



DAID FORUM FOR RESEARCH AND DESIGN SOLUTIONS

2024/25,

VOL. II, STUDIO IV,

Design of Museums, Libraries
and Exhibition Halls,
Chapter Three: Design Solutions

Editor in Chief: Prof. Arch, Paul Mwangi Maringa
(PHD), CBS, FAAK, MKIP





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DEPARTMENT OF ARCHITECTURE AND
INTERIOR DESIGN (DAID)

SCHOOL OF ENGINEERING AND
ARCHITECTURE (SEA)

KENYATTA UNIVERSITY (KU)



Welcome



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Department of Architecture and Interior Design (DAID),
School of Engineering and Architecture (SEA), Kenyatta University (KU),
Nairobi, Kenya.



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SCHOOL OF ENGINEERING AND ARCHITECTURE (SEA),

KENYATTA UNIVERSITY (KU)



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FOREWORD

It is with great pride and joy that I present this book showcasing the architectural work of 4th year second semester Design Studio students work. This collection reflects not only the quality of their final designs but also the deep commitment, creativity, and growth each student has demonstrated throughout the semester.

This semester's focus on museum complexes, public libraries, and exhibition halls opened-up rich discussions on culture, memory, identity, and public space. It was a pleasure to journey alongside the students as we explored these essential typologies, unpacking their roles in society, their spatial demands, and their potential to inspire and connect communities.

I've been particularly impressed by the ability of the students to translate critical thinking into architectural form, and how their designs responded to context with sensitivity and ambition. Their dedication, willingness to learn, and capacity to push creative boundaries have made this studio a truly rewarding experience.

Thanks, my dear students for your hard work, resilience, and passion. I hope this book stands as a proud milestone in your academic path and a source of continued inspiration

Dr. Rehab Hamdy Elnaggar, Studio Master, Department of Architecture and Interior Design Kenyatta University, Nairobi, Kenya.

September 2025





EDITORIAL NOTE

Curiosity, inquiry, and the spark of discovery form the lifeblood of creative learning within the hallowed halls of academia. Here, the unlocking of imagination in architectural minds calls forth the bold and the supple, those who dare to wander the wilds of possibility while weaving their dreams within the measured loom of structured thought. The horizon of potential is as boundless as the designers themselves, each vision shaped by the unique tapestry of their context and illuminated by the wisdom of distant and local precedents, offering treasures both practical and profound.

We are delighted to unveil reflections that dance between freedom and order, visions kindled by the fire of restless minds. These ideas, born of rigorous principles and carefully woven methodologies, are united by a shared devotion: to conjure spaces that are thoughtful, creative, and alive; real-world sanctuaries sculpted for the stories of life.

Through these works, we offer our distilled approach: a path toward solutions that are not merely innovative, but deeply attuned to context, rooted in the rich soil of the learning environment. True innovation, we believe, is not a solitary flower; it flourishes in the fertile ground of collaboration, nourished by the ever-shifting realities of each project's place and people.

The learning journey undertaken guides emerging designers through a landscape of knowledge, studying echoes of the past, wandering through sites, and pondering the philosophical bedrock of design. This odyssey crescendos in the design studio, a crucible where vision is forged through iterative rituals of critique, deep analysis, and the alchemy of concept. Each step is a meditation on need, on society, on values, and on the singular character of space; yielding design resolutions that marry the poetry of constructability with the clarity of representation, rendered through a symphony of annotated drawings and models; each a testament to the power of thoughtful creation.

Welcome to this didactic discourse of an empirical, creative architectural design process.

Prof. Arch. Paul Mwangi Maringa (PHD), CBS, FAAK, MKIP,

Adjunct Professor of Architecture and Planning, Department of Architecture and Interior Design (DAID), School of Engineering and Architecture (SEA), Kenyatta University (KU).



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PREFACE

PRINCIPAL POLICY ANCHORS:

Museums and Public Libraries

- I. Sustainable Development Goal (SDG)4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- II. Africa Agenda 2063 goal 2: Well-educated citizens and skills revolution underpinned by science, technology, and innovation.

Museum and Exhibition Hall

- III. Sustainable Development Goal (SDG)11: Make cities and human settlements inclusive, safe, resilient and sustainable.
- IV. Africa Agenda 2063 goal 1: A high standard of living, quality of life and well-being for all citizens

A-Museums:

Museums play a vital role in the cultural, educational, and social fabric of cities. They are more than just repositories of art, history, and science; they are dynamic spaces that connect people to their past, enrich their present, and inspire their future. Here are some key reasons why museums are so important in urban settings:



PREFACE

DESIGN OBJECTIVES

1. Cultural Preservation and Education

Museums serve as guardians of a city's heritage. They preserve artifacts, artworks, and historical documents that reflect the unique stories of a community, region, or nation. By housing these items, museums help ensure that future generations can learn about and appreciate their history and cultural heritage. They are educational hubs where both locals and visitors can deepen their understanding of the world, gaining insights into diverse cultures, traditions, and historical events. This educational role is particularly important in cities, where people from various backgrounds come together.

2. Community Identity and Pride

Museums often act as symbols of a city's identity. Whether showcasing local art, historical landmarks, or the achievements of its people, museums reflect the collective spirit of a community. For residents, these institutions foster a sense of pride and connection to their city's past and present. Museums celebrate local achievements, commemorate significant events, and give communities a place to tell their own stories. This sense of ownership and pride can strengthen social cohesion and create a shared understanding of what makes a city unique.

3. Civic Engagement and Social Interaction

Museums are spaces where people can come together, exchange ideas, and engage in meaningful conversations. They are inclusive environments that encourage dialogue, reflection, and critical thinking. Exhibitions often address complex societal issues, which can spark conversations about culture, history, and identity. In this way, museums contribute to the ongoing civic discourse within a city, allowing individuals to explore topics that shape their community and the world at large.

4. Tourism and Economic Impact

Museums are significant drivers of tourism, attracting visitors both domestically and internationally. Iconic museums, such as the Louvre in Paris or the British Museum in London, have become major cultural landmarks that boost the economy of their cities. The influx of tourists visiting museums supports local businesses, including restaurants, hotels, and transport services. Additionally, museum events and exhibitions often generate revenue and provide jobs, contributing to the economic vitality of the urban area.



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5. Inspiration and Creativity

Museums inspire creativity by showcasing works of art, science, and innovation. For artists, students, and creatives, museums are spaces of inspiration where they can encounter new ideas and reflect on the work of others. Many museums also host workshops, lectures, and performances that nurture creativity in the local community. In cities, where innovation and artistic expression are often at the forefront of urban culture, museums provide a platform for new ideas to flourish.

6. Accessibility and Inclusivity

In many cities, museums are open to all, offering a level of accessibility that allows people from different backgrounds, economic statuses, and abilities to experience cultural enrichment. Many museums offer free or reduced-price entry, making them accessible to a wide range of people. Additionally, many modern museums are increasingly committed to inclusivity, offering accessible exhibits for those with physical or cognitive disabilities and creating programs that serve diverse communities.

7. Preserving Natural History and Science

While art and history museums are essential, museums dedicated to natural history and science play an equally critical role. These institutions help explain the natural world, from the origins of life on Earth to the latest scientific discoveries. They educate the public about environmental issues, biodiversity, and the importance of sustainability—critical concerns in today’s world. By providing interactive exhibits and hands-on experiences, science museums engage citizens of all ages, fostering a deeper understanding of science and nature.

8. Promoting Lifelong Learning

Museums encourage lifelong learning. They offer visitors the opportunity to explore new ideas, revisit old interests, and challenge their thinking. For children, museums provide hands-on learning experiences that complement traditional education. For adults, they offer a space for continued exploration and intellectual growth. Many museums also offer lectures, courses, and other educational programs that support personal development and lifelong curiosity.



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A.9 Fostering Global Understanding

In an increasingly globalized world, museums act as bridges between cultures. They allow people to engage with art, artifacts, and ideas from around the world, fostering cross-cultural understanding and empathy. For cities that are diverse or have international ties, museums can be a space for dialogue, helping to build connections between different cultural groups and promoting global awareness.

CONCLUSION:

In summary, museums are essential to the cultural, social, and economic life of cities. They preserve and share the stories of the past, offer educational opportunities, inspire creativity, and foster a sense of community. Museums also have an important role in promoting inclusivity, engaging with global issues, and boosting the local economy. In a city's bustling urban environment, museums provide spaces for reflection, learning, and connection—reminding us of the value of history, culture, and art in shaping the future

B-Public Library:

Public modern libraries are invaluable assets to cities, serving as vital community centers that foster learning, promote literacy, and enhance the overall well-being of urban populations. In an era where information is constantly evolving, these libraries are not just places to borrow books—they are dynamic spaces that offer diverse resources, services, and opportunities for personal and collective growth. Below are several key reasons why modern public libraries being essential in cities:



PREFACE

DESIGN OBJECTIVES

1. Access to Knowledge and Information

At their core, public libraries are gateways to knowledge. They provide free access to books, research materials, digital resources, and databases that might otherwise be inaccessible to many members of the community, particularly those from lower-income backgrounds. In cities, where socioeconomic disparities can be more pronounced, libraries ensure that everyone has an equal opportunity to learn and grow, regardless of their financial situation. Whether it's a student needing textbooks, an adult looking to improve their skills, or a senior citizen interested in reading the latest novels, libraries are the great equalizer, offering resources for all.

2. Promoting Literacy and Lifelong Learning

Modern libraries are crucial in promoting literacy, both for children and adults. They offer programs that support early childhood education, reading programs for all age groups, and adult education classes. In an increasingly knowledge-based economy, the importance of fostering literacy and critical thinking skills cannot be overstated. Libraries provide a supportive environment where individuals can access resources to improve their reading, writing, and analytical abilities. Furthermore, they promote lifelong learning by offering a variety of educational programs, workshops, and lectures, helping people of all ages continue to grow intellectually throughout their lives.

3. Community Engagement and Social Interaction

Libraries are often described as "third places"—spaces that are neither home nor work but where people can come together to engage with their community. In urban environments, where people often lead busy and isolated lives, libraries offer a welcoming, neutral space for social interaction. They host community events, book clubs, discussion groups, and cultural programs that allow individuals to connect, share ideas, and build relationships. These activities create a sense of belonging and cohesion in diverse urban populations, fostering a stronger, more engaged community.



