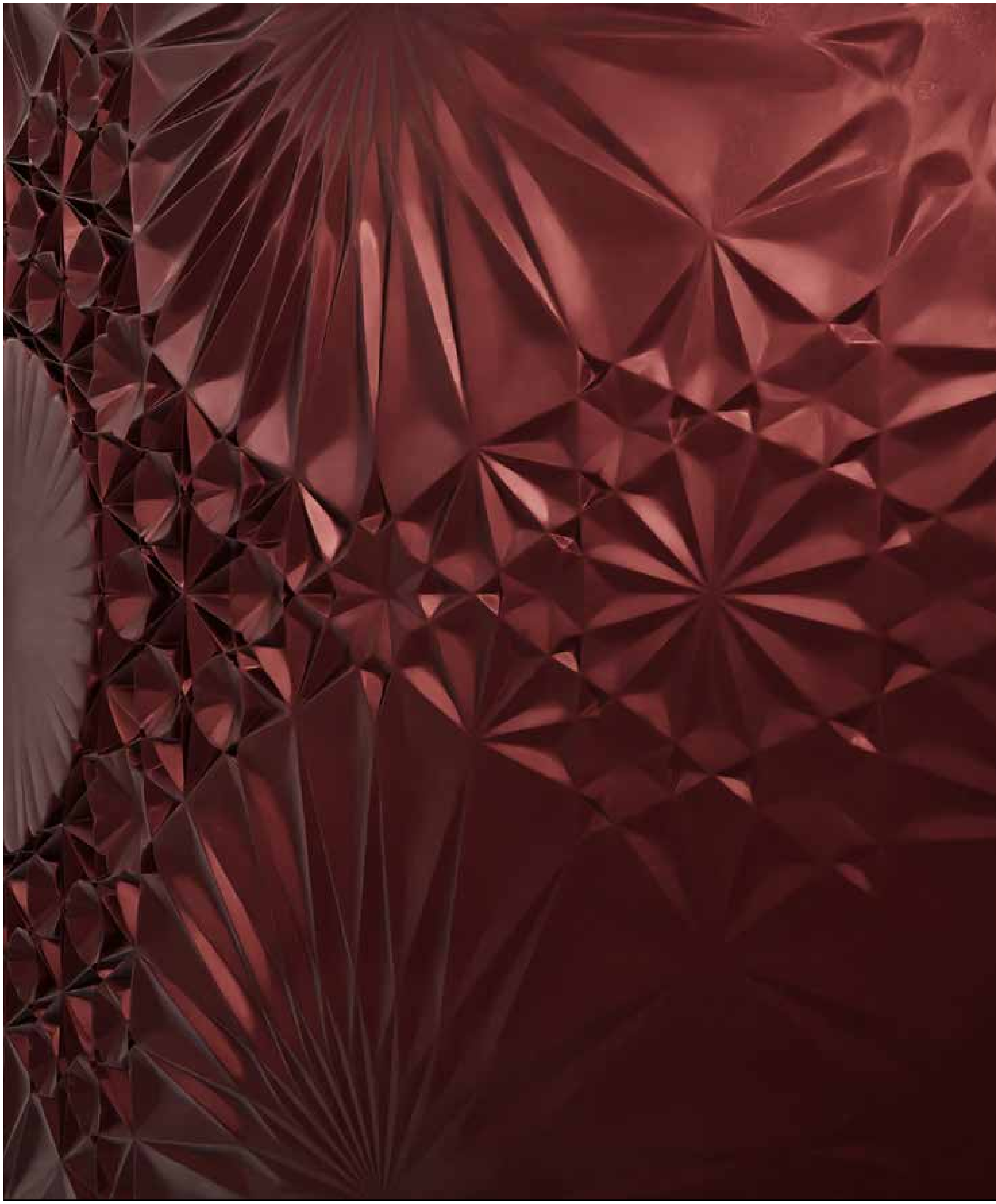
The ceiling embodies a fusion of innovative design and practical functionality. Leveraging the principles of design, the surface features meticulously calculated curves. These undulations represent a harmonious marriage of aesthetics and utility. The design allows the Reparametrize Ateliers team to achieve precision and detail that surpasses traditional methods. Visitors are captivated by the elegance that emerges from a carefully crafted blend of code and computation, each curve a testament to the underlying mathematical equation.

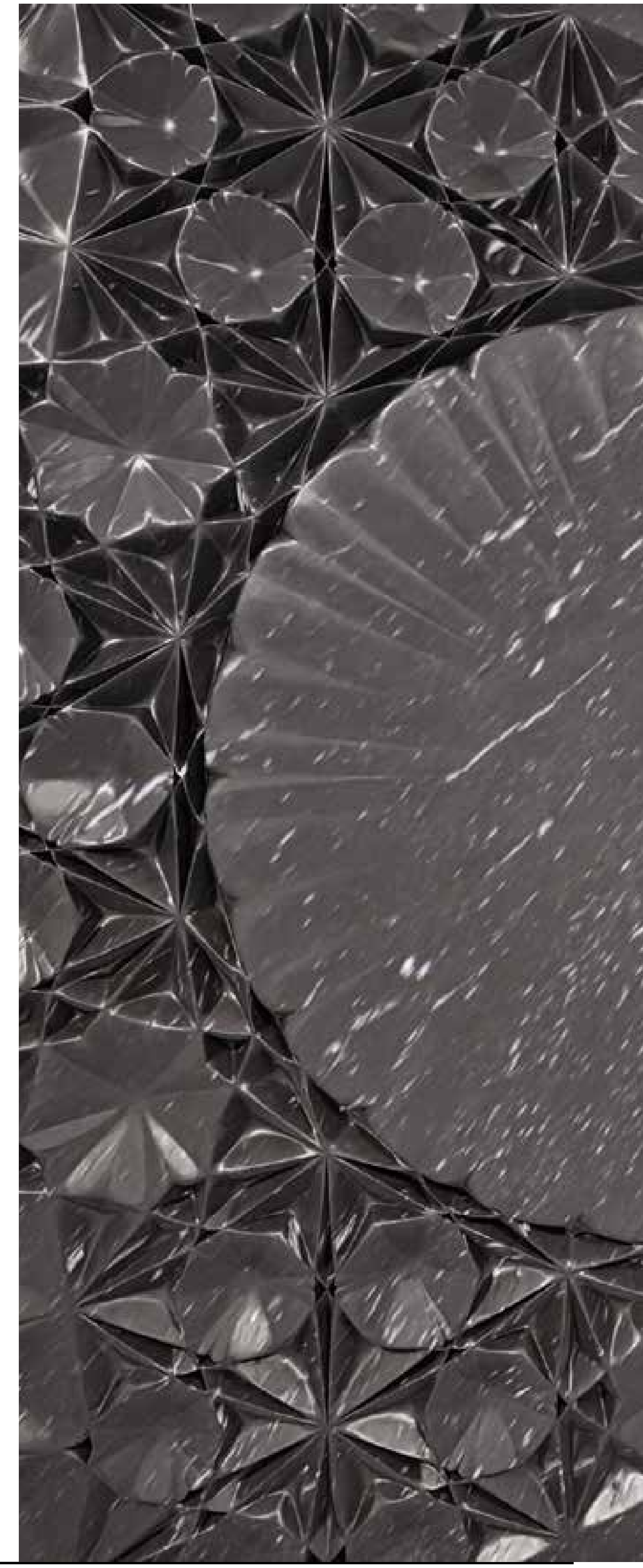
The undulating form transcends mere visual appeal. It serves a multitude of purposes within the showroom. Strategically designed to optimize acoustic performance, the ceiling ensures clear conversation amidst the curated furniture displays. Furthermore, the form subtly influences airflow patterns, creating a comfortable environment for visitors to explore the space. Beyond its functional benefits, the meticulously crafted ceiling serves as a conversation starter. Architects may engage in discussions regarding its origins, while engineers may marvel at its structural stability. For others, the undulating form may spark a sense of wonder and ignite the imagination. **The ceiling exemplifies the power of design to transcend its physical purpose and inspire creativity in all who experience it.**

As one steps into the space, a captivating symphony of marble unfolds across a monumental feature wall. These expansive panels, crafted from textural marbles boasting dynamic, fluid patterns, are reminiscent of natural elements present around us. As light bathes the surface, the intricate designs create a captivating interplay of light and shadow, further accentuated by the subtle variations within the stone's natural hues. **These variations are not merely aesthetic; they possess a depth that invites closer inspection, revealing a mesmerizing dance of color that seems to shimmer and shift before your eyes.**

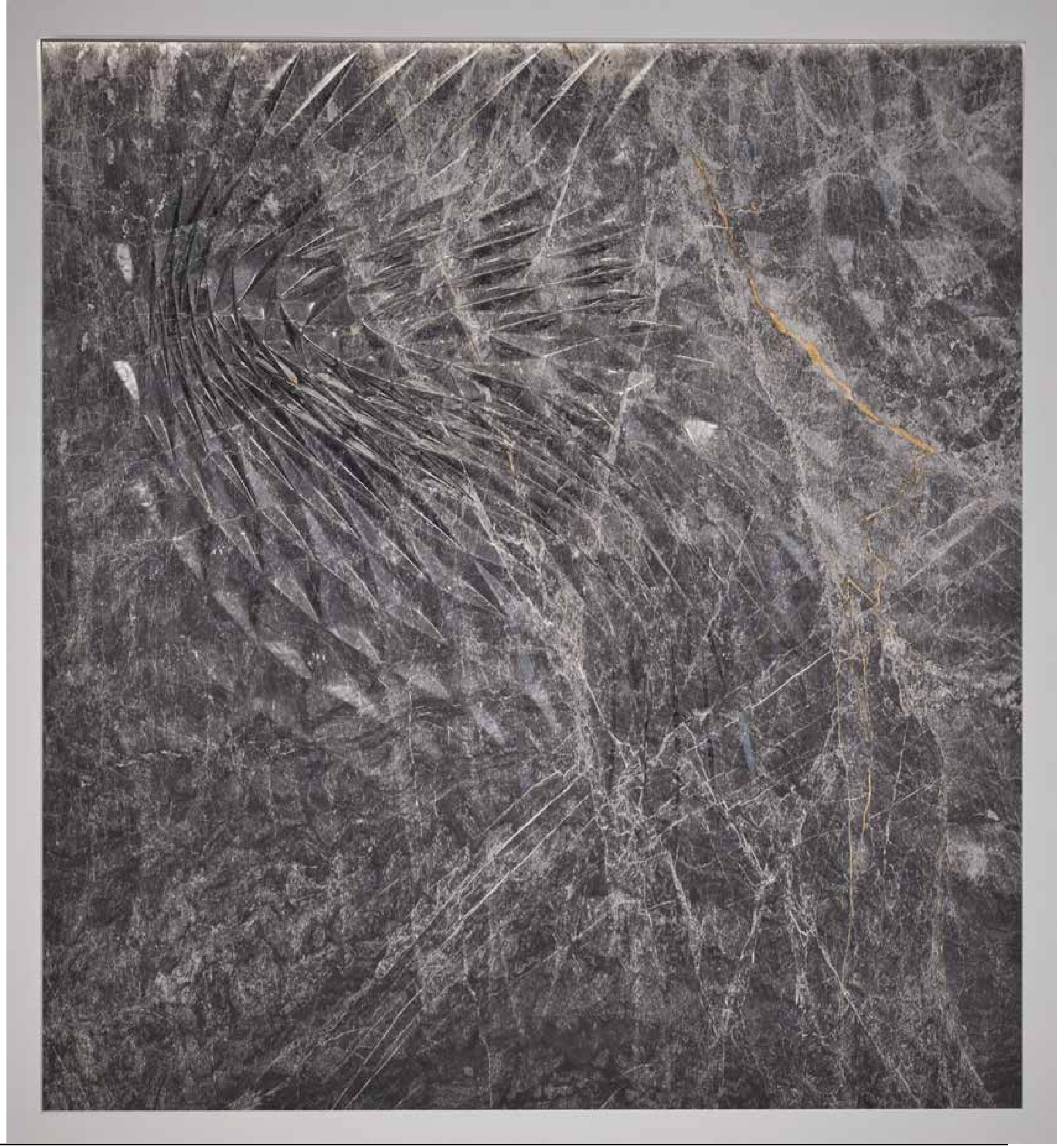


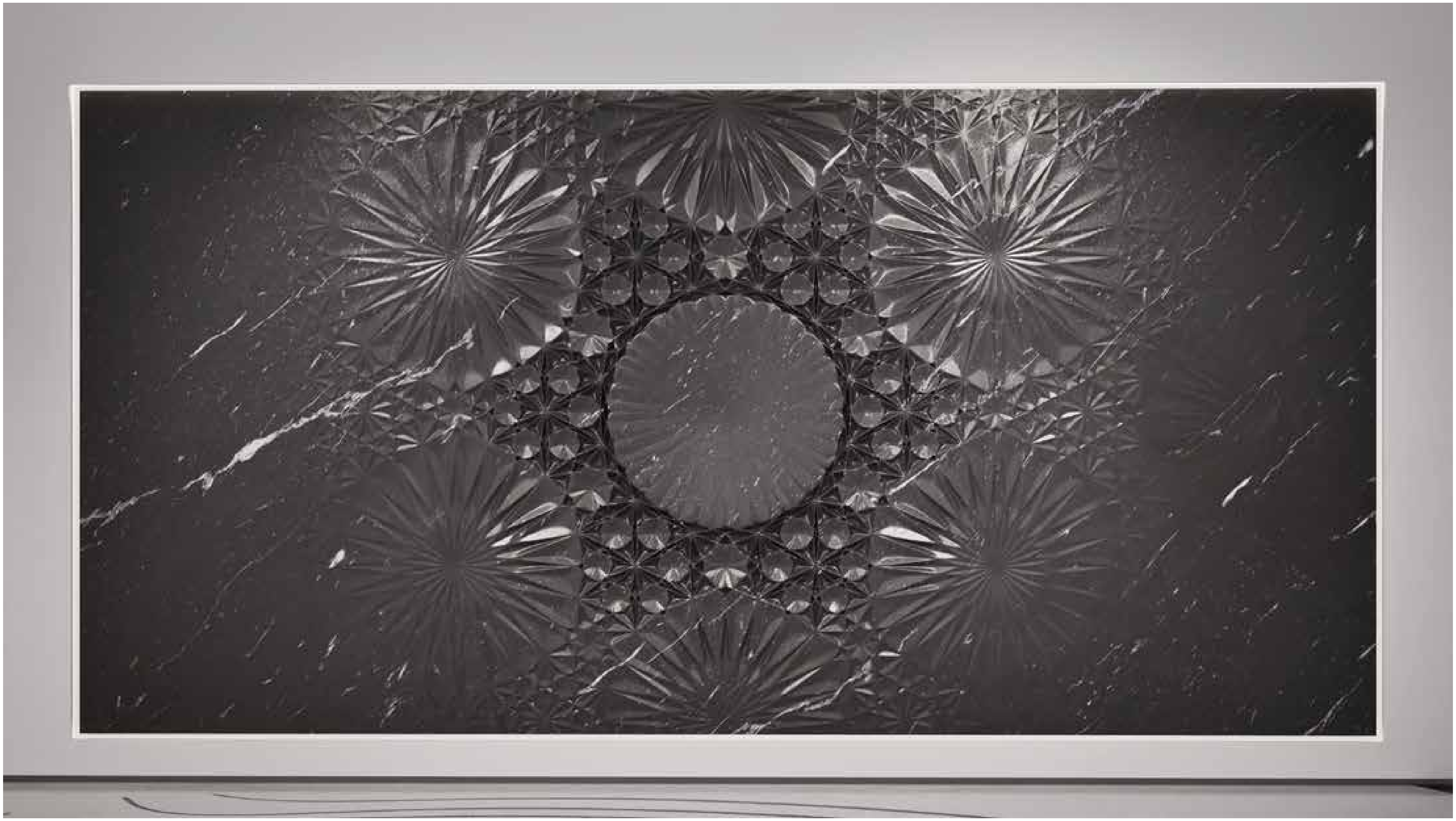






The results are breathtaking artworks, where cool, smooth textures of the marble provide tactile counterpoints to the visual dynamism. Form seamlessly blends with function in these stunning focal points, elevating the space beyond mere utility. **The marble feature walls transcend their utilitarian purposes, transforming into sculptural masterpieces that commands attention and inspires awe.**





A Triangular Odyssey

Lahore ,Pakistan

Client: Swiss Royal Hotels

Size: 30m^2 / 985sqf

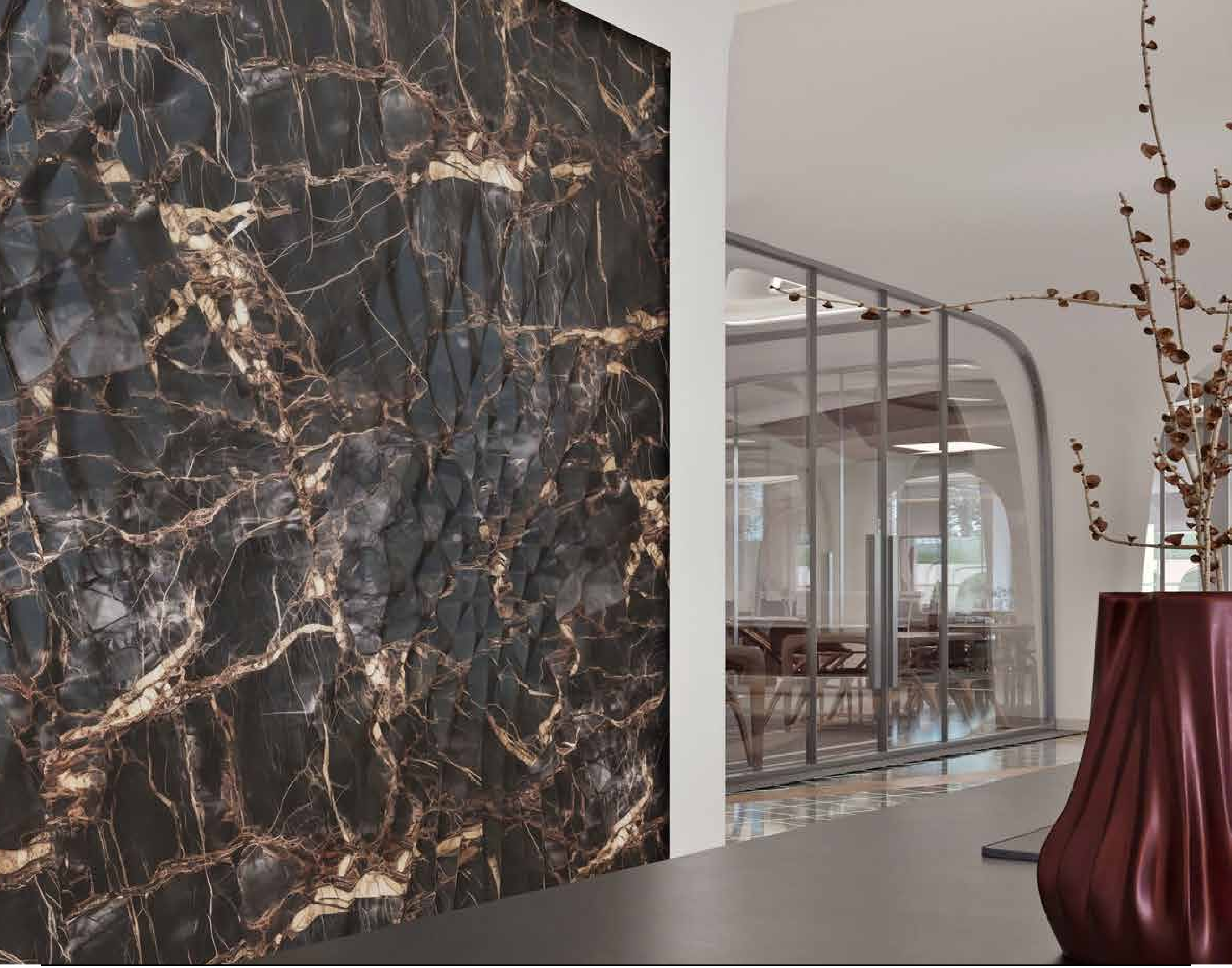
Status: Done

Typology: Furniture

Year: 2024

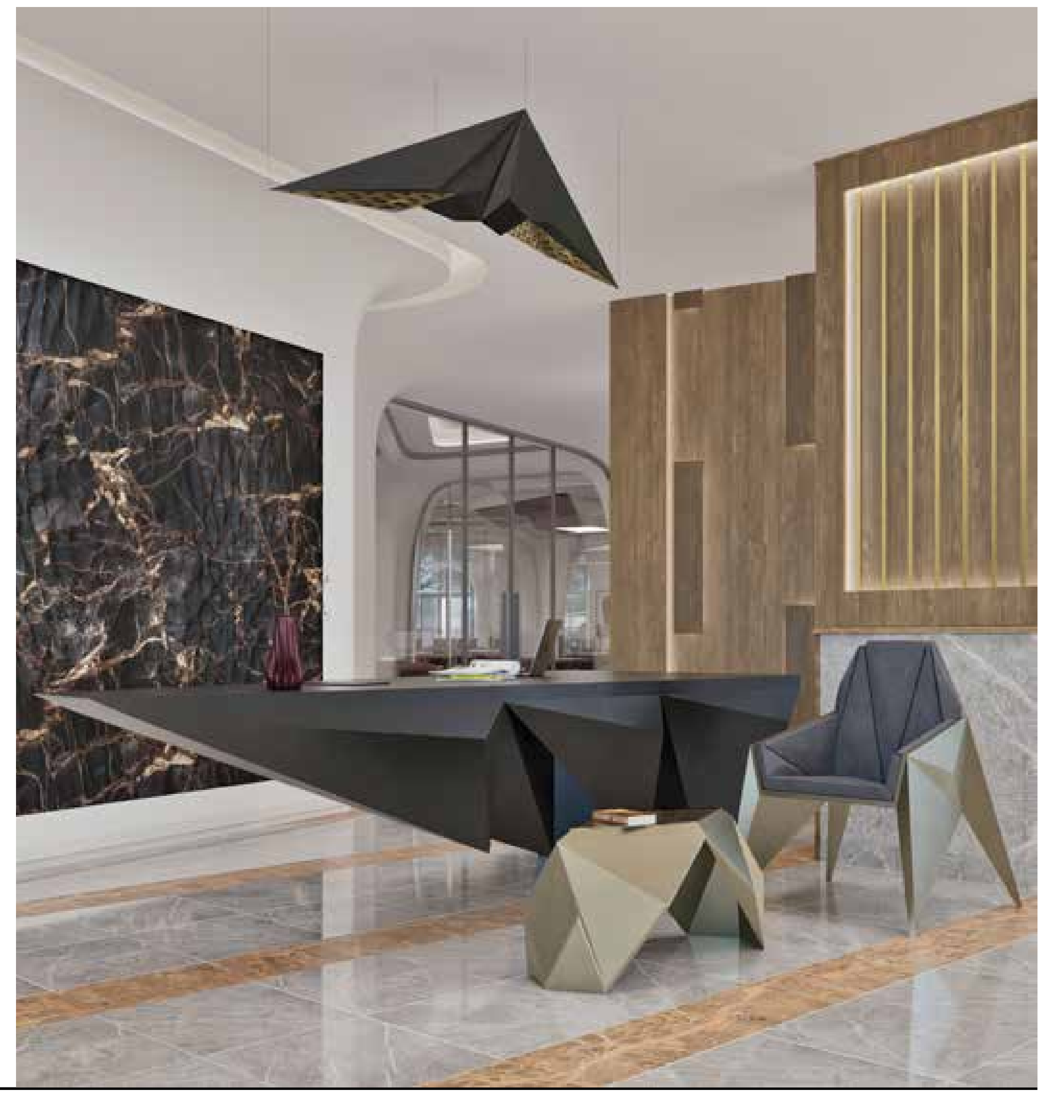
The Guest Relation Desk emerges as a sophisticated architectural composition, where form, function, and lighting converge harmoniously. The cantilevered desk, a testament to structural innovation, occupies a central role in the spatial optimization strategy.
Its triangular framework, a bold geometric motif, not only reinforces the desk's visual impact but also underpins its structural integrity. This configuration maximizes floor space while creating a dynamic and open ambiance, a particularly valuable attribute in environments constrained by square footage.

The monolithic feature wall, a counterpoint to the desk's linearity, serves as a dramatic backdrop. Its potential to become a captivating focal point is significantly amplified through strategic illumination. **A judicious interplay of light and shadow on this surface can dramatically influence the overall atmosphere.** The desk itself demands subtle illumination to highlight its form and materiality without introducing glare.



To accentuate the desk's cantilevered form, lighting placement becomes a critical design consideration. The triangular light system effectively emphasizes the desk's horizontal projection, generating a sense of levitation and drawing attention to the unobstructed space below. Conversely, it also employs to highlight the desk's materiality and texture, enriching the tactile experience.

This architectural element is more than a mere reception counter; it is a carefully considered spatial solution that contributes significantly to the overall ambiance and functionality of a space. **The experience is one of openness and accessibility. The desk's cantilevered design creates a sense of airiness, visually lightening the space and making it feel welcoming.** This, combined with the strategic placement of the desk within the environment, encourages approach and engagement



Sheraton Suite

Syria ,Damascus

Client: Sheraton Hotel

Size: 40 m^2/ 430 sqf

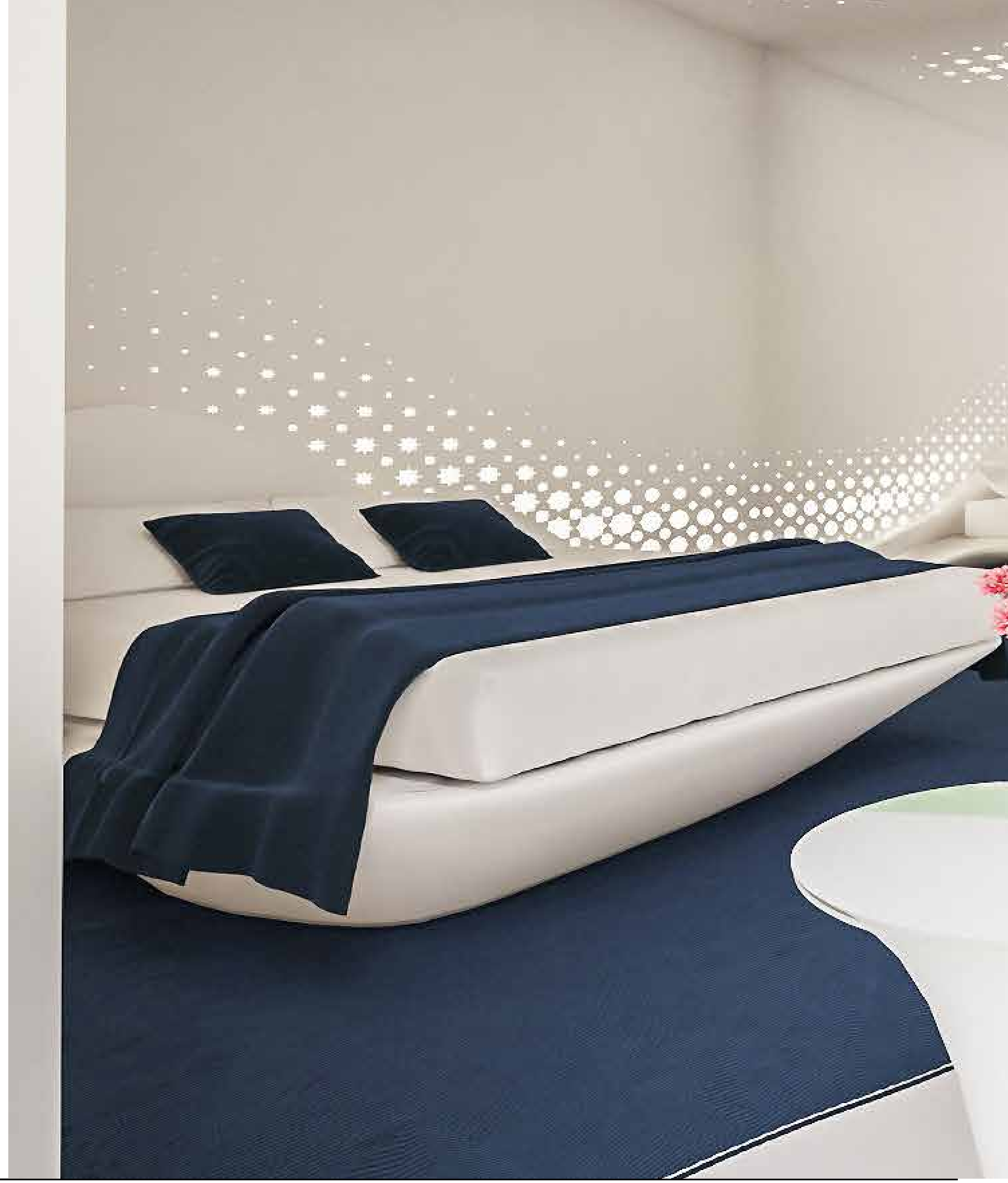
Status: Proposal

Typology: House

Year: 2017

The project involves redesigning a 40m² suite within a five-star hotel in Damascus. The goal is to craft a unique and immersive experience that harmoniously integrates art, design, comfort, and luxury.Designing an interior that exudes calmness, comfort, and visual appeal through minimalism, fluidity, and luxury.

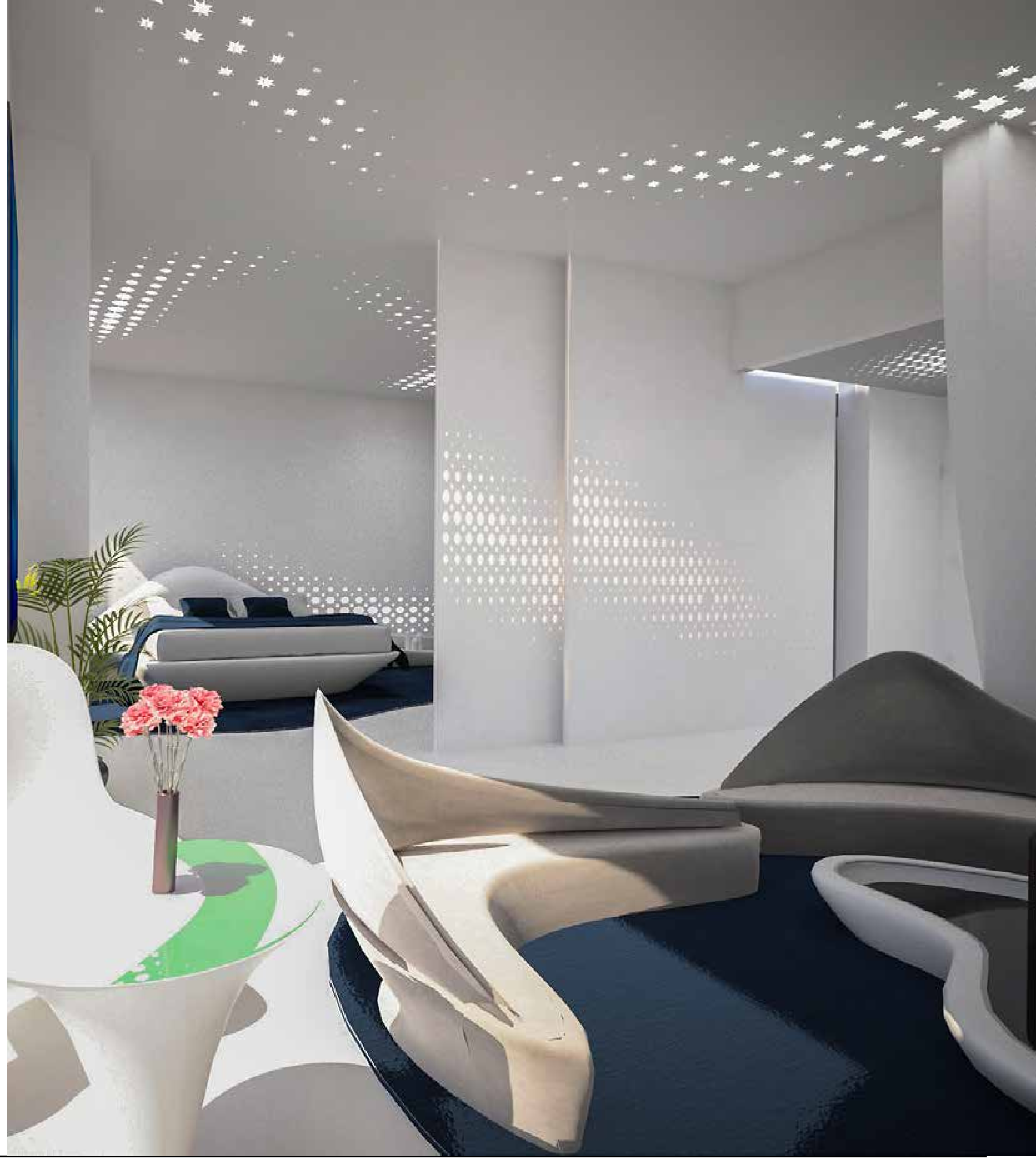
The futuristic all-white interior features a minimalist aesthetic with a predominant use of curves to create a sense of fluidity and movement.The interior space is meticulously crafted with the user's perspective in mind.



The interior space is designed with careful consideration for the user's experience. Layouts are customized to accommodate individual movements, creating a sense of open fluidity and motion. Sensory cues, including spatial sculptures, multimedia elements, two-dimensional graphics with label-free detection, fast response, easy operation, and integration capabilities, lighting, and scents, are strategically incorporated throughout the space to enhance safety and efficiency. This multidimensional approach ensures a dynamic and continuous experience that is both unique, minimalist, and engaging for visitors.

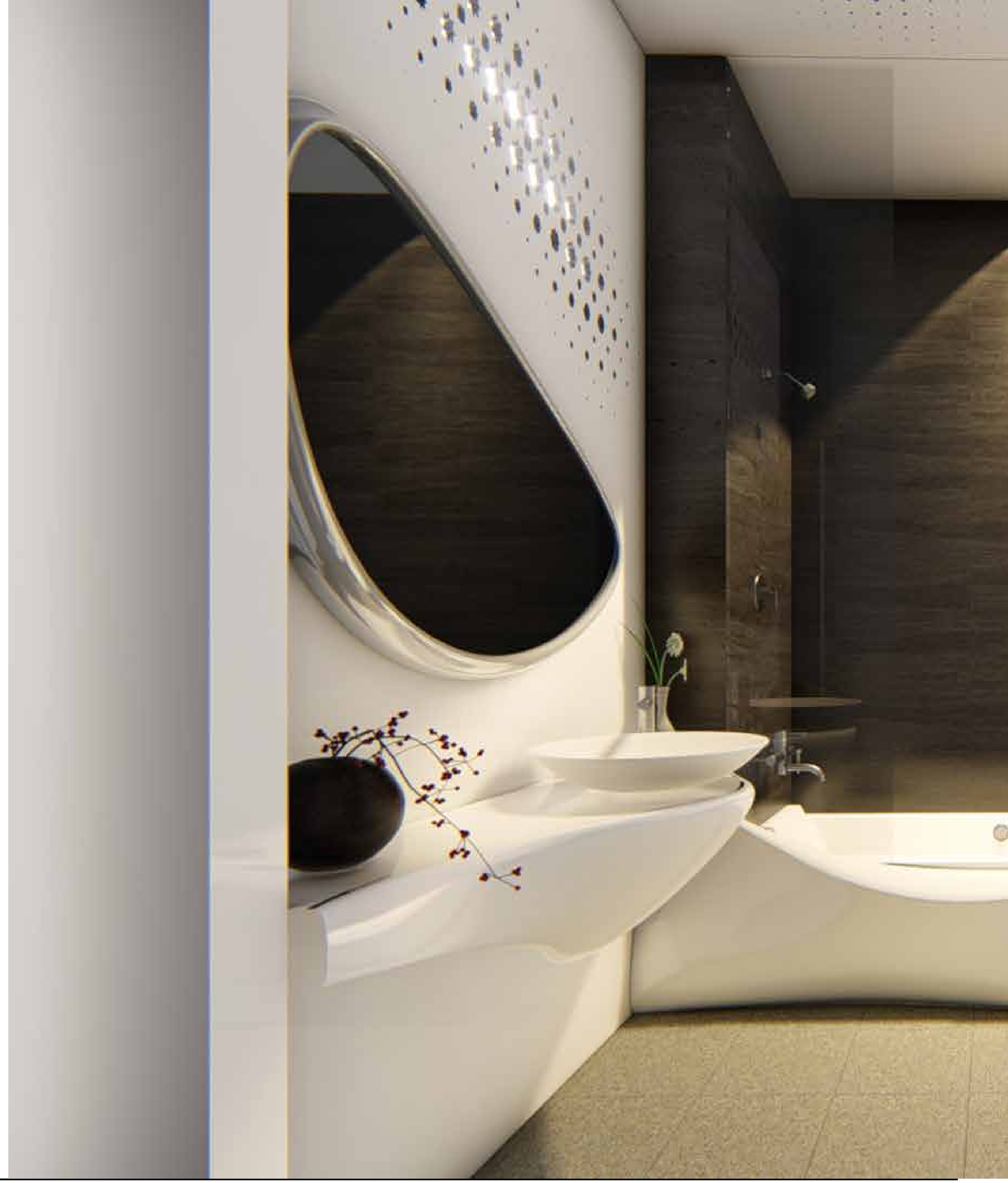
A futuristic interior design featuring an all-white color scheme and minimalist aesthetics, characterized by a prominent use of curves that create a sense of fluidity and movement. The design of the suite places a strong emphasis on creating a modern aesthetic for the walls. The white envelope is punctuated by unevenly scaled holes strategically placed according to a system designed based on attractor points, resulting in a visually striking pattern reminiscent of an art piece. **This pattern contributes to a cozy and welcoming atmosphere within the room, where the simplicity of the color palette is enhanced by the intricate features present.** Dark blue accents are introduced to provide a subtle contrast and add a touch of calmness to the overall design. The selection of dark blue curtains complements the breezy white window treatments, creating a harmonious combination. A corner lighting fixture adds a touch of sophistication to the space. Additionally, a uniquely shaped bed serves as the focal point of the sleeping quarters, while each room is equipped with an interactive media center featuring an integrated digital music environment.

The sliding and pivoting panels in this design serve to facilitate the easy transform the space according to their needs, and division of spaces, providing enhanced privacy between the bedroom and sitting area. Each furniture piece within the space has been meticulously designed or curated by our studio to ensure a cohesive and harmonious aesthetic. The living accommodation benefits from ample natural light, creating a bright and inviting atmosphere. Furthermore, the rooms offer sweeping views of the cityscape below, adding a sense of openness and connection to the urban environment.



The bathroom showcases a refined minimal design, characterized by white marble and treated timber that establish an atmosphere of timeless elegance. The surfaces feature sleek, fluid lines, emphasizing simplicity and functionality. A luxurious bathtub is strategically positioned as the focal point, boasting a comfortable and luxurious shape.

The futuristic all-white interior, with its minimalist aesthetic and predominant use of curves, creates a sense of fluidity and movement within the bathtub, washbasin, and mirror that serve a functional purpose.



The use of white marble adds a touch of opulence while enhancing the overall sense of cleanliness and tranquility. This bathroom design, characterized by its minimalistic approach and thoughtful material selection, offers a harmonious blend of sophistication and functionality in a space dedicated to relaxation and self-care

Valencia Restaurant

Syria ,Damascus

Client: Sheraton Hotel

Size: 50 m^2/ 538 sqf

Status: Proposal

Typology: Restaurant

Year: 2017

Located in Damascus within a former five-star hotel, the task at hand is to redesign a hotel restaurant spanning approximately 100m^2. This project aims to create a distinctive and immersive experience that seamlessly blends art, design, and culinary offerings.
By intertwining these elements, the goal is to redefine the hotel restaurant concept and transform our interactions with food into a truly innovative and engaging experience.

The design prioritizes open accessibility for visitors and a feeling of transience within a straightforward, inviting environment. In this project, creating an interior that immediately catches the eye of passersby and motorists to a fresh, contemporary space was crucial. The philosophy behind this place is to transform the urban essence of “Damascus” into a green environment, offering an escape from the hustle and bustle of everyday life.

A striking steel structure shell, clad with cement clay, was meticulously crafted to envelop the columns and roof of the restaurant. The ceiling, designed in a wave-like pattern, gracefully covers the main hall, creating a distinctive spatial “shell.” The visual concept aimed to evoke an immediate connection to an Asian theme without relying on direct references commonly found in oriental restaurants. The green walls add an element of intrigue, concealing the interior ambiance. Inside, the narrow space gains a sense of depth through the vertical green wall adorned with lush plants.Contemporary furniture with bright color complements the overall design philosophy, which seeks to transport the urban essence of “Damascus” into a lush green environment, providing an escape from the bustling chaos of city life

Wared Store

Lebanon , Ba’alabak

Client: S Group

Size: 15 m^2/ 161 sqf

Status: Complete

Typology: Retail

Year: 2017

Into a fashion retail space, creating a visually striking yet highly functional contemporary store that was the challenge within a 15 m2 in Baalbek The principal idea of this Wared retail store was balancing the power of spatial experience and functionality.This challenge was met by creating two distinct experiences, one experience focuses on perfect symmetry and multiplication of perspectives via the repetition of mirrors.The other experience sculpts space with a black and white geometric stalactites like ceiling center piece that acts as a spectacular window display and doubles as a functional merchandise area.The design embodies the essence of modern industrial style through its industrial, unique, and minimalist characteristics, incorporating a contemporary touch in its architecture. The strategic use of white walls and black stands to showcase merchandise and black and white geometric stalactites , metal and wood elements are incorporated through the store's design. The use of metal adds a sleek and contemporary touch, while the warmth of wood brings a sense of natural beauty and texture. Together, these elements come together to create a visually appealing environment that reflects a perfect blend of industrial edge and modern sophistication in the world of fashion.