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4. Digital Access and Technological Equity

As technology continues to advance, modern public libraries play a key role in bridging the digital divide. Many city residents may not have access to the internet, computers, or other technological tools at home, but libraries offer free access to these resources. Public libraries provide computer terminals, Wi-Fi, and digital literacy training, helping individuals develop essential technology skills. In a world where digital access is increasingly important for education, job opportunities, and communication, libraries are instrumental in ensuring that no one is left behind in the digital age.

5. Cultural Enrichment and Arts

Modern public libraries are not only places of reading but also cultural hubs that promote the arts and local culture. Many libraries host art exhibits, film screenings, live performances, author talks, and other cultural events that enrich the lives of city dwellers. Libraries also provide access to a wide range of multimedia resources—movies, music, audiobooks, and digital art—offering diverse forms of cultural expression. For cities with diverse populations, libraries can serve as platforms for showcasing the richness of different cultures and fostering mutual respect and understanding.

6. Supporting Research and Academic Growth

Libraries are indispensable resources for academic and professional development. For students, researchers, and professionals, public libraries provide access to a vast range of academic journals, reference materials, and research databases that may not be available elsewhere. They also offer study spaces, quiet areas for focused work, and meeting rooms for group collaborations. In cities with universities, research institutions, and a thriving workforce, libraries become essential partners in academic success and career advancement.

7. Providing Resources for Job Seekers and Career Development

Public libraries increasingly serve as job resource centers, providing services like resume writing assistance, job search support, interview coaching, and access to job boards. Many libraries also host career workshops, provide access to specialized software for professional development, and offer training in high-demand skills such as coding, graphic design, or digital marketing. In cities with competitive job markets, libraries provide critical support to individuals looking to improve their employment prospects, helping them navigate the complexities of the modern job market.



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8. A Safe and Inclusive Space

Libraries are one of the few public spaces that are open to everyone, regardless of background, age, race, or social status. They provide a neutral, non-judgmental environment where people can feel safe and welcomed. In urban areas with diverse populations, libraries act as inclusive spaces that support all community members, including marginalized groups, immigrants, and refugees. They also offer services for individuals with disabilities, creating an accessible environment for all. Libraries can be sanctuaries for those who may not have other places to go, providing a sense of comfort and security.

9. Environmental Sustainability and Green Spaces

Many modern public libraries are designed with sustainability in mind, incorporating green building practices and energy-efficient technologies. Libraries can also serve as centers for promoting environmental awareness, hosting events and educational programs on sustainability, conservation, and climate change. In cities where access to green spaces can be limited, libraries with outdoor areas or green roofs provide much-needed places for relaxation, reflection, and environmental education. These libraries contribute to the overall well-being of the city and its residents, making the urban environment more liveable and sustainable.

10. Fostering Civic Engagement and Democracy

Libraries play a crucial role in promoting civic engagement and supporting democratic values. They offer programs that teach people about their rights and responsibilities as citizens, provide access to legal resources, and host discussions on important social and political issues. In cities where diverse populations may not always have equal access to political information or public services, libraries act as vital hubs for democratic participation, encouraging informed decision-making and active involvement in civic life.

Conclusion:

Public modern libraries in cities are far more than just places to borrow books—they are dynamic, multifaceted community centers that provide essential services and resources to a wide range of people. From promoting literacy and lifelong learning to offering access to technology and supporting job seekers, libraries are crucial to the intellectual, social, and economic development of urban areas. They foster community engagement, cultural enrichment, and inclusivity, while also serving as safe spaces for reflection, creativity, and personal growth. In short, modern public libraries are pillars of urban life, making cities more vibrant, connected, and equitable for all.



PREFACE

C- Exhibition Hall:

Exhibition halls play a critical role in the cultural, economic, and social life of cities. These spaces are not only venues for showcasing art, innovation, and industry but also serve as catalysts for community engagement, education, and economic development. Whether they host art exhibitions, trade shows, conventions, or cultural festivals, exhibition halls are key components of a city's infrastructure, contributing to its vibrancy, creativity, and global connectivity. Here are several reasons why exhibition halls are so important in urban environments:

DESIGN OBJECTIVES

1. Cultural and Artistic Expression

Exhibition halls are central to the arts and culture scene in cities. They provide a platform for artists, designers, and creators to showcase their work, whether it be visual art, sculpture, photography, or multimedia installations. By hosting exhibitions, these venues give the public access to new ideas, perspectives, and forms of creative expression. They contribute to the cultural richness of a city, drawing in local, national, and international visitors who are eager to experience new artistic trends and cultural movements. Cities with thriving exhibition halls often become cultural hubs, attracting art collectors, curators, critics, and tourists. These spaces also foster collaborations between artists, curators, and cultural institutions, helping to elevate the city's cultural profile on a global scale. Furthermore, exhibition halls often serve as venues for public art projects, community-based exhibitions, and educational programs that engage diverse audiences and promote cultural dialogue.

2. Economic Impact and Tourism

Exhibition halls are significant drivers of the local economy. Large-scale exhibitions, conventions, trade shows, and expos often attract thousands of attendees, including professionals, exhibitors, and tourists from around the world. This influx of visitors generates revenue for local businesses, including hotels, restaurants, transportation services, and retail outlets. The economic impact of these events can be substantial, with many cities investing in exhibition halls as long-term infrastructure projects designed to boost their economies. In addition to the immediate economic benefits, exhibition halls can enhance a city's reputation as a destination for business and leisure travel. Events like international trade shows, product launches, and industry conferences can position a city as a global center for specific sectors, whether it be technology, fashion, design, or the arts. Over time, this can lead to increased investment, tourism, and job creation, making exhibition halls an important pillar of a city's economic development strategy.



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3. Platform for Innovation and Knowledge Sharing

Exhibition halls are not only about showcasing art and culture but also serve as venues for sharing knowledge, innovation, and new ideas. Trade shows and conventions are spaces where industries come together to display the latest technologies, products, and services. Whether it's a tech expo, a healthcare conference, or a green energy exhibition, these events foster the exchange of ideas, stimulate creativity, and promote professional networking. They help businesses stay up to date with the latest trends and innovations in their fields, providing valuable opportunities for collaboration, investment, and growth. Moreover, exhibition halls often host educational programs, workshops, and panel discussions that encourage learning and skill development. By bringing together experts, thought leaders, and entrepreneurs, these spaces create an environment conducive to knowledge sharing and the advancement of new solutions to global challenges.

4. Community Engagement and Social Interaction

Exhibition halls serve as community gathering spaces where people from diverse backgrounds and interests can come together. Whether it's a local art exhibition, a cultural festival, or a public event, these venues provide opportunities for social interaction, dialogue, and collective experiences. They foster a sense of community by encouraging people to explore shared interests, celebrate common values, and learn from each other. For cities with diverse populations, exhibition halls can act as platforms for cultural exchange, allowing different communities to share their stories, traditions, and artistic expressions. This promotes greater social inclusion and understanding, while also enriching the city's cultural fabric. In this way, exhibition halls can contribute to social cohesion and help build stronger, more interconnected communities.

5. Supporting Local Artists and Creators

Exhibition halls are vital spaces for the promotion of local artists, creators, and entrepreneurs. These venues provide a stage for emerging talent to showcase their work, gain exposure, and connect with potential buyers, collectors, and collaborators. Many exhibition halls host dedicated spaces for local artists, crafts persons, and designers, helping them reach broader audiences and gain recognition within their fields. By hosting exhibitions that focus on local art, heritage, and craftsmanship, these venues help preserve and celebrate a city's unique cultural identity. They provide opportunities for local artists to engage with global trends while staying rooted in their communities. Additionally, exhibition halls often partner with schools, universities, and cultural organizations to offer mentorship programs, workshops, and educational initiatives that support the growth of the local creative economy.



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6. Education and Cultural Literacy

Exhibition halls are important educational resources, providing opportunities for people of all ages to learn about art, history, science, and culture in an interactive and immersive way. They often feature exhibits that are designed to educate visitors on a wide range of topics, from historical events and social issues to technological advancements and scientific discoveries. These exhibitions make learning engaging and accessible, often incorporating multimedia, interactive displays, and hands-on activities that cater to diverse learning styles. Many exhibition halls also host educational programs for schools, families, and individuals, offering workshops, guided tours, and lectures that deepen visitors' understanding of the subjects on display. For children, in particular, these spaces can spark curiosity, creativity, and critical thinking, helping to cultivate a lifelong love of learning.

7. Architectural and Urban Development

Exhibition halls can also have a significant impact on the physical and architectural landscape of a city. Well-designed exhibition venues often become iconic landmarks, contributing to the city's aesthetic appeal and architectural heritage. They may be housed in innovative, cutting-edge buildings that attract attention and serve as architectural showcases in their own right. In addition, the development of exhibition halls can spur urban regeneration and revitalization. By creating attractive, functional spaces for cultural and business events, cities can revitalize neglected or underutilized areas, attracting investment, improving infrastructure, and enhancing the overall quality of life for residents. Exhibition halls, particularly when integrated into mixed-use developments, can help create vibrant urban districts that combine culture, commerce, and public spaces.

8. Fostering Global Connectivity

Exhibition halls are essential for fostering global connectivity and international collaboration. Many large-scale exhibitions, such as world expos or international trade fairs, bring together countries, industries, and professionals from across the globe. These events provide platforms for showcasing global innovations, discussing international issues, and exploring cross-cultural connections. For cities, hosting international exhibitions and events enhances their global profile and strengthens diplomatic, trade, and cultural ties. It allows local industries to gain exposure on the world stage while attracting foreign investment and partnerships. In this way, exhibition halls contribute to a city's position as a global player, helping to promote international exchange and understanding.



PREFACE

CONCLUSION

Exhibition halls are indispensable to the cultural, economic, and social fabric of cities. They are more than just spaces for displaying art and products—they are dynamic, multifaceted venues that contribute to the growth and development of urban areas. By providing platforms for cultural expression, innovation, education, and community engagement, exhibition halls enrich the lives of city residents and visitors alike. They also stimulate economic activity, attract tourism, and promote global connectivity, helping cities thrive in an increasingly interconnected world. Whether hosting a local art exhibition or a major international conference, exhibition halls are vital to the continued vibrancy and progress of cities.

CHAPTER THREE

DESIGN SOLUTIONS

TOPICAL CUES ON DESIGN PHILOSOPHIES & CONCEPTS

In order to maintain accuracy of the originally intended meanings and retain authenticity, materials obtained from online sources and published references are acknowledged using essential links and names of authors.

An introductory lecture by: Prof. Paul Mwangi Maringa (PhD), CBS, FAAK, MKIP,
Adjunct Professor of Architecture and Planning

UNDERSTANDING DESIGN:

DEFINITION OF DESIGN AND ITS PURPOSE:

Designing is the art of creating something that is both functional and visually appealing.

We design to communicate, express ourselves, and solve problems.

Designing helps us to create products that are more efficient, effective, and user-friendly. Mohammed Adib, <https://bootcamp.uxdesign.cc/why-design-understanding-the-purpose-behind-designing-1673d25019c7>

ELEMENTS OF DESIGN:

Line, shape, form, space, texture, tone (or value) and colour, are elements or materials from which all designs are built." Hiking Trail Club,

<https://guelpkhiking.com/Elements-of-Design#:~:text=The%20elements%20of%20design%20are,which%20all%20designs%20are%20built.%>

BASIC PRINCIPLES OF DESIGN:

These include, contrast, balance, emphasis, proportion, hierarchy, repetition, rhythm, pattern, blank-empty or void spaces, movement, variety, and unity.

These principles are configured in careful complementation to create appealing and functional designs that have contextual value to users. Design often addresses spaces and artifacts for use by people. It is defined by the intended purpose of use by the client.

Design therefore necessarily is driven by a functional purpose. In this regard it is different from art that may purely expresses ideas or emotions. (Meg Reid,

<https://www.vistaprint.com/hub/principles-of-design#:~:text=The%20fundamental%20principles%20of%20design,attention%2C%20a%20point%20of%20focus,Cameron Chapman>,

<https://www.toptal.com/designers/gui/principles-of-design-infographic#:~:text=There%20are%20twelve%20basic%20principles,that%20make%20sense%20to%20users>).

GENERAL MEANING OF PHILOSOPHY:

Scholars generally associate philosophy with the study of the fundamental nature of knowledge, reality, and existence. They relate it to theory or attitude that guides behaviour. As a philosophical stance, managing expectations for instance leads one to set modest goals or targets. This as a principle impulse to behaviour aids one to absorb poor or low performance with less vexation and anxiety. The term wisdom has over the years often been used interchangeably with philosophy, often seen as a venture to comprehend basic truths of existence, with its intricate social relationships (<https://philosophy.fsu.edu>). Philosophers are seen as a logical thinkers involved in an enterprise to gain completeness of well-reasoned, evidential knowledge. Two philosophical threads that easily come into view here are:

1. The history of philosophy. These are evident in: (1) Ancient Philosophy, from Socrates to Augustine; (2) Medieval Philosophy, from Augustine to Machiavelli; and (3) Modern Philosophy, from Descartes to Kant.
2. Systematic philosophy. This is manifested in: (1) metaphysics - the study of reality; (2) ethics - the study of what is morally right and good; (3) Epistemology - the study of how we know reality; (4) logic - the study of good arguments; (5) Aesthetics - the philosophy of art, or the study of appreciating the beautiful; and theory of art; and (6) Socio-political philosophy - the study of political and legal theories.

<https://www.depauw.edu/academics/departments-programs/philosophy/what-is-philosophy#:~:text=Examples%20of%20systematic%20philosophy%20would,the%20study%20of%20appreciating%20the>

PHILOSOPHY OF DESIGN – WHAT DESIGN IS:

Design relies on art as an input and is therefore not exclusively defined by art. There is practice or use of art to creating great design, but the final output of the design process is not art.

Art is creative expression intended to provoke questions and individual interpretation. Art is inspiring, emotional and important. However, it often does not fill a specific need beyond humanities' desire to express itself. Design though is a process intended to solve a problem, and as a result, satisfy a need for users that will ultimately interact with the solution that is developed.

In consequence, design should not be open to interpretation, but instead should define how it is to be engaged with and should guide a user at each stage of that engagement. So, whereas art provokes questions, design proffers solutions.

As design is driven by purpose, it manifests the reality, function or context it seeks to serve. Appropriate design therefore resonates with the end-user client population, and their reality or context of functional needs, socio-spatial settings and cultural realities, all which must be truly felt and be well understood by the designer.

This perspective is well captured in Dieter Ram's dictum, "*Indifference towards people and the reality in which they live is actually the one and only cardinal sin in design*", which reflects his design philosophy of Less, but better, that accorded premium to a functionalism design approach, placing function before form.

Design is a never-ending cyclic spiral rather than a journey to an end state. It is never perfect. It is a continuous process subject to change through a user feedback loop. Its suggested solutions, evolves with a dynamically transforming complex social context, which changing circumstance also receives and responds to the impulses from the design itself. As such, design is always in transition, always in cumulative self-reinforcing iterations, and can never quite attain an end state perfection or perfect fit.

Design is an informal sequencing of thought and reflection. It is neither a set of tools, nor a standardized process. As such, every problem presents its own unique set of characteristics, such that there is no rule of thumb route or sequence of activities to follow in order to achieve a favourable solution.'

Design must be easily legible to the user. It therefore ought to reflect its intended function in a simple forthright manner, without ambiguity. Design elicits empathy with users and by extension, the subjective complex and ever shifting emotions of pleasantness, ease, comfort, interest and therefore delight.

(Jessee Weaver, "What is your design philosophy", 2015,

<https://hairyelefante.medium.com/what-is-your-design-philosophy-a32d43985899>).

POPULAR DESIGN PHILOSOPHIES:

1. Form Follows Function (Architect Louis H. Sullivan). In this mold, design is expected to be straight forward, relating expression to functional needs of users. Spaces then must derive character from the desired uses of such spaces.

The building envelop and resulting forms are also expected to express the internal functions of the buildings they embellish. To this extent, and consistent with a view that aesthetics must be founded upon functional value, Frank Lloyd Wright averred that form and function are one.
2. Details are not mere details, rather they make the design (Architect Charles Eames). This attitude towards design is anchored in the common adage that "God or the good God is in the details", that affirms the value of details and the need to take them seriously.

The saying was coined much earlier first by Gustave Flaubert, followed by the German art historian Aby Warburg and then architects Ludwig Mies van der Rohe and Le Corbusier.

For this orientation, designers are encouraged to give every aspect of a design full attention. The understanding that great design is both pleasing and functional and that it emerges from a composition of well-crafted details finds a home in this philosophy too.

<https://blog.proto.io/10-of-the-best-design-philosophies-of-all-time/>).

3. To provide meaningful architecture is not to parody history, but to articulate it (Architect, designer and artist Daniel Libeskind). The intention here is to display the horror of history so as to engender learning and understanding while integrating it with hope for a better tomorrow. Libeskind strove to attain this in his designs of the Jewish Museum in Berlin, Denver Art Museum's extension in the U.S., and the Imperial War Museum in England.

This thinking resonates with Frank Gehry's perceptions of deconstructivism as a philosophy for designing a better future from the brokenness of human experience. His pronouncement that Architecture, should speak of its time and place, while yearning for timelessness finds resonance here too.

Here, architecture is expected to serve as a repository of human experiences past, present and future with full deep historical value, as a timeless archive. It should avoid mere replication of artifacts and ideas of the past but instead infuse full, relevant present meaning to designs.

Also relevant here is the philosophical poise of design as a cultural artifact. Yves Behar, chief creative officer of Jawbone and arguably the most influential industrial designer alive, asserts that the work of a designer is really at the intersection of commerce and culture. True value in designs therefore emerges when they are nested in and exude distinctive cultural flavour.

<https://blog.proto.io/10-of-the-best-design-philosophies-of-all-time/>).

4. Life is chaotic and buildings should reflect this reality (Architect Frank Gehry). Interpreted here is the deconstructivism design philosophy to defy tradition and expand personal choice, in the sense of appreciating that, life is not a set of monotonous and reduced simple rules, but rather an ever-changing dynamic of diversity of preferences and choices. Gehry ventures to capture this thinking in his design of the Guggenheim Museum.

5. Anything that exists only to satisfy the ego of the designer must be eliminated, (Eric Reiss, Theoretician, consultant and author).

Emphasis here is laid on the need to subsume the preferences of an architect and instead give pre-eminence to the priorities of the user. Consistent with this is the associated philosophy that a design is not complete until it is put into use (Brenda Laurel, researcher and a videogame designer).

Of prime value here is the end consumer who then is ascribed the dominant role of validating all design. Also cast in this same framework is the philosophy that all fine architectural values are human values, else they are not valuable (Architect Frank Lloyd Wright).

The persuasion that humanity is at the centre of all design for man and society is accorded centre stage. Buildings and their contrived environments must therefore reflect the essence of humanity and its culturally contextual values.

In the absence of such inclinations, architecture becomes stale and irrelevant. Value is seen in the philosophical thought that while good design is obvious, great design is transparent (Joe Sparano, Graphic Designer). In such an understanding, designers are encouraged to imagine how people use their designs as a way to keep the designs accessible, simple legible and easy to use.

6. Simplicity is not the absence of clutter (Jonathan Ive, designer for Apple). Integral to this thinking is the ongoing discussions kicked off by Mies van der Rohe of 'less is more', and repudiated by Robert Venturi "less is a bore" in his writings on complexity and contradictions in architecture.

Simplicity then should not require reduction in diversity and intensity of variance, but rather an introduction or complex order and clarity. Reinforcing this thinking is the notion that good design is as little design as possible.