A-Jewelery

Syria , Damascus

Client: S Group

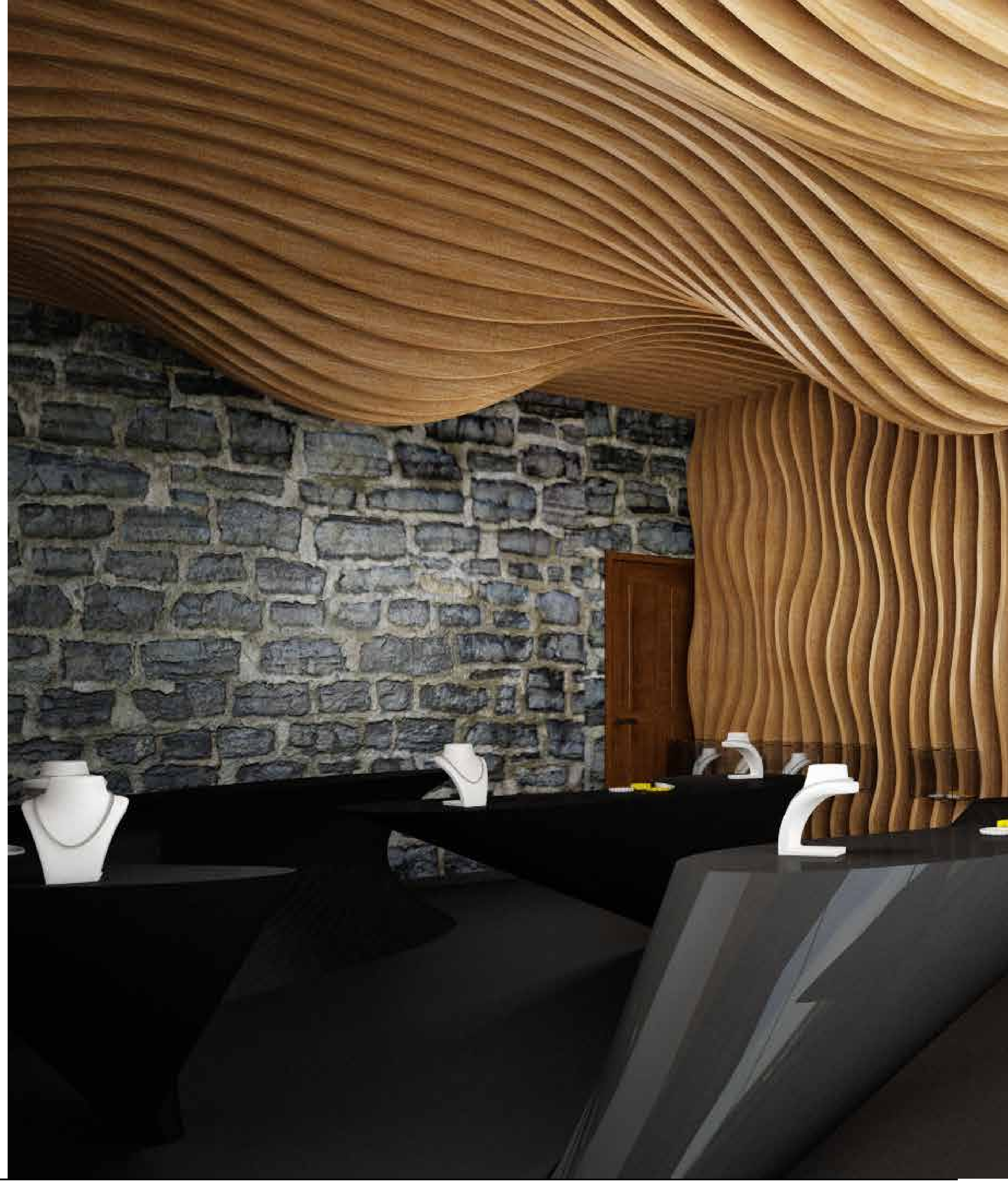
Size: 60 m^2/ 645 sqf

Status: Complete

Typology: House

Year: 2017

The elegant jewelry store is a masterpiece of architectural design, Situated in Syria within a 30 m^2. Space, The design of the jewelry store embodies the modern style featuring wooden slices and custom made piece of furniture that create a visually striking and unique environment. Designing a system of the timber stalactites of undulating cave-like that adaptive to wall and ceiling to create an enclosure sense, As continuous surfaces inflected by function.
The curvilinearity expresses both the digital genesis and the seamless fabrication logic, providing actual machining files to the fabricator offering delivery of a highly crafted interior.



A glass facade allows for ample natural light and ventilation within the space. Furthermore, the seamless transition and a fluid connection between the interior exhibition tables, harmonizing the overall spatial experience within the space.
These intricate wooden slices add a touch of modernity and sophistication to the space, enhancing its luxurious ambiance, the fluid Furniture reflects simplicity and functionality, and natural materials, strategic lighting create a harmonious design, offering a space for refined shopping experience for discerning customers.

SA Garden Studio

Syria , Damascus

Client: S Group

Size: _ m^2/ _ sqf

Status: Consept

Typology: Furniture , Interior

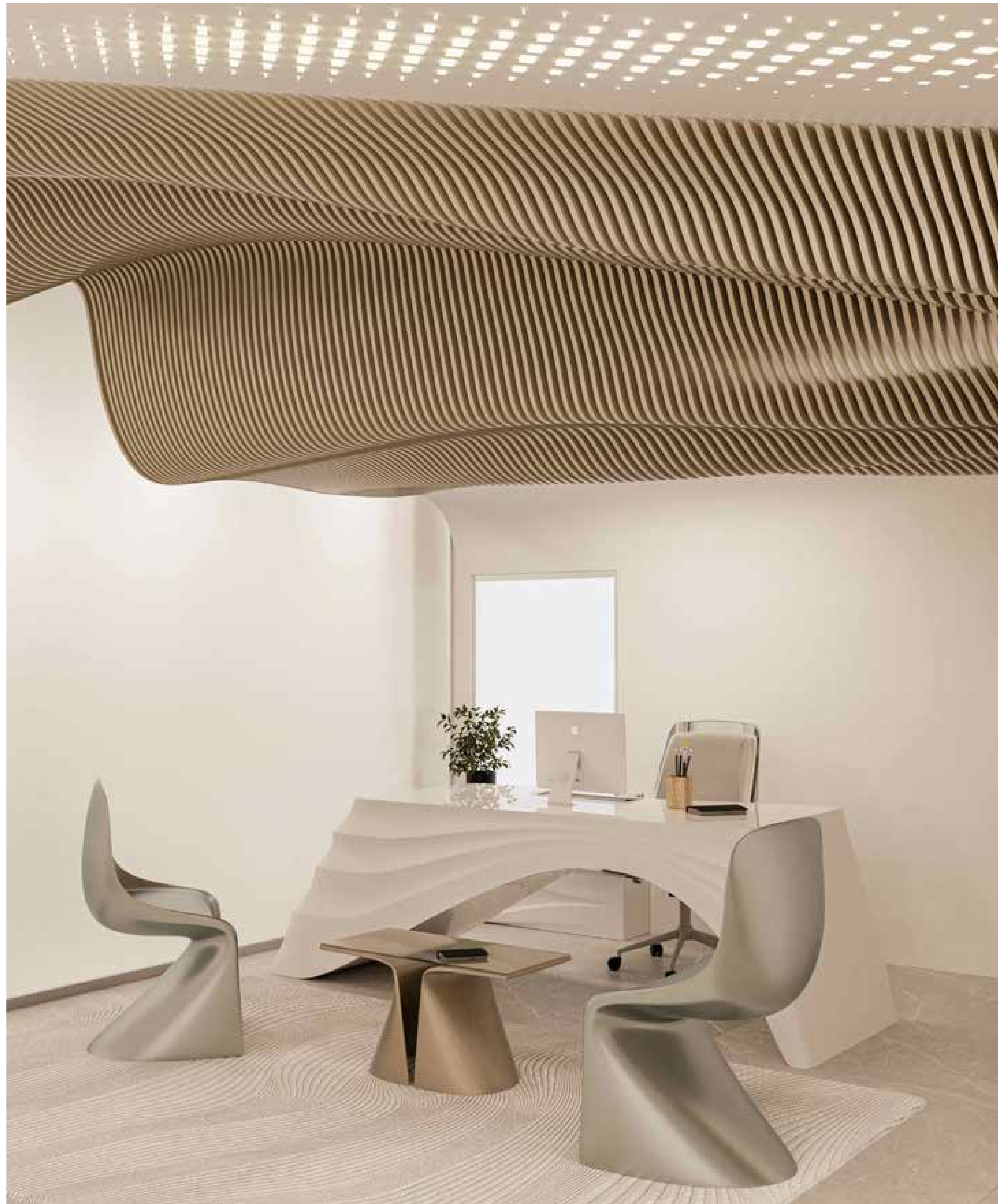
Year: 2022

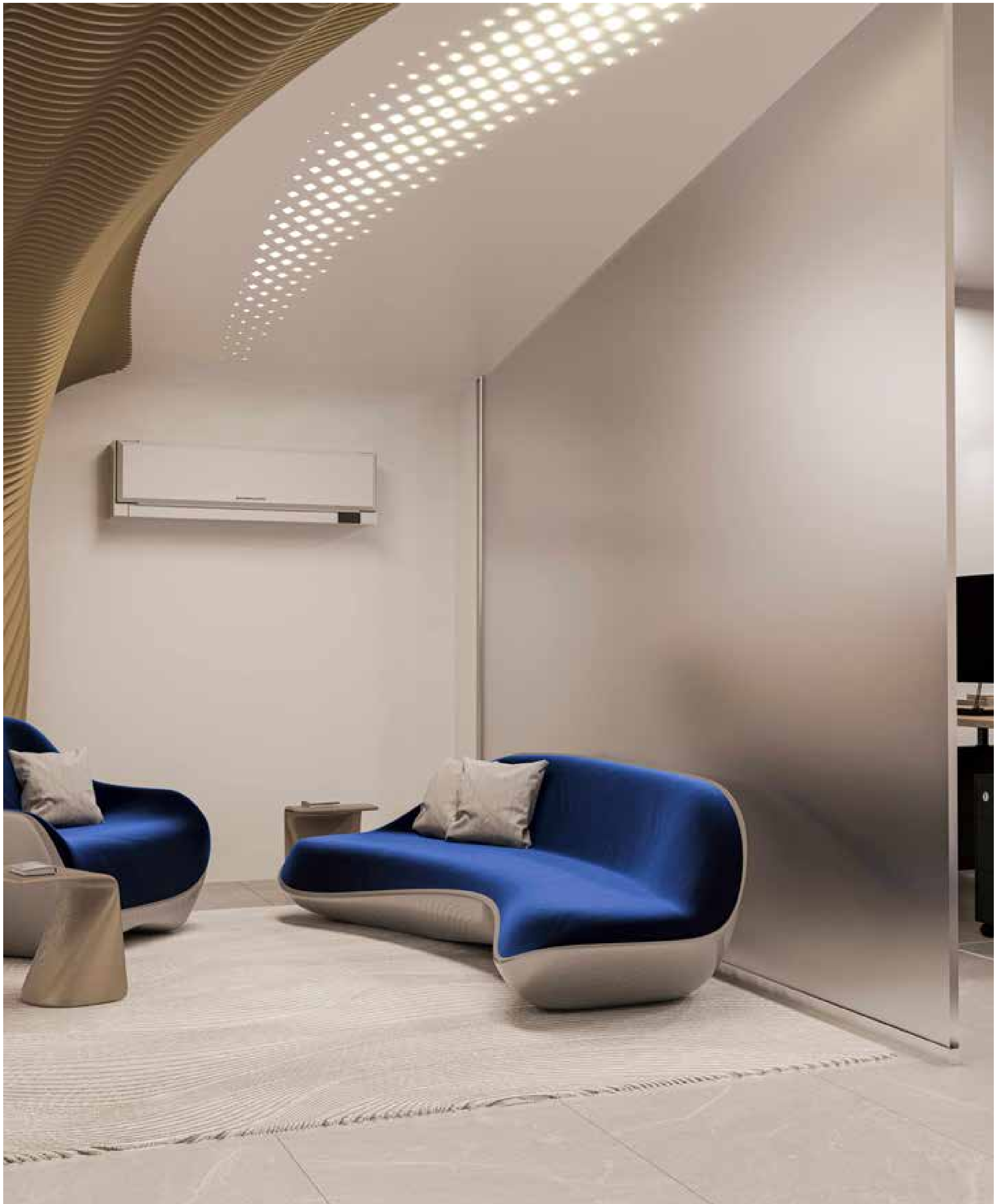
The design for the SA Garden Office exemplifies a paradigmatic shift in corporate interior architecture, eschewing conventional rectilinear geometries in favor of a fluid, organically derived spatial narrative. The project demonstrates a profound understanding of spatial dynamics, material innovation, and ergonomic imperatives, culminating in an environment that transcends mere functionality to become a powerful expression of the firm's design ethos.

This analysis delves into the intricacies of the spatial concept, materiality, and bespoke furniture design, elucidating the technical prowess and aesthetic sophistication that underpin this remarkable project.

The project's spatial articulation pivots on a nuanced manipulation of volume and planar articulation. The orchestrated choreography of spaces, wherein the traditional rigidity of office layouts yields to a dynamic interplay of solid and void, compression and expansion. Curvilinear geometries, deployed with precision, define circulation paths and functional zones, engendering a sense of fluidity and visual continuity.

The reception area, strategically positioned to act as a spatial hinge, exemplifies this approach. Its volumetric articulation, characterized by subtle shifts in plane and curvature, generates a dynamic spatial experience, guiding the user through the space with an intuitive grace.





The bespoke furniture designs for the SA Garden Office epitomize a fusion of ergonomic principles and sculptural expression. The reception desk, conceived as a continuous, fluid form, challenges the conventional archetype of corporate reception furniture. Its seamless surfaces and ergonomic contours create a tactile experience that is both visually captivating and functionally efficient. Similarly, the seating elements, sculpted with meticulous attention to anthropometric considerations, offer a harmonious blend of comfort and aesthetic refinement.
The material selection, characterized by high-performance composites and refined upholstery, reinforces the design's commitment to durability and tactile quality. These bespoke furnishings transcend mere utility, becoming integral components of the architectural narrative, enhancing the space's overall experiential quality.

Swiss Suites

Lahore ,Pakistan

Client: Royal Swiss Hotel

Size: - m² / -sqf

Status: Under Construction

Typology: Furniture , Hospitality , Interior

Year: 2024

The Royal Swiss Fifth Floor Suites represent the pinnacle of contemporary design, seamlessly integrating the precision of computational algorithms with the rich tactility of hand-selected materials and bespoke craftsmanship. Guests are immediately embraced by an atmosphere of refined elegance upon entry, their gaze drawn to the captivating feature wall anchoring the bedroom.

This sculptural masterpiece, a product of cutting-edge parametric modeling and advanced digital fabrication, showcases a dynamic interplay of undulating curves and flowing lines. Its three-dimensional texture, achieved through subtle variations in depth and the interplay of light and shadow, creates a mesmerizing focal point, imbuing the space with artistic expression and architectural innovation.

This artistic narrative continues with the futuristic, low-profile bed frame. Its sleek silhouette and sophisticated grey finish harmonize perfectly with the wall's subtle hues. Dressed in luxurious, high-thread-count linens in a calming neutral palette, the bed promises restful slumber. A pair of meticulously crafted armchairs, featuring warm wood frames that contrast beautifully with the cool tones of the room, and plush upholstery, offer a comfortable seating area ideal for conversation or quiet contemplation. A minimalist side table, crafted from polished metal and glass, provides a convenient surface for personal items and curated art books. Discreetly integrated within a wave-shaped console, finished in a complementary grey, a large, flat-screen television offers state-of-the-art entertainment without compromising the room's minimalist aesthetic. The console itself provides ample concealed storage, maintaining the suite's clean lines and uncluttered ambiance. Recessed cove lighting within the sinuously curved ceiling casts a soft, diffused glow, enhancing the sense of tranquility and understated luxury.

Transitioning seamlessly from the bedroom through a frosted glass partition, which allows light to filter through while maintaining privacy, the en-suite bathroom is a sanctuary of pure indulgence. Clad in premium Calacatta marble, its delicate veining adds a touch of organic elegance to the pristine space, exuding an aura of refined opulence. A sculptural, freestanding oval bathtub, with its smooth, ergonomic form, commands attention as the centerpiece, inviting a long, luxurious soak. The vanity unit, a testament to the seamless integration of form and function, echoes the fluid forms of the bedroom's feature wall, incorporating integrated, sculpted shelving and a sleek, modern sink basin with high-end designer chrome fixtures. A separate, enclosed water closet, also finished in luxurious Calacatta marble, ensures utmost privacy and functionality. The innovative ceiling design, a continuation of the bedroom's sinuous motif, creates a visual link between the two spaces, reinforcing the suite's cohesive design language and enhancing the sense of flow. A rain shower head and premium chrome fixtures add the final touch of luxury to the bathing experience.


LOUIS VUITTON
CHANEL

Strategically positioned between the bedroom and bathroom, the dressing area is a haven of organization and style. A custom-designed wardrobe, enclosed by bronze-tinted sliding glass doors, provides ample storage. Integrated LED lighting illuminates the interior, showcasing impeccable craftsmanship and facilitating the arrangement of clothing and accessories. A compact yet functional desk area, equipped with a sleek, ergonomically designed chair, offers a dedicated space for work or personal grooming.

The consistent use of the highest quality materials, including premium Calacatta marble, rich wood veneers, and reflective glass surfaces, combined with innovative computational design principles, elevates the Royal Swiss Fifth Floor Suites beyond mere accommodation. These suites offer a holistic living experience, seamlessly blending form and function, luxury and technology, to create a sanctuary of modern elegance and unparalleled comfort. Expansive windows, strategically placed to maximize natural light and offer breathtaking panoramic views, complete the experience, further enhancing the sense of spaciousness and serenity.

Swiss Caffe

Lahore ,Pakistan

Client: Royal Swiss Hotel

Size: - m^2 / -sqf

Status: Under Construction

Typology: Furniture , Hospitality , Interior

Year: 2024

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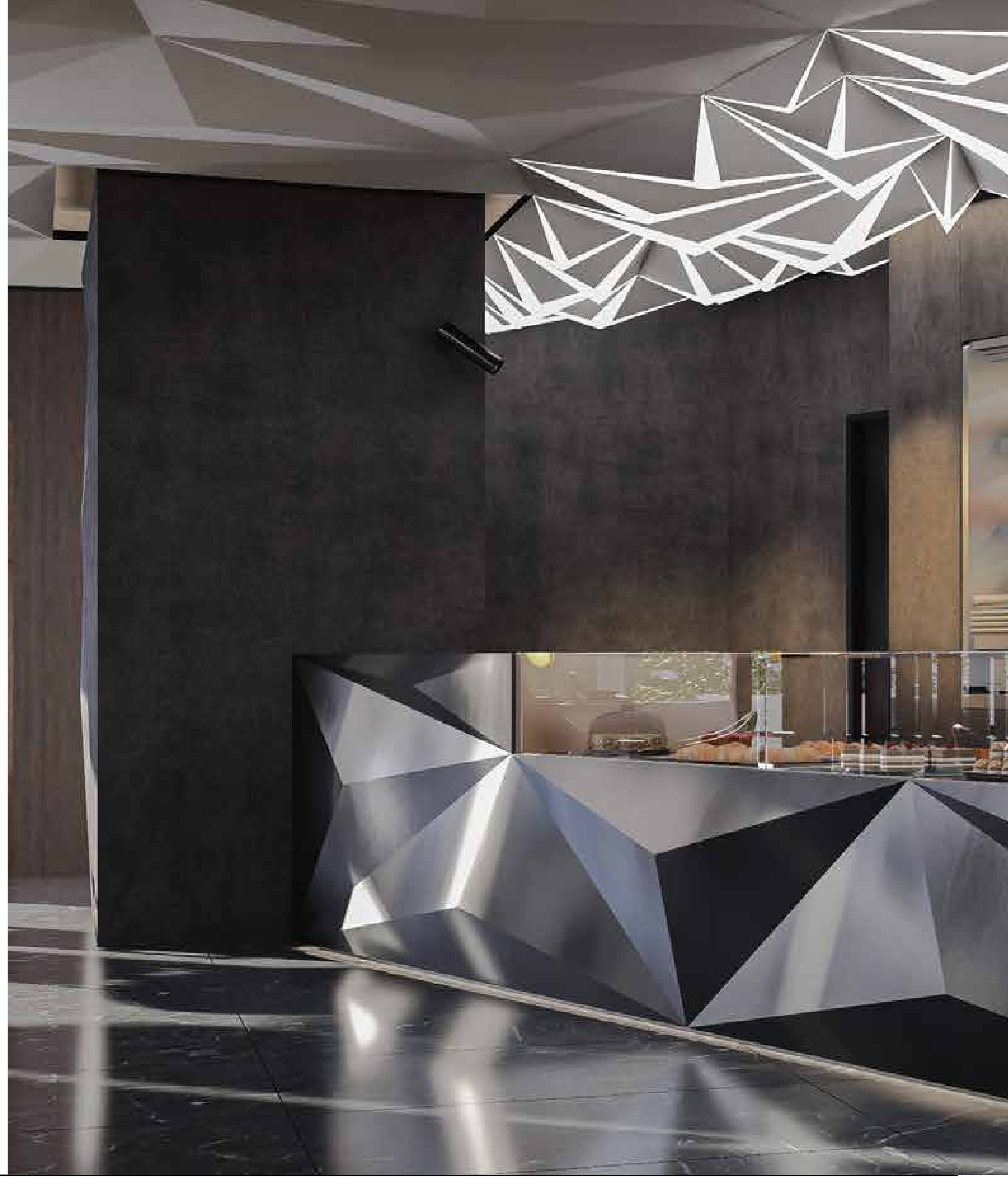

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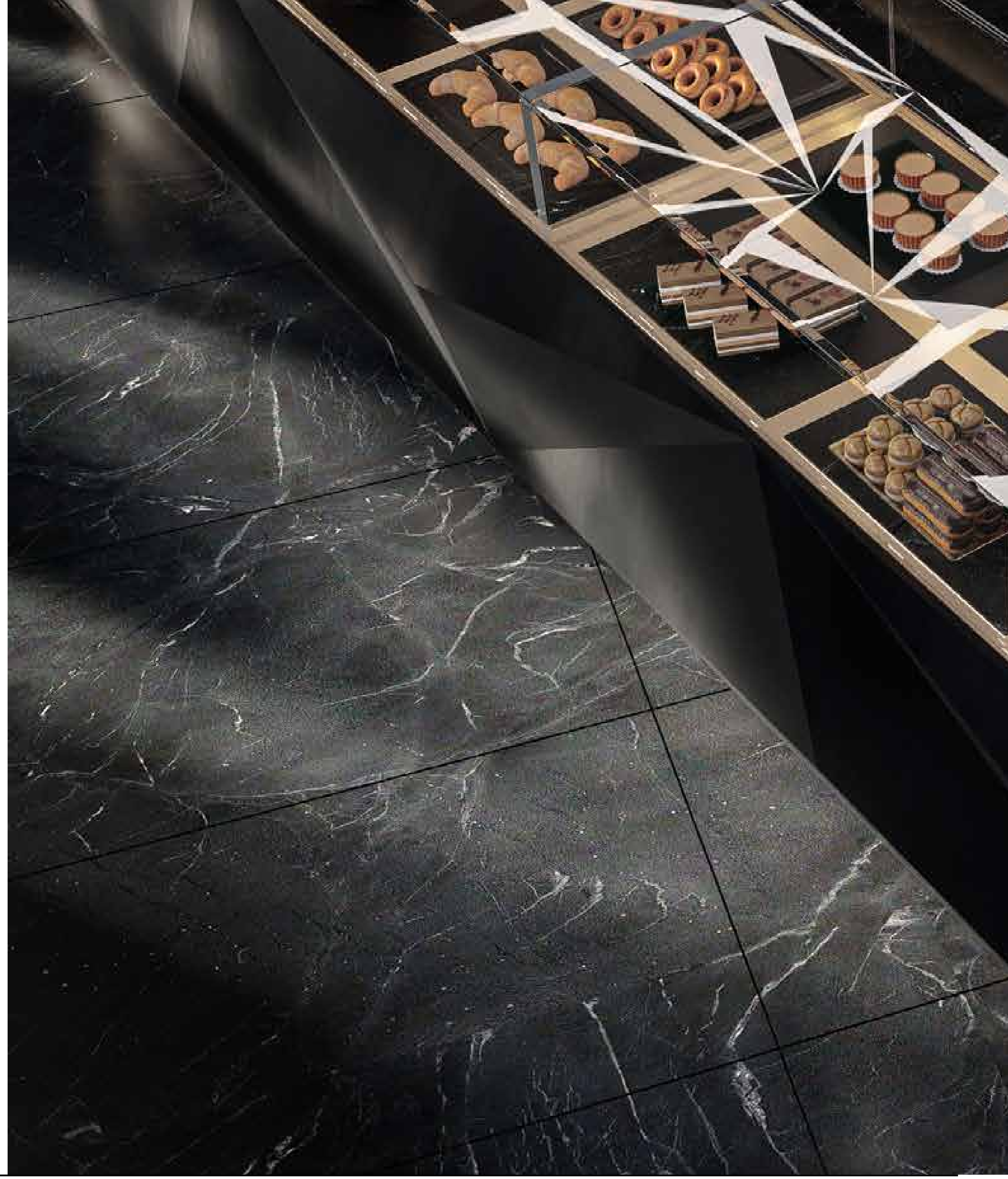

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Swiss Corridor

Lahore ,Pakistan

Client: Royal Swiss Hotel

Size: - m^2 / -sqf

Status: Under Construction

Typology: Furniture , Hospitality , Interior

Year: 2024

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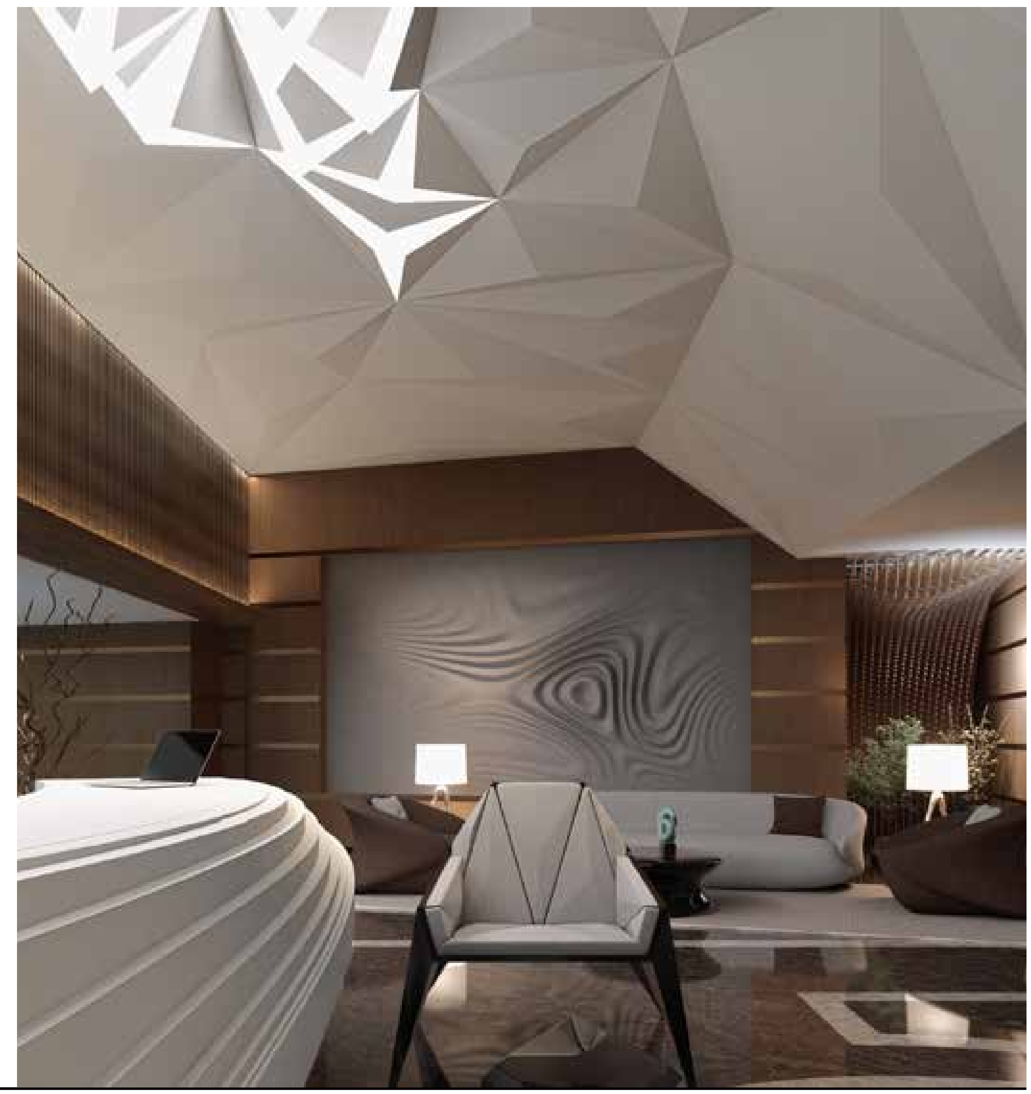

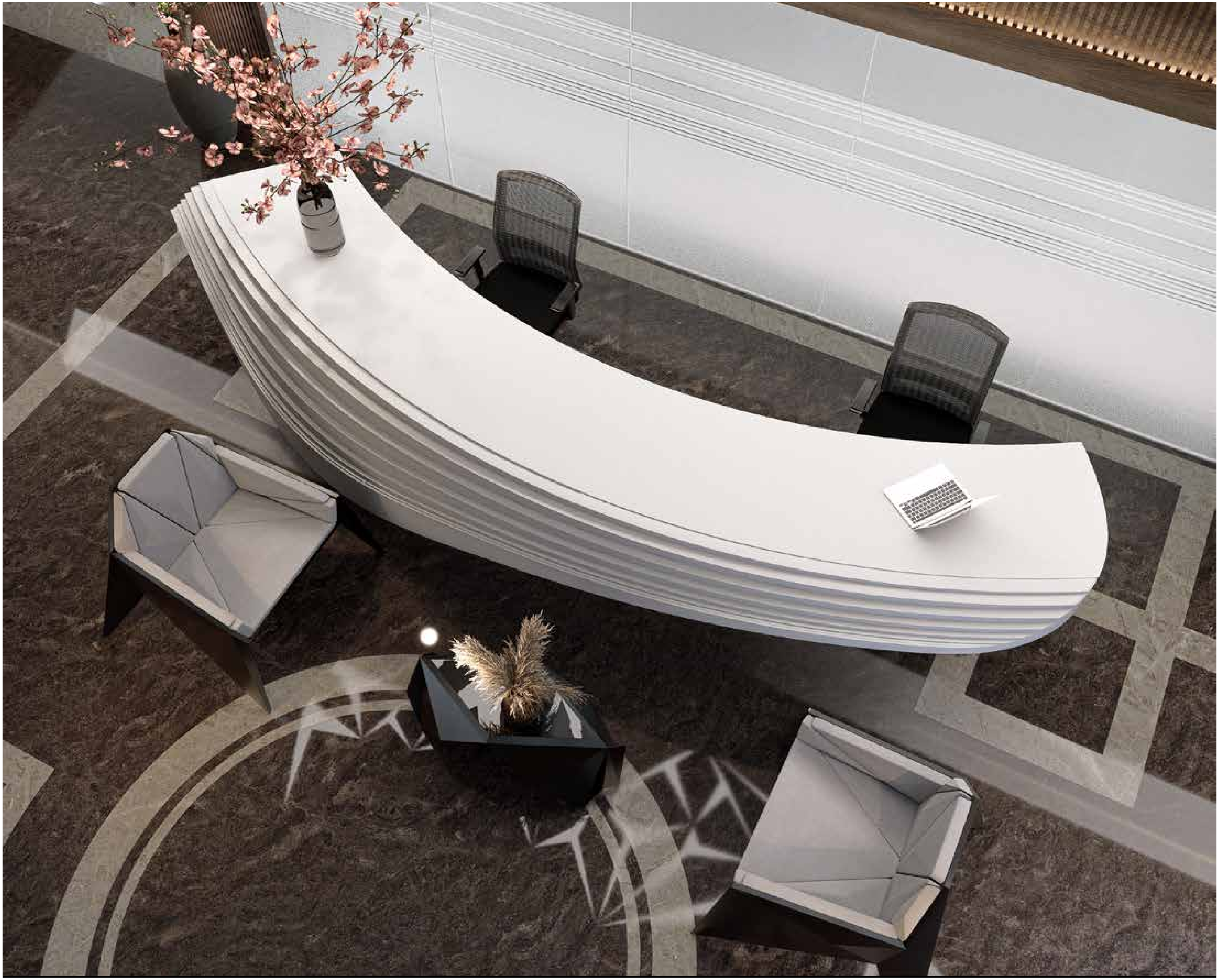

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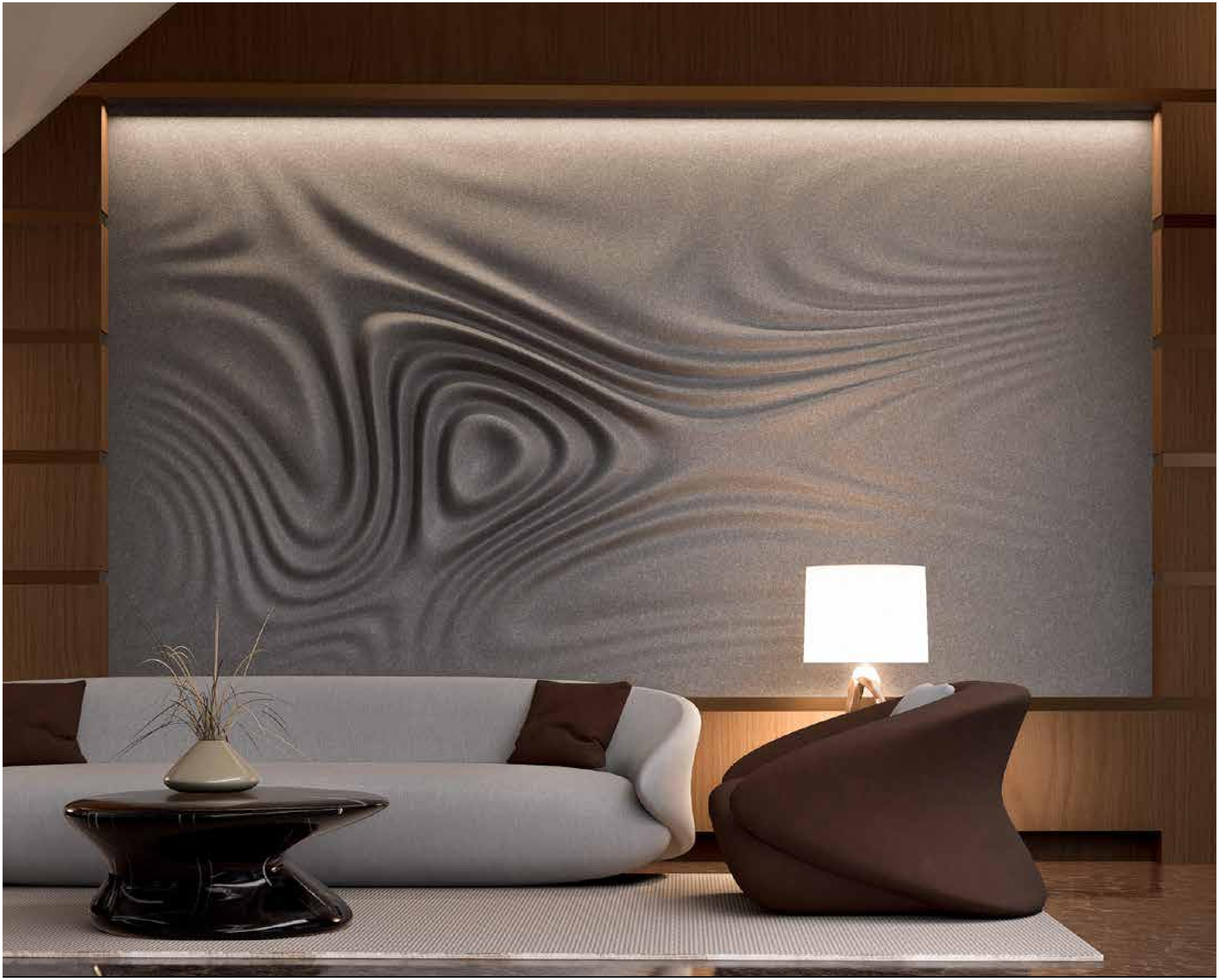