Further, thought is underpinning here on the conviction espoused by Jonathan Ive and Stefan Sage Meister, Diego Armani and Ludwig Mies van der Rohe among others that is founded on the value of controlled reduction or minimalism (less is more) as opposed to unwarranted embellishment

<https://blog.proto.io/10-of-the-best-design-philosophies-of-all-time/>)

7. Good design redefines itself, rapidly. Alexander Rodchenko, one of the founding fathers of the constructivist movement, advocated for making multiple variations of the same subject to capture its essence, declaring that "*one has to take several different shots of a subject, from different points of view and in different situations, as if one examined it in the round rather than looked through the same keyhole again and again*". Accordingly, therefore, design does not exist in isolation but rather it emanates from and reflects its client society changing and adapting in rhythmic iterations and at pace with corresponding changes in society. (<https://blog.proto.io/10-of-the-best-design-philosophies-of-all-time/>).

The preceding discussion restates and articulates the ideas of Karen Elyssa, 2020, in her writing "10 Design Philosophy Ideas for Architecture Students

<https://girlbossarchitect.com/2020/07/27/10-design-philosophy-ideas-for-architecture-students/>).

A GENERAL UNDERSTANDING OF CONCEPTS:

A concept may be understood to be a core or basic abstract idea, impression, notion, or thought

(<https://www.vocabulary.com>
<https://www.merriam-webster.com>).

It reflects an intention that is frequently illustrated through words, images and sketches

(<http://airfocus.com>).

SPECIFIC MEANINGS OF CONCEPTS:

Architectural concepts are abstract ideas or notions that are provoked by particular user needs, functional and contextual instances. They infer or hint at essential meanings or values of a specific design circumstance. Though abstract and intangible, they are the main essence behind all decision-making in the subsequent design process.

Architectural concepts anchor ideas that are conceived out of an initial incisive analysis of the design functions, its setting and the nature and values systems of the target users. This is an absolutely necessary first step of the design process.

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Concepts constrain the design to set philosophical boundaries, according to the singular identity of the design. They ward off compromises and distortions that may arise from possible digressions away from the seminal core values of the design.

(<https://www.novatr.com/blog/architectural-concepts-types>).

SOURCES OF CONCEPTS:

Competitive concepts derive from a good understanding arising from an in-depth analysis of the functional needs and planning predilections, accessible technology and physical environment (terrain, flora, fauna, climate, weather – rainfall, sunshine, water and wind), culture (meanings and identity), and site context (circumstances, surroundings and prevailing structure of space use). In this way, they offer a clear framework for well-reasoned, rational decision making, (Maringa & Okello, 2006).

NATURE OF CONCEPTS:

Concepts are dynamic. They evolve constantly throughout the design lifetime as new perspectives of the design and locational areal parameters come into view. Concepts therefore metamorphose with a changing understanding of the holistic design context and user needs as well as internal functional interactions. A designer can cumulatively assemble, different types of architectural concepts in a design throughout the design development process

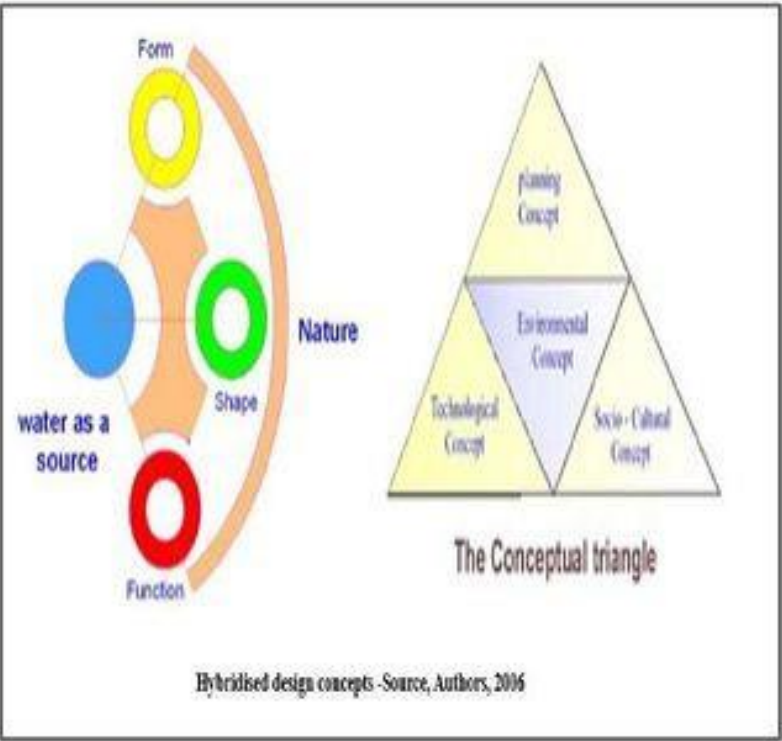
(<https://www.novatr.com/blog/architectural-concepts-types>).

SYNTHESIS OF CONCEPTS:

There are multiple concepts in every design, and these align to the many diverse imperatives that drive the designs. Principally, designs will rely on the following three classifications of concepts:

- A. Planning and organisation concepts – site, spatial character and meaning.
- B. Technological concepts – structural order, assembly, materials, environment.
- C. Socio-cultural concepts – meaning, identity, structure.
- D. Environmental concepts - the site and its natural and developed physical context.

These translate from the holistic context of the design imperatives and location through images that are frequently abstracted into functional analogies/symbolism, metaphors or allegories. At times biomimicry of natural and created artifacts in the environment are synthesised for expression or structure and meaning and captured into equivalent visual representations.



Framework of sources of concepts, Source, Maringa & Okello, 2006.

ANCHORING CONCEPTS ON DESIGN THEORY:

Appropriate design approaches are brought to bear in order to integrate the concepts and their representative analogies into space organisation and form making in an orderly manner along the design process. The standard four, iconic, pragmatic, canonic, analogic design approaches can be brought on board, either singularly, or in complementation, as they are able to provide value to the design solution sought.

The wide array of architectural styles and the emerging neologisms or variants that are on hand throughout recent history of evolving architectural practice, are referenced freely though critically. These cover the range of regionalism, postmodernism, functionalism expressionism, eclecticism, structuralism, historicism and the rather recent radical deconstruction/disintegration/destruction.

They are, selectively grafted into the process of creating compulsive, evocative images, order, identity and meanings that manifest the selected concepts effectively to produce imageable environments, forms or edifices.

ELEMENTAL DEFINITION OF FORM:

A Form is a three-dimensional (3D) object or void with real or implied mass, volume, height, width and depth. Geometric forms are contrived into visual or physical expressions using, squares, rectangles, circles, and polygons as flat shapes. Shapes are modelled through 3D expressions of cubes, spheres or polyhedra and in this way take on forms.

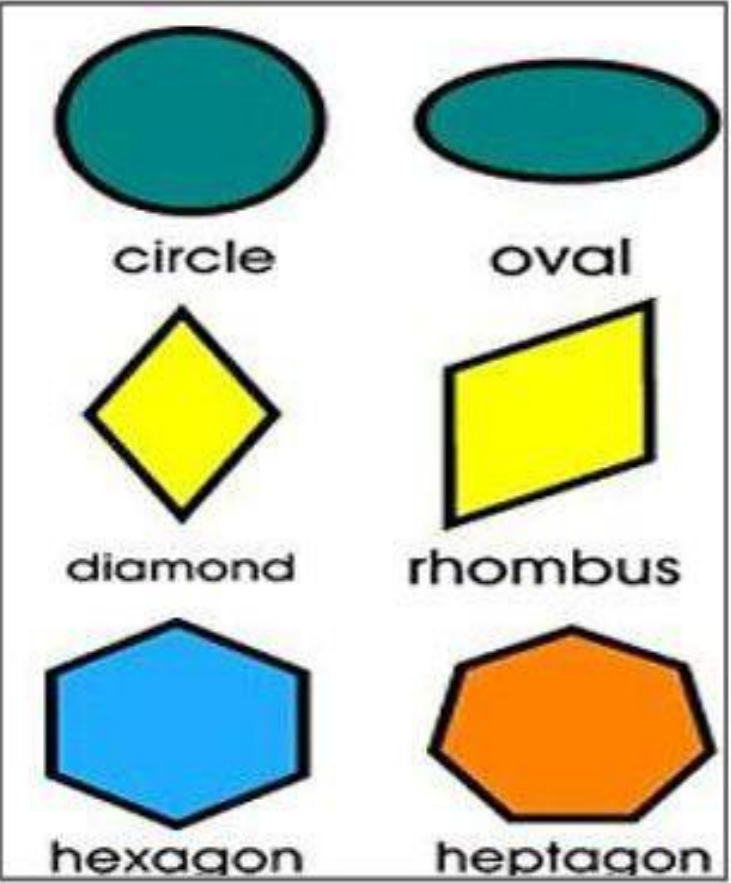
The latter covers the range of four sided tetrahedrons, six sided hexahedrons, eight sided octahedrons, twelve sided dodecahedrons with equal pentagonal faces, and twenty sided icosahedrons (Ching, 2015, Vandyke, 1990). Forms are volumes in three dimensions as prescribed by length, width and depth or circumference and radius (Vandyke, 1990). In consequence, forms manifest scale, size, colour & texture (surface treatment), position, orientation, visual motion or inertia/stability (Maringa & Okello (2006).

Visual and physical art as well as architecture that embraces three dimensional sculptures and models is expressed through forms. A circle therefore is a shape that corresponds in form to a cylinder and sphere. In turn, a triangle is a shape which translates into the form a pyramid. Forms, can also be irregular or amorphous and these too find use in design.

(Hiking Trail Club, <https://guelphhiking.com/Elements-of-Design#:~:text=The%20elements%20of%20design%20are,which%20all%20designs%20are%20built.%22>).

DEFINITION AND TYPES OF SHAPES:

A shape can be defined as a two-dimensional area that stands out from the space next to or around it on account of well delineated or implied boundaries. These boundaries may assume the form of physical lines and barriers, change of patterns or differences of value, colour, and texture. Drawings are bounded by lines that separate internal space & the surroundings.



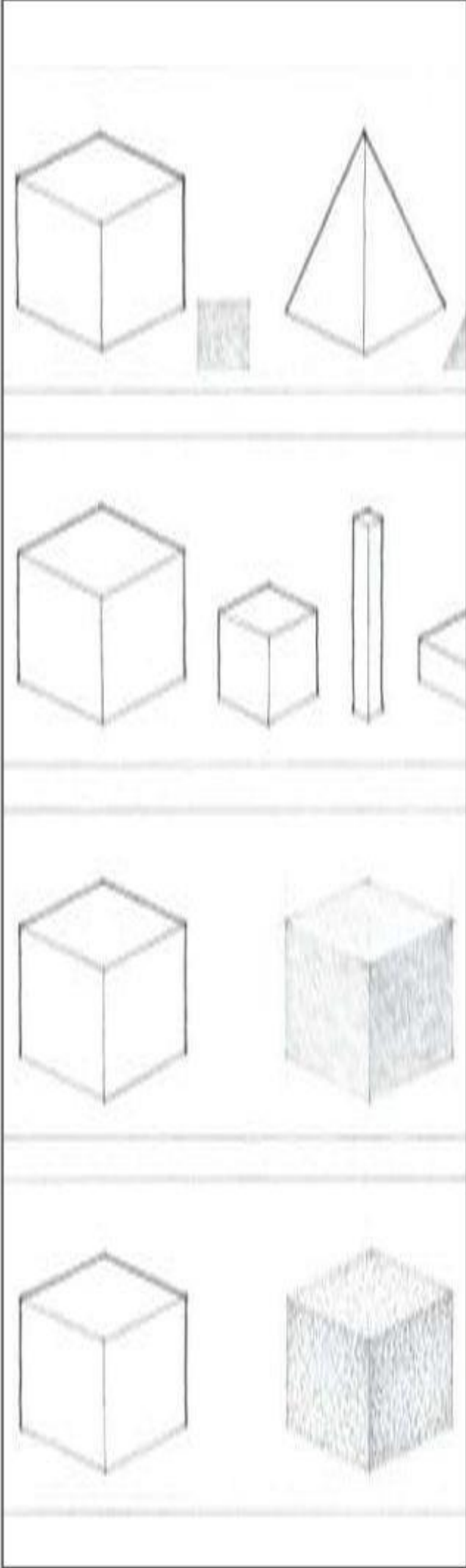
These lines serve as barriers that place the drawing and the shape it represents apart when disposed against a background of papers, boards or tables.

Basic shapes available to designers include geometric shapes that often reflect regular proportions and definite shapes as seen in squares, circles, and triangles. Rhombuses and other diverse polygons are other variations that assume unequal proportions while retaining recognisable shape. It is therefore common to classify geometric forms into the following two primary sets:

- A. Curvilinear shapes that generally display smooth curvature.
- B. Rectilinear shapes that are characterised by conspicuous angularity, with the convergence of their constituent lines ranging from acute to obtuse angles.

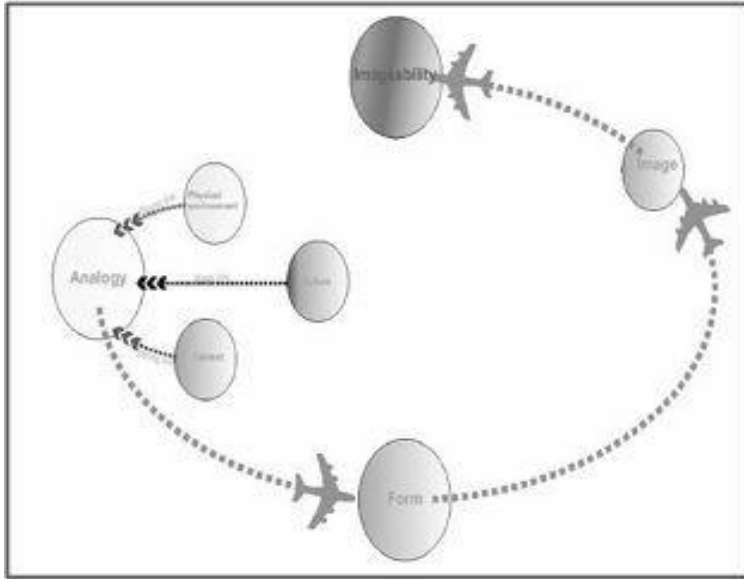
Then there are organic shapes that commonly manifest complex irregular patterns of intricate proportions that evoke nature, with indefinite edges, and free-flowing outlines.
Hiking Trail Club,

<https://guelphhiking.com/Elements-of-Design#:~:text=The%20elements%20of%20design%20are,which%20all%20designs%20are%20built.%22>

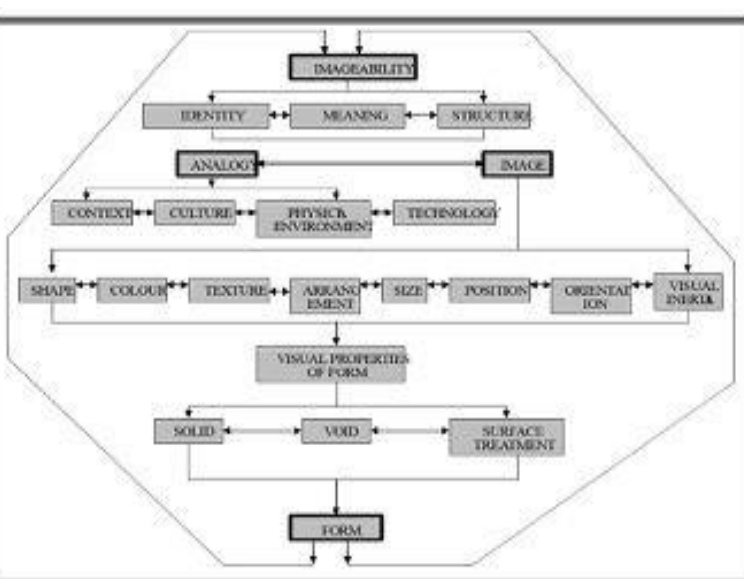


IMAGEABILITY: Buildings have certain qualities that give them a high probability of evoking a strong image in any given observer (Lynch 1960). This is imageability that may also be termed legibility or even accentuated visibility. It is an image with clarity and harmony of form, which is well formed, distinct and remarkable (Stern 1914 -15, Lynch 1960).

ANALOGY, FORM AND IMAGEABILITY, Maringa & Okello (2006).



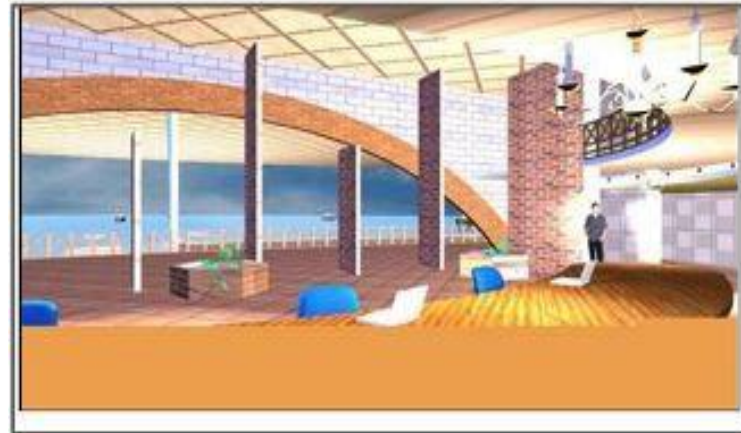
DERIVING IMAGEABILITY FROM FORM, Maringa & Okello (2006)



THE EMOTIONAL BASIS or MEANING OF ARCHITECTURE, Maringa & Okello (2006)

Metaphors and analogies that are founded on local codes (as is expected of architectural metaphors), are here abstracted from the adjacent ocean, its animal life and seafaring vessels, are extensively used too, as sensory cues that evoke rich meaning to the user.

Metaphors are brought into use with 'wit' – an indirect innuendo that provokes the user to make thought provoking, but nevertheless believable associations. Drama in the design scheme is accelerated by the use of a collage of metaphors. Mystery and power on their part are enhanced by intentionally keeping the metaphors only slightly suggestive – in a sense, camouflaging their meanings from obvious interpretation.

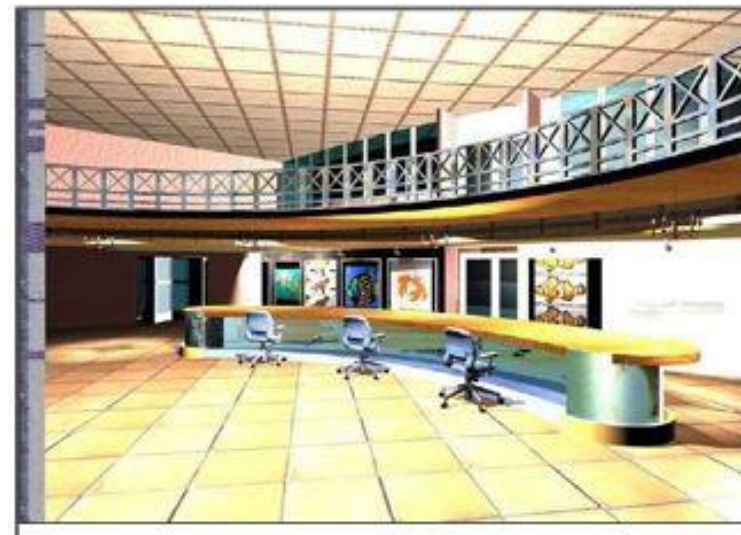


Metaphors & analogies founded on local codes used as sensory cues that give meaning, Source, Maringa & Okello, 2006.

Mixed or hybridised metaphors give even more compulsive value to the design in a synergistic contrivance providing exciting emotional energy.

Together, this blend of metaphors provides the basis upon which people find their emotional affinity or connection with the built form.

The users are attracted in this manner to these forms because by design, the forms are contrived to carry metaphorical analogies that people can relate to easily.