Swiss Elevator

Lahore ,Pakistan

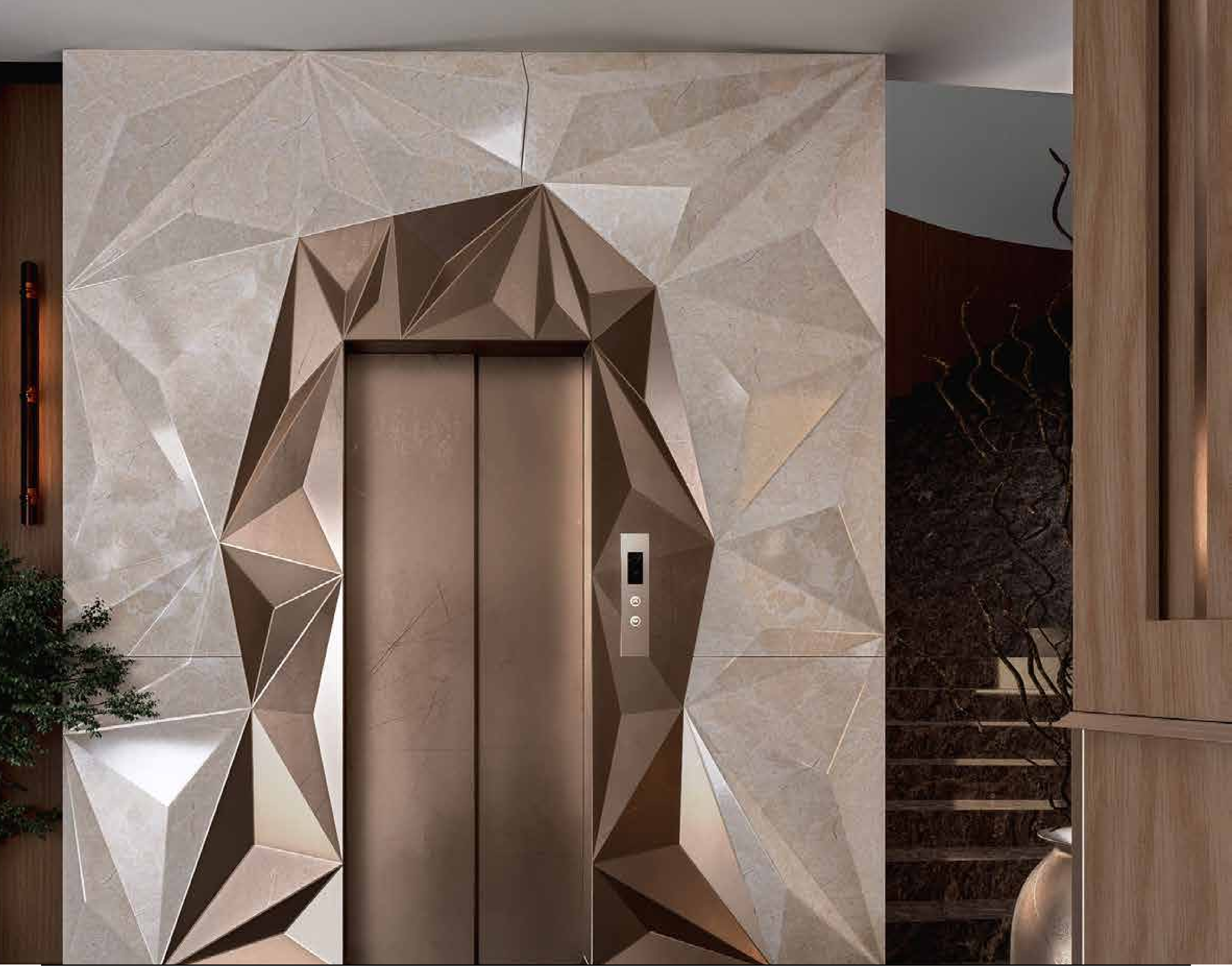
Client: Royal Swiss Hotel

Size: - m² / -sqf

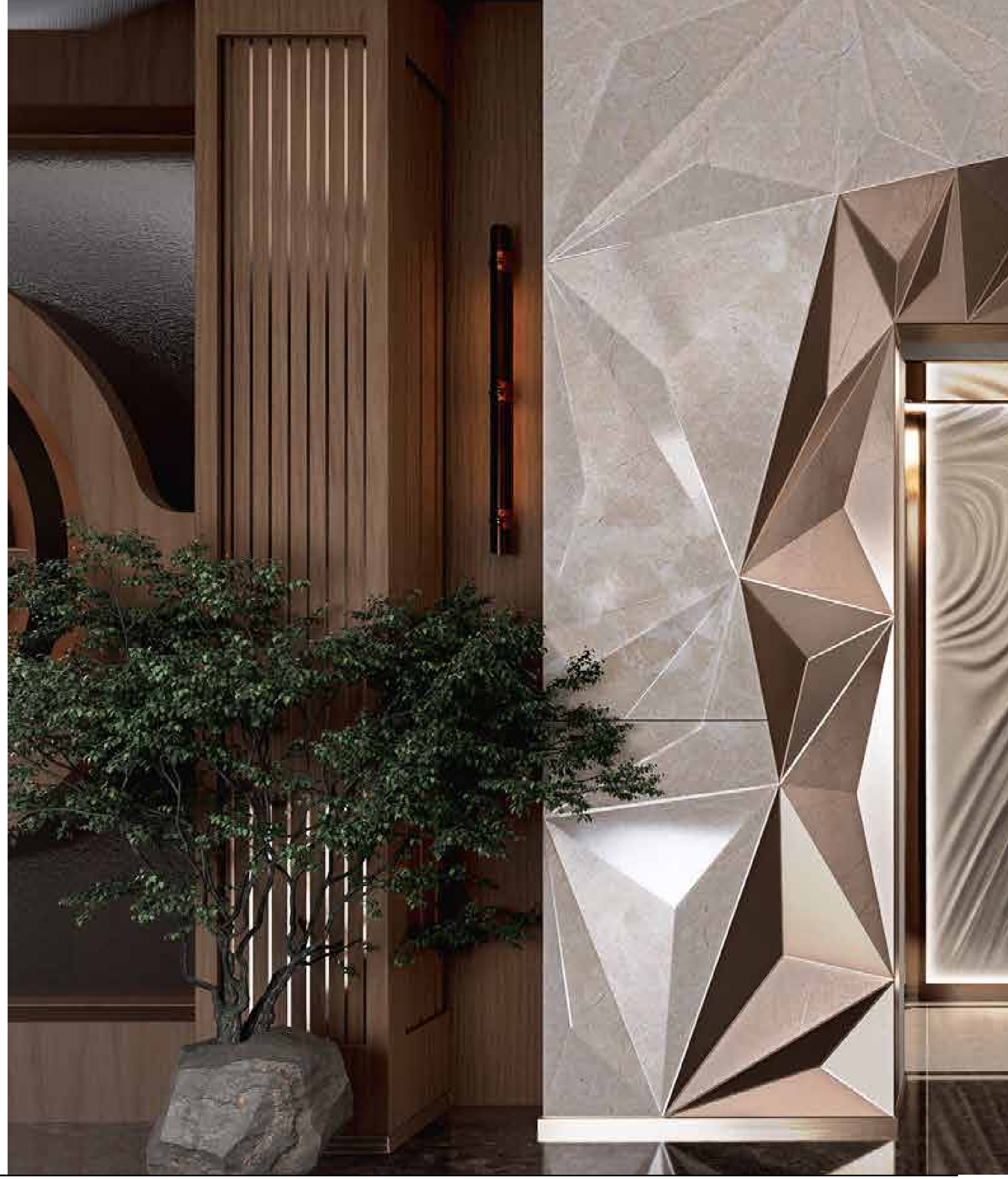
Status: Under Construction

Typology: Furniture , Hospitality , Interior

Year: 2024

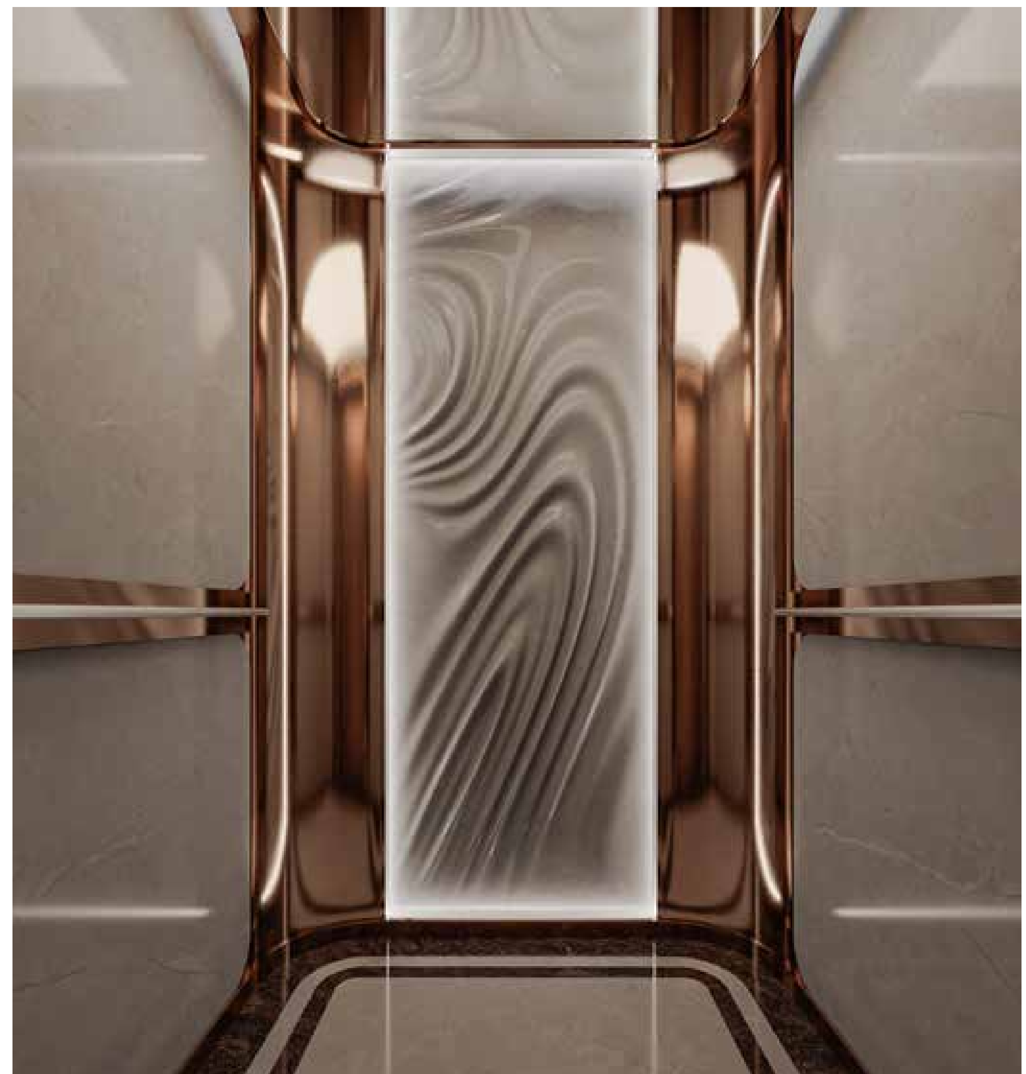


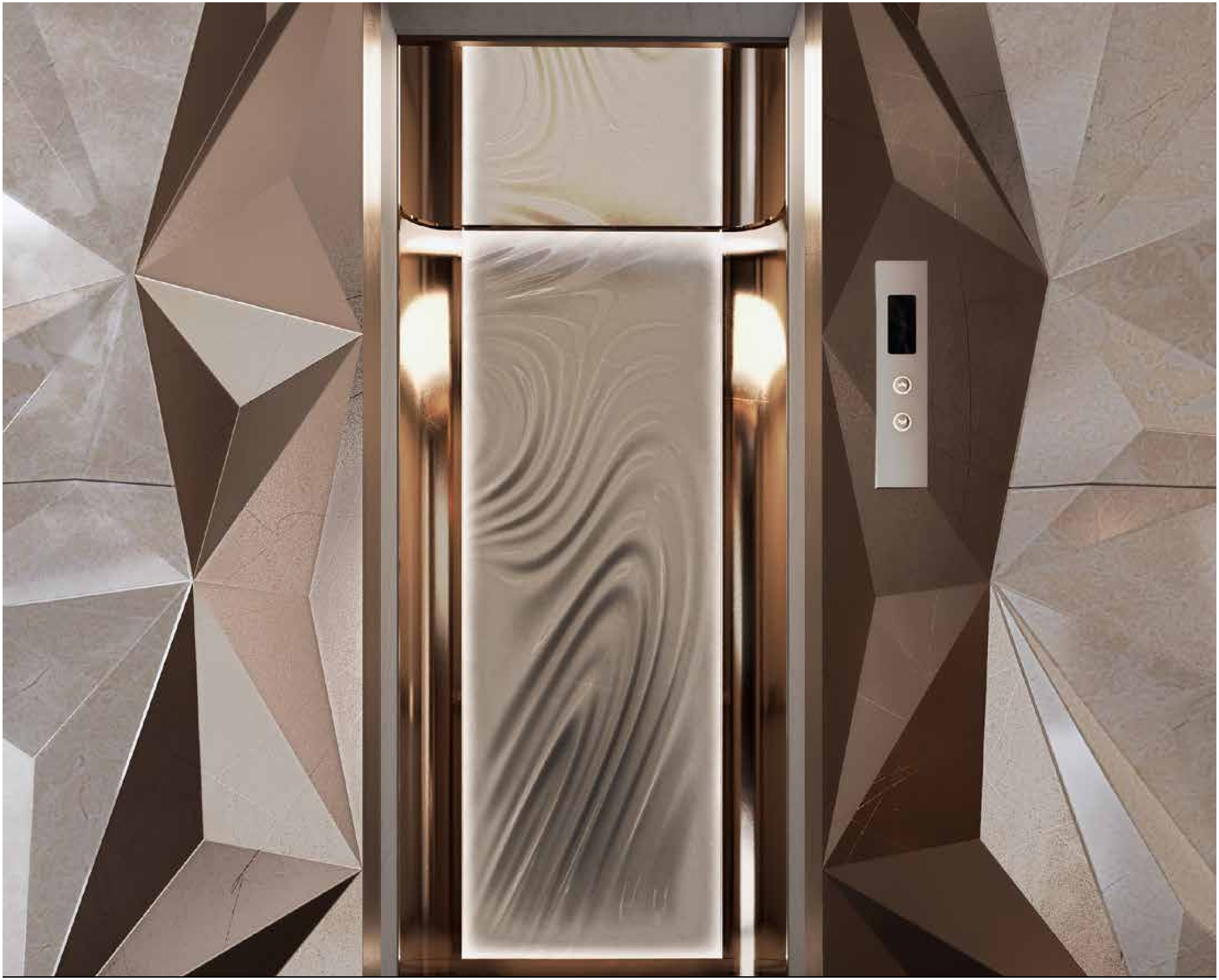
The elevator entrance makes a bold architectural statement with a bespoke, three-dimensional geometric surround fabricated from a richly toned dark bronze metal. This sculptural element, reminiscent of a fractured crystalline structure or a complex origami fold, hints at the sophisticated computational algorithms employed in its design. The interplay of light and shadow across the tessellated surface creates a dynamic visual effect, enhancing the sense of depth and intricacy.



The intricate metalwork is strategically juxtaposed against a backdrop of light, textured stone cladding, creating a harmonious balance between organic texture and computational form. The considered placement of the elevator within the lobby, adjacent to a contrasting dark staircase and framed by warm wood paneling, further accentuates its sculptural qualities.

The elevator cabin itself is a sanctuary of refined elegance. Upon entering, one is greeted by a floor of highly polished dark stone, its reflective surface amplifying the sense of spaciousness and luxury. This dark stone base provides a grounding element for the lighter, more ethereal features of the cabin. Vertical panels of the same light, textured stone used on the exterior wall cladding line the interior walls, creating a visual connection between the elevator's exterior and interior. This continuity reinforces the overall design narrative and provides a sense of cohesive elegance. However, the true pièce de résistance of the interior is the series of backlit, translucent panels showcasing a captivating, fluid marble pattern. **This dynamic pattern, almost certainly generated using computational fluid dynamics or similar digital morphogenesis techniques, introduces a sense of organic movement and fluidity, contrasting beautifully with the geometric precision of the exterior surround.** These luminous panels, framed by polished bronze metal trim that echoes the exterior aesthetic, emit a soft, diffused glow, enveloping passengers in a calming and luxurious ambiance. The interplay of natural materials – the stone and the evocative marble pattern – with the precisely crafted metal details and the computationally designed lighting elements elevates the elevator experience. It transforms a functional transition into a moment of considered luxury, a testament to the hotel's commitment to sophisticated design and unparalleled guest experience.





Crew Lounge

Lahore ,Pakistan

Client: Royal Swiss Hotel

Size: - m² / -sqf

Status: Under Construction

Typology: Interior

Year: 2024

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PLANNING

Landscape

The Verdant Oasis

Lahore ,Pakistan

Client: Swiss Royal Hotel

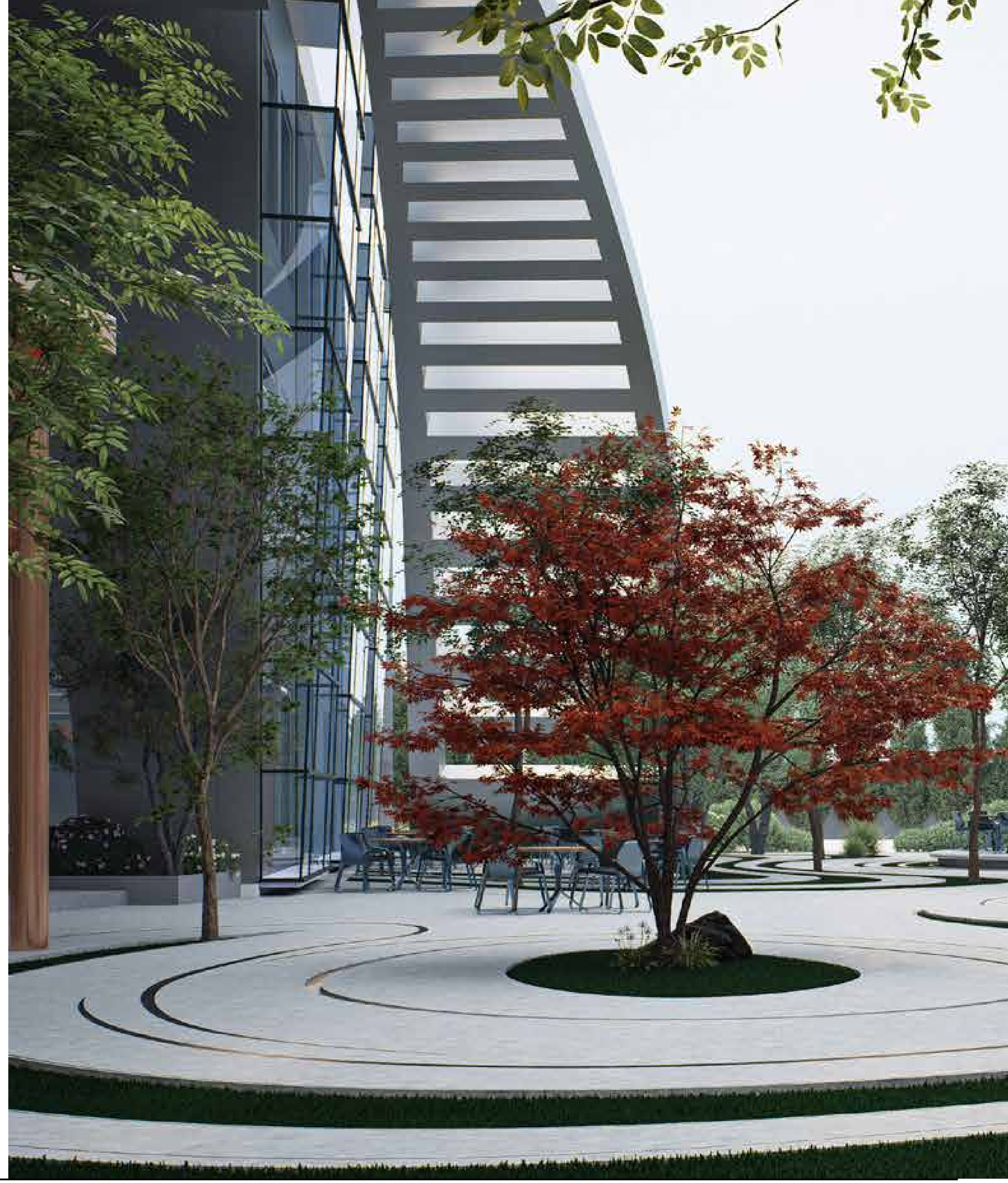
Size: 1100m²/ 12,000sqf

Status: In Construction

Typology: Hospitality

Year: 2024

Within the prestigious Royal Swiss Hotel, a meticulously designed garden serves as a vibrant nexus, seamlessly integrating the DK Restaurant with the Continental food court. This verdant sanctuary, conceived for both tranquil reflection and dynamic social gatherings, including weddings, masterfully balances natural elements with refined architectural design.

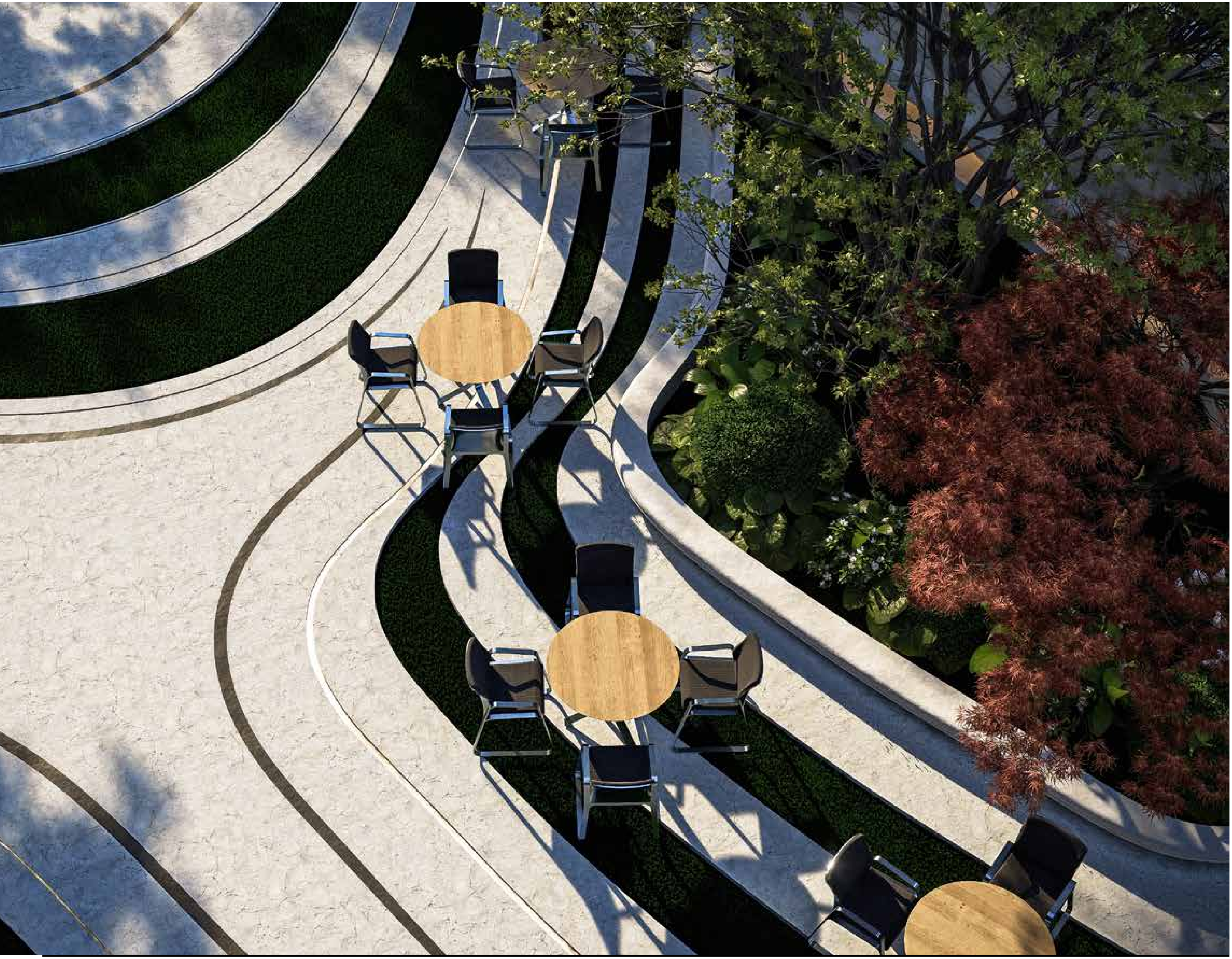


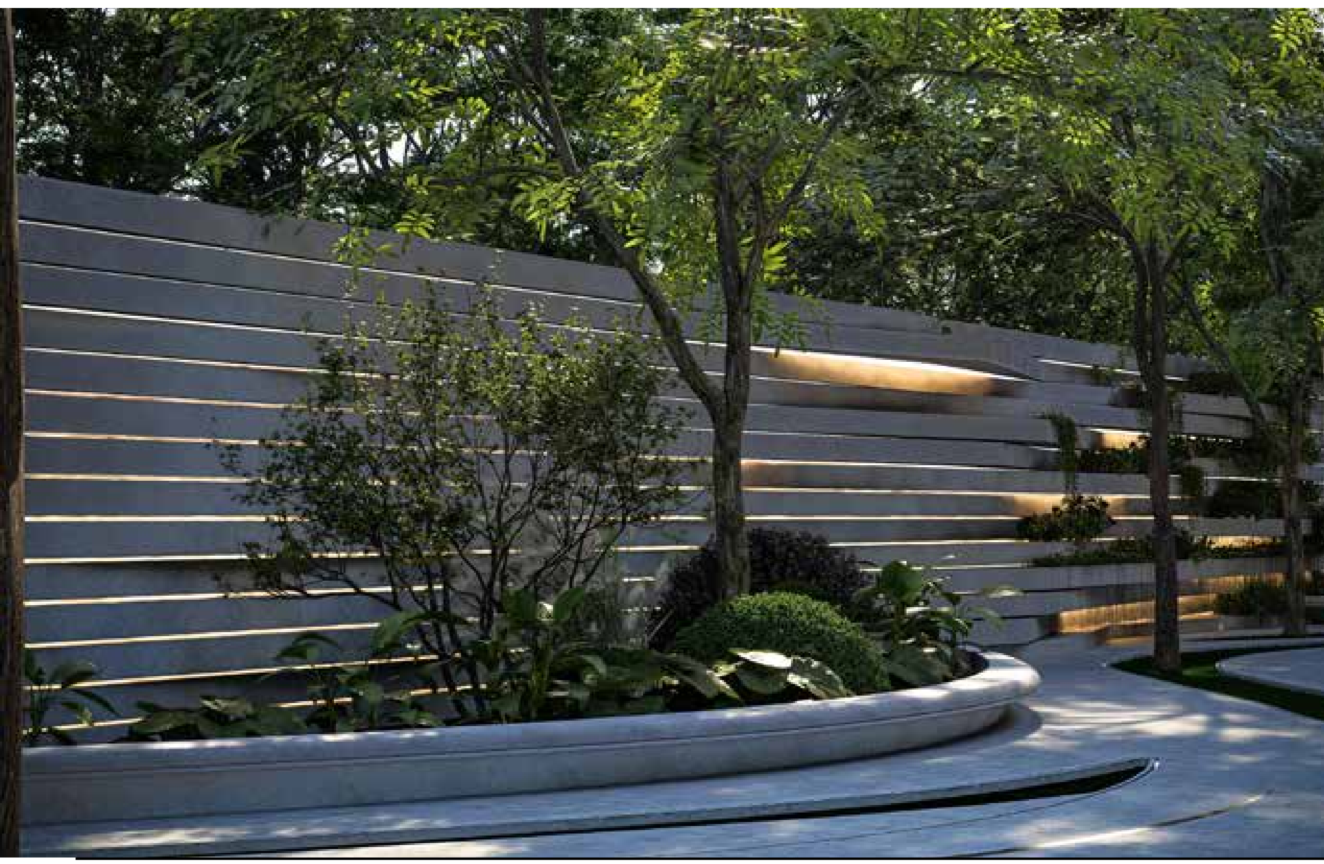
A fluid transition between spaces cultivates a harmonious flow, inviting guests to explore the diverse offerings within this thoughtfully curated environment.

The garden’s centerpiece, a welcoming central square paved with warm, natural stone, provides a focal point for pre-dinner receptions, wedding ceremonies, or simply moments of quiet contemplation. Framed by lush plantings and strategically positioned seating, the square fosters a sense of intimacy while maintaining an open and airy atmosphere. Subtle, integrated lighting within the paving enhances the ambiance for evening events, casting a warm glow across the gathering space.

An innovative waiving circulation system defines the garden's flow. Smooth, pale concrete pathways meander through the verdant landscape, elegantly guiding guests between the restaurant, food court, and various seating areas. This design transcends mere functionality, adding an artistic dimension to the landscape reminiscent of organic forms found in nature. **The varying widths of the pathways accommodate both intimate gatherings and larger processions, ensuring adaptability and a seamless guest experience.**

The furniture Design reflects a commitment to both comfort and aesthetic refinement. Sleek, metallic chairs with gently curved backs offer ergonomic support, while the warm hues of the circular wooden tables foster a sense of conviviality. **The furniture's placement, thoughtfully aligned with the waiving pathways, creates intimate seating pockets that integrate seamlessly with the landscape**. This considered approach allows guests to fully appreciate the garden's natural beauty while enjoying the comfort of well-designed furnishings.



Strategically integrated green walls introduce a vertical dimension of verdant texture, enhancing the sense of immersion within the natural world. These living walls, incorporated into the garden's terraced levels and flanking select architectural elements, create vibrant backdrops while simultaneously contributing to a more temperate microclimate.

The curated plant palette adds layers of texture and color, softening the hardscape and imbuing the space with a sense of tranquility.

The transition from the interior of the DK Restaurant and Continental Food Court to the exterior is seamless, achieved through a thoughtfully curated outdoor area. A central circular patio, defined by concentric rings of textured paving and bordered by verdant plantings, anchors the space. A specimen Japanese maple and carefully placed shrubs soften the hardscape, while a contemporary screen of horizontal slats provides a degree of privacy and filters the sunlight. Configured for both dining and relaxation, the patio furniture invites guests to linger. **The building's expansive glazed façade further blurs the lines between inside and out,** bathing the area in natural light and providing diners with uninterrupted views of the landscaped surroundings. This harmonious interplay of natural elements and modern architectural design cultivates a refined and tranquil ambiance, ideal for enjoying a meal or simply taking a respite.

The Royal Swiss Hotel Garden cultivates a sophisticated yet serene ambiance. The fluid transitions, Central Square, waiving pathways, carefully chosen furnishings, and integrated green walls create a harmonious environment ideal for a spectrum of occasions. Whether hosting a lavish wedding reception, enjoying a casual al fresco meal, or seeking a moment of respite amidst the lush greenery, this meticulously designed garden provides an unparalleled experience.

It reflects the hotel’s unwavering ded-ication to providing guests with a luxu-rious and memorable stay, seamlessly blending nature and design to create an unforgettable sanctuary.

Future Academic Spaces

St Petersburg ,Russia

Client: University of LETI

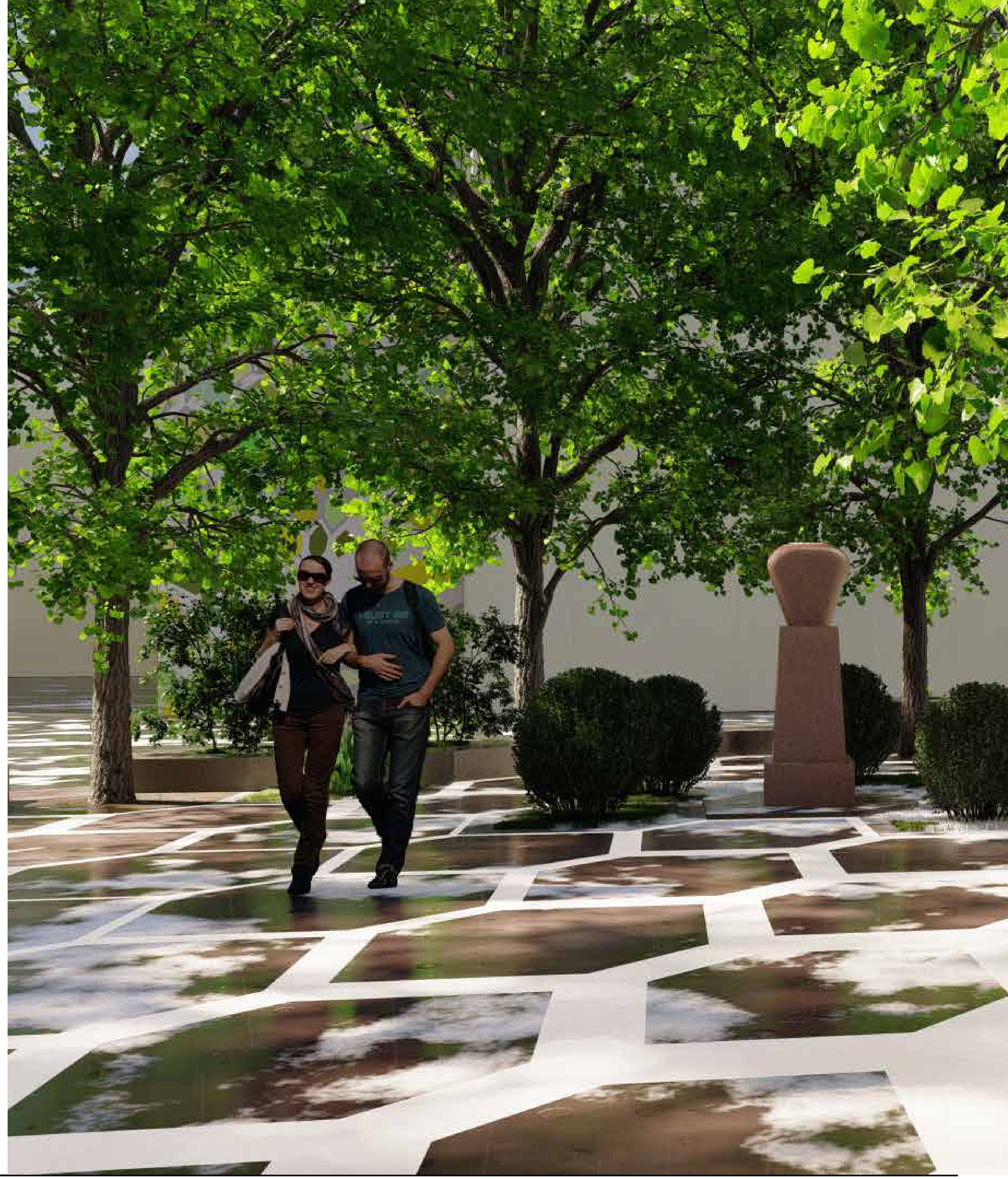
Size: 200m^2 / 2153sqf

Status: Proposal

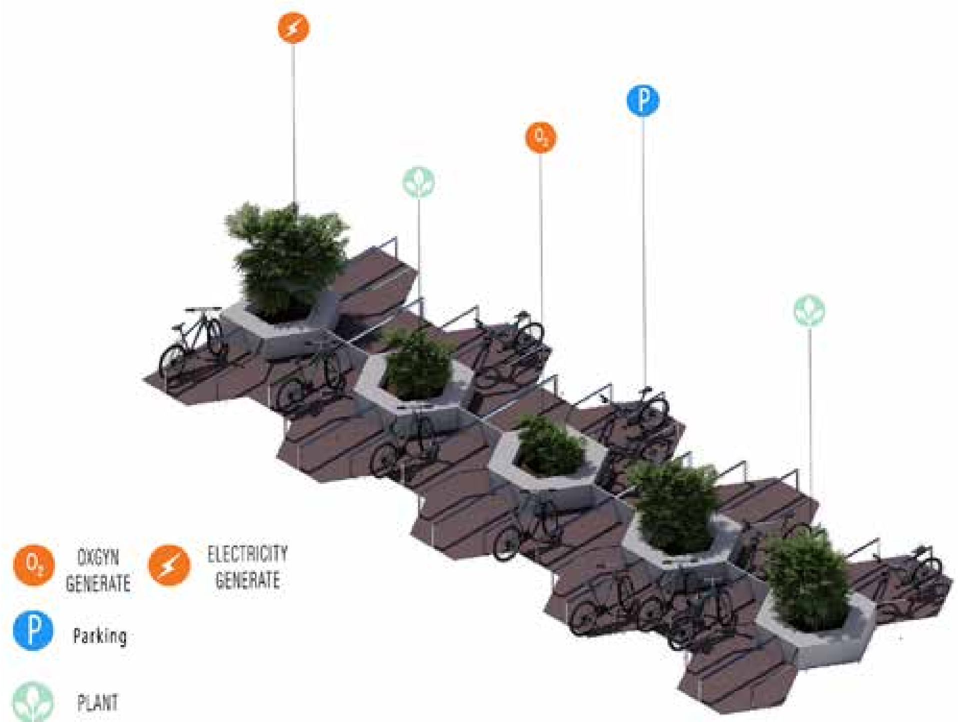
Typology: Competetion

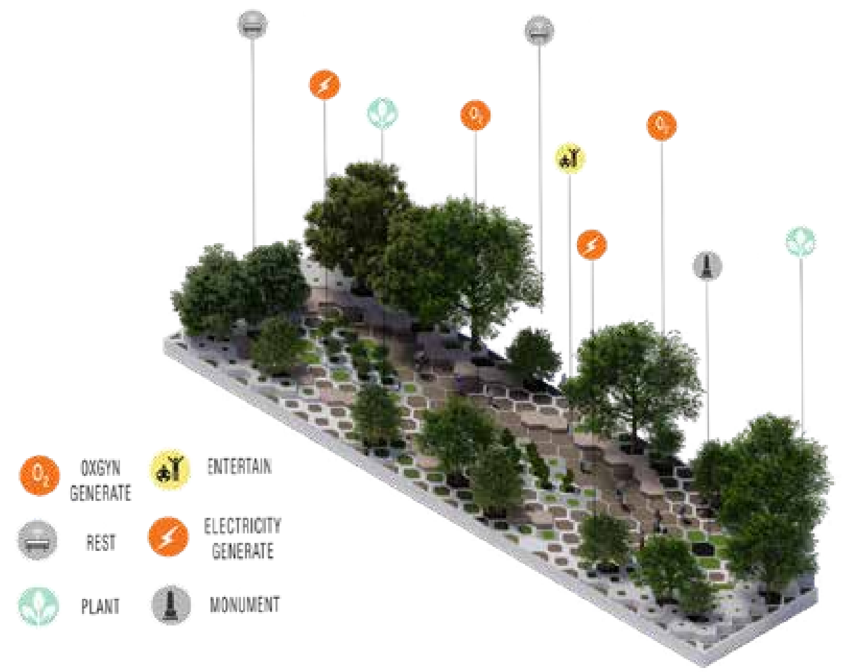
Year: 2021

The University of LETI in Saint Petersburg, Russia embraces a bold vision for the future of learning with the groundbreaking Future Academic Space. This meticulously crafted project breathes new life into the historic Vologdin Garden, seamlessly integrating aesthetic brilliance, technological innovation, and sustainable practices. The resulting public space transcends its role as a visual landmark, transforming into a dynamic hub that fosters deeper engagement between students and their environment. Prepare to embark on a transformative journey as we delve into the exquisite interplay of nature, technology, and human interaction that defines the Future Academic Space



The heart of the Future Academic Space beats with a unique rhythm. A testament to thoughtful design, the space is defined by a central element a parametric hexagonal division. This architectural marvel represents a harmonious marriage of the Vologdin Garden's historical significance with the demands of a modern university environment. Leveraging cutting-edge parametric design techniques, the layout optimizes the garden's existing aesthetic allure while seamlessly integrating features that cater to the practical needs of the LETI community. The result is a space that not only respects the past but also embraces the future, fostering a vibrant hub for learning and social interaction.


OXGYN GENERATE
ELECTRICITY GENERATE
Parking
PLANT


OXGYN GENERATE
ENTERTAIN
REST
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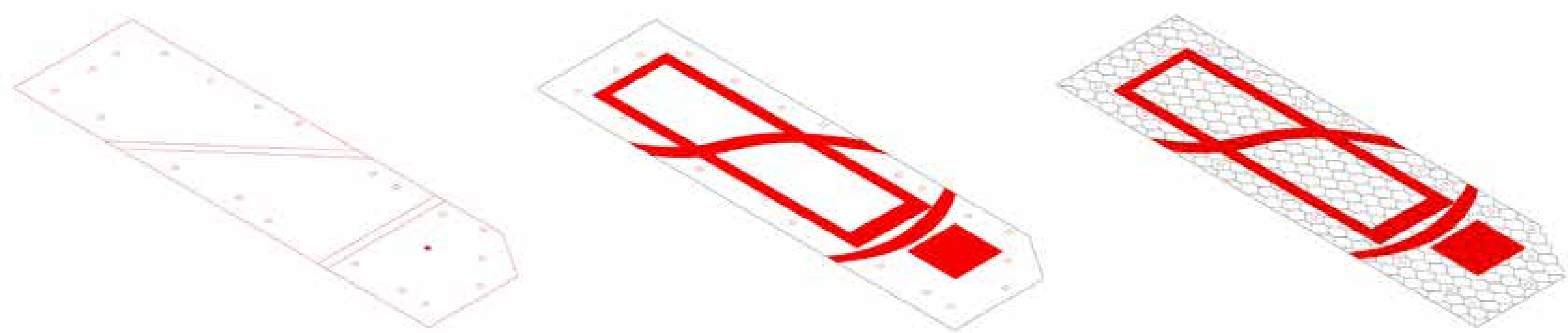
PLANT
MONUMENT


OXGYN GENERATE
ENTERTAIN
REST
ELECTRICITY GENERATE
PLANT


OXGYN GENERATE
ENTERTAIN
REST
ELECTRICITY GENERATE
PLANT
BATHWAY

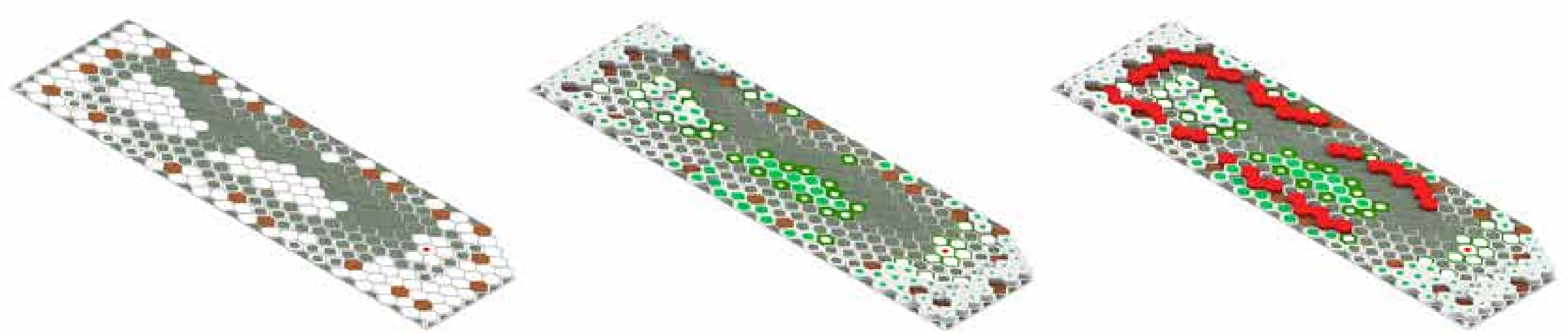
The Future Academic Space exemplifies a resolute dedication to intelligent design principles. This commitment transcends mere aesthetics, transforming the Vologdin Garden into a dynamic and ecologically responsible ecosystem. State-of-the-art technological solutions seamlessly integrate with the natural environment, forming the foundation of this innovative project. Strategically deployed smart sensors optimize resource utilization, while energy-efficient lighting and renewable energy sources significantly reduce the project's environmental impact. **This unwavering commitment to sustainability fosters a harmonious dialogue between nature and technology, cultivating an inspiring space for academic exploration and fostering a culture of environmental stewardship within the LETI community.**



Property and existed parameter

Combination with new Hybrid areas

hexagonal grid tessellation



flow between existed Trees location and pedestrian zone

Vegetation location

Benches location

The Future Academic Space transcends the limitations of a conventional garden, evolving into a dynamic ecosystem meticulously crafted to support diverse student needs. It offers a thoughtfully curated arrangement of multifunctional zones, each meticulously designed to foster a specific learning environment. Open communication areas, bathed in natural light, encourage vibrant collaboration and the exchange of ideas. Conversely, strategically placed private study nooks provide havens for focused concentration and quiet contemplation.
This spectrum of spaces caters to the individual preferences of every student, ensuring a comfortable and productive environment that supports a variety of learning styles. The Future Academic Space is more than just an aesthetically pleasing landscape; it's a meticulously orchestrated symphony of spaces designed to inspire, engage, and nurture the intellectual and social well-being of the LETI community.

Iqbal Garden Landscape

St Petersburg ,Russia

Client: University of LETI

Size: 200m² / 2153sqf

Status: Proposal

Typology: Competetion

Year: 2021

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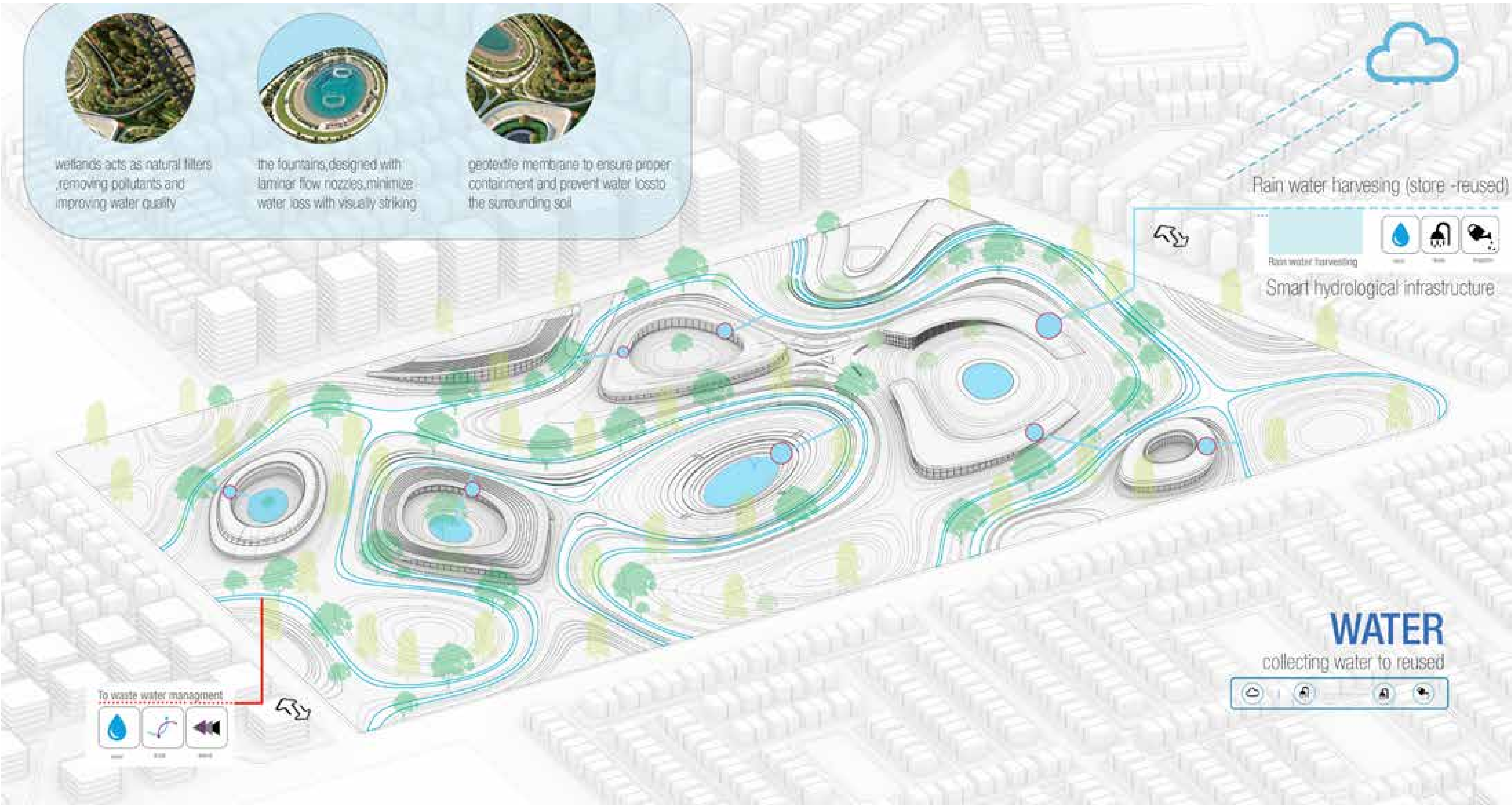
The heart of the Future Academic Space beats with a unique rhythm. A testament to thoughtful design, the space is defined by a central element a parametric hexagonal division. This architectural marvel represents a harmonious marriage of the Vologdin Garden's historical significance with the demands of a modern university environment. Leveraging cutting-edge parametric design techniques, the layout optimizes the garden's existing aesthetic allure while seamlessly integrating features that cater to the practical needs of the LETI community. The result is a space that not only respects the past but also embraces the future, fostering a vibrant hub for learning and social interaction.



Cooper wire meshes extract humidity from the external environment; while the brick cools the flowing air through the material, therefore, cooling the surrounding environment on the roof top. The wind catcher has a downward opening to direct the flowing wind to the underground through cool bricks which react with evaporation, consisting of 3D printed porous ceramic bricks set in mortar, each brick absorbs water like a sponge and is constructed as a three-dimensional lattice allowing air to move through. High raised Wind towers as well are built parallel to the wind catchers from the same responsive materials, built on the roof top to provide shading, and extract humidity from the external weather on the surface of wire meshes to cool the flowing air by evaporation using Distributed cool bricks, allowing natural sun light radiation to the underground level through its transparency. Cooling Unit works as an Artificial Oasis, it was envisioned to be built in the centre of the site on the underground level. The diameter of the oasis is 4 meters while the depth is 40 cm. The Oasis will work as an evaporative cooling system. As water falls smoothly from the

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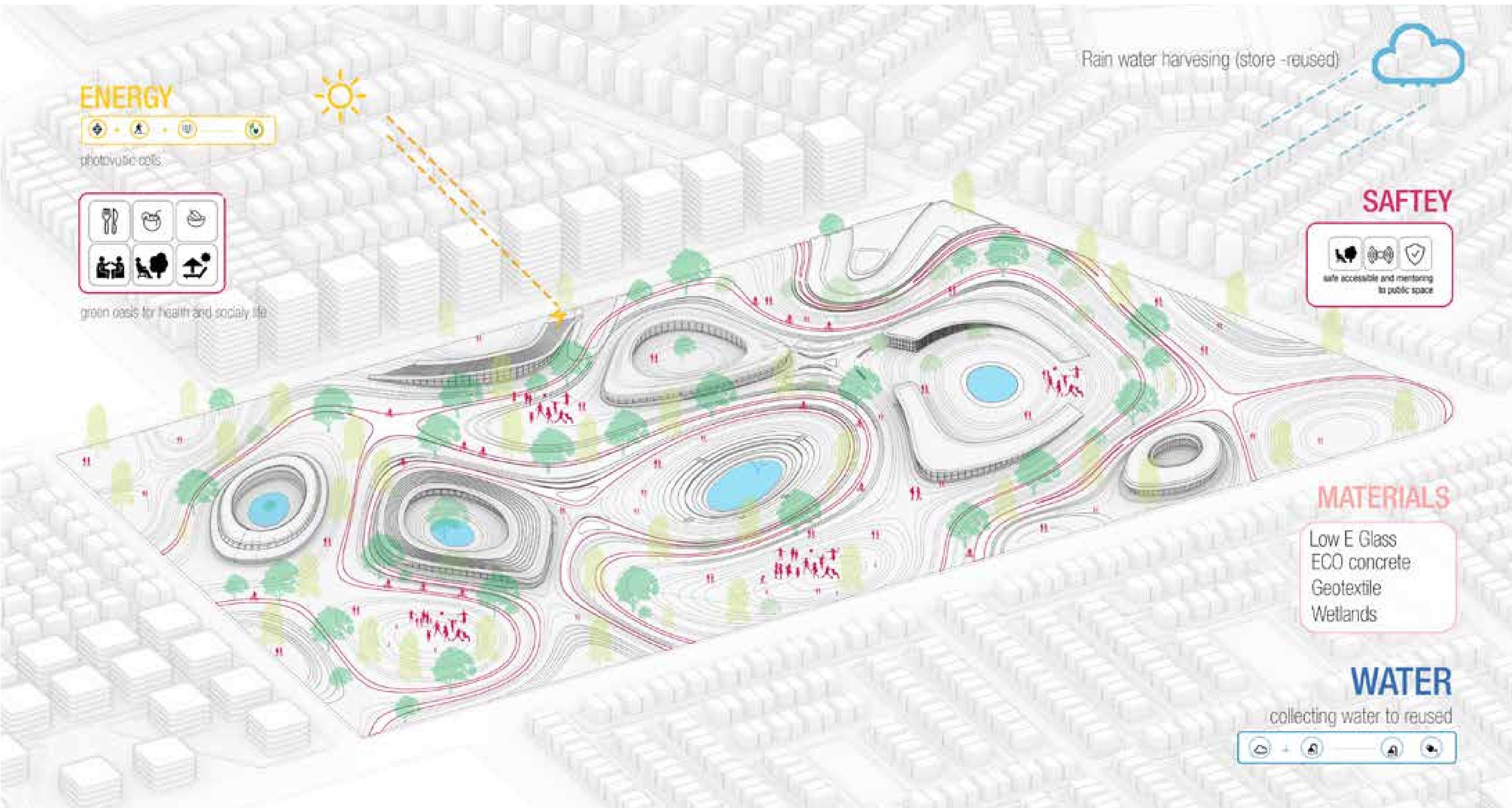

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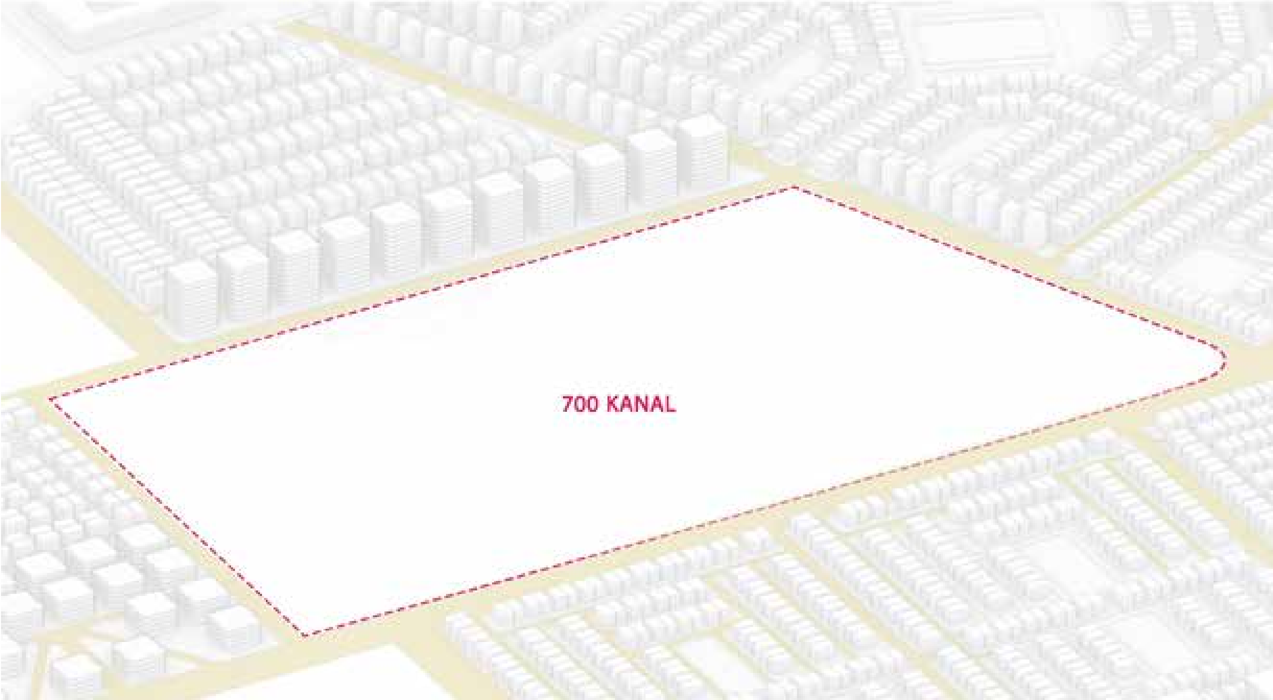
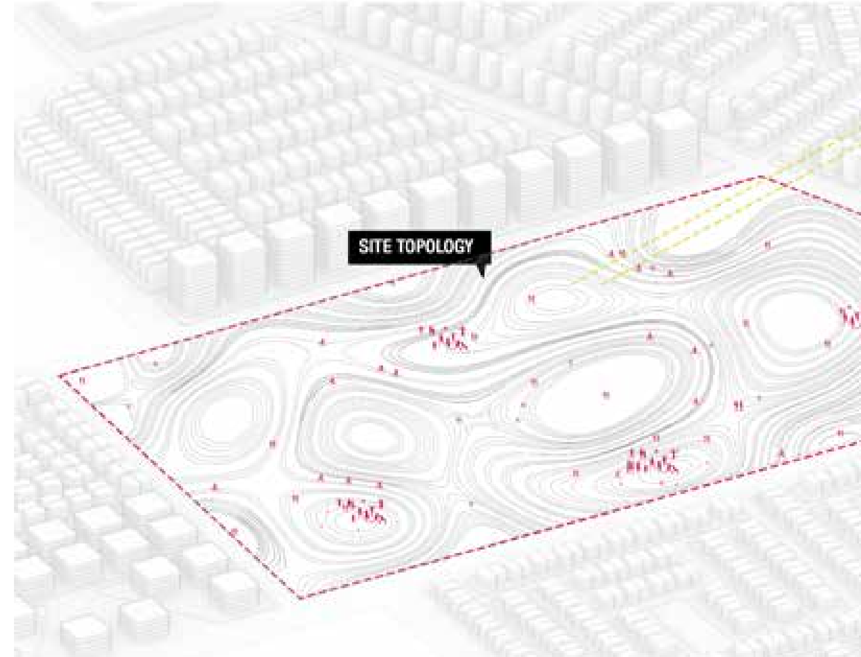
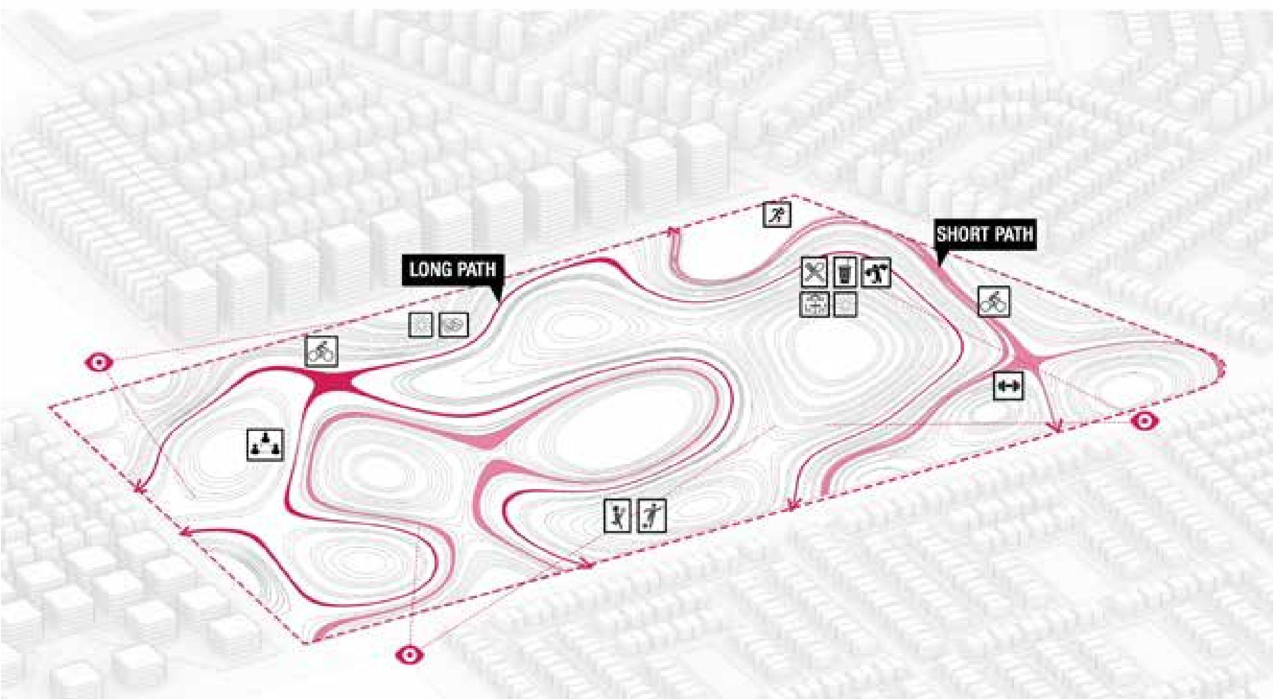
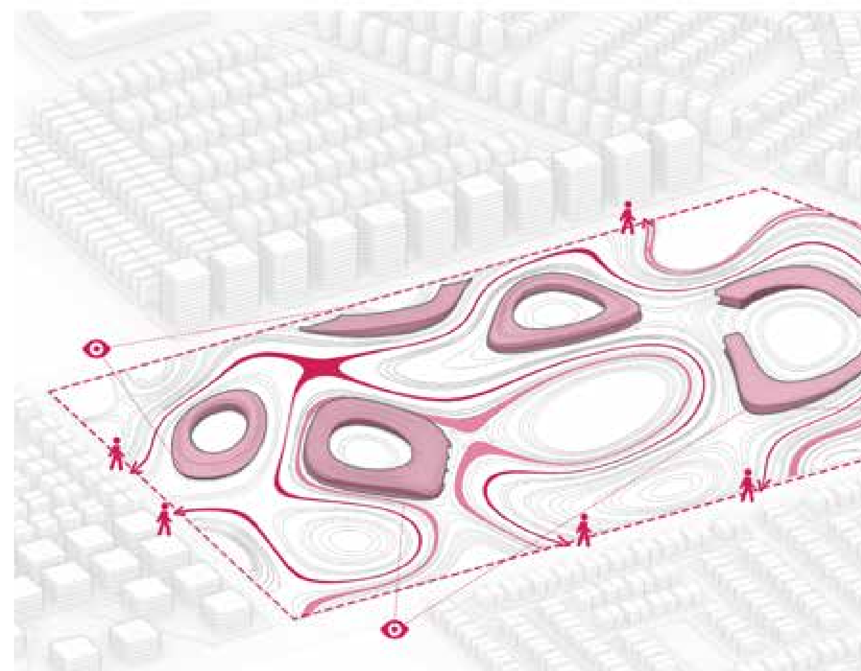


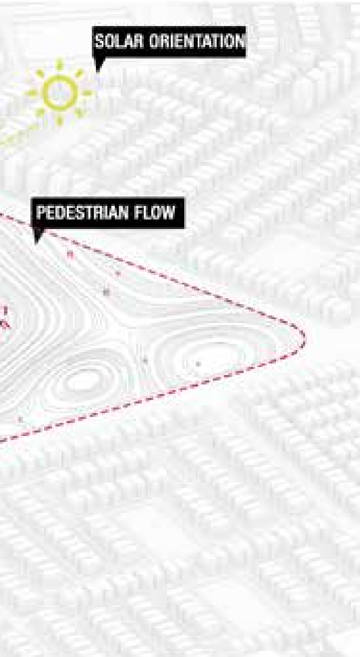


PARAMETRICALLY
GENERATED CURVILINEAR FORMS. A SOPHISTICATED ALGORITHM THAT CONSIDERS SITE TOPOGRAPHY,
SOLAR ORIENTATION, AND PEDESTRIAN





THE PLAN IS
FURTHER CHARACTERIZED BY A SERIES OF STRUCTURALLY EXPRESSED CIRCULAR FORMS, OFTEN ELEVATED
WHICH ACT AS FOCAL POINTS WITHIN THE LANDSCAPE. THESE FORMS ARE CONSTRUCTED USING STEEL



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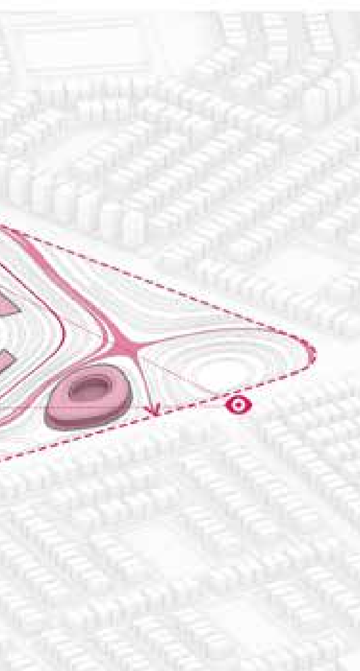
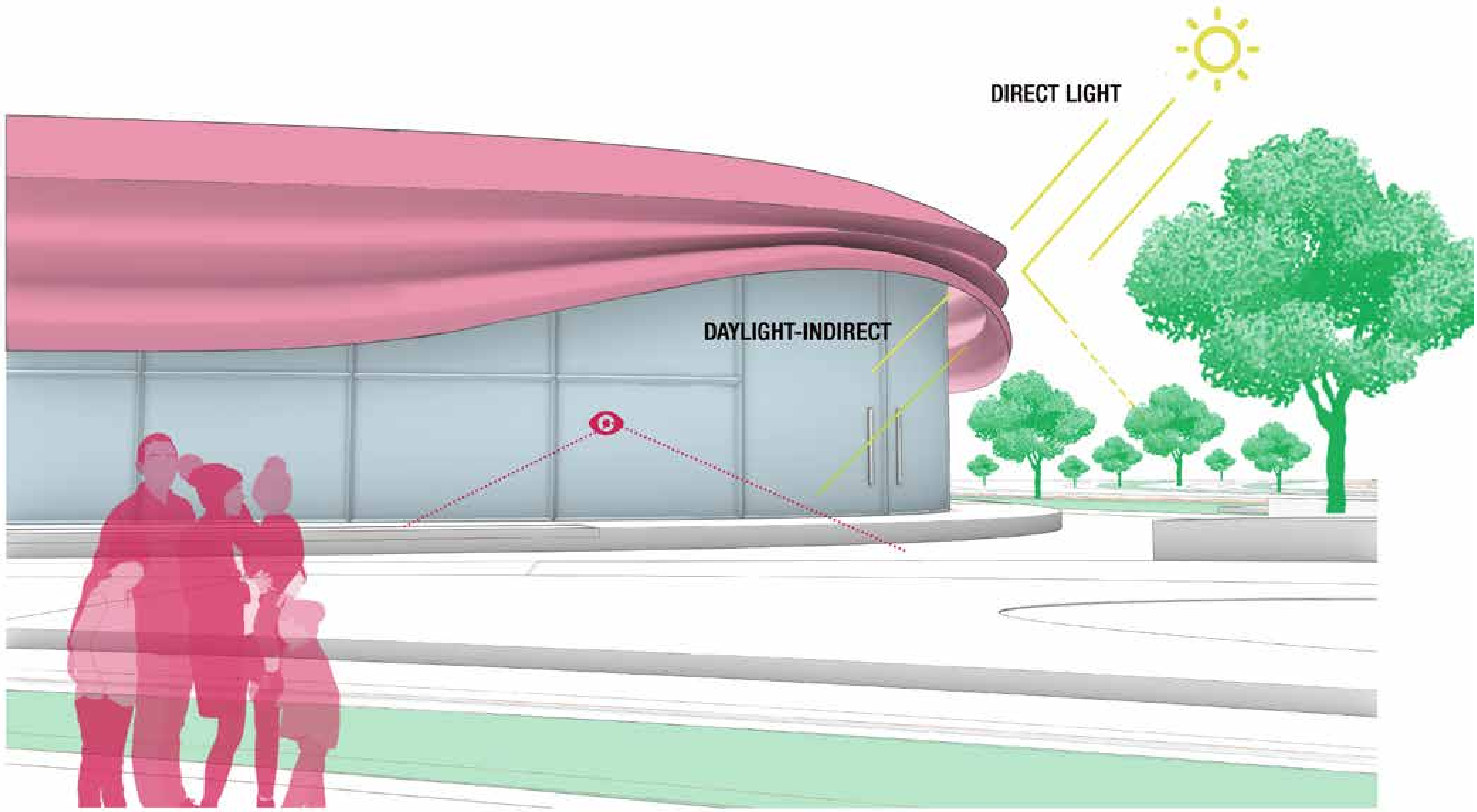
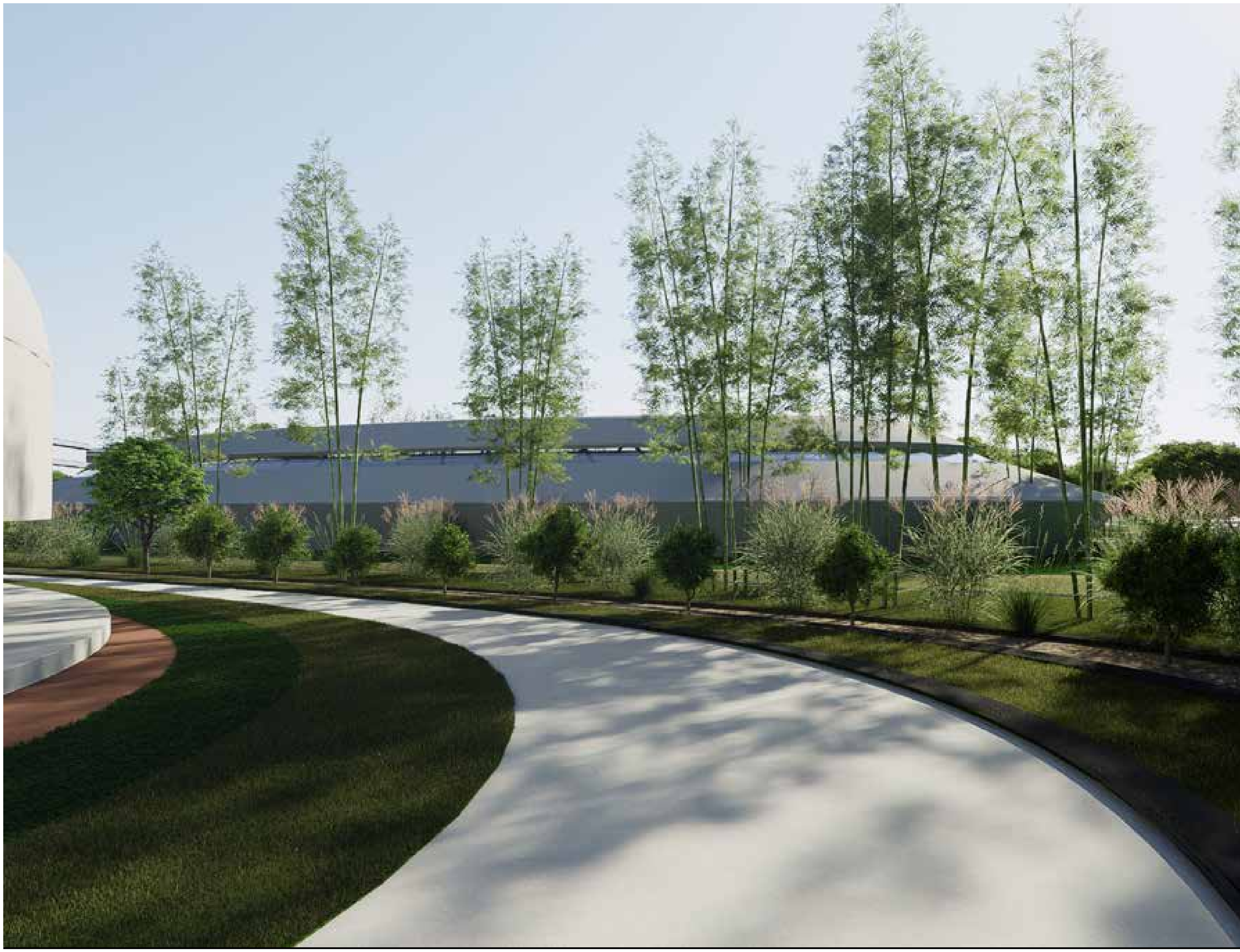




THESE FORMS ARE CONSTRUCTED USING STEEL FRAMES, CLAD IN A COMPOSITE MATERIAL THAT COMBINES DURABILITY WITH A SUBTLY TEXTURED, MATTE FINISH, MINIMIZING GLARE AND MAXIMIZING VISUAL CONTINUITY. THESE BUILDINGS' ROOFLINES ARE ARTICULATED WITH OVERHANGS AND STRATEGICALLY PLACED LOUVERS, ALLOWING FOR PASSIVE SOLAR CONTROL.

The transition from the interior of the DK Restaurant and Continental Food Court to the exterior is seamless, achieved through a thoughtfully curated outdoor area. A central circular patio, defined by concentric rings of textured paving and bordered by verdant plantings, anchors the space. A specimen Japanese maple and carefully placed shrubs soften the hardscape, while a contemporary screen of horizontal slats provides a degree of privacy and filters the sunlight. Configured for both dining and relaxation, the patio furniture invites guests to linger.

The furniture Design reflects a commitment to both comfort and aesthetic refinement. Sleek, metallic chairs with gently curved backs offer ergonomic support, while the warm hues of the circular wooden tables foster a sense of conviviality. **The furniture's placement, thoughtfully aligned with the waiving pathways, creates intimate seating pockets that integrate seamlessly with the landscape**. This considered approach allows guests to fully appreciate the garden's natural beauty while enjoying the comfort of well-designed furnishings.



Strategically positioned between the bedroom and bathroom, the dressing area is a haven of organization and style. A custom-designed wardrobe, enclosed by bronze-tinted sliding glass doors, provides ample storage. Integrated LED lighting illuminates the interior, showcasing impeccable craftsmanship and facilitating the arrangement of clothing and accessories. A compact yet functional desk area, equipped with a sleek, ergonomically designed chair, offers a dedicated space for work or personal grooming.

PLANNING

Urban Design

Eco-Urban Oasis

Khushab ,Pakistan

Client: MA Development

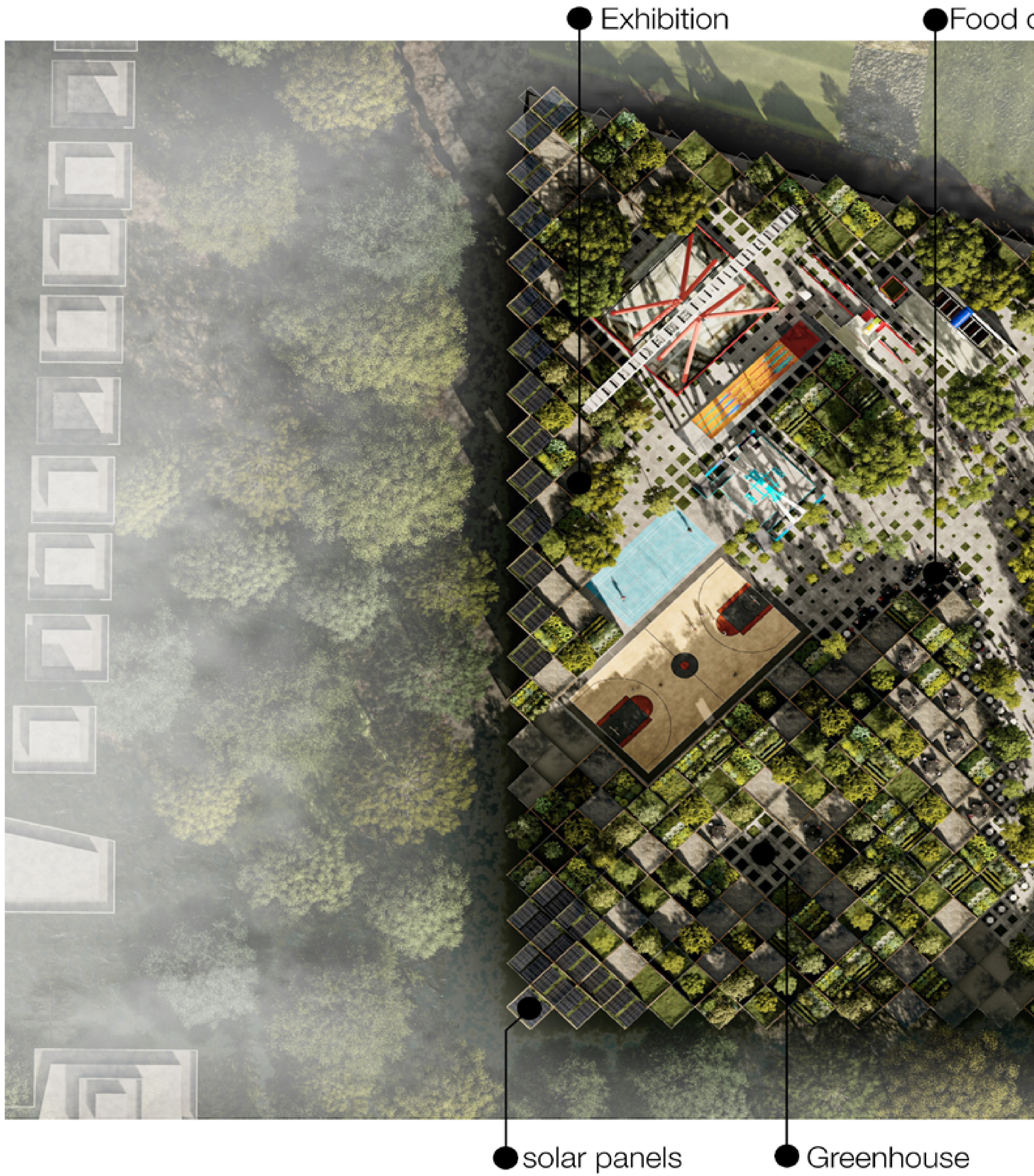
Size: 4,000m²/43,055f²

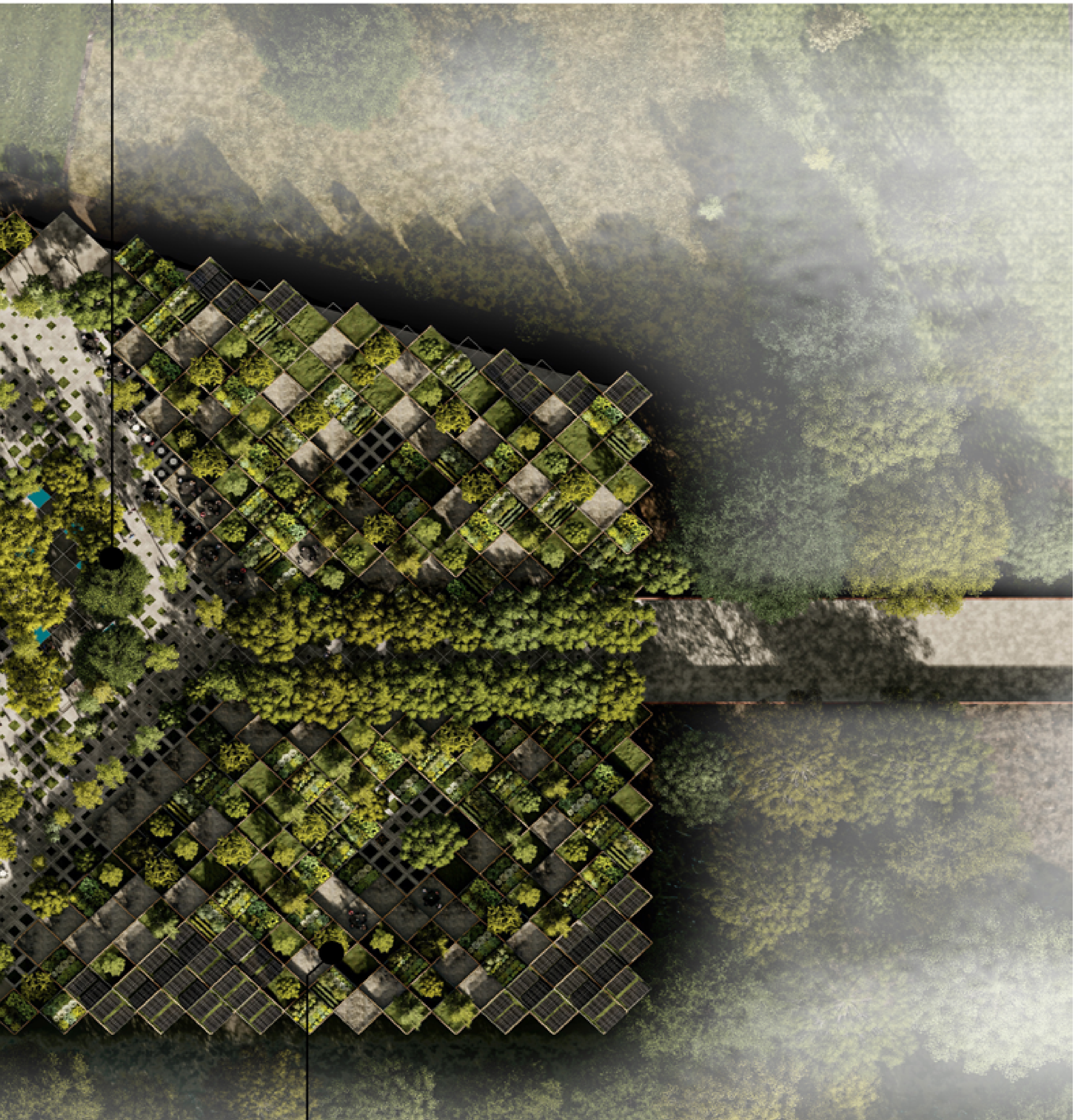
Status: In Design

Typology: Culture

Year: 2022

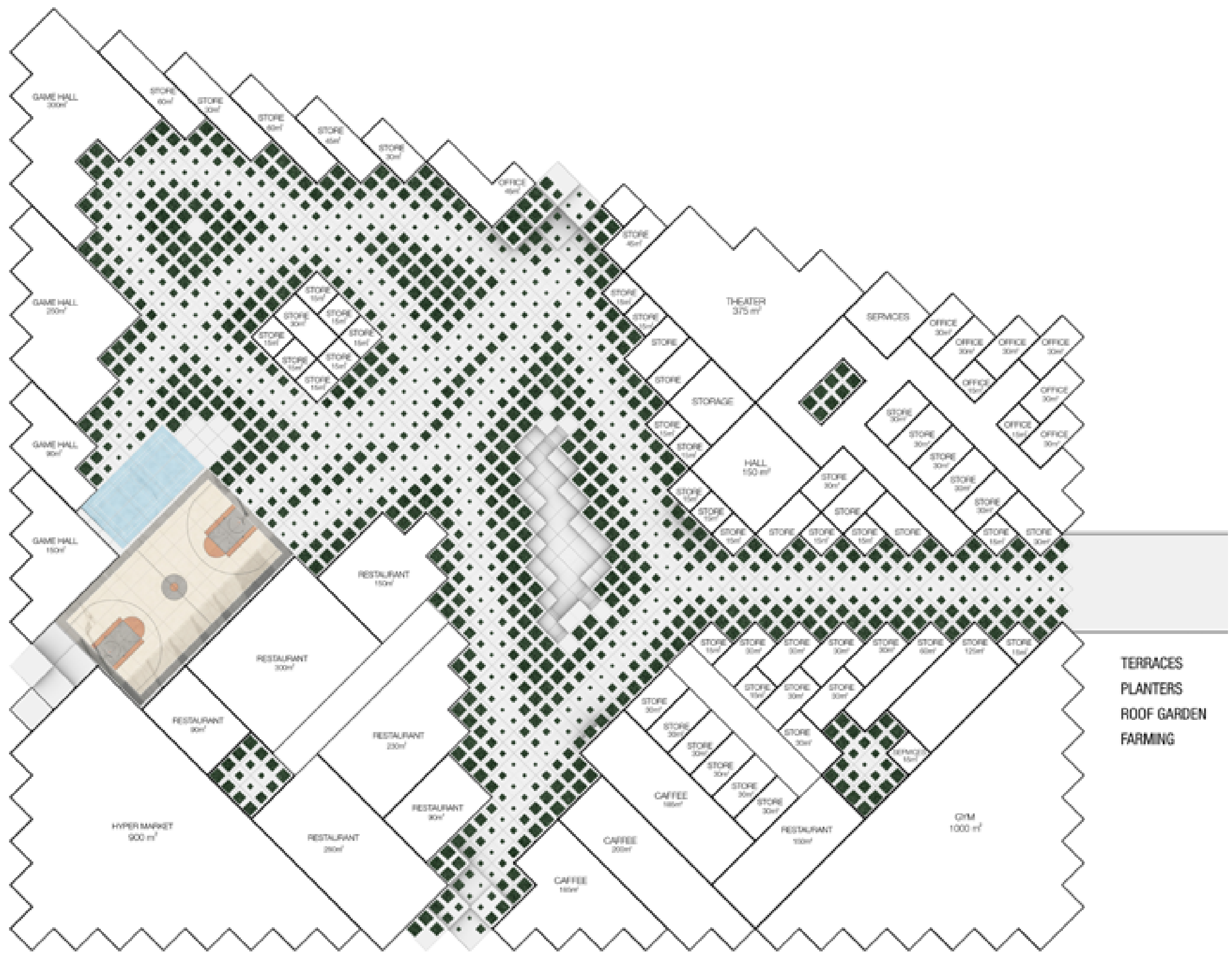
A Vision of Sustainable Diversity:
Our urban design project embraces diversity through a blend of recreational hubs, curated amenities, and cultural spaces fostering intellectual vibrancy.

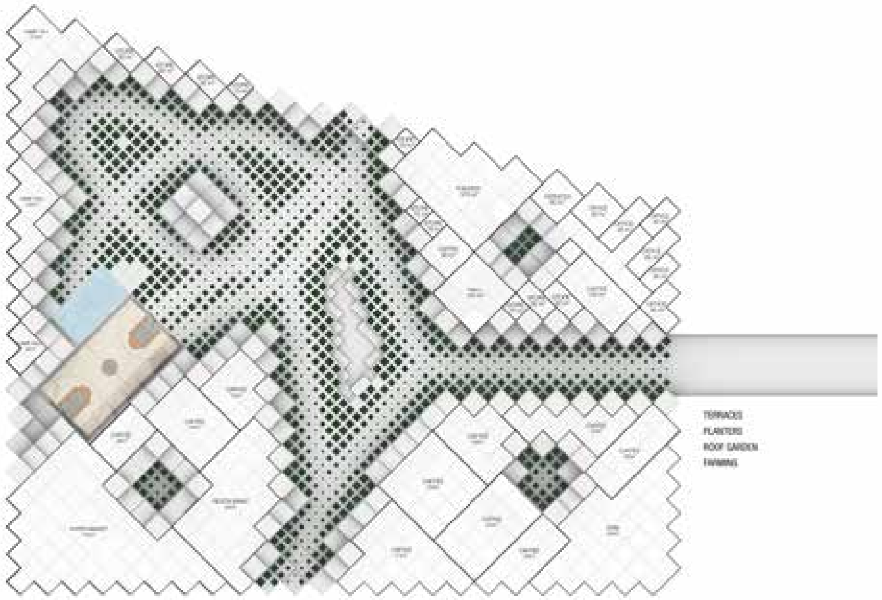


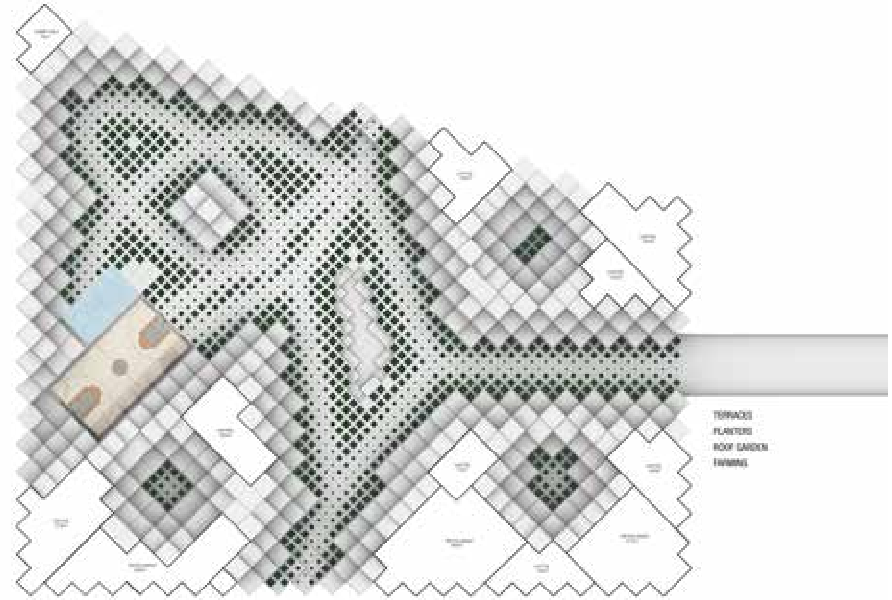


Biomimicry spaces, inspired by nature, serve an educational purpose, enriching the urban environment with a multifaceted and inclusive experience for public. It incorporates a mix of public spaces, amenities, and housing options, fostering a vibrant and inclusive environment that reflects the rich tapestry of the community.

This versatile architectural endeavor, revolutionizes urban functionality by seamlessly integrating a hierarchy of spaces. From diverse restaurant experiences to fitness facilities, professional office spaces, cultural theaters, bustling markets, and integrated parking solutions, the project reflects a harmonious synthesis of form and function. It optimizes urban functionality with distinct levels housing various functions, creating a harmonious and dynamic urban space.