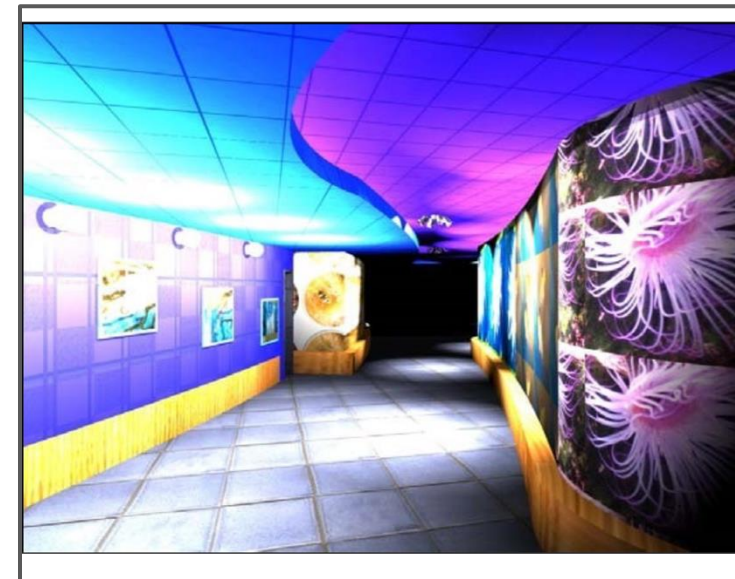
Forms designed to carry metaphorical analogies that people can relate to easily, Maringa & Okello, 2006

Man is taken here in agreement with theory, to instinctively perceive the large scale as hostile and threatening unless it is moderated by, or carefully crafted from a well-ordered small scale. The desired scaling then is achieved here at the level of detail, materials, and the smaller building elements, whose size approximates well, man's anthropometrics.



A large scale that is moderated by a well-ordered small scale, Maringa & Okello, 2006

A large scale that is moderated by a well-ordered small scale, Saring & Okello, 2006 Similar reflections apply here once more that: Man is taken here in agreement with theory, to instinctively perceive the large scale as hostile and threatening unless it is moderated by or carefully crafted from a well-ordered small scale. The desired scaling then is achieved here at the level of detail, materials, and the smaller building elements, whose size approximates well, man's anthropometrics. Perceptively beautiful forms that establish an emotional link with the elemental structural order, Maringa & Okello, 2006



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**SIGNAL PORTFOLIO
OF
DESIGN SOLUTIONS**

A. MUSEUM DESIGNS

**B.A.S YEAR IV CONTRIBUTING STUDENT RESEARCHERS
AND DESIGNERS - 2024/2025**

Mwinja Barhibonera

Murigo Nguti

I am Mwinja Barhibonera Rebecca studying Architecture at Kenyatta University. My journey in Architecture made me passionate about designing without destroying the environment and solving problems through innovative design, while respecting the cultural identity of the place. That demonstrates my dedication to human centered and environmental consideration.

SITE PLAN



SITE ORGANIZATION

The Site Has Curvilinear Building Complex Acting As The Primary Focal Point. The Organisation Suggests A deliberate Separation Of Functions, With The Sport Field Located distinctly From The Main Building. The Landscaping Integrates The Built Elements Into The Site, Creating A More Cohesive Environment.
 The Building Appears To Be Multi-Storeyed, Indicated By The Visible Levels.
 The Central Open Space Within The Curve Suggests A Courtyard Or Plaza, Potentially Serving As A Gathering Space.

Outdoor Seating

Providing Opportunities For Informal Meetings, Conversation And Community Building. Offering Places To Rest, Enjoy The Outdoors, And Connect With Nature, Contributing To A More Positive And Health Environment.
 Act As A Transition Spaces Between Indoor And Outdoor Environments.

Vehicular Circulation And Parking

Dedicated Parking Area To Separate The Primary Pedestrian Zones And Enhances Safety.
 The Museum Provide A Single Entry/Exit Point For Vehicular Traffic, Which Can Help Manage Flow.

Pedestrian Circulation

Primary Pedestrian Seems To Encourage Pedestrian Movement Through The Central Courtyard And The Pathways CONNECTING The Central Courtyard And Along The Pathways Connecting The Different Parts Of The Complex.
 The Pathway Appear To Weave Through Landscaped Areas, Creating A Pleasant And Potentially Shaded Pedestrian Experience.

Football Field

Discrete Zone Is Situated In A Separate Zone, Away From The Main Building Complex. This Separation Minimizes Potential Noise And Activity Conflicts.
 The Orientation Of The Field Might Be Considered In Relation To Sunlight Angles To Optimize Playing Conditions.

Service Areas

There Might Be Service Areas For Deliveries And Waste Management.

Signage And Wayfinding

A comprehensive Site Must Include Signage To Guide Pedestrians And Vehicles.

Landscaping

Trees Are Planted Along The Site Boundaries, Providing Visual Screening, Noise Reduction And A Sense Of Enclosure.
 Landscaping With The Courtyard And Along Pathways Enhances The Aesthetic Appeal And Can Provide Shade And Microclimate Benefits.
 The LANDSCAPING Appears To Be Integrated With The Built Elements, Softening The Hard Surfaces And Creating A More Natural Environment.



PROJECT JUSTIFICATION

Based on the historical context of JERICHO, Nairobi, a MUSEUM OF SPORT AND HISTORY can be justified as follows:

1. RICH HISTORICAL BACKGROUND

- JERICHO was established in the 1950s as part of Nairobi's early urban planning efforts and has a deep cultural and historical significance.
- The estate is named after Ambrose Odiat, a key political figure, and had involvement from the Israeli government, linking it to broader historical narratives.

2. LEGACY OF SPORTS EXCELLENCE

- JERICHO has produced notable sports figures such as Robert Nwuluni Wangila, Kenya's only Olympic boxing gold medalist.
- Camp Toyota, a major sports ground in the area, is a hub for local and national sporting activities.
- The presence of sporting activities in the community shows a strong cultural connection to athletics, making a sports museum highly relevant.

3. CULTURAL AND COMMUNITY SIGNIFICANCE

- The area has strong communal ties with various social spaces including playgrounds, open areas, and graffiti art that express the local identity.
- A museum would preserve and celebrate these aspects, ensuring the community's cultural heritage is documented for future generations.

4. EDUCATIONAL AND INSPIRATIONAL VALUE

- The museum can serve as an educational center for schools and young athletes, showcasing Kenya's rich sporting history and inspiring future generations.
- Exhibits can feature Kenya's Olympic history, legendary athletes, and historical milestones in Kenyan sports.

5. URBAN RENEWAL AND TOURISM POTENTIAL

- Given JERICHO's existing challenges such as overcrowding and underutilized public spaces, a well-designed museum could revitalize the area.
- It could attract tourists, generating economic benefits and boosting local pride.

6. INTEGRATION WITH EXISTING LAND USES

- The site has open spaces and social areas that can be adapted for museum-related activities without disrupting the neighborhood fabric.
- The museum could incorporate public art, graffiti, interactive exhibits, and outdoor sports-related installations to blend into the local environment.

7. INFRASTRUCTURE AND ACCESSIBILITY

- The site has a well-connected road network and is close to major landmarks like JERICHO Market and Odiat High School, making it easily accessible.
- This accessibility makes it a practical location for a public institution like a museum.

PROJECT AIM

The aim of a Museum of Sport and History would be to preserve, celebrate, and educate visitors about the rich heritage of sport within a specific historical and cultural context. By integrating historical narratives with the evolution of sports, the museum would serve as a bridge between past and present, showcasing how sports have shaped societies, influenced identities, and contributed to social change.

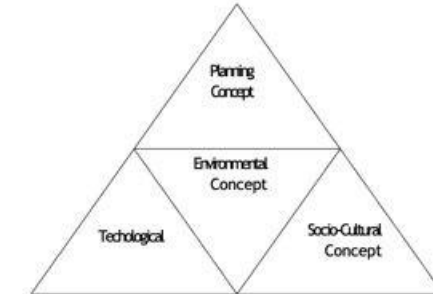
Through carefully curated exhibitions, the museum would highlight key historical events, legendary athletes, and significant moments that have defined various sports. It would also explore the social, political, and economic impact of sport, demonstrating their role in nation-building, community development, and international relations. By emphasizing the historical context of sports in the region or country where the museum is located, it would create a deeper understanding of how sports have evolved alongside broader societal transformations.

Additionally, the museum would aim to inspire future generations by celebrating perseverance, teamwork, and the spirit of competition. It would provide an educational platform where visitors, including students, researchers, and sports enthusiasts, can engage with interactive displays, archival materials, and multimedia presentations. By fostering a sense of pride and appreciation for the past, the museum would also contribute to the promotion of sports culture and heritage conservation.

PROJECT BRIEF

	SPACES	SUB-SPACES	CAPACITY	FUNCTIONS	SPACIAL CONSIDERATIONS	AREA				
1.	Entrance And Reception	Entrance Lobby	50-100	Visitor Orientation	Spacious Clear Circulation Welcoming Ambiance	150-300				
		Reception /Information Desk		Ticketing						
Lockers	Information Desk									
2.	-Exhibition Space	Main Exhibition Halls	50-100	Display Of Historical And Sports Artifacts	Climate control Proper Lighting Accessibility	500-1000 Per Hall				
		Temporary Exhibition Areas								
		Special Interactive Zones								
	-Showcases And Display Areas	Freestanding Display Cases	50-150	Honoring Sports Legends Display Of Graffiti	Iconic Design Multimedia Displays					
		Wall-mounted Display Panels								
		Multimedia Display								
3.	Educational And Interactive Spaces	Auditorium/Lecture hall	200-300	Talks Film Screenings Presentations	Good Acoustic Flexible Seating	400-600				
		Seminar/Workshop rooms								
		Library And Archive Research Rooms	30-50	Research, document storage	Quiet Space Humidity Control	200-400				
4.	Administration And Staff Area	Offices	20-50	Museum Management And Operation	Quiet Space Workstation	200-400				
		Staff Lounge								
		Security/Surveillance Room								
		Storage	10-20	Artifact Preservation	T/Humidity Control	200				
5.	Visitor Facilities	Cafeteria/Restaurant	100-200	Dining	Comfortable Seating	300-600				
		Gift/Souvenir shop					30-50	Souvenir	High Visibility, Easy to Access	150-300
		Restrooms/Male/Female								
6.	Parking	cars		Carparking						
		Buses								
7.	Outdoor Plaza		200-500	Public Gatherings	Shaded Seating Open-Air Displays	500-1000				
	TOTAL AREA									

THE CONCEPTUAL TRIANGLE



CONCEPT

CULTURAL LEGACY IN MOTION

Refers to the dynamic ways in which cultural heritage is preserved, transmitted, and reinterpreted across time and generations.

It emphasizes that cultural is not static but constantly evolving, shaped by various factors.

1. Environmental Concept 'ECOSYSTEM OF HERITAGE'

The natural landscape, resources, and ecological knowledge often form an integral part of cultural identity and practices. Cultural legacy in motion recognizes the importance of maintaining this connection and promoting sustainable practices that protect both culture and natural heritage.

2. Planning Concept 'CURATED EVOLUTION'

Cultural legacy in motion requires deliberate planning to ensure its continuity and relevance. This involves identifying key elements of heritage, developing strategies for their preservation and transmission, and fostering an environment that encourages innovation and adaptation.

3. Technological Concept 'DIGITAL ECHOES'

Technology plays a crucial role in documenting, preserving, and disseminating cultural legacy. From digital archives and virtual museums to interactive storytelling platforms and social media, technology enables cultural heritage to reach wider audiences and engage new generations.

4. Socio-Cultural Concept 'SHARED NARRATIVE'

Cultural legacy in motion is a collective endeavor, shaped by the interactions and experiences of diverse individuals and communities. It involves passing down traditions, values, and knowledge through generations, while also adapting them to changing social contexts.

DESIGN CONCEPTUALIZATION

DESIGN PHILOSOPHY

ALL FINE ARCHITECTURAL VALUES ARE HUMAN VALUES, ELSE THEY ARE NOT VALUABLE

This principle underscores that architecture should serve people, enhancing their well-being and reflecting their cultural and social identity. Any architectural feature that does not improve human experience, whether through functionality, or emotional connection, lacks value.

For the Museum of Sport and History, this means:

- Celebrating Human Achievement by narrate the stories of athletes and historical moments, using architecture to evoke emotions of triumph, perseverance, and legacy.
- Inclusive Design by make spaces universally accessible, ensuring that people of all abilities can engage with exhibits and architectural elements.
- Community Engagement: The museum should have multipurpose spaces for educational programs, sports training area, and cultural events, allowing visitors to actively participate rather than just observe.

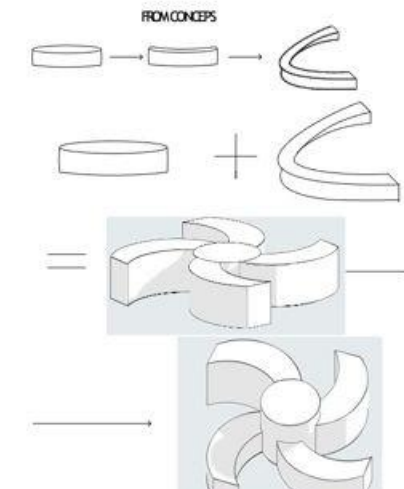
PHILOSOPHY OF DESIGN

"DESIGN MUST BE ROOTED IN REALITY"

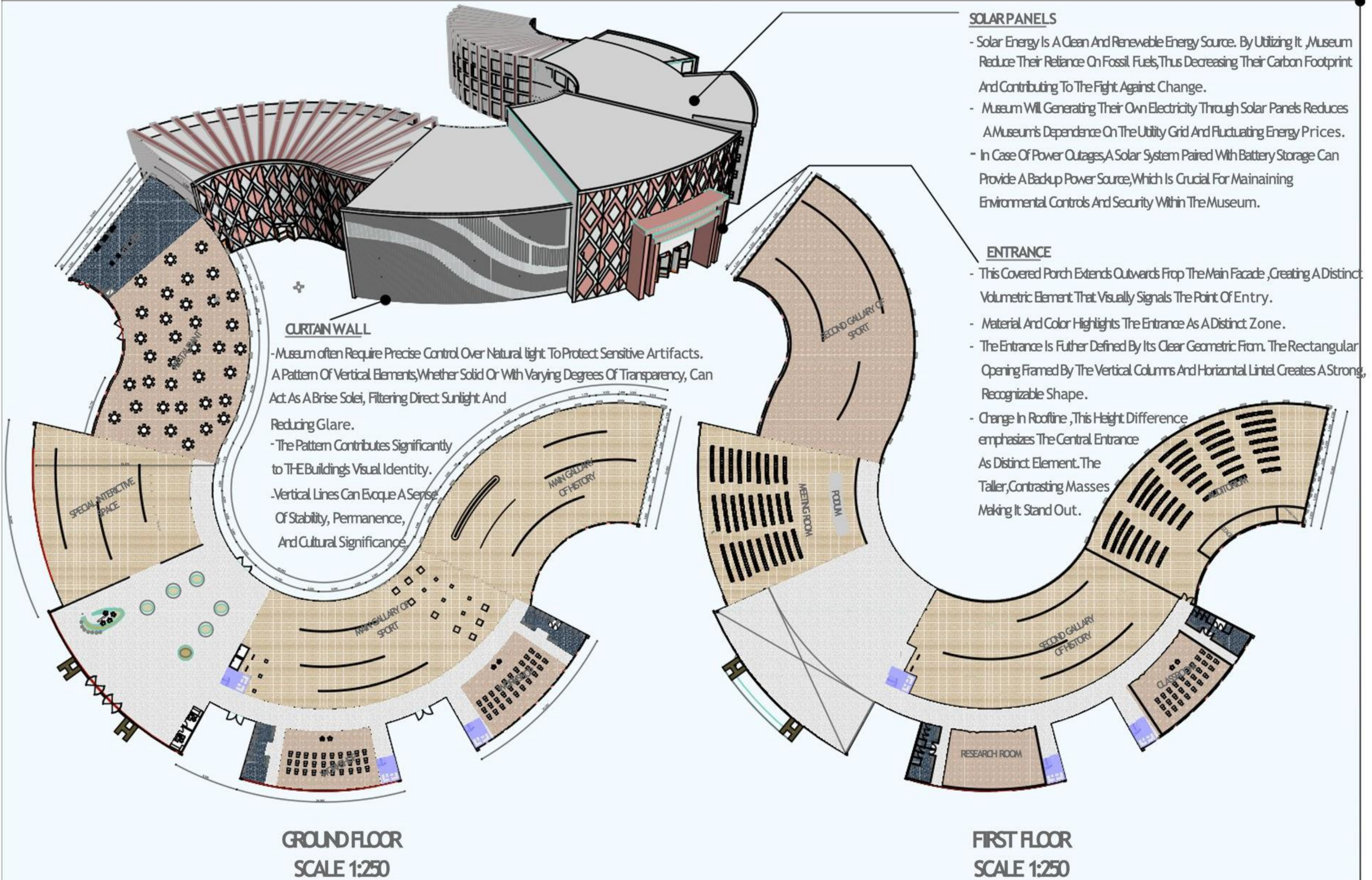
This philosophy emphasizes that architecture should be grounded in real-world needs, constraints, and cultural contexts. A design that is too theoretical or detached from practical concerns loses its relevance. In the case of a Museum of Sport and History, this means the architecture must reflect both the historical significance of sport and the modern experience of engaging with history.

Experience of Engaging With History:

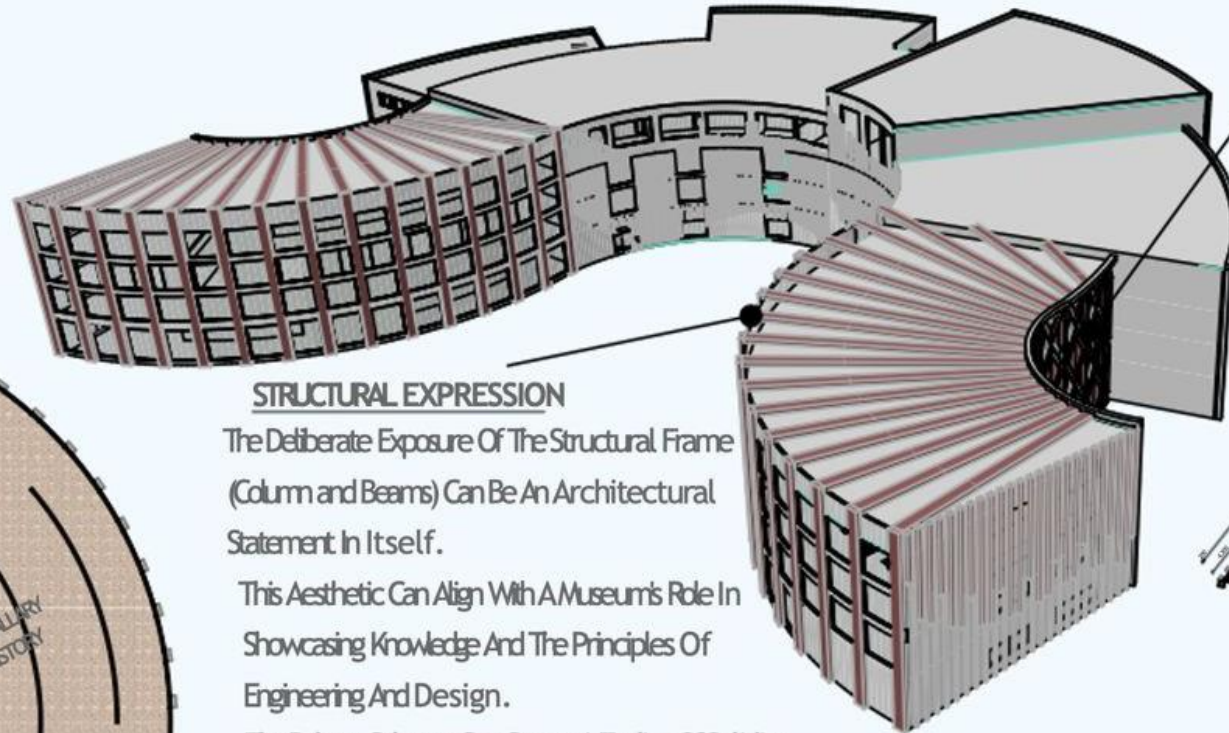
- Site Context: Architecture and materials should integrate into the construction to connect the past and the present.
- Functionality and Accessibility: Must serve a diverse audience, ensuring ease of movement, clear navigation, and interactive spaces that engage visitors of all ages.
- Technological Integration: By using modern interactive displays, virtual reality exhibits and sustainable building technologies to enhance both the visitor experience and environmental responsibility.