TERRACES
PLANTERS
ROOF GARDEN
FARMING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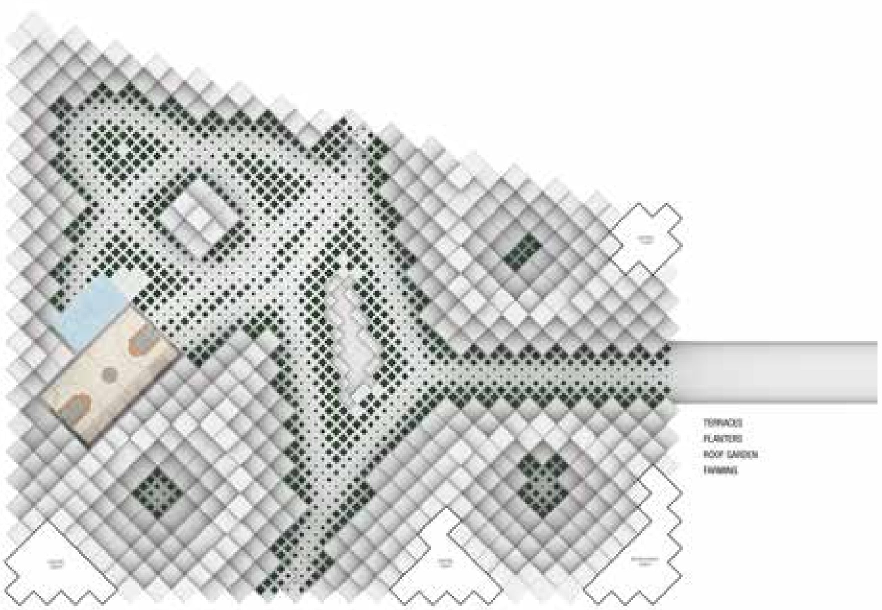
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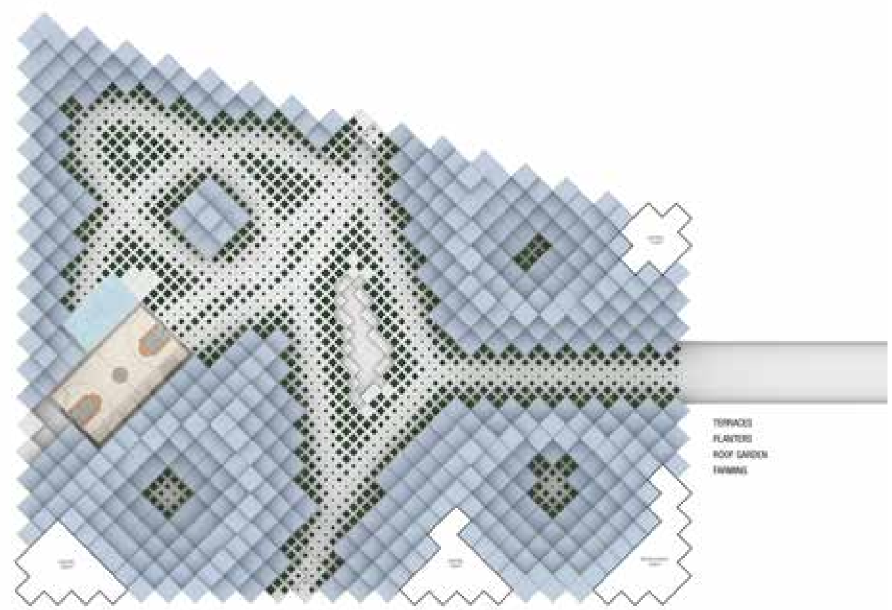
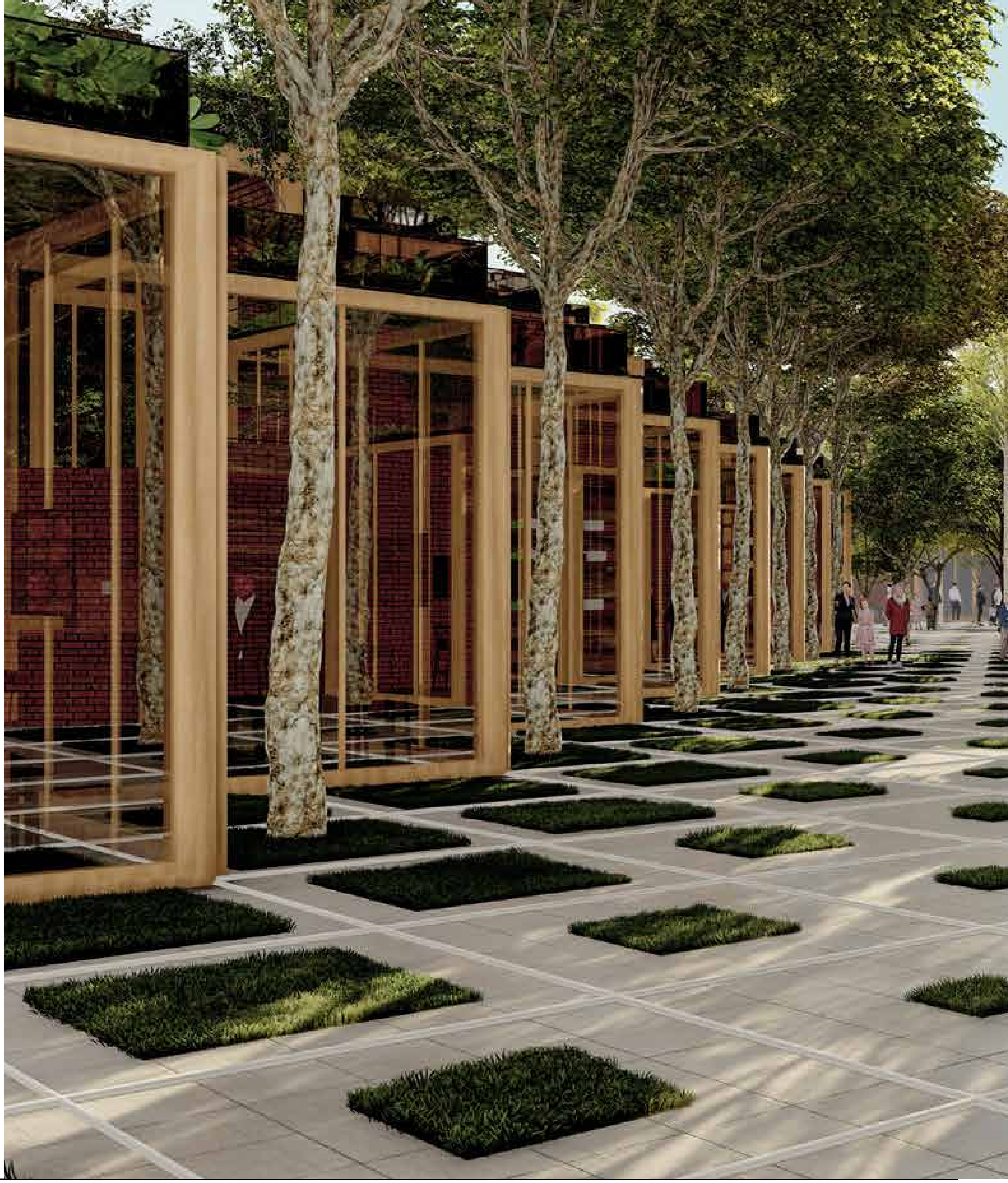
FARMING


TERRACES
PLANTERS
ROOF GARDEN
FARMING

The primary objective of our project aligns with the Clean Green Pakistan initiative, aiming to transform urban spaces into environmentally conscious and sustainable hubs by integrating green spaces, eco-friendly architecture, and promoting sustainable practices, the project strives to contribute significantly to the overarching goal of fostering a cleaner, greener urban environment within the context of the Clean Green Pakistan initiative.

This innovative project is distinguished by a green modular floor pattern, seamlessly blending urban functionality with biophilic elements. Large glass windows flood interiors with natural light, enhancing spatial aesthetics.



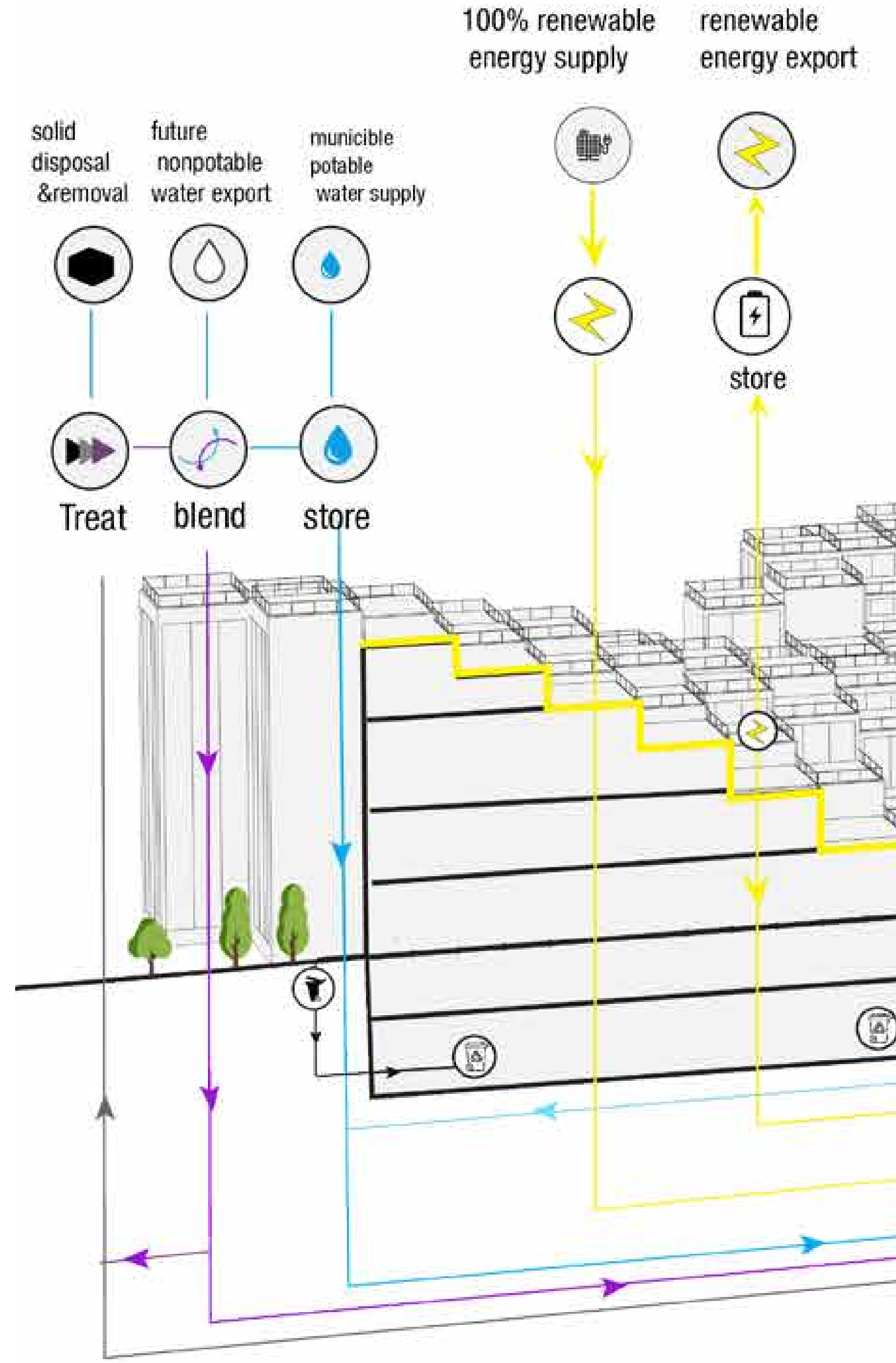
The incorporation of self-harvesting green roofs, along with intelligently designed public spaces, aligns with smart city principles, ensuring sustainability and technological advancement within the urban landscape.

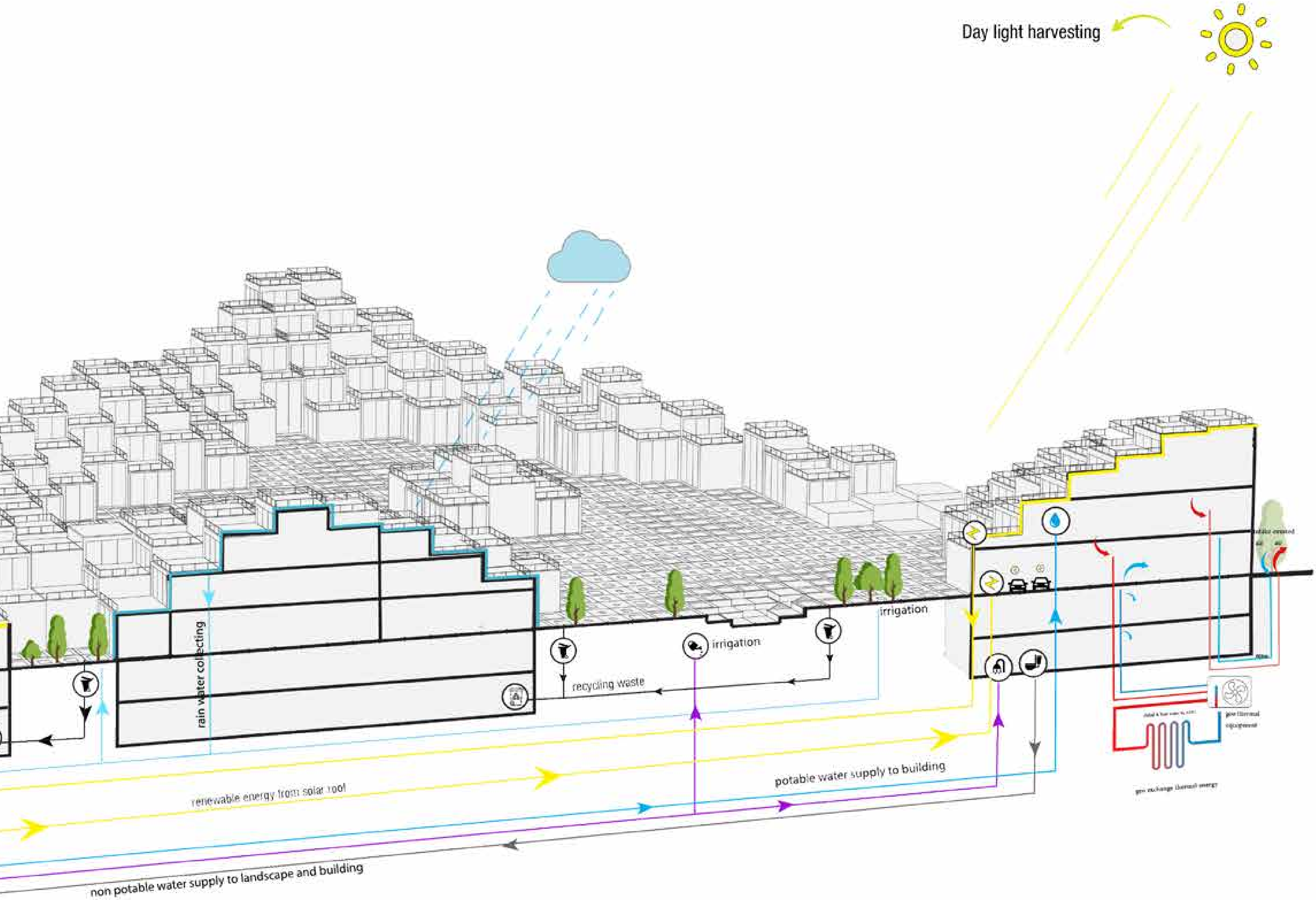
The project's modular architecture not only ensures unobstructed views and optimal sunlight for residents but also allows for adaptable axis configurations,enhancing the urban experience.

The strategic placement of terraces serve to optimize sightlines, allowing residents to enjoy panoramic views of the cityscape or natural surroundings.

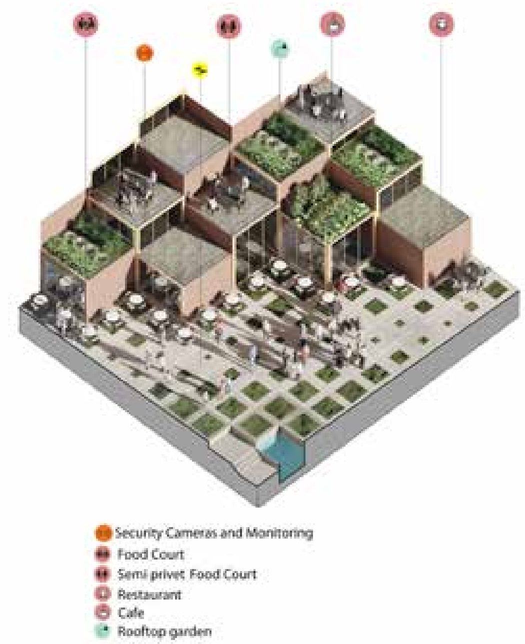
Sustainability is at the core :

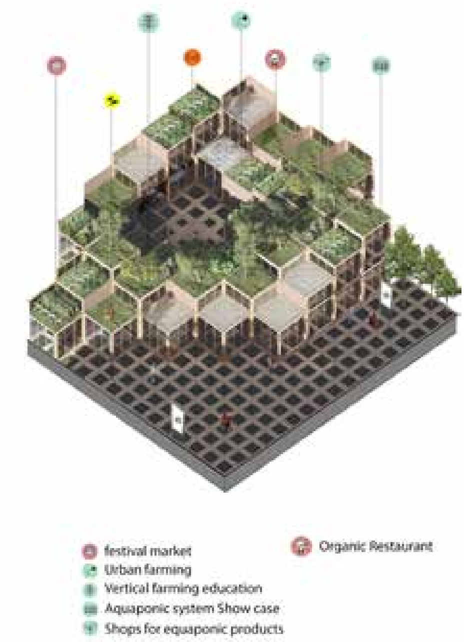
Central to our design philosophy is a profound commitment to sustainability, evidenced by a meticulous emphasis on integrating green spaces, deploying energy-efficient infrastructure, and utilizing eco-friendly materials. This ethos ensures a harmonious blend of functionality and environmental responsibility within our architectural endeavors.

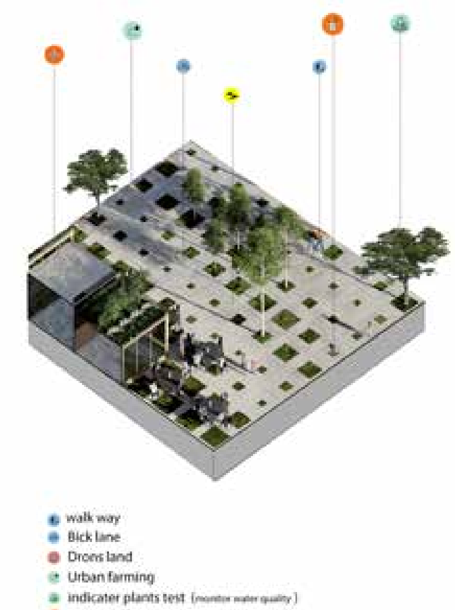



Day light harvesting
rain water collecting
irrigation
irrigation
recycling waste
renewable energy from solar roof
potable water supply to building
non potable water supply to landscape and building

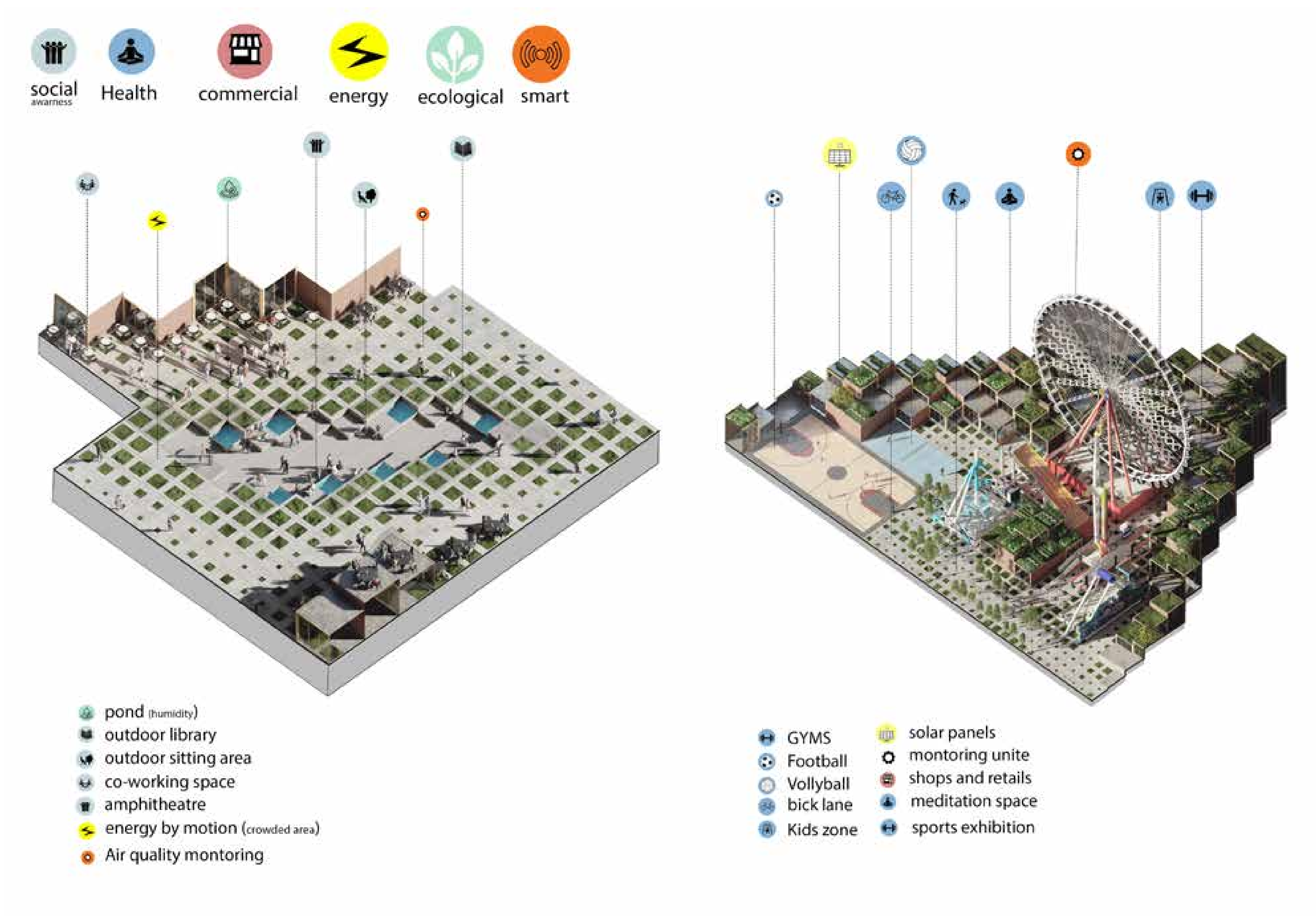
This project incorporates smart urban principles through cutting-edge technologies. It employs air quality monitoring systems, harnesses energy through motion, integrates solar panels for sustainable power generation, features an indoor aquaponic system for efficient agriculture, and utilizes smart trash systems for optimized waste management.







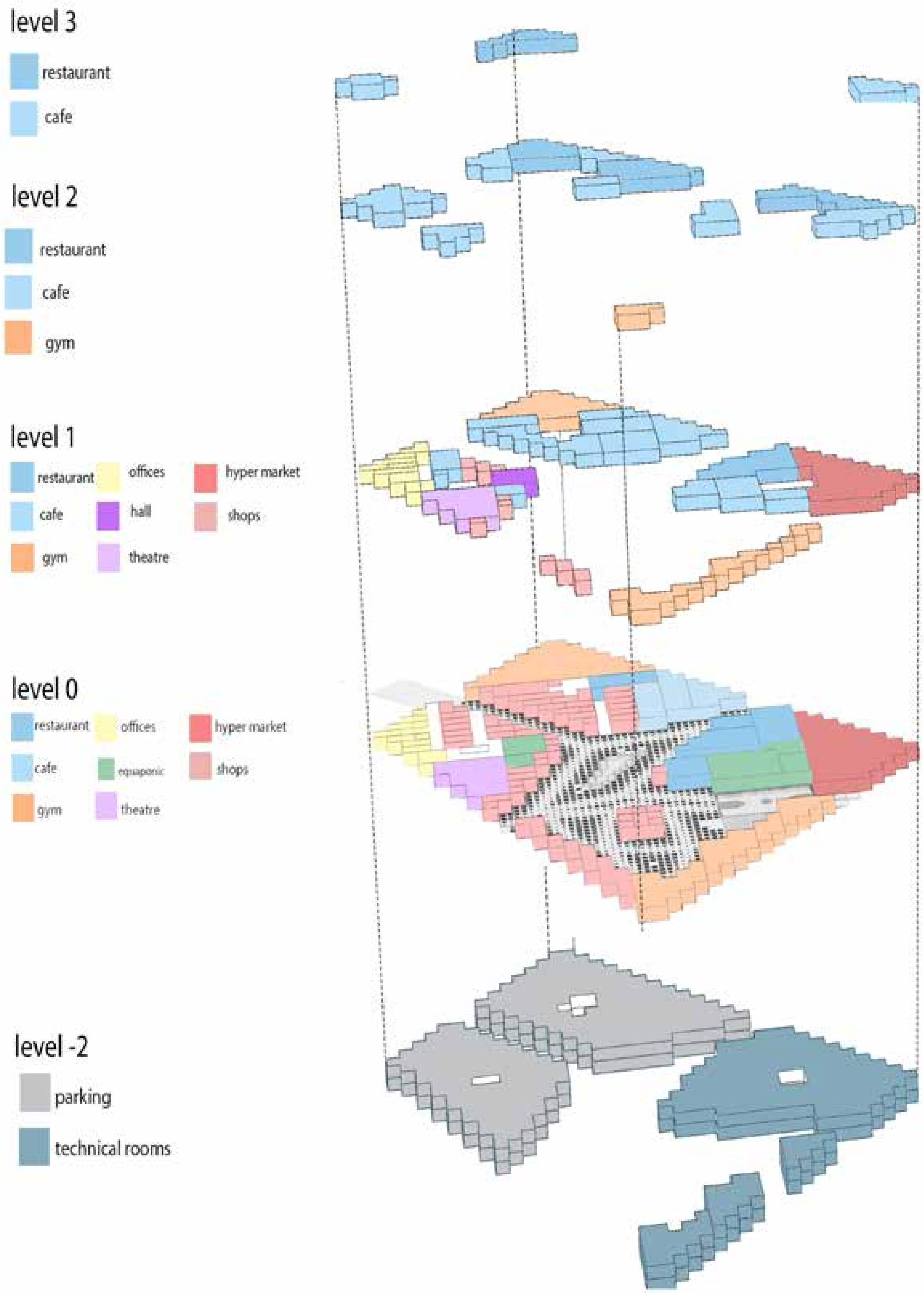
These initiatives collectively contribute to an intelligent, sustainable, and technologically advanced urban environment. Moreover, our design incorporates advanced sun and wind simulation techniques, ensuring optimal use of natural resources and creating comfortable, well-ventilated spaces.These collective measures underscore a commitment to minimizing the project's carbon footprint



This urban design features a ground-breaking floor pattern designed to mimic both human pathways and natural elements The modular layout fosters an intuitive urban experience by seamlessly integrating spaces for trees. These green pockets contribute to the harmonious integration of nature and architecture, representing a thoughtful convergence of functionality and biophilic principles for an enhanced urban landscape.

This synthesis is a testament to the project's commitment to enhancing the urban landscape through a conscientious convergence of functionality and biophilic design principles.

FUNCTION DIAGRAM



A Profound Exploration of Architectural Ingenuity through the Project's Green Roof Design. The green roof in this project offers multifaceted benefits, acting as a natural heat absorber to regulate temperatures and enhance energy efficiency. Simultaneously, it serves as an effective air cleanser, removing particulate matter and promoting cleaner air quality.

Beyond environmental advantages, the green roof features self-harvesting capabilities, contributing to sustainable practices. Moreover, it transforms into inviting public spaces, creating a harmonious blend of ecological functionality and community engagement within the urban setting.

Recoding Smart Oasis

Abu Dhabi ,UAE

Client: Dept. of Municiplaty & Transport

Size: 1,000m^2 / 10,000 SFT.

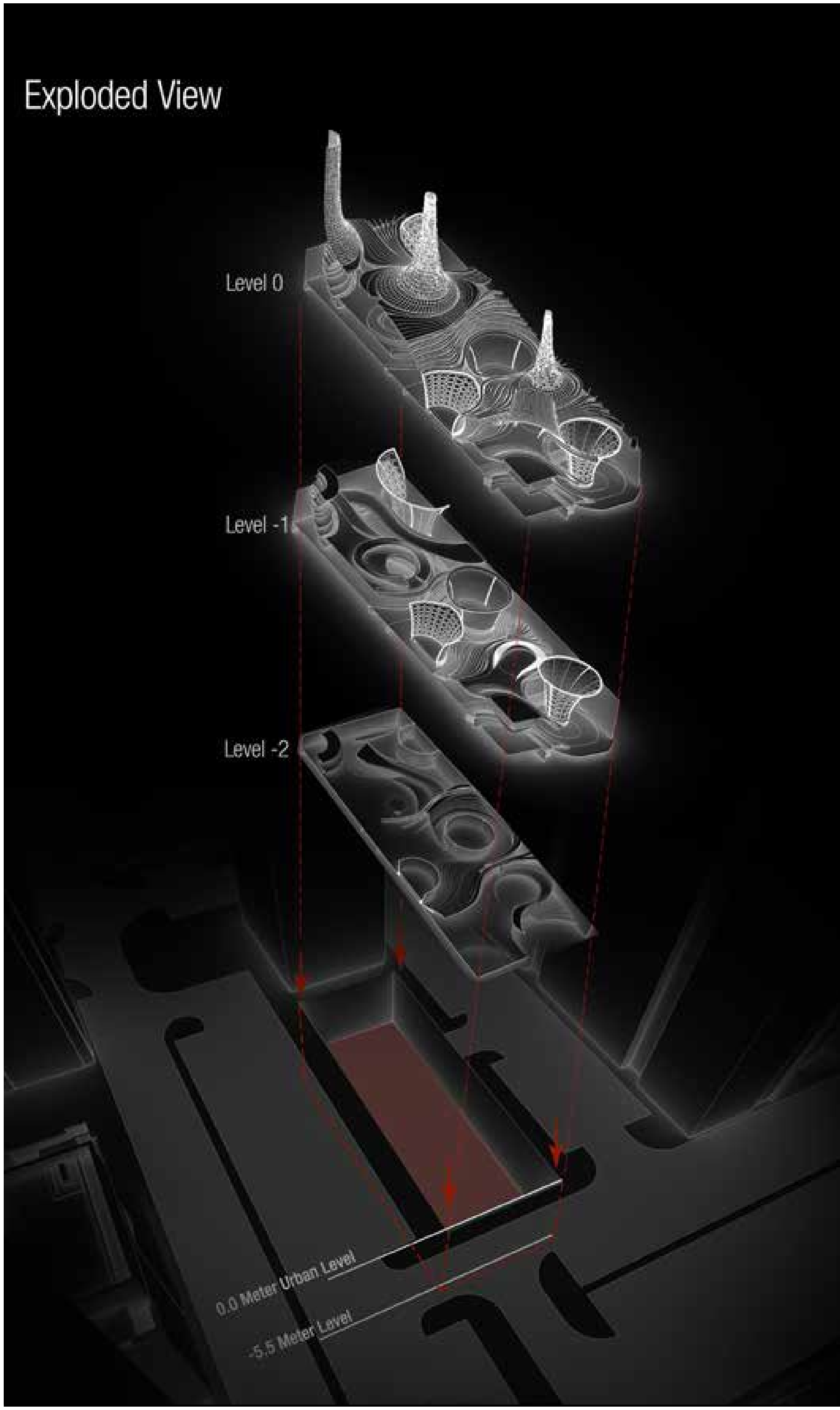
Status: Proposal

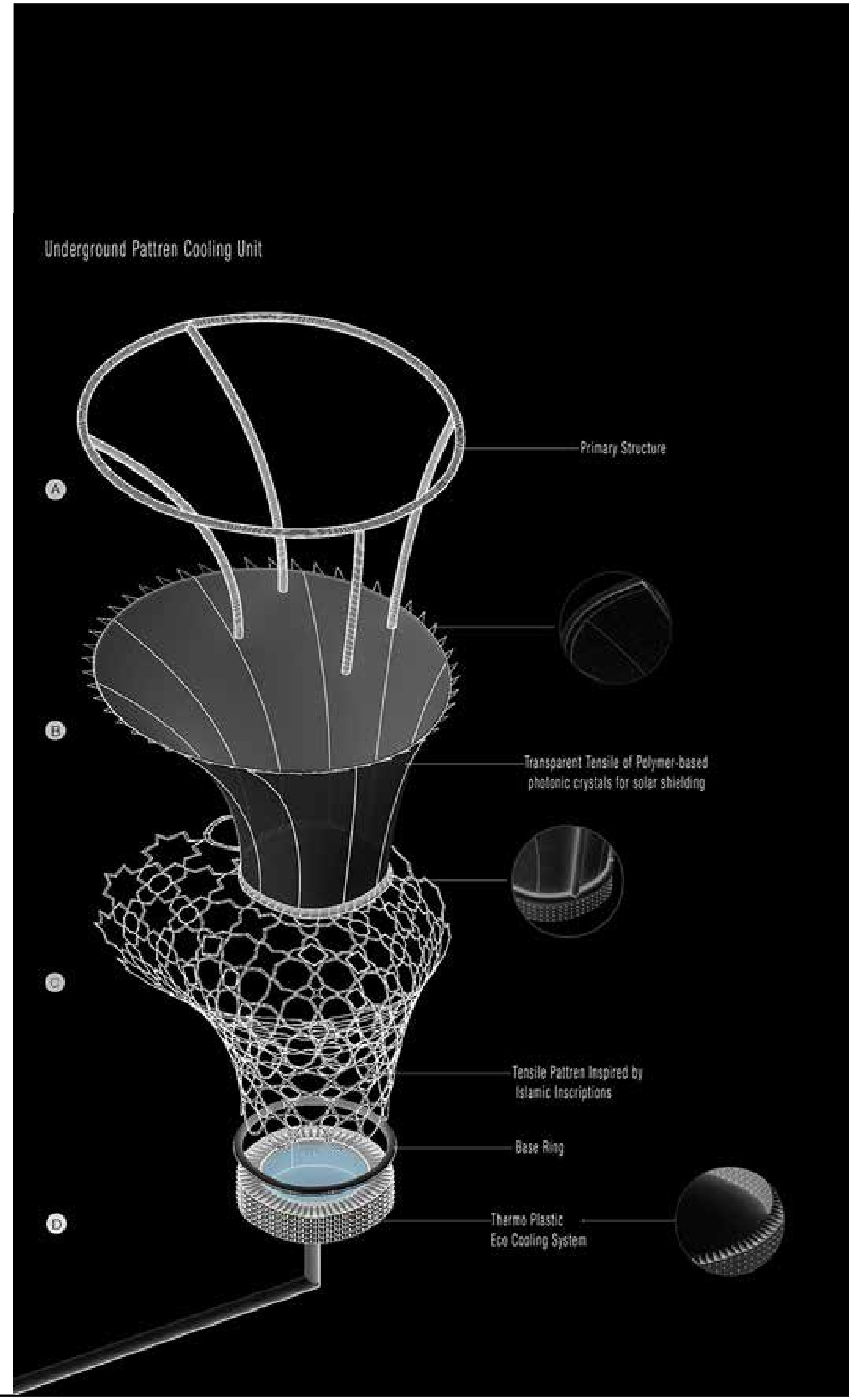
Typology: Urbanizm

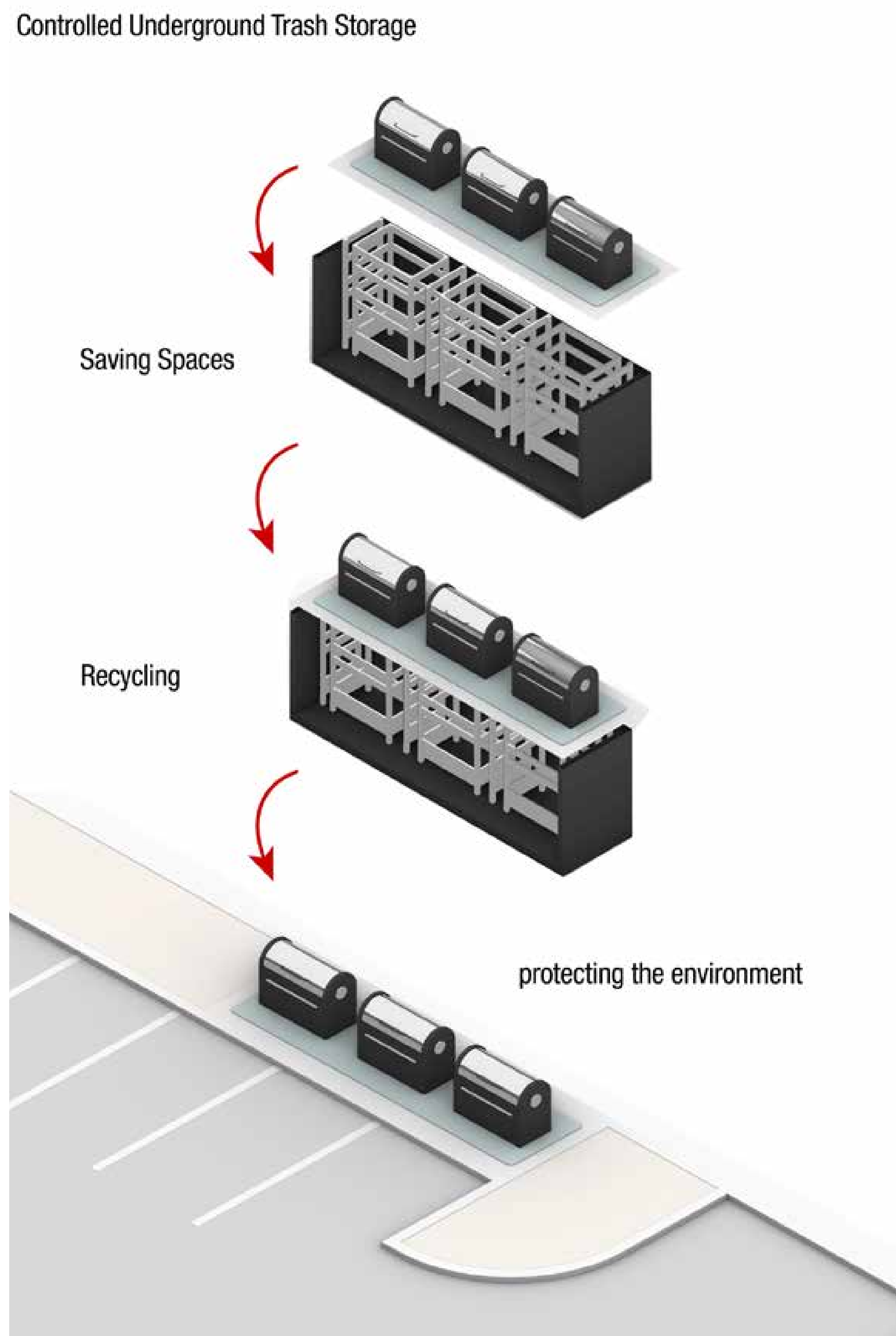
Year: 2020

RPA Studio pioneers a sustainable smart system for cooling urban public spaces, addressing the challenge of extreme climates and direct solar radiation in Abu Dhabi. Drawing inspiration from Traditional Arab House and Desert Oasis cooling systems, the intervention combines scientific research, advanced site analysis, anthropology, and social studies. This innovative approach transforms an urban area, creating a zero-energy outdoor cooling oasis that fosters a vibrant community through social, cultural, and entertainment activities.

Due to the Urban Heat Island Effect, the city center of Abu Dhabi is estimated to be several degrees Celsius warmer than the surrounding natural environment; in addition to high humidity levels, high surrounded buildings and direct solar effect. This made activities spent outdoors extremely limited. Proposed systems in this case, consumes unaccounted energy amount to cool and cover these plazas which mostly affect urban environment and people.


Exploded View
Level 0
Level -1
Level -2
0.0 Meter Urban Level
-5.5 Meter Level


Underground Pattren Cooling Unit
Primary Structure
A
B
Transparent Tensile of Polymer-based
photonic crystals for solar shielding
C
Tensile Pattren Inspired by
Islamic Inscriptions
Base Ring
D
Thermo Plastic
Eco Cooling System


Controlled Underground Trash Storage
Saving Spaces
Recycling
protecting the environment

This innovative system represents a pioneering paradigm shift in urban thermal comfort, embodying a zero-energy approach to outdoor cooling. Seamlessly blending into the urban landscape, the intervention spans both underground and rooftop spaces within the plaza, embracing biomimicry principles and sustainable design factors. Its regenerative features not only cool the environment but also harness renewable energy sources to ensure a minimal ecological footprint. Tailored to meet the diverse needs of the community, the system serves as a catalyst for various social, cultural, and entertainment activities, fostering a vibrant and inclusive atmosphere. The gracefully flowing curves of the design captivate attention, creating an enticing and dynamic urban space that beckons exploration in the heart of the city neighborhood.

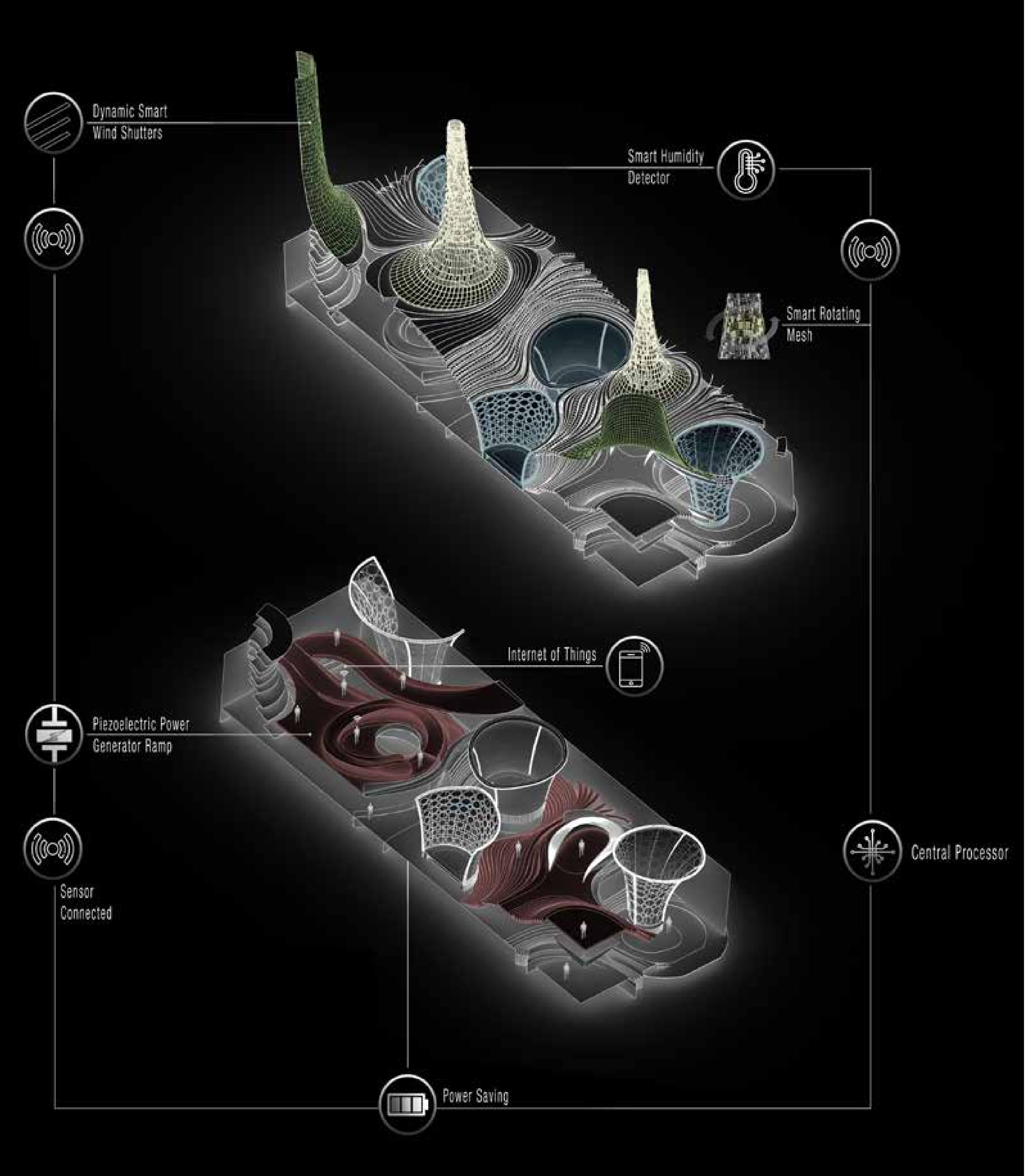
Site Parameters were detected through advanced site analyzations, several environmental problems such as hot and humid atmosphere, the extreme heat stress and high air temperature made the challenge wider, on the other hand, the lack of walking spaces, and the need of an open outdoor green space for working people to have break and socialize is a big investment point, if achieved by a careful considered design intervention to the plaza.

Cool Abu Dhabi is an urban outdoor self-sufficient working system, using multiple responsive working elements developed from traditional methods and using today's Smart Technology. Relying on 5 main components: The Cooling system, Sustainable materials, Alternative Energy Systems, Culture and activities, and green components. These Systems are revealed using an optimized typology for each unit such as Underground Cooling System, Eco Coolers, and Renewed Wind catchers "The Malqaf".

Taking cues from the iconic Malqaf, a traditional wind tower design prevalent in Arabic houses, the system incorporates passive cooling techniques. The design mimics the natural ventilation principles of the Malqaf, channeling prevailing winds to create a cooling effect within the public spaces. Additionally, the system leverages the concept of desert oasis cooling, where evaporative cooling and shade play crucial roles in maintaining a comfortable environment. Smart sensors monitor temperature, humidity, and wind patterns, adjusting the cooling mechanisms in real-time to optimize energy efficiency.

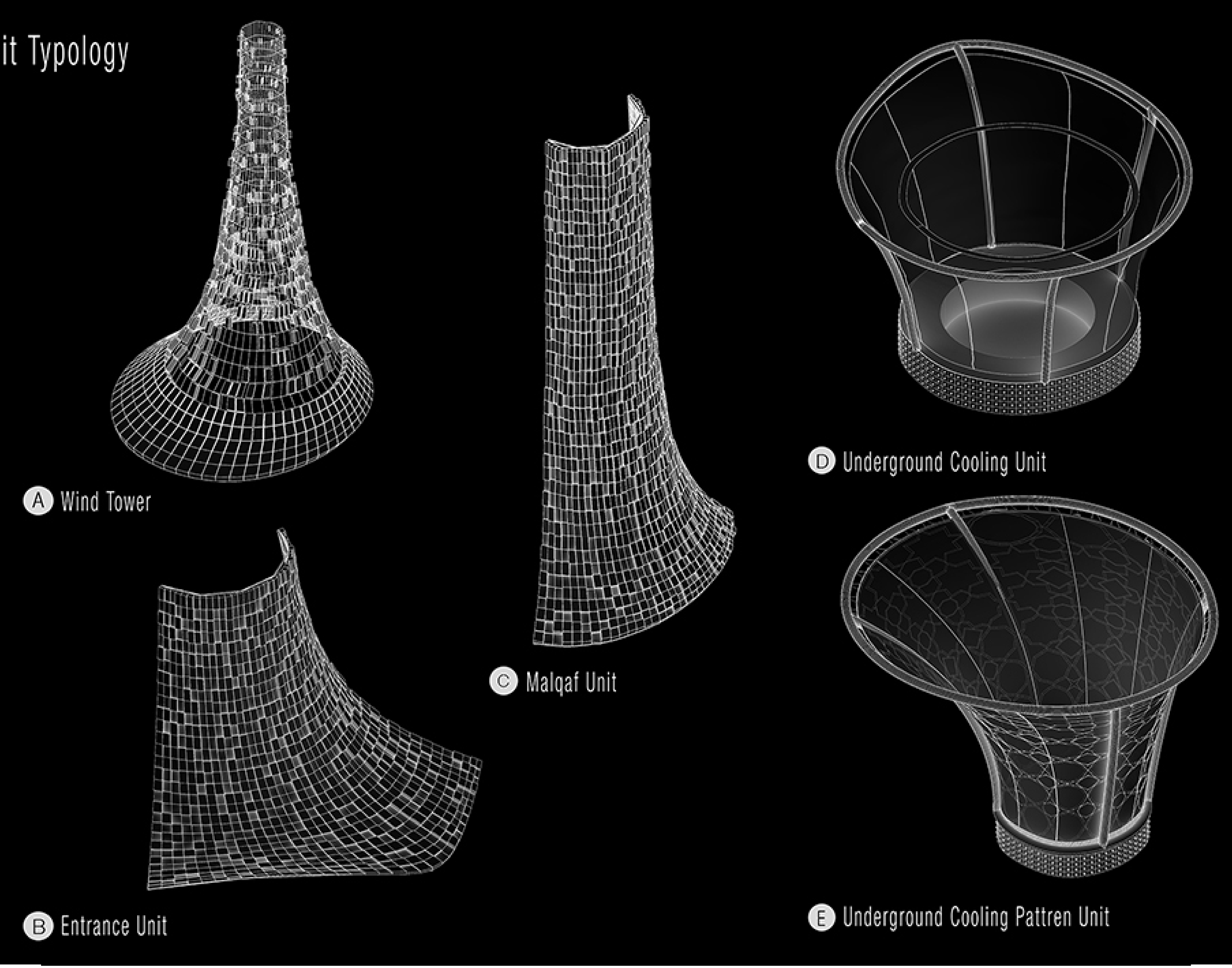
The design elements of this innovative system are anchored in the integration of four strategically placed wind towers and a centralized cooling unit, offering a holistic approach to thermal comfort and sustainability. The four wind towers are thoughtfully distributed across the land, each strategically positioned to maximize the harnessing of natural airflow. These wind catchers create wind flows between the roof top and the underground, by capturing the hot external air and directing it to the internal site and the roof top through a combination of materials consisting of Primary steel structure, wire cooper mesh, and cool bricks.

Cooper wire meshes extract humidity from the external environment; while the brick cools the flowing air through the material, therefore, cooling the surrounding environment on the roof top. The wind catcher has a downward opening to direct the flowing wind to the underground through cool bricks which react with evaporation, consisting of 3D printed porous ceramic bricks set in mortar, each brick absorbs water like a sponge and is constructed as a three-dimensional lattice allowing air to move through. High raised Wind towers as well are built parallel to the wind catchers from the same responsive materials, built on the roof top to provide shading, and extract humidity from the external weather on the surface of wire meshes to cool the flowing air by evaporation using Distributed cool bricks, allowing natural sun light radiation to the underground level through its transparency. Cooling Unit works as an Artificial Oasis, it was envisioned to be built in the centre of the site on the underground level. The diameter of the oasis is 4 meters while the depth is 40 cm. The Oasis will work as an evaporative cooling system. As water falls smoothly from the roof top centre pond into the artificial oasis on the underground level. It will work as a water body for the roof top and as an evaporative system for the plaza.



Un

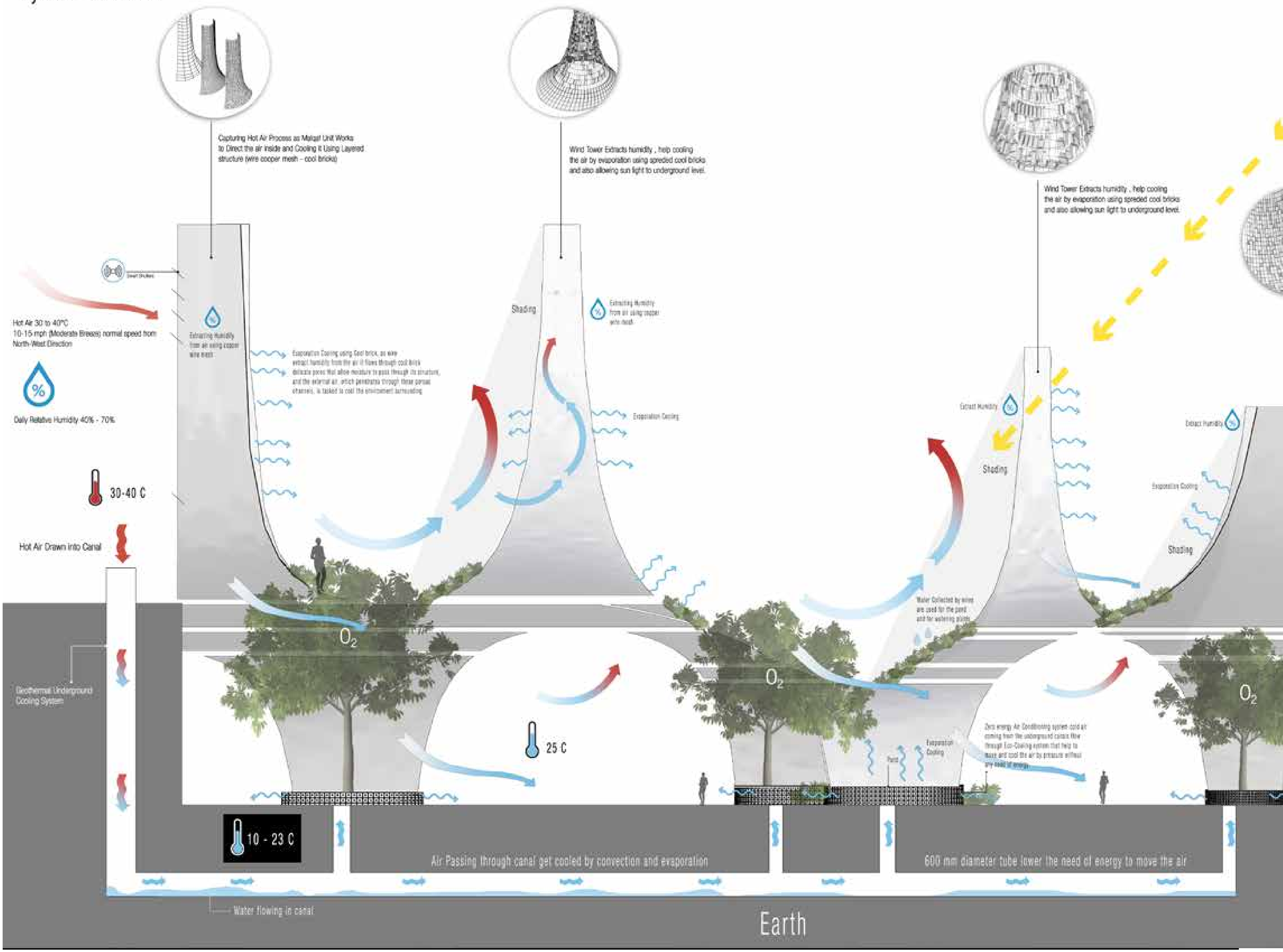
Relying on a low-tech method used in the base of the cooling unit ,consist of a basic a bottle shape like called zero energy eco-coolers , applied on the bottom of the pillars on a height of 1.5 meters to allow the underground cooling canal to flow through it. Adding the Photonic Tensile Fabric coated by polyester will allow air flow to move through the bottom part of the pillar which is separated from the upper part by the photonic tensile. In every Pillar there is a tree planted to provide the built environment concept and evaporative cooling system to the site. **There are four eco-cooler pillars, distributing air flow and cool air to the underground site.** The upper part of the pillar is made up of photonic tensile material, while the bottom part is made up using primary structural material and Thermal-Smart Pro Tube.

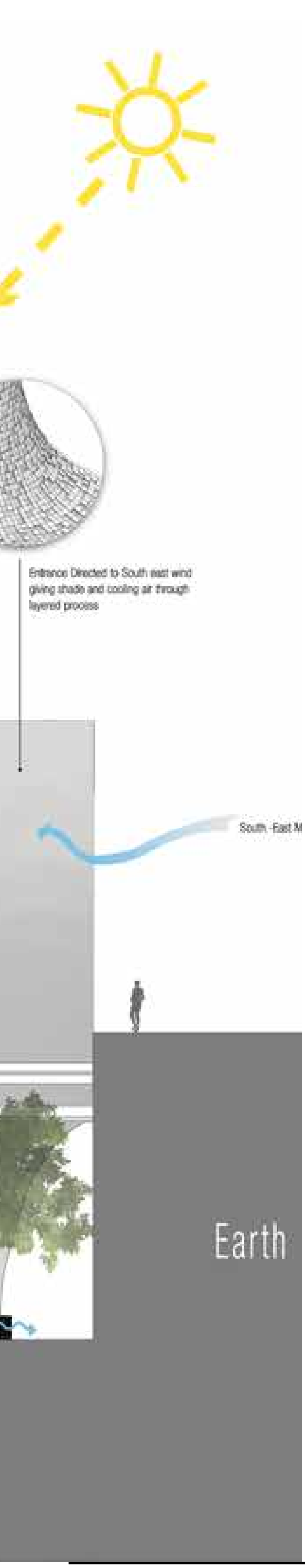

it Typology
A Wind Tower
B Entrance Unit
C Malqaf Unit
D Underground Cooling Unit
E Underground Cooling Pattren Unit

The wide cylinder openings on the outside, catches the warm air to bring it into and through the small neck tube and release it as cool air. As the area of the tube decreases the pressure increases to cool down the air temperature and suppress it to the directed area. Eco cooler pillars are connected to underground cooling canals openings to provide extra cooling to the system. **The cooling canal is 40 meters long and 65 meter diameter made of Thermal-Smart which is an innovative insulating material, made of high-grade thermoplastic foam, suitable for heating**, cooling and drinking water. It inhibits loss of energy in pipes, minimizes noise from the flow and prevents from mechanical damage. With an air flow pump it ensures the distribution of the cooled air, providing the underground water (10 -23 degrees) to cool the external hot air and distribute it to the eco cooler's pillars equally. Cooling canals catches the external warm wind to direct it to the underground geothermal system; therefore the cooled wind is guided to the eco cooler pillars through the provided openings.

People have access to both levels easily, providing shaded areas as the lattice ceiling will be the roof top of the system to provide natural light and shading to the underground level. Fluid Kerto-Q Laminated veneer lumber (LVL), this material made of bonded softwood veneers for use in buildings and bridges as structural or non-structural elements. Flowing along and giving a semi-transparent experience, by using Double Low-E Glass designed to reduce the amount of ultraviolet and infrared radiation that can pass through glass without reducing the amount of visible light transmitted, and stays tempered as well, allowing pedestrians' movement and activities on the roof top. Car Parking areas contribute in the heat island issue of Abu Dhabi, these areas take wide urban spaces and emit more heat to the surrounding. In order to work with this issue the parking lot was covered with an integrated smart unit to benefit from direct solar radiation made from cooper wire mesh and solar cells covered by Tensile Fabric. **The solar cells will be used as an alternative energy provider to the site services and the surrounding areas.** In addition the panel's to absorb solar radiation to generate power for heating, and car charging service.

System Section



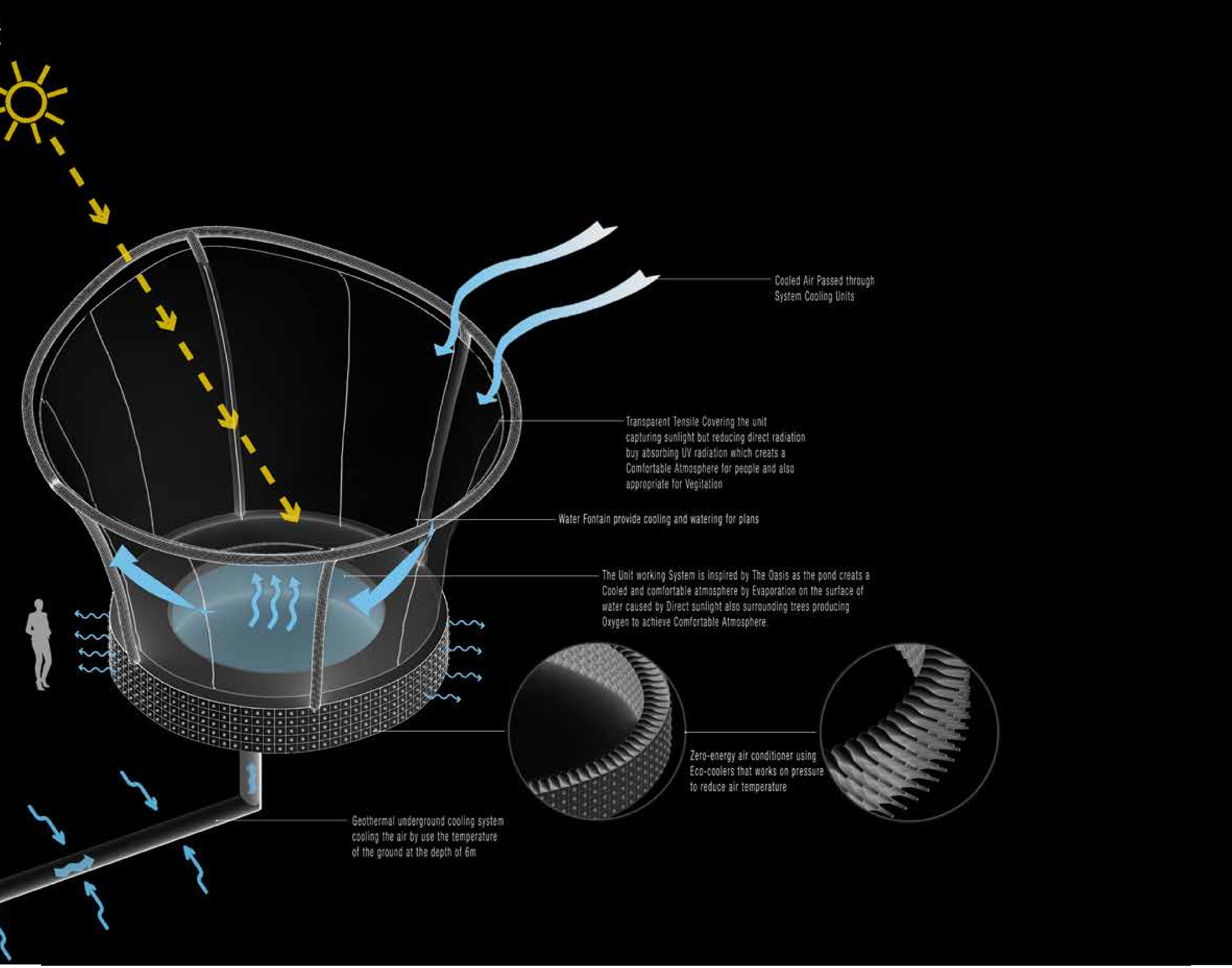


Re-Coding Smart Oasis Rely on Smart Technology to keep the system responding and working under control, benefiting from the movement of people to generate power from pressure. The Piezoelectric transducers used as an alternative energy systems to the site's service. Moreover, Sensation's sensor solutions provide detailed and reliable data on key environmental parameters such as humidity, temperature, volatile organic compounds (VOCs), particulate matter (PM2.5), and CO2. Environmental Sensing opens up new possibilities to create smarter devices that improve human thermal comfort and well-being as well as increase energy efficiency in a wide variety of applications. RPA studio aim to exploit the possibilities of using this smart technique for sustainable approaches, also by studying a new ways to get rid of trash containers which have bad emissions on the environment. In this technique Containers are divided according to the type of waste stored automatically under the ground, which facilitates the recycling process.

The artificial oasis rises from green trees, such as Ghaf and Palm trees. The vegetation have an important role encouraging people to start planting small plants and flowers such as rosemary, Kale, Okra, Broccoli, Romanesco Cauliflower, corn, and eggplants, which are suitable for the hot weather. Central to our design philosophy is the idea of community engagement.

The Smart Oasis is not merely a cooling system; it is a vibrant hub of social and cultural activities. By incorporating green spaces, walkways, and gathering areas, we have created a multifunctional environment where people can work, socialize, and unwind. This oasis not only cools the surroundings but also warms the hearts of those who visit, fostering a sense of belonging and community.

"We at RPA Studio envisioned a sustainable masterpiece for Abu Dhabi — a fusion of tradition and innovation. The four wind towers, inspired by our rich Arabic heritage, adapt gracefully with the wind, This project isn't just about architecture; it's a commitment to a harmonious coexistence with nature, creating an urban sanctuary that not only cools but captivates, a testament to the timeless elegance of sustainable design."


Cooled Air Passed through System Cooling Units
Transparent Tensile Covering the unit capturing sunlight but reducing direct radiation buy absorbing UV radiation which creats a Comfortable Atmosphere for people and also appropriate for Vegitation
Water Fontain provide cooling and watering for plans
The Unit working System is inspired by The Oasis as the pond creats a Cooled and comfortable atmosphere by Evaporation on the surface of water caused by Direct sunlight also surrounding trees producing Oxygen to achieve Comfortable Atmosphere.
Zero-energy air conditioner using Eco-coolers that works on pressure to reduce air temperature
Geothermal underground cooling system cooling the air by use the temperature of the ground at the depth of 6m

PLANNING

Master Planning

Future City

Lahore ,Pakistan

Client: IAN Contracting

Size: 22 Hectares

Status: Proposal

Typology: Office , Residential , Retail

Year: 2022

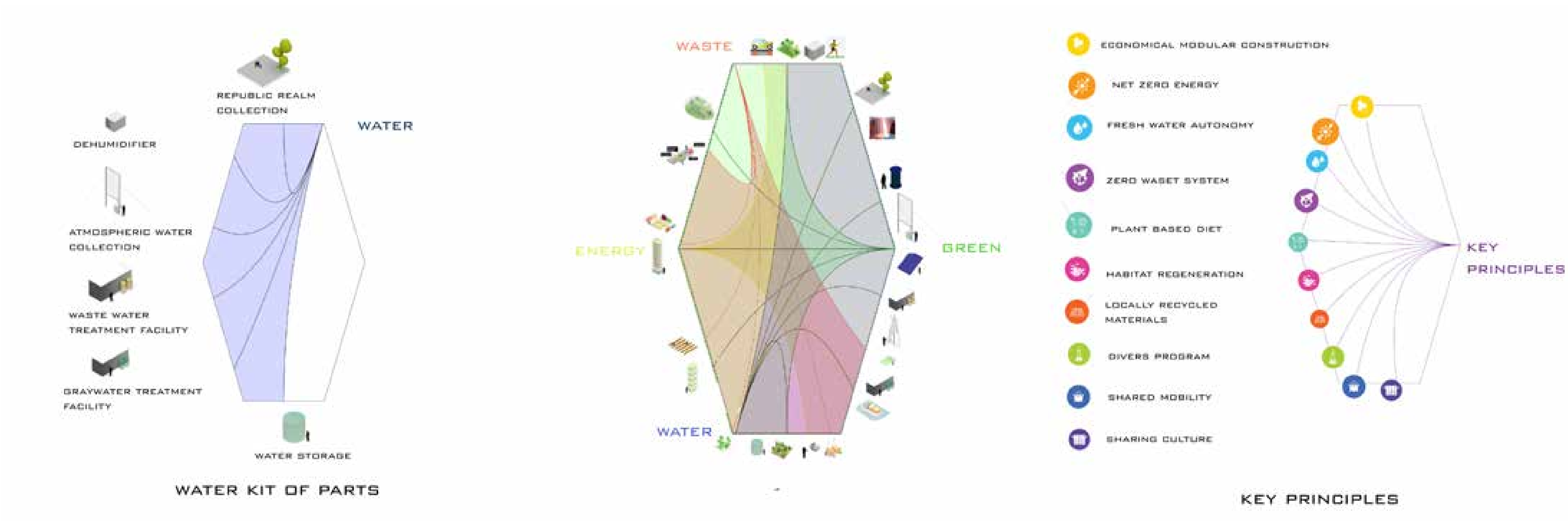
Aligned with Pakistan's "Clean Green Pakistan" initiative, Future City presents a pioneering 22-hectare urban development proposal in Lahore. This project champions eco-friendly architecture, sustainable energy sources, and innovative waste management practices.

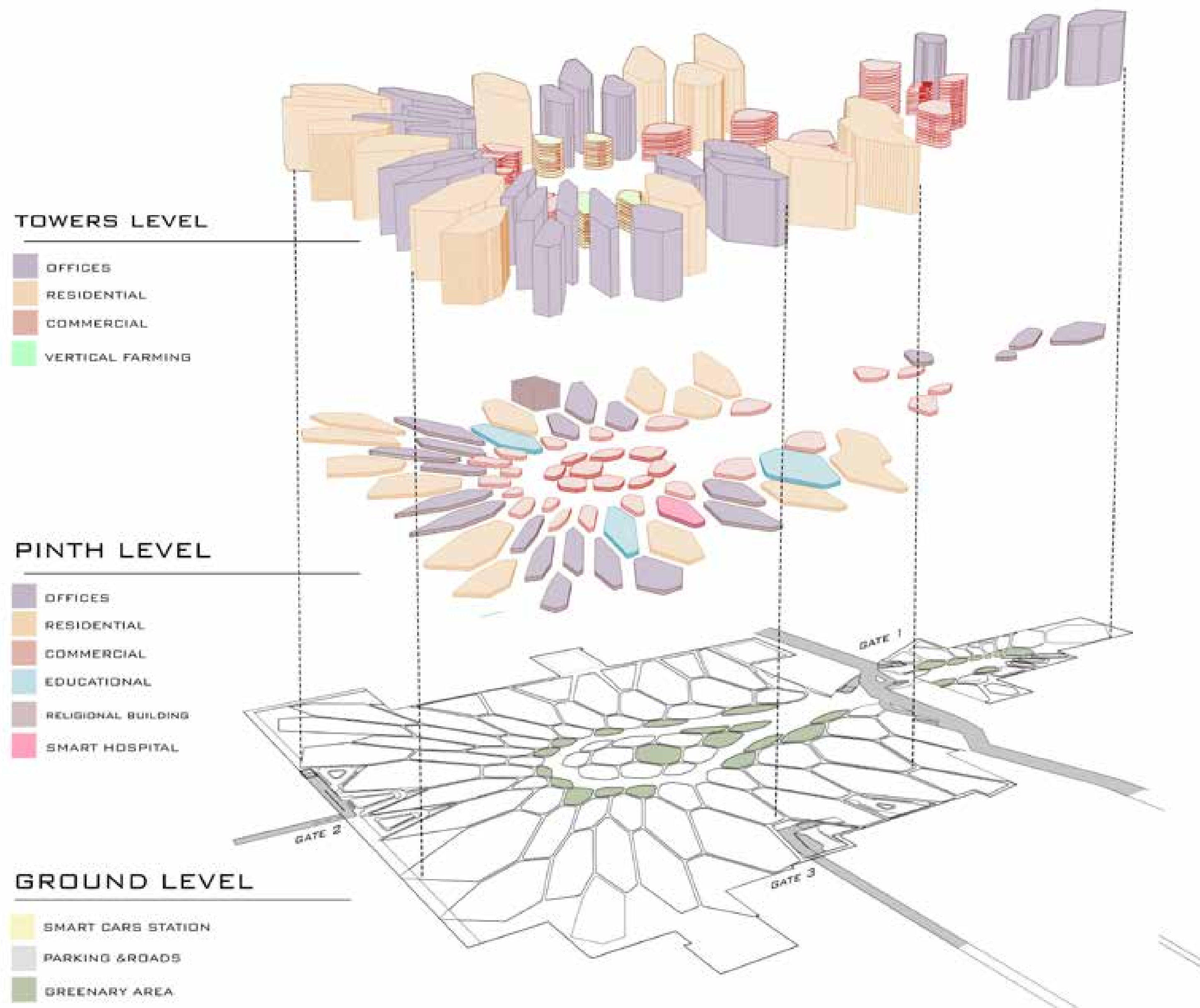
Future City envisions a thriving mixed-use space for a diverse community. Residents will enjoy a seamless blend of residential areas, smart schools, hospitals, and commercial hubs, fostering a dynamic live-work-play environment.

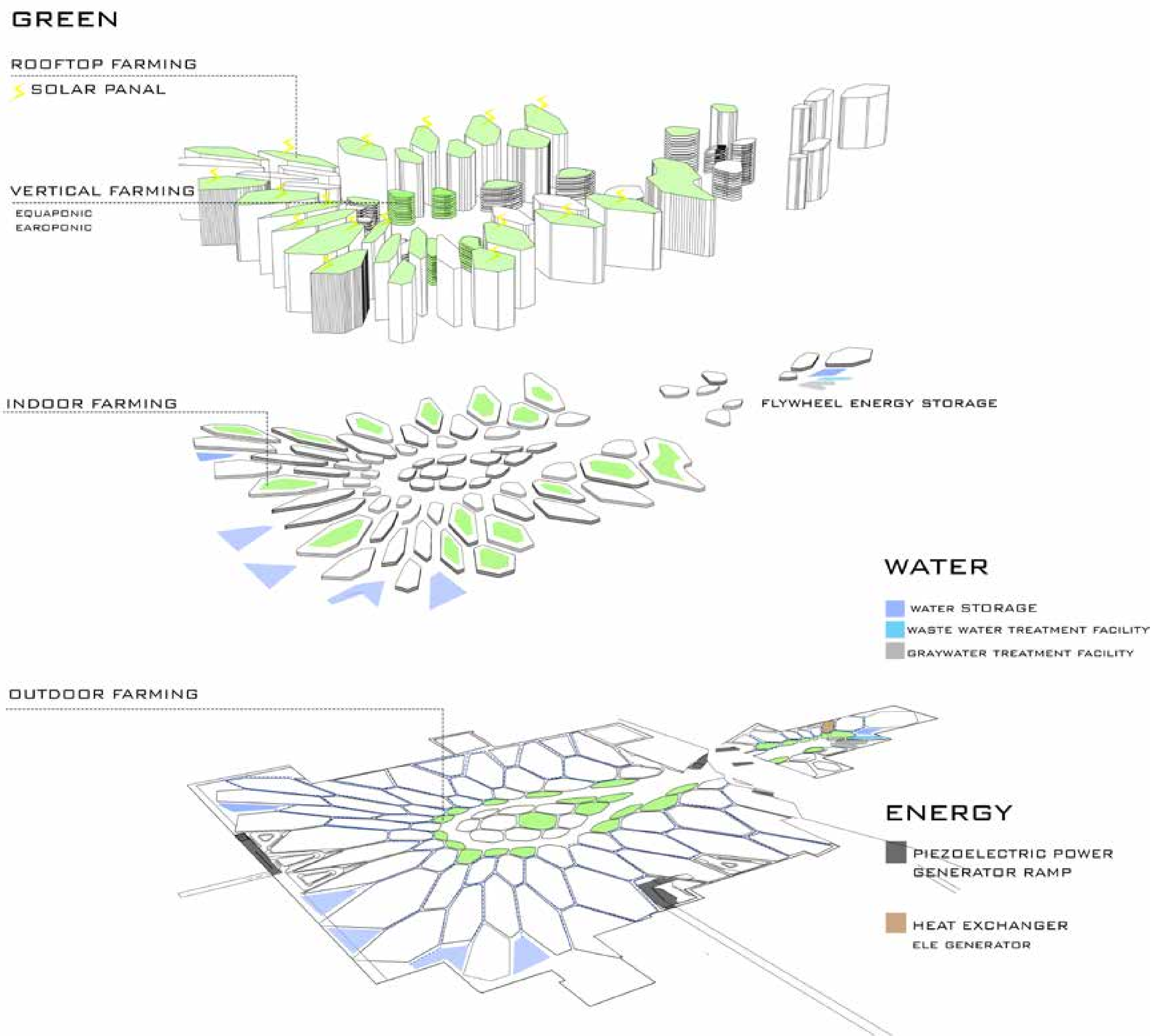
Future City's design employs a hexagonal module inspired by the rich tradition of Islamic-influenced geometries. This selection transcends mere aesthetics, offering a foundation for optimal space utilization, adaptable planning, scalability for future growth, and ease of replication for sustainable construction. The hexagons are strategically arranged in a hive grid pattern, subsequently subjected to parametric distortion through an axial curve. This innovative approach dynamically adjusts the module's height and scale, resulting in a visually striking and functionally diverse urban environment.

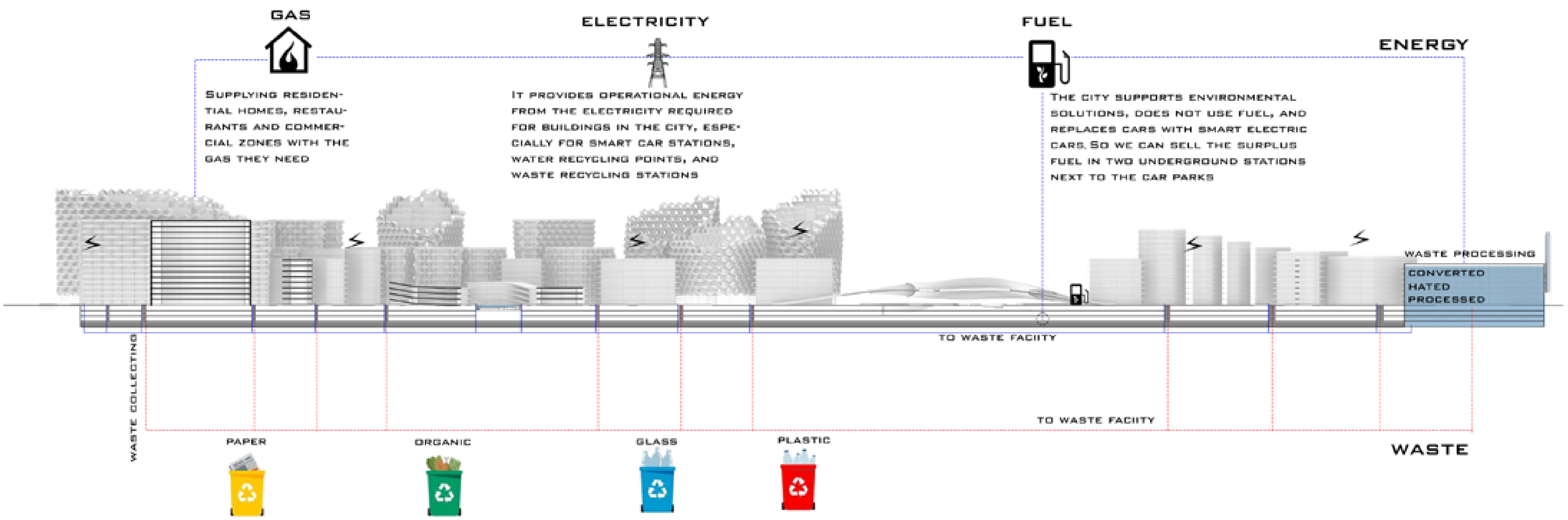
Future City embodies a commitment to sustainable urban development. Aligned with UN-Habitat's New Urban Agenda, the project actively supports the UN's 17 Sustainable Development Goals. This focus translates into a meticulous design that prioritizes long-term sustainability, fostering a model city for the futur

Future City embodies a commitment to sustainable urban development. Aligned with UN-Habitat's New Urban Agenda, the project actively supports the UN's 17 Sustainable Development Goals. This focus translates into a meticulous design that prioritizes long-term sustainability, fostering a model city for the futur



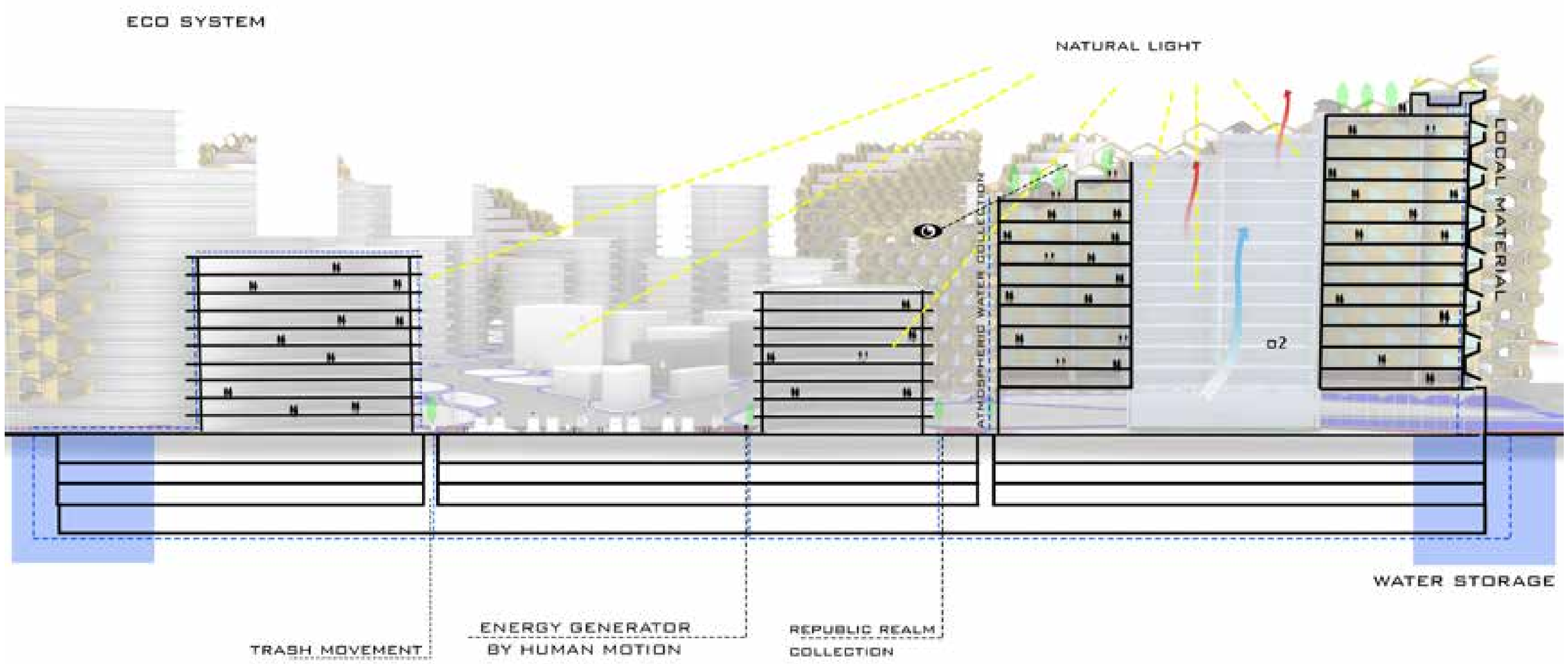

TOWERS LEVEL
OFFICES
RESIDENTIAL
COMMERCIAL
VERTICAL FARMING
PINTH LEVEL
OFFICES
RESIDENTIAL
COMMERCIAL
EDUCATIONAL
RELIGIONAL BUILDING
SMART HOSPITAL
GROUND LEVEL
SMART CARS STATION
PARKING &ROADS
GREENARY AREA
GATE 1
GATE 2
GATE 3


GREEN
ROOFTOP FARMING
SOLAR PANAL
VERTICAL FARMING
EQUAPONIC
EAROPONIC
INDOOR FARMING
FLYWHEEL ENERGY STORAGE
WATER
WATER STORAGE
WASTE WATER TREATMENT FACILITY
GRAYWATER TREATMENT FACILITY
OUTDOOR FARMING
ENERGY
PIEZOELECTRIC POWER GENERATOR RAMP
HEAT EXCHANGER
ELE GENERATOR

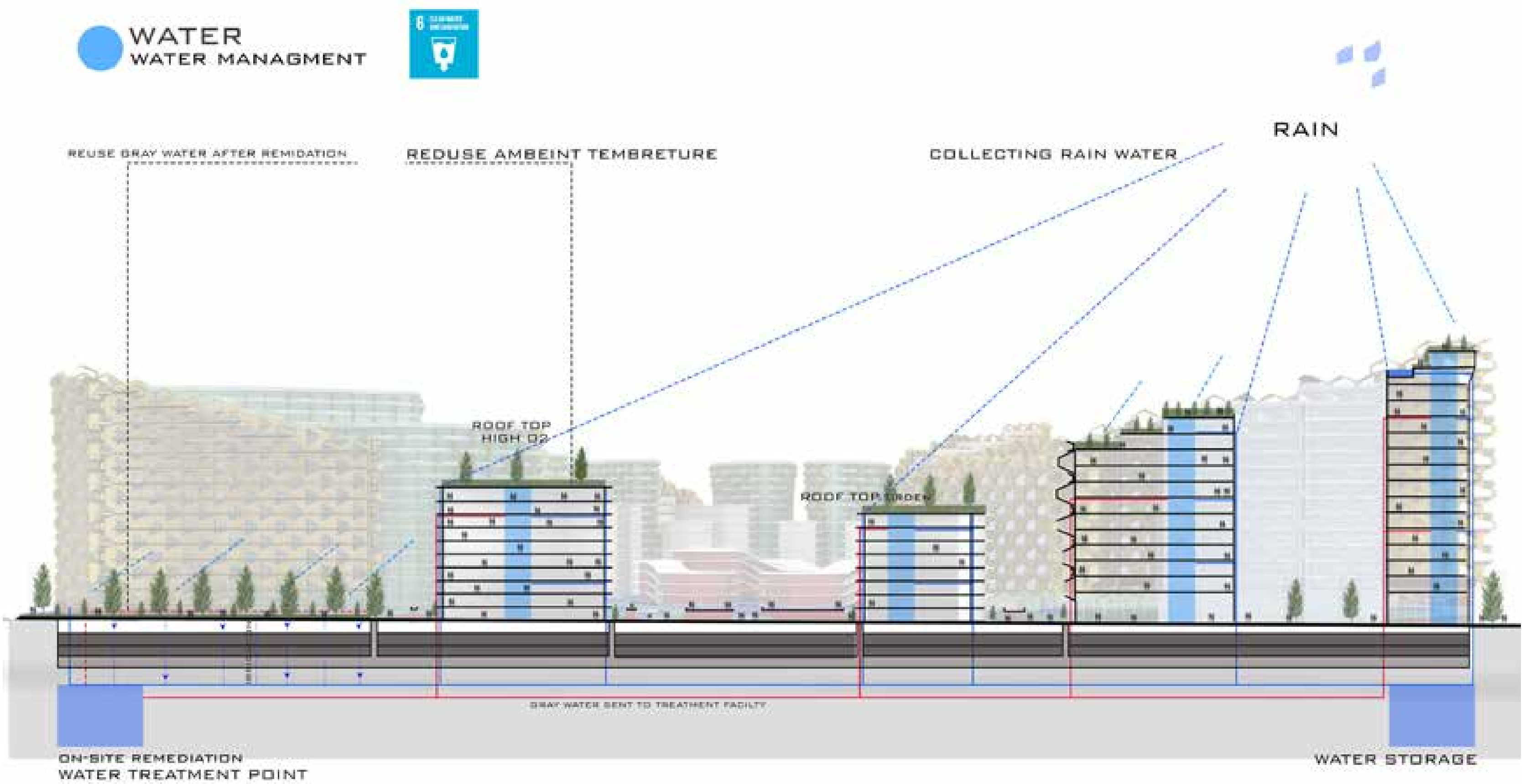


FROM WASTE TO ENERGY

THERE IS ASYSTEM TO TRANSPORT THE TRASHES TO THE GARBAGE MECHANICALLY THROUGH RAILS, COLLECTED UNDERGROUND, AND TRANSFERRED TO A STATION TO CONVERT IT INTO CLEAN ENERGY AND MAKE THE CITY SELF-SUFFICIENT IN ELECTRICITY, GAS AND FUEL.


ECO SYSTEM
NATURAL LIGHT
ATMOSPHERIC WATER COLLECTION
LOCAL MATERIAL
o2
WATER STORAGE
TRASH MOVEMENT
ENERGY GENERATOR
BY HUMAN MOTION
REPUBLIC REALM
COLLECTION

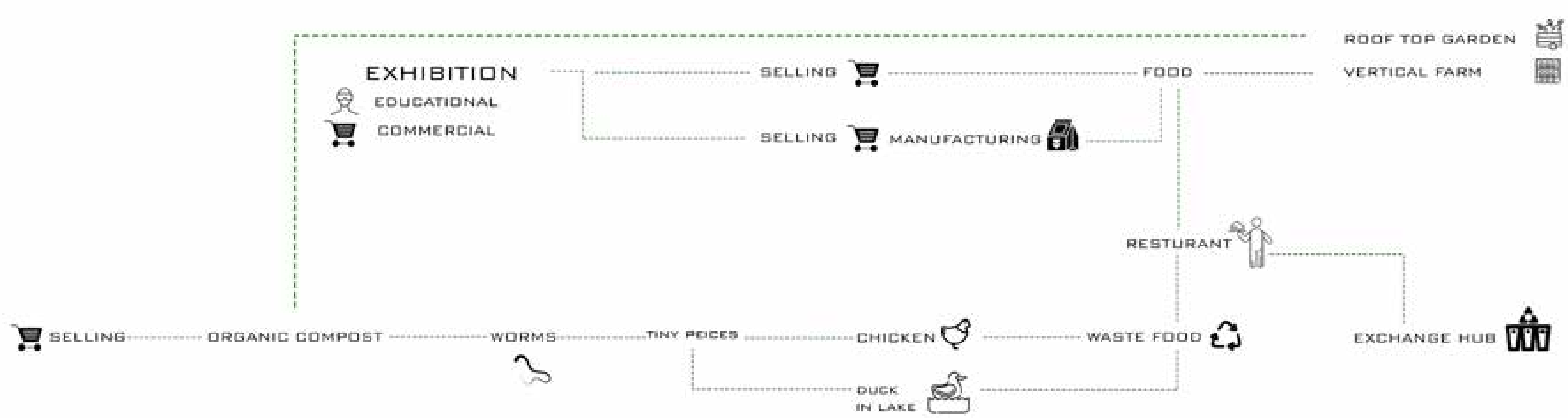
SELF SEFFICIENT CITY



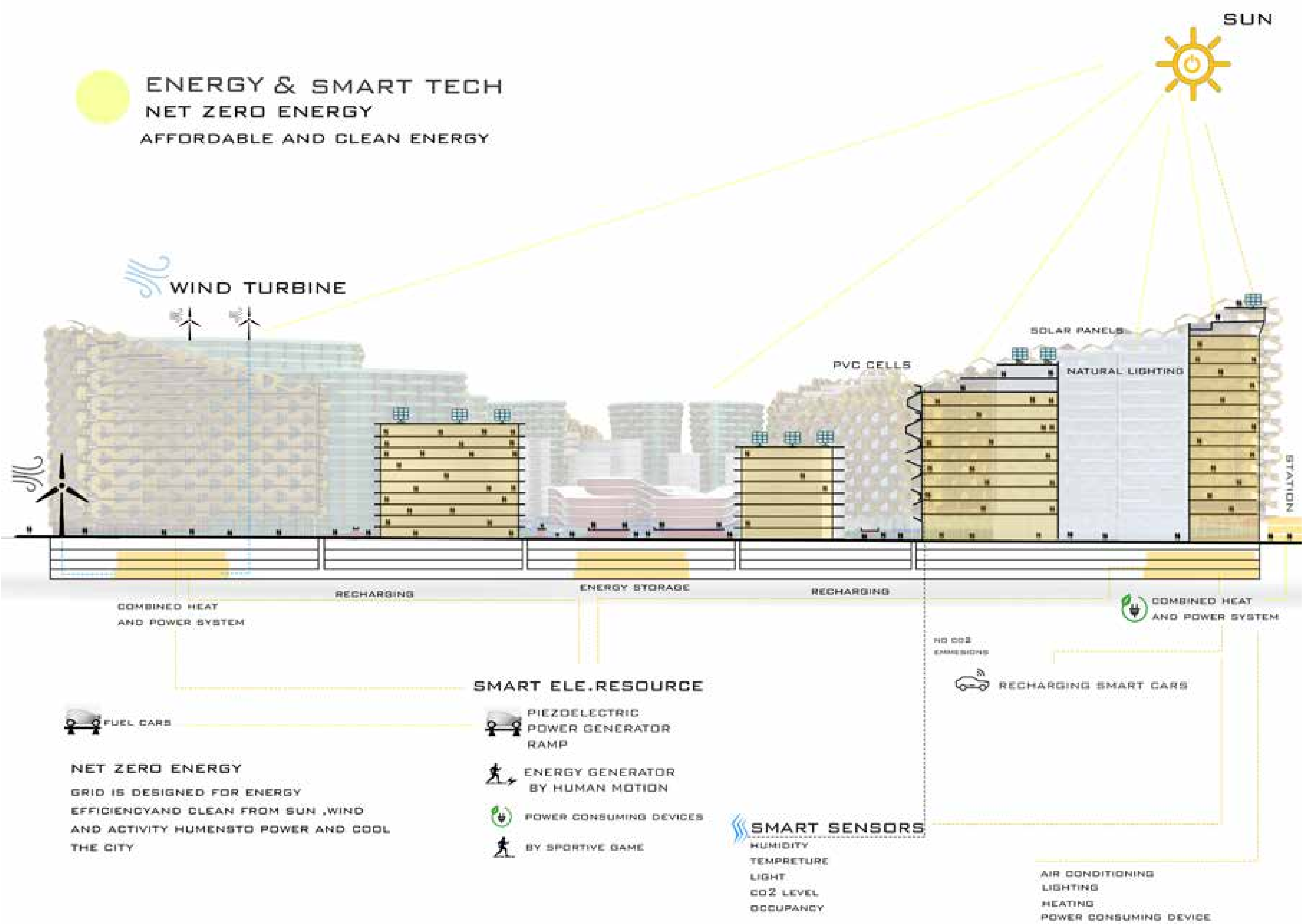
PROGRAM DIVERSITY

MIXED USED SPACES FOR LIVING,WORKING,GATHERING AND HIGH INVESTMENT

ZERO WASTE PROCESS



SELF SEFFICIENT CITY



Future City prioritizes a dynamic streetscape achieved through a strategic deformation of the hexagonal grid. This approach fosters a network of pedestrian-friendly thoroughfares, converging at a central plaza that serves as the community's focal point. The expansive streets accommodate a spectrum of mobility needs, seamlessly integrating walkers, cyclists, and even autonomous vehicles.

Furthermore, this adaptable infrastructure transcends mere transportation. It functions as a flexible platform, readily accommodating mobile retail, delivery services, medical clinics, and shared transportation hubs, fostering a vibrant and multifaceted urban environment.

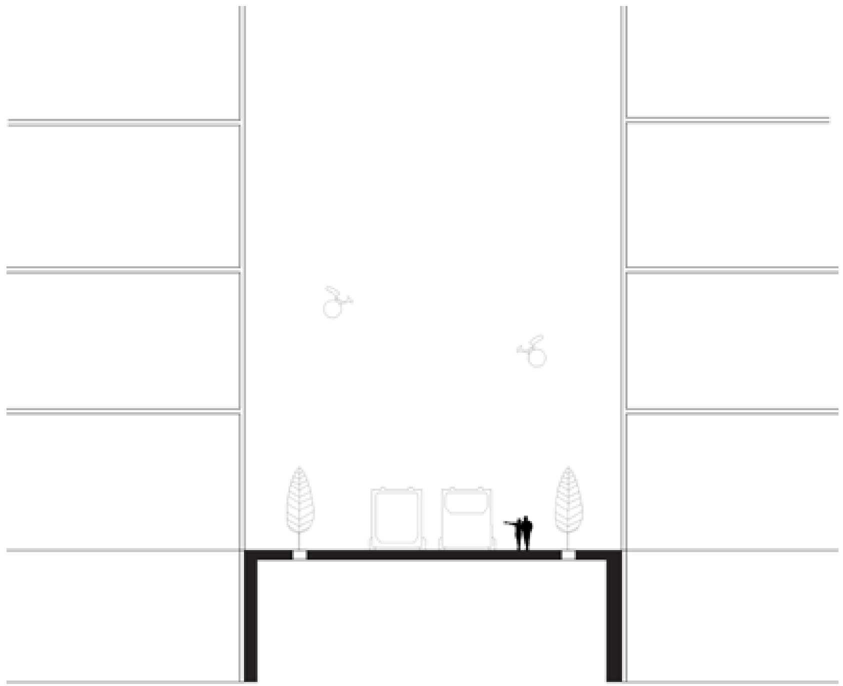
The strategic deformation of the hexagonal grid fosters not only a network of pedestrian-friendly streets but also a central plaza, serving as the city's vibrant core.

This space features three distinct, architecturally-integrated units. These hubs house innovative showrooms, bustling marketplaces, and farm-to-table restaurants, fostering a dynamic nexus of commerce and community engagement.

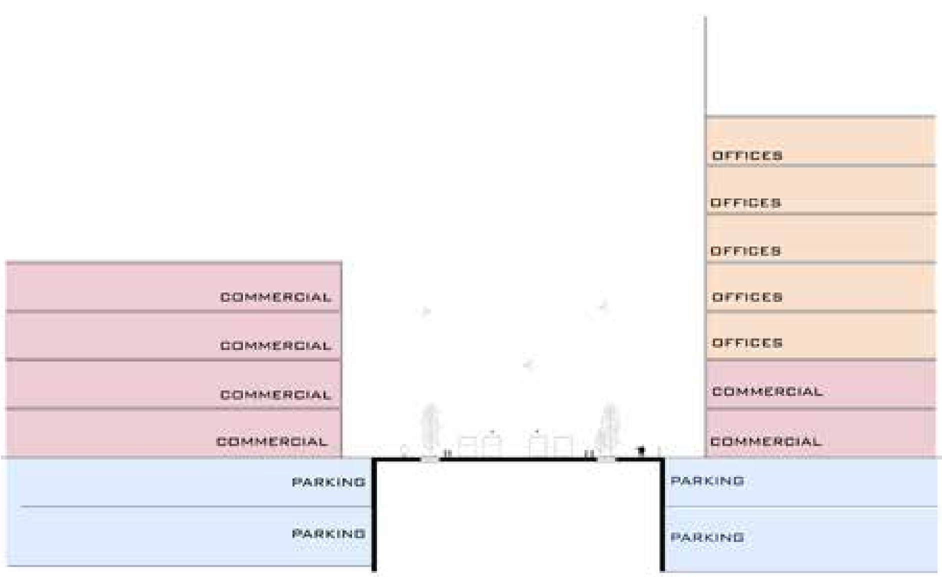
Further emphasizing the project's commitment to sustainability, vertical farms strategically line the plaza's perimeter. These structures transcend their primary function, transforming into interactive community spaces. Residents actively participate in cultivating fresh produce, supplying both their own needs and the farm-to-table restaurants below.

This collaborative approach not only celebrates a bountiful harvest but also offers a culinary experience rooted in local sourcing and environmental responsibility.



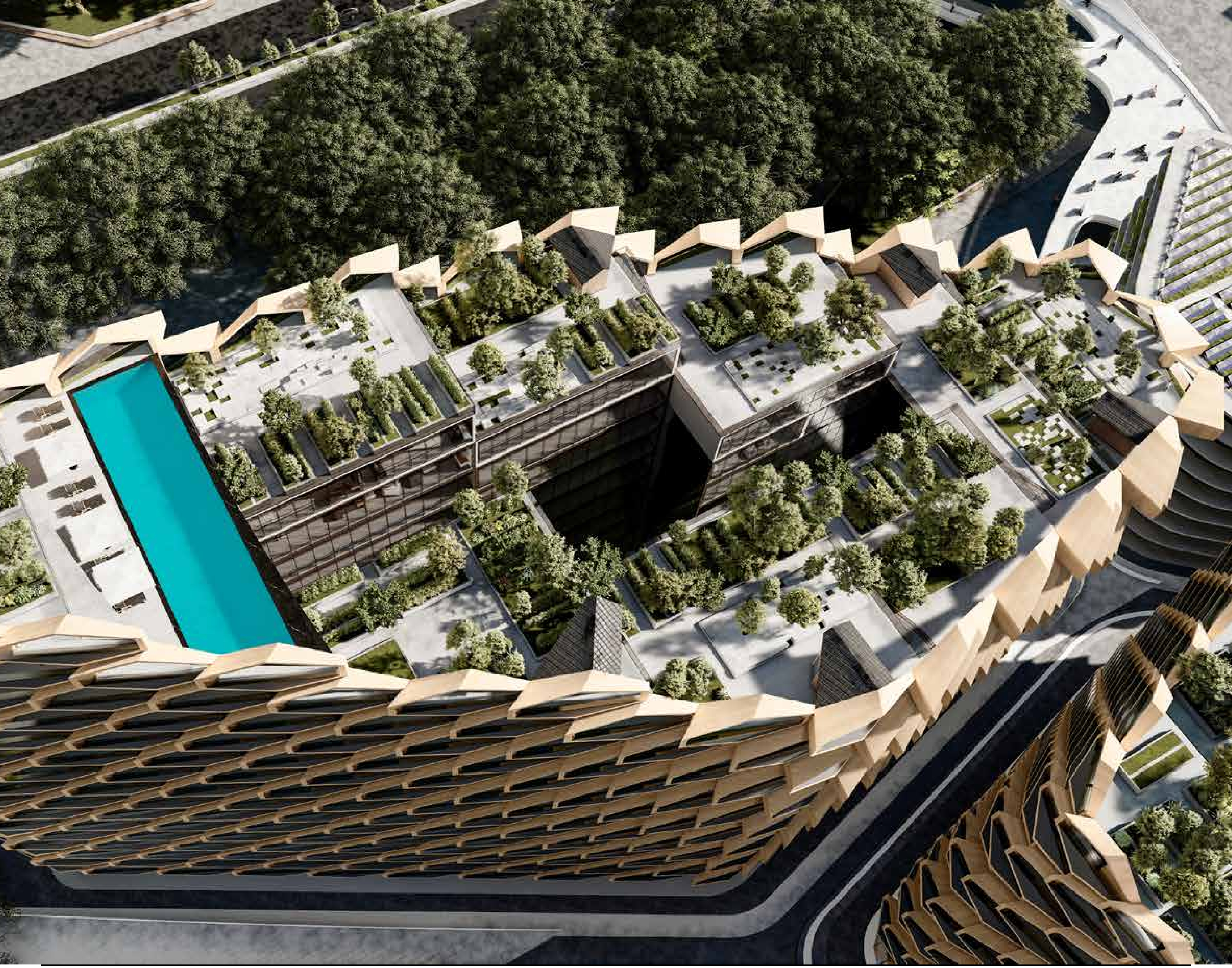


NARROW STREET
ENTRANCE AND BRIDGE AND BETWEEN BUILDINGS

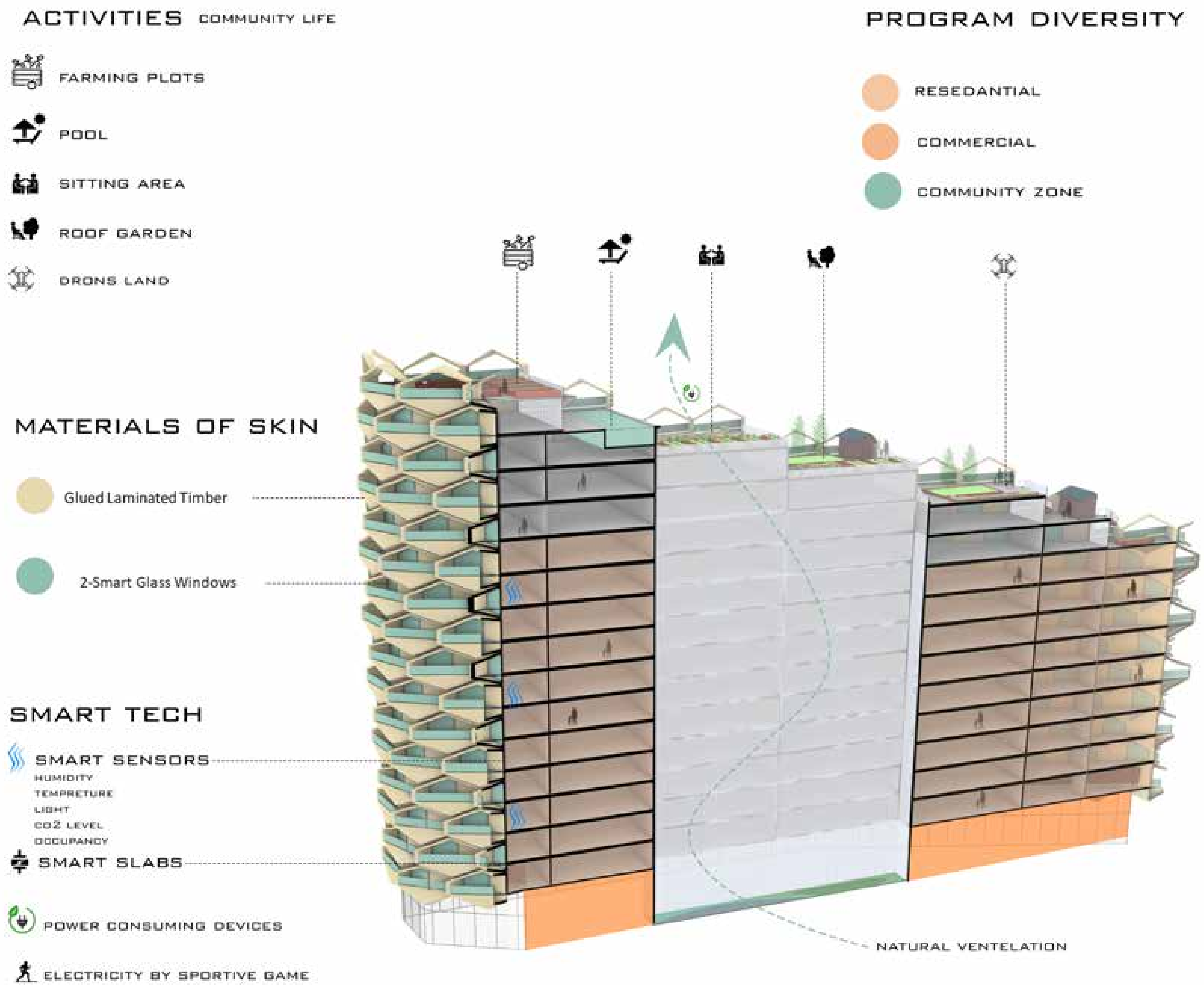


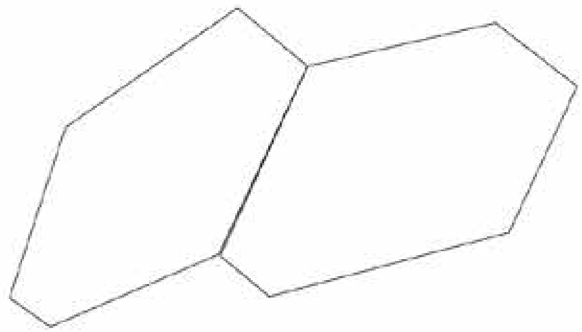
SECTION WITH FUNCTIONS OF BUILDINGS AND HIGH QUALITY INVESTMENT

Future City transcends mere architectural innovation, establishing itself as a catalyst for a more sustainable future. The project's integrated vertical farms and rooftop gardens directly contribute to several United Nations Sustainable Development Goals. Highly efficient harvesting practices promote food security through sustainable agriculture while simultaneously generating economic opportunities within the community

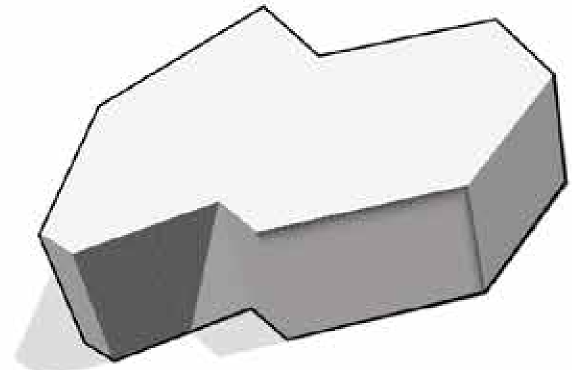


These green spaces not only enhance resident well-being by fostering a healthier environment with cleaner air, but also contribute to local biodiversity. Furthermore, sustainable agricultural practices align with climate action goals, highlighting Future City's seamless integration with broader sustainability initiatives. **This holistic approach ultimately cultivates a resilient and vibrant urban environment, perfectly embodying the principles of Sustainable Cities and Communities.**

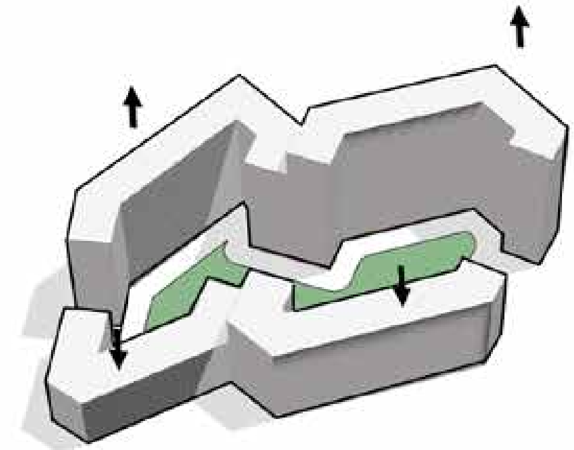

ACTIVITIES COMMUNITY LIFE
FARMING PLOTS
POOL
SITTING AREA
ROOF GARDEN
DRONS LAND
PROGRAM DIVERSITY
RESEDANTIAL
COMMERCIAL
COMMUNITY ZONE
MATERIALS OF SKIN
Glued Laminated Timber
2-Smart Glass Windows
SMART TECH
SMART SENSORS
HUMIDITY
TEMPRETURE
LIGHT
CO2 LEVEL
OCCUPANCY
SMART SLABS
POWER CONSUMING DEVICES
ELECTRICITY BY SPORTIVE GAME
NATURAL VENTELATION



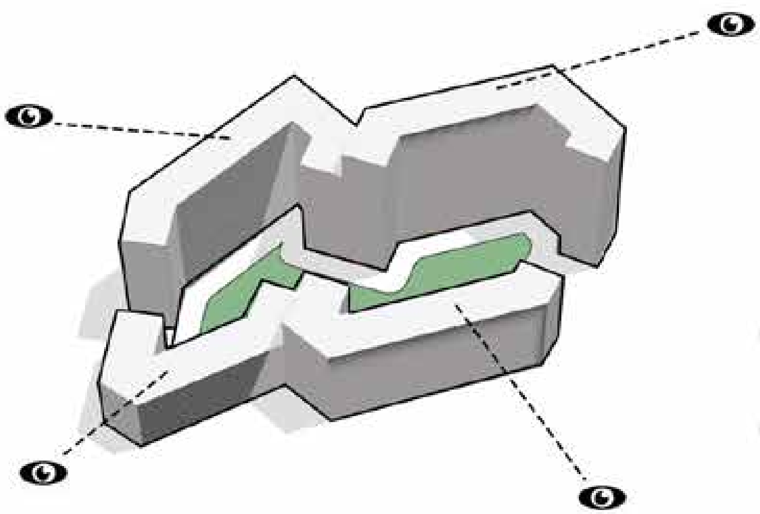
1.UNIT OF GRID



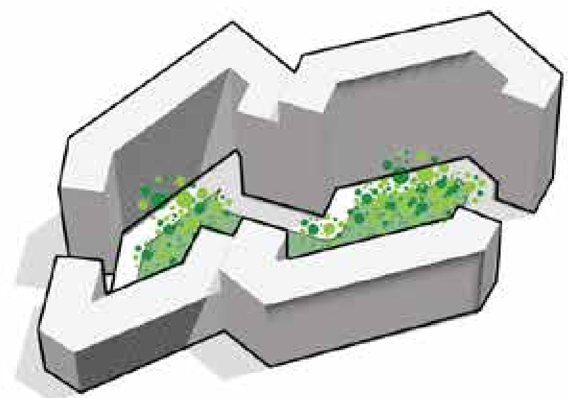
2.EXTRUDE



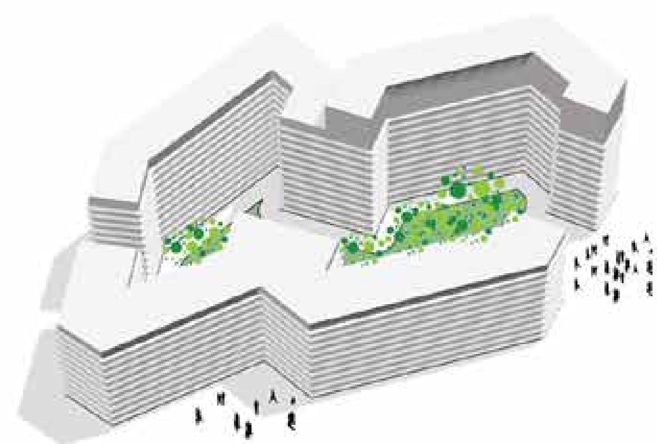
2.HIGHTS



4.VIEW POINT AND AXIS



5.GREENARITY



6.ADDING FLOORS

Future City establishes itself as a leader in sustainable urban development through its commitment to innovative energy generation. The strategic integration of wind turbines, solar panels, and cutting-edge piezoelectric technology directly addresses multiple United Nations Sustainable Development Goals (SDGs).

This comprehensive strategy minimizes dependence on fossil fuels, thereby mitigating carbon emissions and fostering climate action, aligning with both Affordable and Clean Energy.

CONNECTIVITY

CONFERANCE SPACE
AS ABEACON OF INTERNATIONAL CONNECTIONS

PUBLIC PARK
AS ABEACON OF LOCAL CONNECTIONS

MEETING SPACES
PROVIDING LOADS OF OPPERTUNITIES FOR PEOPLE TO CNNECT THROUGH PROGRAMS AND SPACES

OPEN-AIR MARKET
ɔSTNG LOCAL ARTISTS AND OTHER LOCAL OR EVEN REGION- AL EVENTS

FARM-TO-TABLE RESTURANTS
BRINGING IN THE RICH LOCAL FOOD CULTURE INVOLVING ALSO LOCAL FARMERS

URBAN COMFORT

THE GARDENS
A BREK INT THE URBAN FARBIC THAT PROVIDES RELIEF FROM HEAT STRESS

CANOPIES
FUNCTIONAL THROUGH PASSIVE COOLING AS WELL AS SOUND BARRIER

GREEN ROOFS
REDUCING THE HEAT ISLAND EFFECT THROUGH LESS EX- POSED GREY

SOUND BREAKERS
(PLANTED) STRUCTURES WHICH PRVIDE NOISE REDUCTION

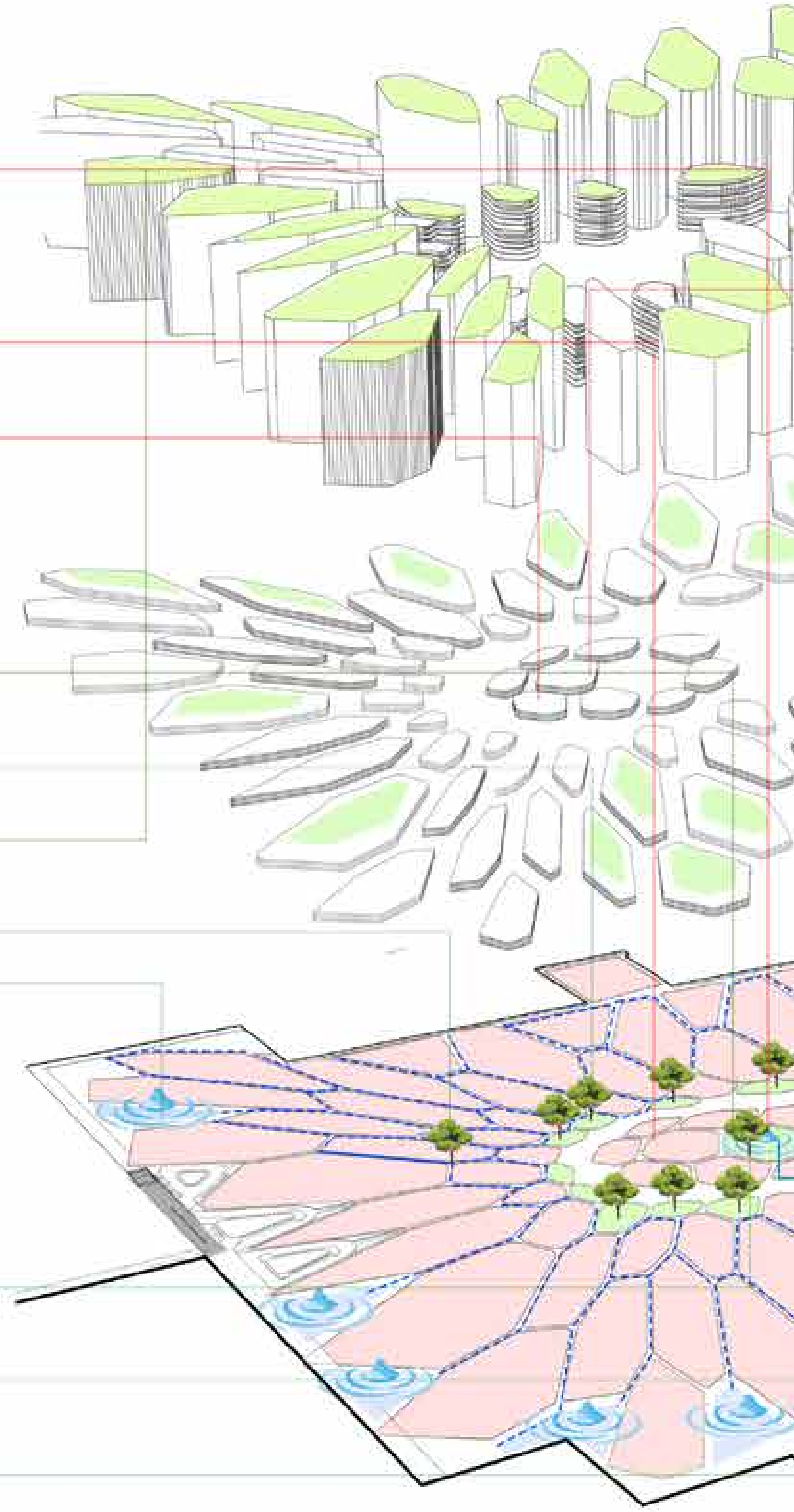
SURFACE WATER FEATUR
PROVIDING PASSIVE COLING

RECREATION

PUBLIC PARK
PROVIDES UTDOR SPACE FOR CITIZENS TO USE FOR LEISURE OR ACTIVITIES

WALKING ROUTES &DISCOVERY PATHS
PROVIDING CONVENIENT WAY TO EXPLORE AND ENJOY THE PARK AND FOREST

PLAY AREA & SPORT FACILITIES
FLEXIBLE SPACES THAT CAN BE USED IN MULTI- PLE WAYS WHEN THERE ARE NO EXHIBITIONS



LOCAL OWNERSHIP

"MY T13F" PLANT A TREE PROGRAM AND WATCH IT GROW

ACTIVELY ENGAGE CITIZENS TO ENGAGE COOPERATIVELY WHILE CREATING A SENSE OF OWNERSHIP

THE FOREST GARDENS

SHOWING THE SERVICES NATURE CAN PROVIDE IN THE RIGHT CNTEXT

EXPO+

FLEXIBLE SPACES THAT CAN BE USED IN MULTIPLE WAYS WHEN THERE ARE NO EXHIBITIONS

BLUE INFRASTRUCTURE

AS INFORMAL MEETING SPACES ,BOOSTING SOCIAL INTERAC-TION/INFORMAL PLAY

ENERGY-TECH

SOLAR PANAL

SOLAR PANELS CAPTURE SUNLIGHT AS A SOURCE OF RADI-ANT ENERGY, WHICH IS CONVERTED INTO ELECTRIC ENERGY

KIT ENERGY OF PECIES

PIEZOELECTRIC POWER GENERATOR RAMP AND HUMAN MOTION

FROM WASTE TO ENERGY

CLEAN ENERGY AND MAKE THE CITY SELF-SUFFICIENT IN ELECTRICI-TY, GAS AND FUEL

COMPRESSED AIR ENERGY STORAGE

CONTRASTED WITH TRADITIONAL BATTERIES, SYSTEMS CAN STORE ENERGY FOR LONGER PERIODS OF TIME AND HAVE LESS UPKEEP.

WATER MANAGEMENT

WATER RESILLIENT PARK

INCREASING WATER INFILLTRATION AND STORAGE ,DECREAS-ING FLOODING RISK AND DAMAGE

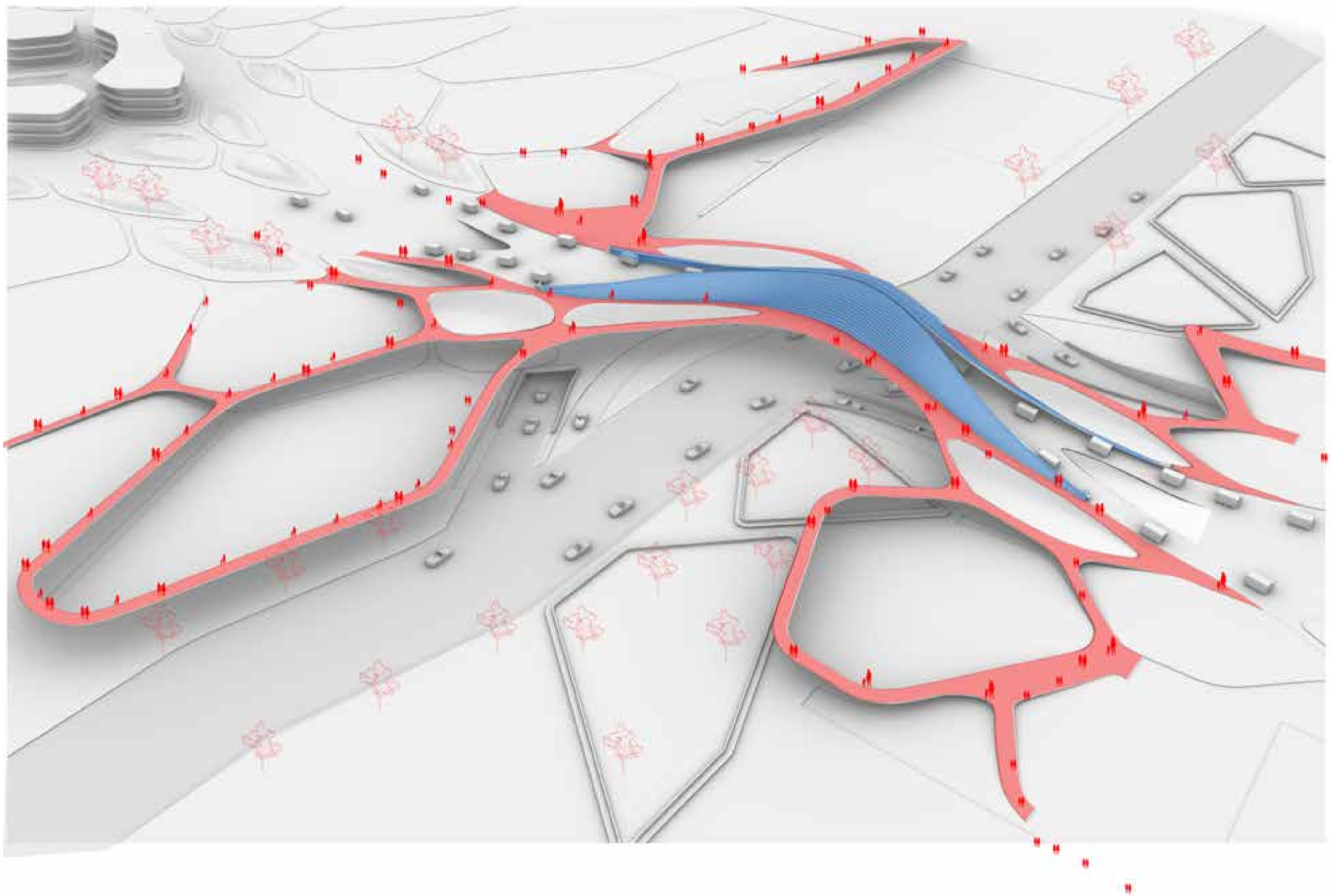
WATER RETENTION ELEMENTS

CREATING AMORE STABLE WATER TABLE AND PRESENCE THROUGHOUT THE SEASONS

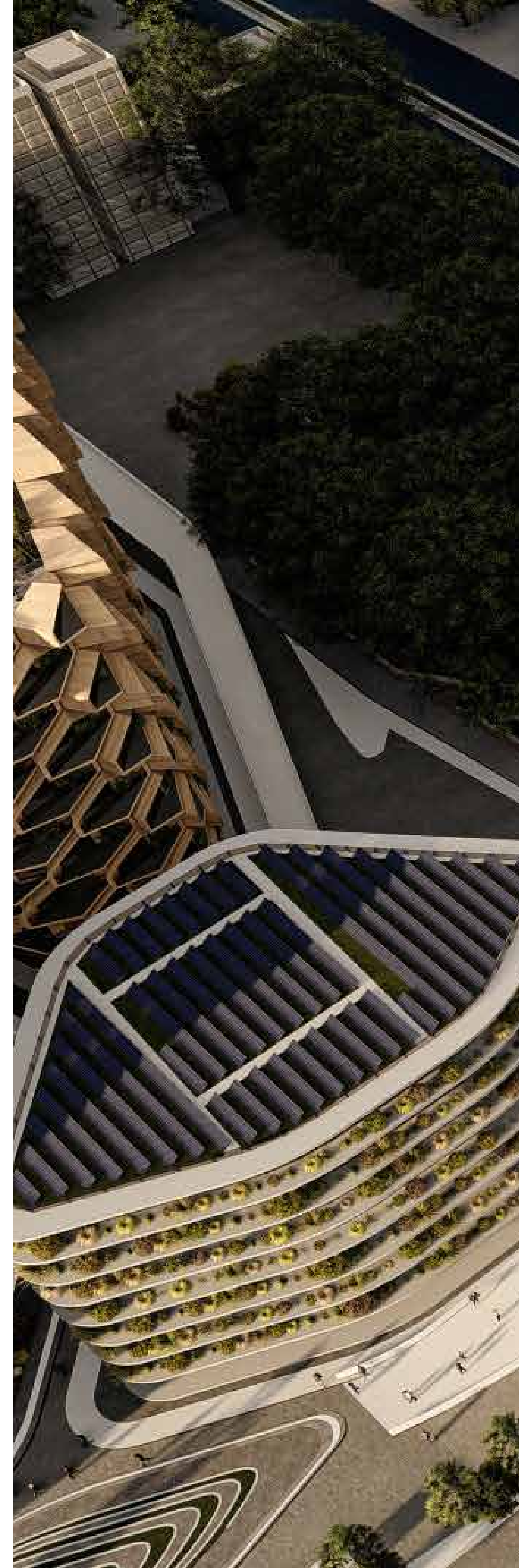
WATER TREATMENT FACILITY

GRAY WATER TREATMENT, PURIFICATION AND CONVERSION INTO POTABLE WATER

FUELS CARS MOVEMENTS
AND PEDESTRIAN ENTRANCE



PEDESTRIAN BRIDGE AND SHELL



Great-Green Wall-Belt

Dakar ,Senegal

Client: International Union Of Architects

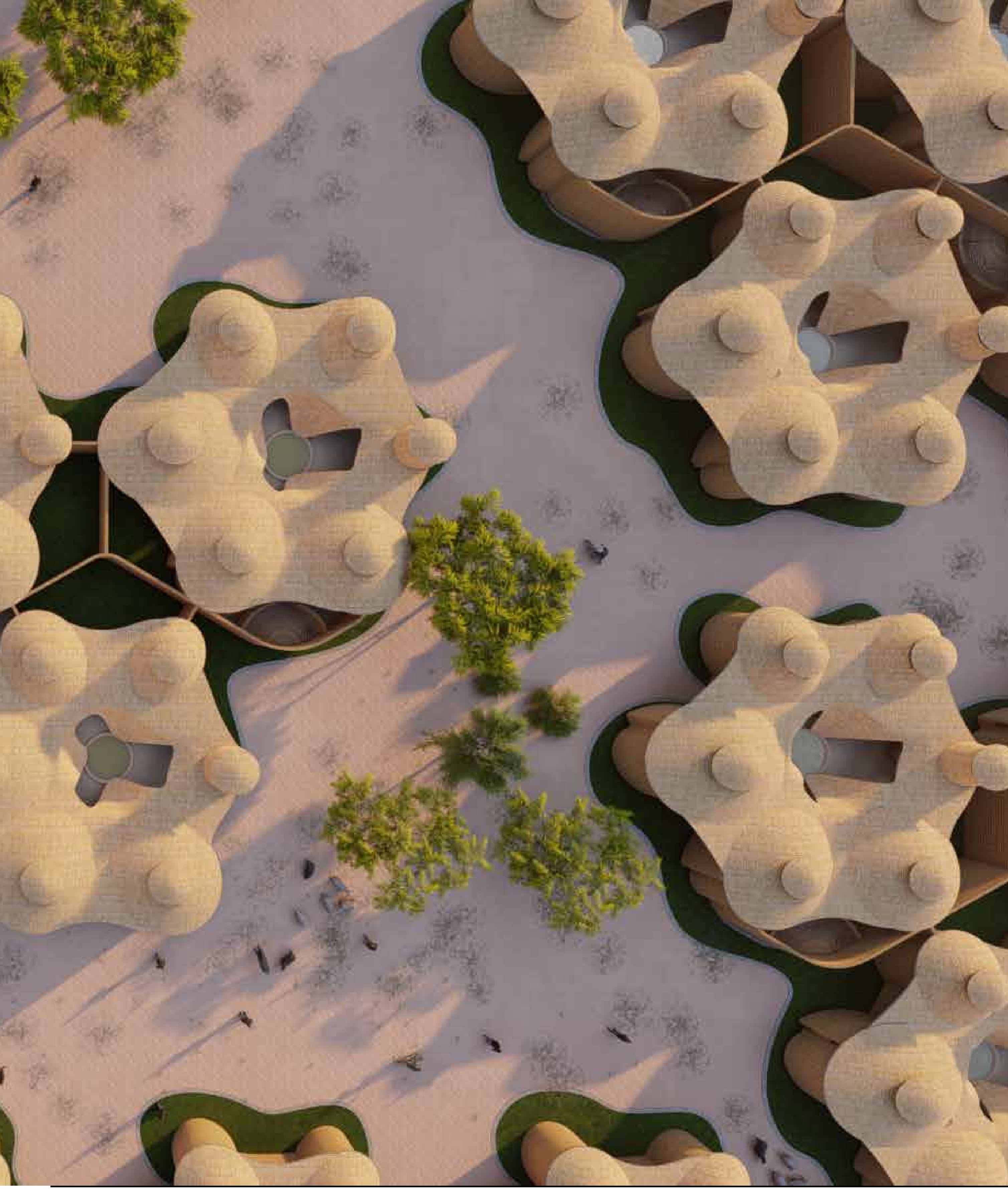
Size: 5000m² / 35,820sqf

Status: Competititon

Typology: City

Year: 2022

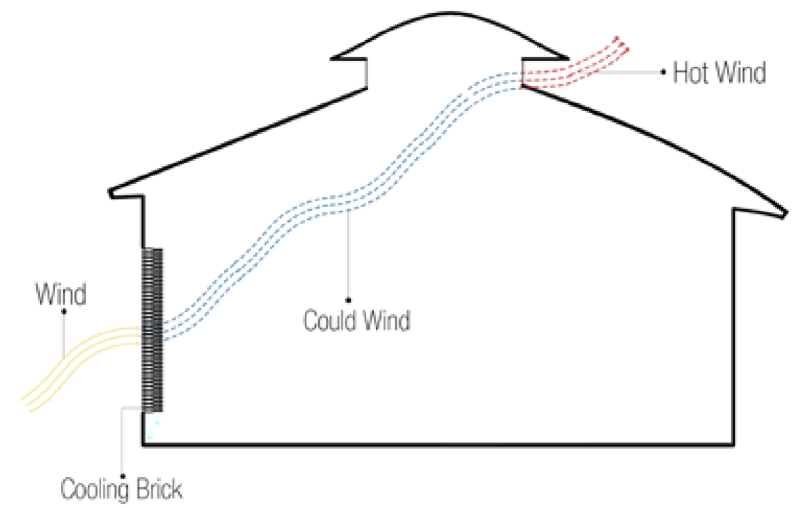
Straddling the ecological transition zone in Africa's Sahel Region arid plains and verdant forests, **The Great Green Wall project represents a pioneering venture in eco-habitation.** These meticulously designed structures integrate traditional knowledge with cutting-edge technology to create a harmonious living environment in a challenging climate. Each Dome embodies a commitment to human resilience and establishes a new paradigm for sustainable living in a fragile ecosystem. The Sustainable Great Green Wall project is rooted in a conceptual framework that prioritizes a respectful dialogue with the surrounding desert environment. This approach manifests in the adoption of organic forms, echoing the natural contours of the dunes. The resulting domes structures seamlessly integrate with the landscape, minimizing visual impact and fostering a sense of belonging within the existing ecosystem.

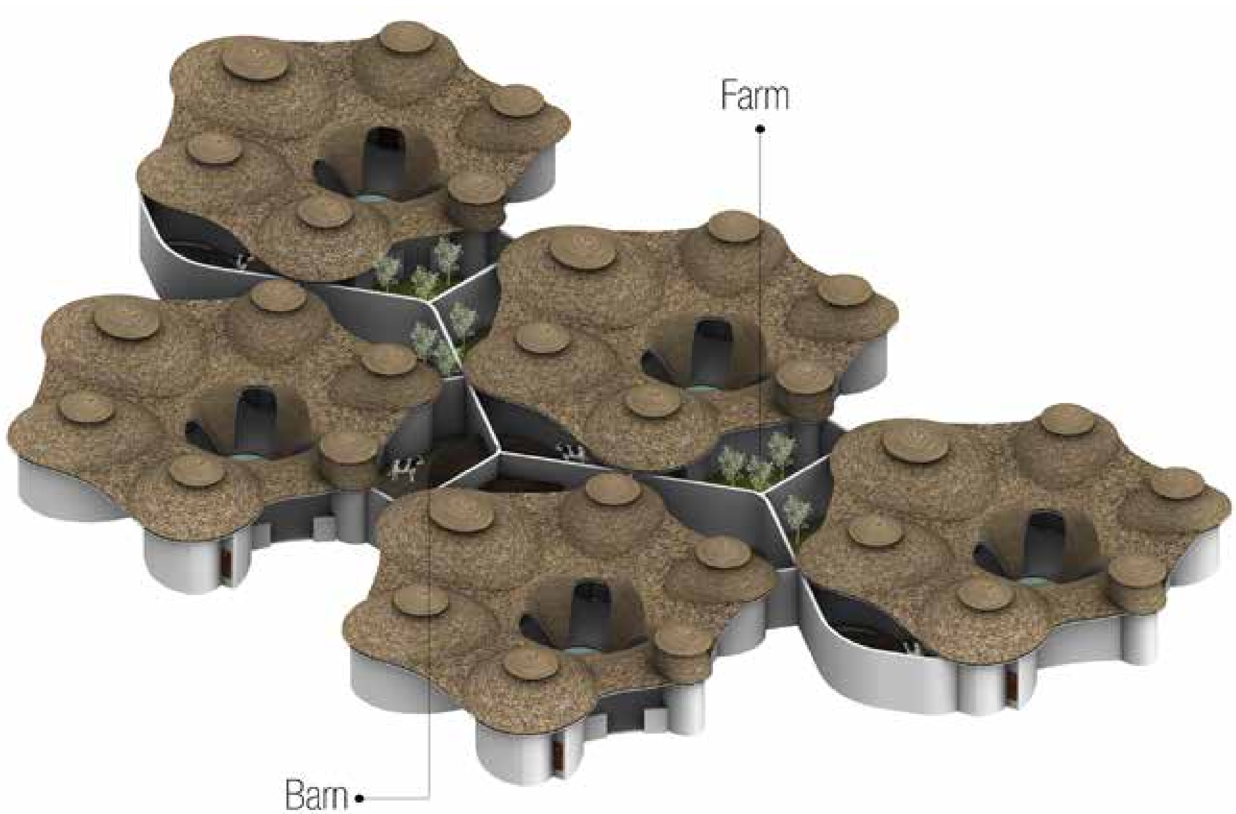


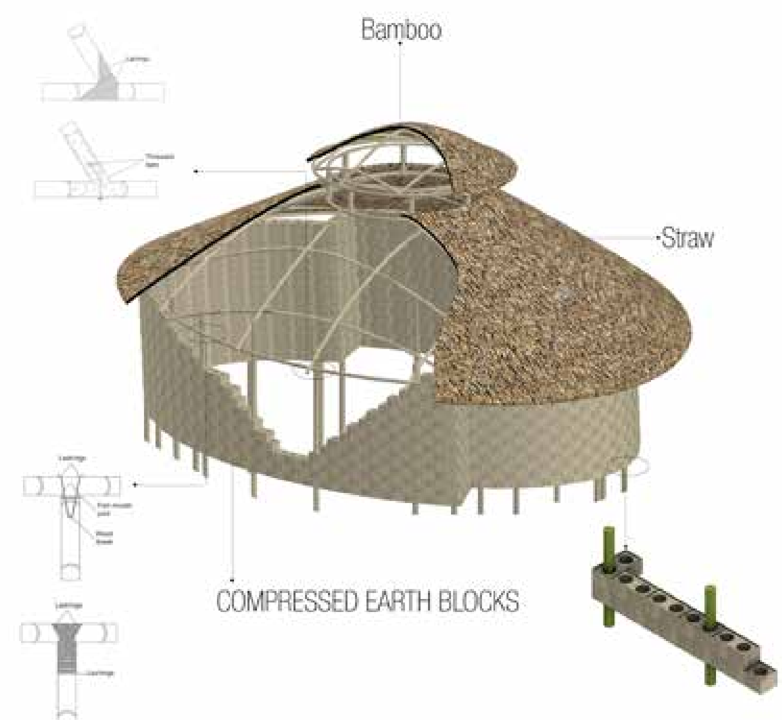
The Great Green Wall project exemplifies a holistic approach, fostering a harmonious relationship between human needs and the desert. Strategically placed, resilient trees like acacias and palms stabilize the soil and provide shade. This deliberate integration transforms the landscape into a thriving oasis, a haven for both inhabitants and wildlife. The Domes themselves embody sustainability. Each features a dual-layered roof. The upper layer, meticulously woven from local straw, acts as a natural umbrella, reducing heat gain while maintaining a connection to the sky. Beneath lies a robust bamboo framework, a fast-growing and renewable resource. This latticework creates a beautiful interplay of light and shadow, blurring the lines between indoors and the desert.

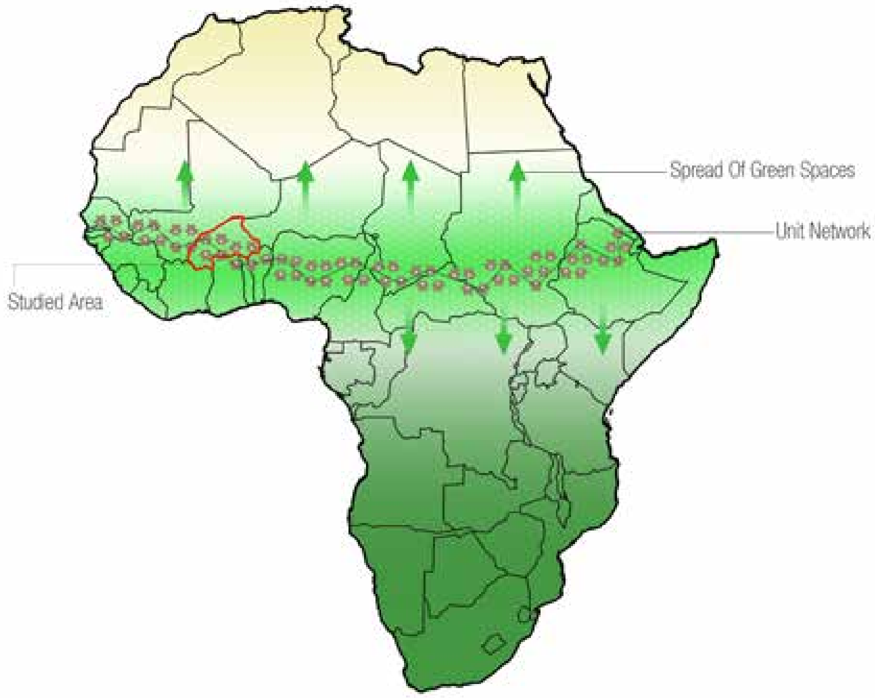
The green roofs function as a natural insulation barrier, effectively mitigating the scorching desert heat and promoting optimal thermal comfort within the Domes. This reduces reliance on mechanical cooling systems, contributing to a more sustainable building operation.

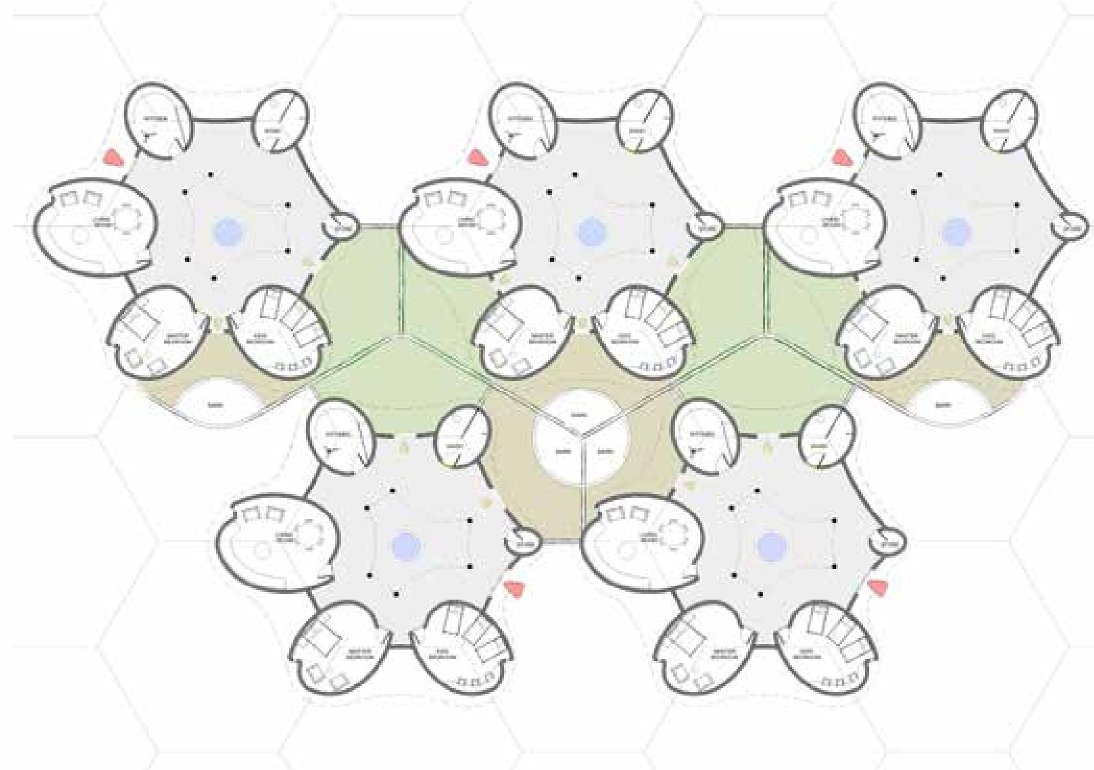
Beyond thermal regulation, these living carpets act as efficient rainwater absorption systems. By capturing and filtering rainwater, the green roofs minimize runoff and contribute to responsible water management practices, a crucial consideration in arid environments. Perhaps most importantly, the green roofs transform into vibrant hotspots for biodiversity. **The meticulously selected flora attracts a diverse array of fauna, from birds seeking refuge in the foliage to busy bees contributing to the delicate balance of the local ecosystem**. This flourishing habitat fosters a vital connection between the Domes and the surrounding desert environment, promoting a thriving microcosm of life within the arid landscape.

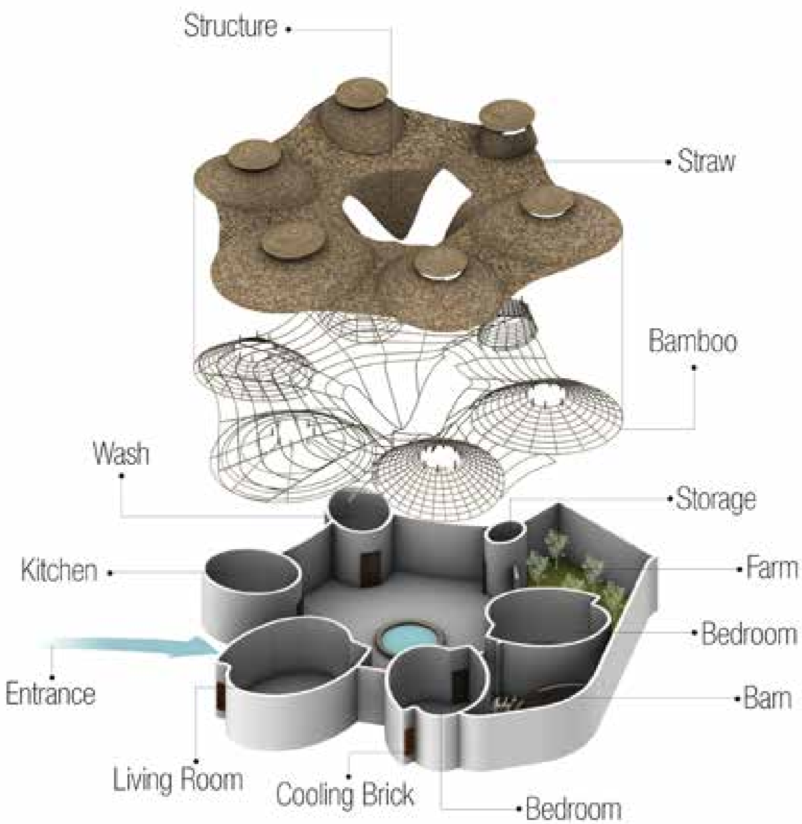


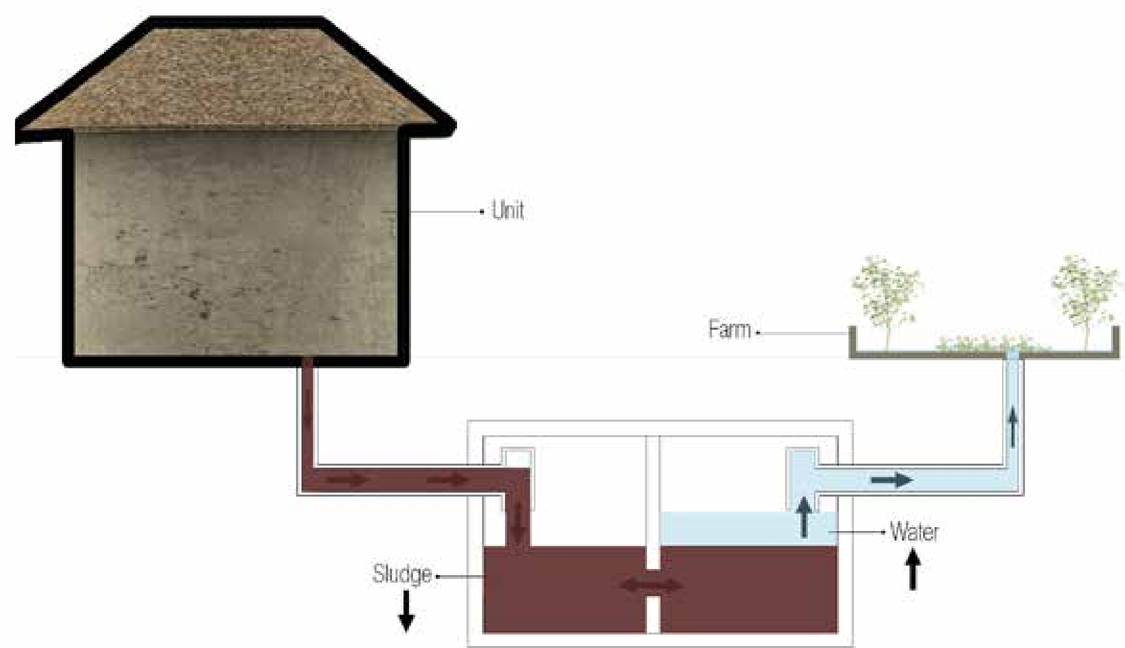





Spread Of Green Spaces
Unit Network
Studied Area




Structure
Straw
Bamboo
Wash
Storage
Kitchen
Farm
Bedroom
Entrance
Barn
Living Room
Cooling Brick
Bedroom


Unit
Farm
Water
Sludge

The Great Green Wall project recognizes the importance of social interaction beyond the individual dwelling unit. A thoughtfully designed network of shaded walkways meanders gracefully between the biomimetic domes, inviting exploration and fostering a sense of community within the desert landscape. These pathways transcend mere circulation routes, evolving into vibrant social arteries.

Residents are encouraged to gather along these shaded walkways, engaging in casual conversation, sharing experiences, and building lasting relationships. This facilitates a sense of belonging and camaraderie, fostering a cohesive social fabric within the project. The very design of the pathways, with their meandering layout and shaded comfort, subtly encourages social interaction and strengthens community spirit.

Marhaba Garden

Sialkot ,Pakistan

Client: Gondal Developers

Size: 20 Hectare

Status: In Construction

Typology: Residential , Retail

Year: 2024

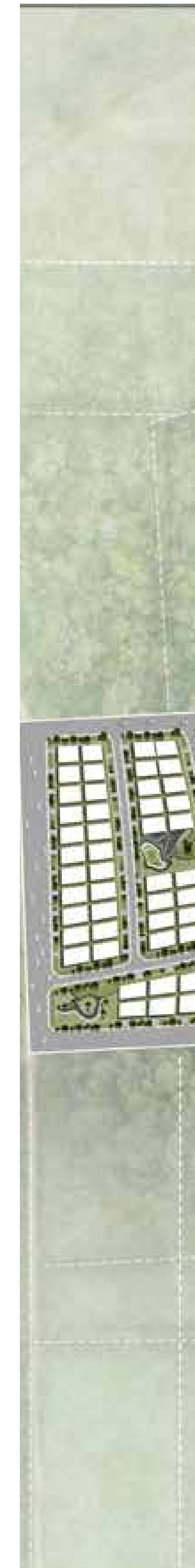
Marhaba Garden, developed by Reparametrize Ateliers, presents a comprehensive framework for sustainable and culturally sensitive urban development. This plan integrates principles of Islamic urbanism with contemporary design strategies to create a resilient, vibrant, and contextually appropriate community.

Through rigorous analysis and a deep understanding of local needs, we have crafted a design that prioritizes resident well-being, economic vitality, and long-term environmental stewardship.

The design process emphasizes the establishment of a clear spatial hierarchy anchored by a centrally located mosque, serving as the primary focal point and reflecting the principles of Islamic urban morphology. Visual axes are carefully articulated throughout the plan, converging on the mosque and creating a sense of unity and orientation. This central mosque is strategically juxtaposed with key civic amenities, including a school, hospital, and commercial center, optimizing accessibility and fostering a vibrant public realm. The resulting urban fabric is designed to promote pedestrian connectivity, social interaction, and a cohesive community identity.

The road network serves as the foundational framework and connective tissue of the Sialkot master plan, seamlessly integrating all programmatic elements and facilitating efficient multi-modal circulation. Designed to accommodate future growth and evolving transportation needs, the network establishes a clear hierarchy of roadways, from primary boulevards to secondary streets, residential access ways, and dedicated pedestrian and bicycle paths. This hierarchical approach ensures efficient vehicular access to key destinations while prioritizing pedestrian safety and promoting sustainable mobility.

Primary boulevards provide high-capacity vehicular movement, distributing traffic to secondary streets that serve residential and commercial areas. Dedicated pedestrian walkways and bicycle paths, strategically separated from vehicular traffic by landscaped buffers and green infrastructure, prioritize non-motorized transportation options, encouraging residents to walk or cycle and fostering a healthy, active lifestyle. **The design of intersections, crosswalks, and pedestrian crossings prioritizes universal accessibility and minimizes traffic congestion,** ensuring safe and efficient movement for all users. Landscaped medians and tree-lined streets enhance the aesthetic character of the road network while mitigating the urban heat island effect and managing stormwater runoff.



The Marhaba Garden Master Plan is predicated on an adaptive system that harmonizes cultural heritage, future growth, and sustainable development. This system, derived through thorough analysis including sun and wind optimization studies, allows for incremental expansion and modification, ensuring the long-term viability and resilience of the community. **The layout and orientation of buildings are strategically planned to maximize passive solar gain in the winter and minimize heat gain in the summer,** reducing reliance on mechanical systems. Prevailing wind patterns have also been carefully considered to enhance natural ventilation and improve microclimatic conditions. By incorporating these environmentally responsive design strategies along with resource-efficient infrastructure and environmentally conscious materials, the plan minimizes ecological impact and promotes harmonious coexistence with the natural environment. The adaptability of the system ensures that the development can respond to changing demographics, economic conditions, and environmental considerations, fostering a community that is both culturally vibrant and ecologically responsible. This approach honors the rich cultural heritage of Sialkot while providing a flexible framework for future generations.

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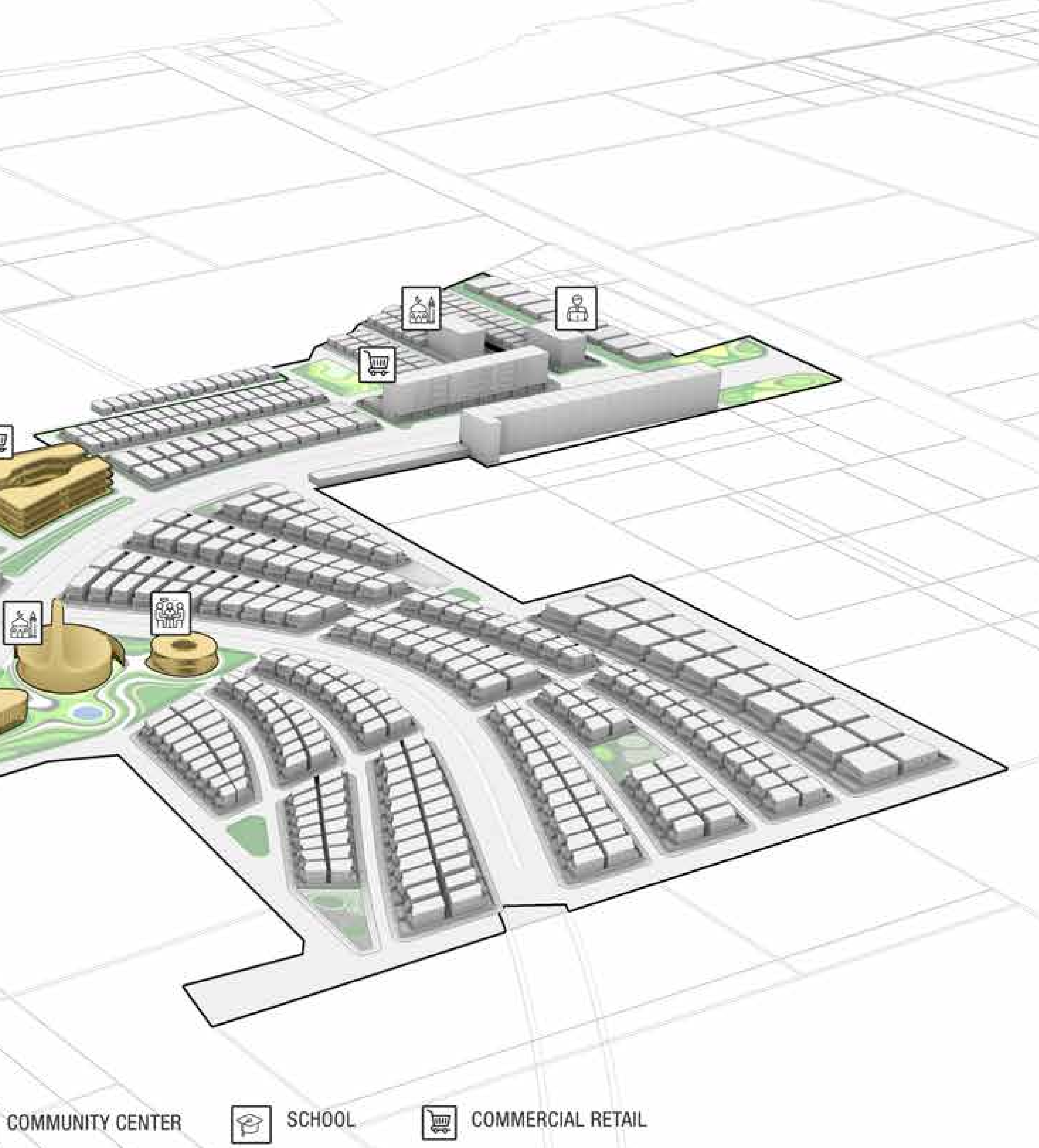
PROGRAM



DIAGRAM

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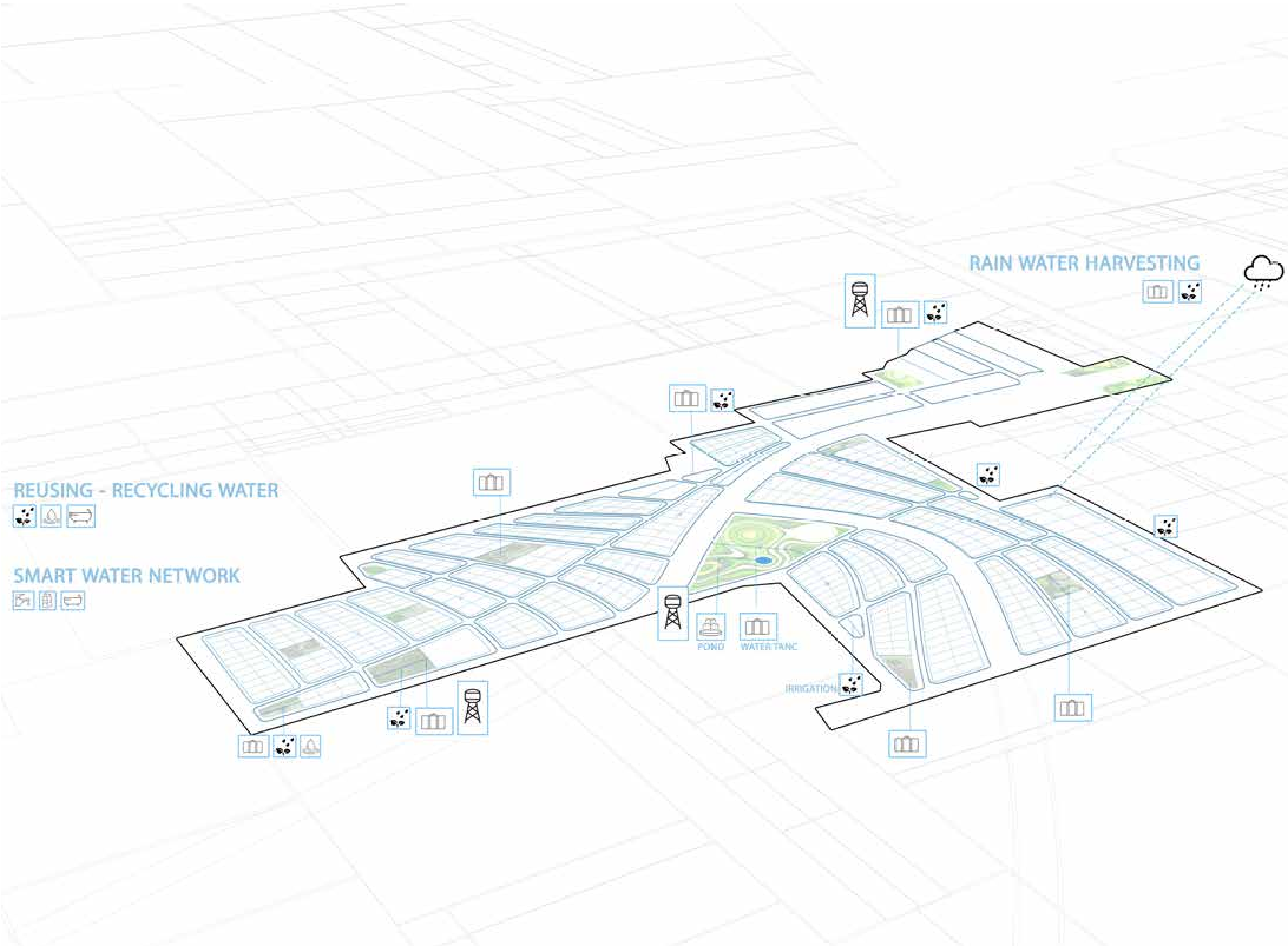
ENERGY DIAGRAM

GREENERY DIAGRAM



WATER DIAGRAM

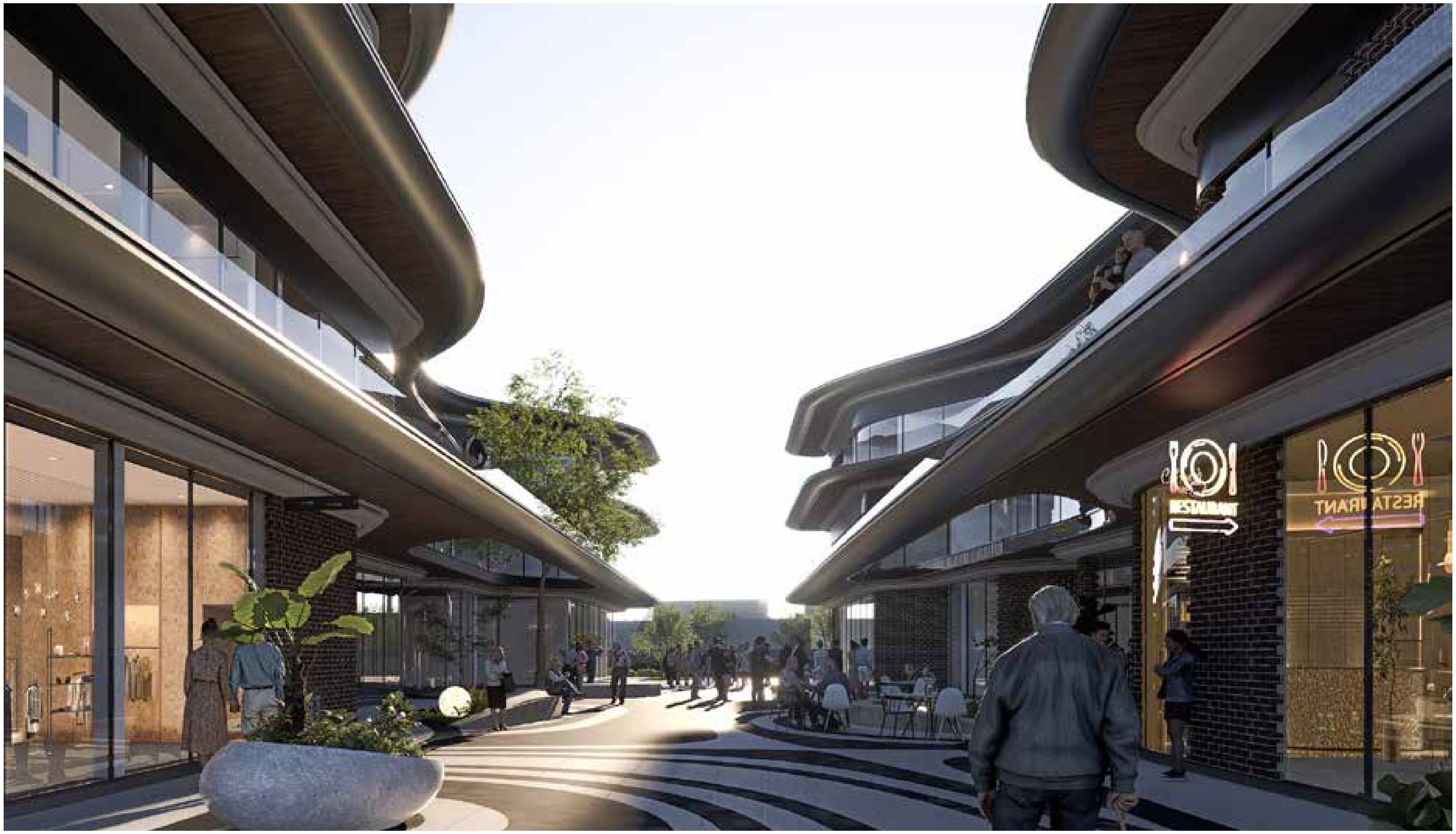
STREET DIAGRAM

The residential components prioritize the creation of a vibrant and sustainable community through a diverse typology of housing units, including townhouses and villas, designed to accommodate a range of household sizes and lifestyles. A cohesive architectural vocabulary, defined by clean lines, a refined material palette of precast concrete, textured brick, and high-performance glazing, establishes a harmonious streetscape. Each dwelling is optimized for passive solar performance through strategic orientation and shading elements, minimizing reliance on mechanical systems. Private outdoor spaces, including courtyards and balconies, extend the living areas and foster a connection to the landscaped surroundings. **The site plan emphasizes pedestrian connectivity and incorporates a network of green corridors, promoting walkability and social interaction within the community.** Furthermore, the integration of water-sensitive urban design principles manages stormwater runoff and contributes to the overall ecological health of the development.

Central Park serves as the organizing principle and vital green heart of the Sialkot master plan, establishing a vibrant community focal point and a restorative respite within the urban fabric. Strategically positioned at the confluence of key programmatic elements – the Mosque, Office Center, and Community Center – the park fosters social interaction, promotes community well-being, and seamlessly integrates nature into the urban environment. Its design prioritizes pedestrian connectivity and multi-modal circulation, creating a network of pathways that weave through carefully curated landscaped gardens, shaded seating areas, and interactive water features. **The curvilinear forms of the adjacent buildings are reflected in the park's landscape design, establishing a sense of visual coherence and continuity.** The Mosque, with its elegant minaret, provides a prominent spiritual anchor for the community, while the Office Center and Community Center offer dynamic spaces for economic productivity and social engagement. Central Park functions as a unifying element, seamlessly connecting these diverse programmatic functions and fostering a vibrant and interconnected community.

The mosque anchoring the Sialkot Master Plan functions as a prominent architectural landmark and spiritual nucleus for the community. Its design synthesizes traditional Islamic architectural vocabulary with a contemporary formal language. The primary cylindrical volume, punctuated by a slender, sculpted minaret, establishes a distinct vertical axis, reinforcing its symbolic connection to the divine. The façade integrates an Algorithmically generated geometric lattice screen, referencing traditional Islamic ornamentation while providing filtered daylight and mitigating solar heat gain. This lattice, juxtaposed with the monolithic, white GRC cladding, contributes to a serene and ethereal aesthetic. The building's orientation is precisely calibrated for proper Qibla alignment, while passive design strategies, informed by solar and wind analysis, optimize natural ventilation and thermal performance. The surrounding landscape design incorporates xeriscaping principles and water-sensitive urban design, fostering a contemplative microclimate and reinforcing the mosque's function as a vital social and spiritual node within the community.

The Office Center, conceived as a high-performance workplace ecosystem, features a distinctive cylindrical volume clad in a high-performance façade system integrating polished stainless steel and sustainably sourced timber. The precisely engineered brise-soleil optimizes daylight harvesting while mitigating glare and unwanted solar heat gain, contributing to a comfortable and energy-efficient interior environment. Internally, adaptable floor plates are configured to support a variety of workplace configurations, promoting flexibility, collaboration, and adaptability. A double-height glazed curtain wall at the entryway establishes a transparent connection between the interior workspaces and the surrounding landscape.



Conceived as a dynamic commercial node, this retail complex draws inspiration from the traditional Islamic souq typology, organizing itself around a central courtyard flanked by retail units. This configuration fosters a sense of community and encourages social interaction while maximizing commercial visibility and optimizing pedestrian flow. The façade integrates a high-performance, parametrically generated louver system, mitigating solar heat gain and contributing a unique architectural expression. This passive solar shading strategy minimizes reliance on active cooling systems, thereby reducing energy consumption and promoting environmental stewardship. The building's sinuous roofline provides supplemental passive shading for pedestrian circulation areas and the central courtyard, creating a microclimate conducive to social activity and commercial engagement. Internally, the retail units offer flexible and adaptable floor plates, accommodating a diverse range of tenant requirements and promoting economic resilience. Extensive glazing throughout the complex maximizes daylight harvesting, reducing artificial lighting demands while creating a bright and welcoming internal ambiance.

The Hospital, envisioned as a patient-centered healing environment, seamlessly integrates advanced medical technologies with a focus on promoting emotional well-being. Its dynamic, curvilinear massing and terraced floor plates decompose the monolithic scale often associated with institutional architecture, fostering a sense of tranquility and human scale. Strategically integrated biophilic elements, such as green roofs and façade-integrated planters, blur the boundaries between the built environment and the natural world, contributing to improved air quality and enhanced thermal performance. High-performance glazing systems maximize daylight harvesting while offering restorative views of the surrounding landscape, and the interior layout is optimized for efficient patient flow and operational efficacy. Evidence-based design principles inform the configuration of therapeutic spaces, prioritizing patient comfort, privacy, and access to natural light and ventilation.

The school's architecture promotes social interaction, experiential learning, and a strong sense of community. The building's curvilinear volume and extensive glazing create a dynamic interplay of light and space, visually connecting occupants with the surrounding landscape context. Flexible and adaptable learning environments are strategically configured to support evolving pedagogical approaches and interdisciplinary exploration, while a carefully curated material palette featuring natural materials such as timber and brick establishes a warm and inviting atmosphere conducive to focused study and creative discovery. Universal accessibility and inclusivity are paramount design considerations, ensuring equitable access to resources and facilities for all students.

RPA

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