PLANS



PLANS



STRUCTURAL EXPRESSION

The Deliberate Exposure Of The Structural Frame (Column and Beams) Can Be An Architectural Statement In Itself.

This Aesthetic Can Align With A Museum's Role In Showcasing Knowledge And The Principles Of Engineering And Design.

The Robust Columns Can Create A Feeling Of Solidity And Permanence, Lending The Museum An Air Of Monumentality And Cultural Significance.

CURTAIN WALL

- Museums Require Carefully Managed Natural Light To Protect Delicate Artifacts From Harmful UV Rays And Excessive Brightness. SO This Intricate Pattern, With Its Alternating Opaque and Potentially Translucent Areas, Could Act As A Sophisticated Brise Soleil.
- Visual Interest And Identity :The Bold Geometric Pattern Creates A Strong Visual Statement, Contributing Significantly to Museum's Architectural Identity. The Specific Choice Of Diamonds And Intersecting Lines Could Be Inspired By Various Sources:

- The Pattern Might Subtly Reference Elements Within The Museum's Exhibits, Such As Geometric Patterns found In Historical Artifacts, Scientific Structures, Or Artistic Styles.

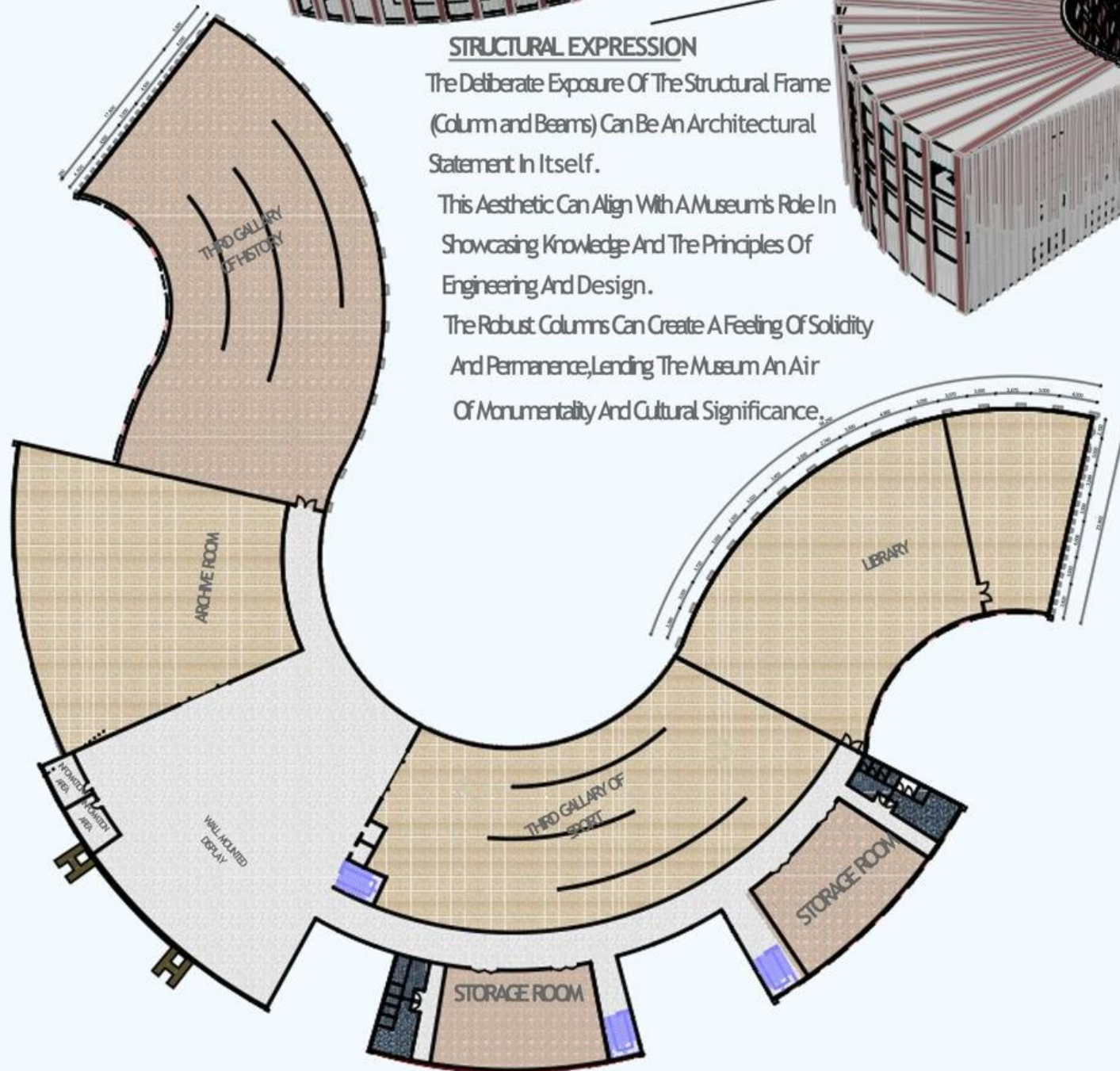
- Cultural :The Design Could Draw Inspiration From Local Art, Craft Traditions Or Historical Architectural Motifs.

- Abstract Artistic Expression, Aiming To Evoke A Sense Of Innovation All Relevant To A Museum Setting.

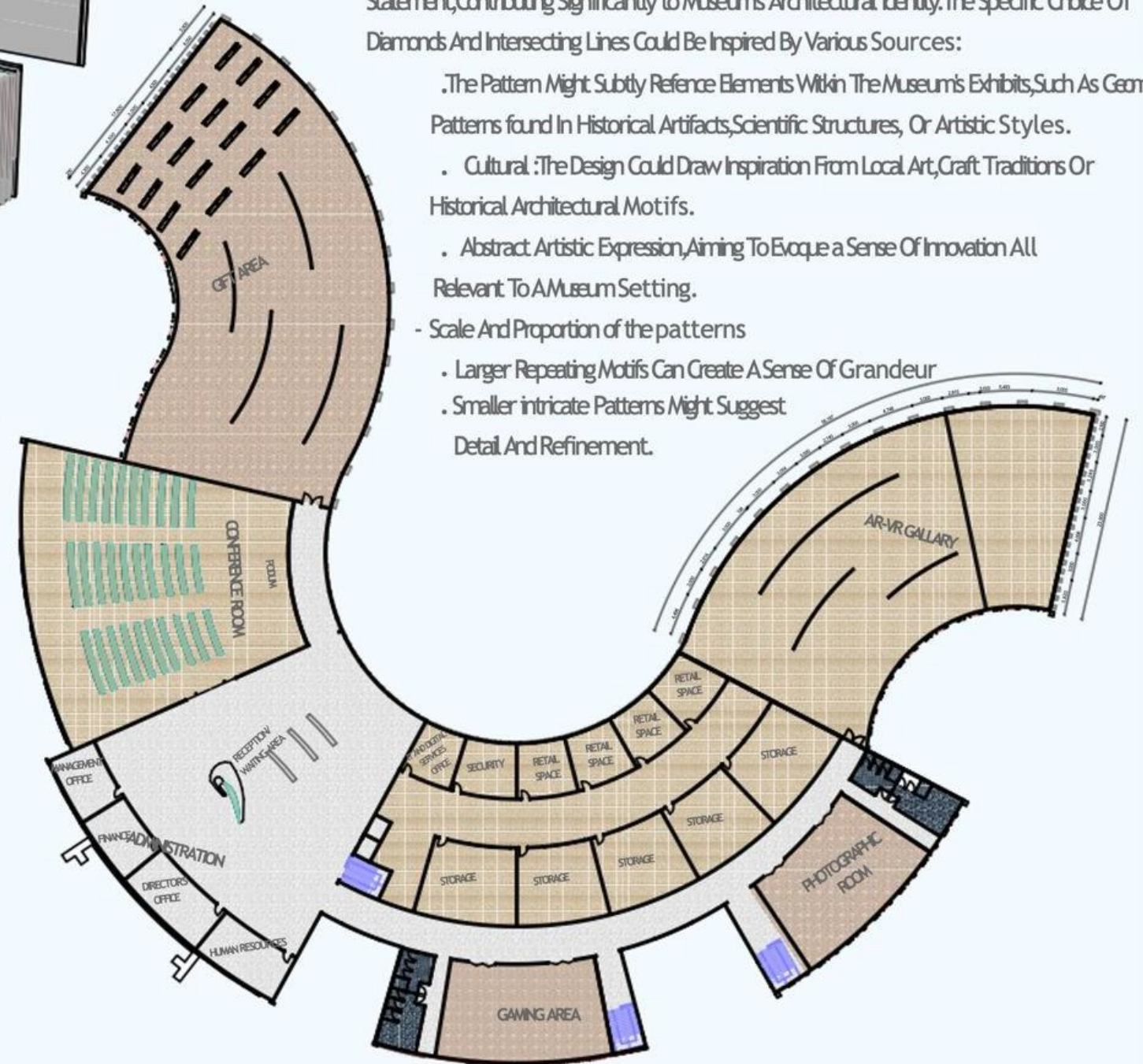
- Scale And Proportion of the patterns

- Larger Repeating Motifs Can Create A Sense Of Grandeur

- Smaller intricate Patterns Might Suggest Detail And Refinement.



SECOND FLOOR
SCALE 1:250



THIRD FLOOR
SCALE 1:250

ELEVATIONS



CURTAIN WALL
 Museum often require precise control over natural light to protect sensitive artifacts. A pattern of vertical elements, whether solid or with varying degrees of transparency, can act as a breeze shield, filtering direct sunlight and reducing glare. The pattern contributes significantly to the building's visual identity. Vertical lines can evoke a sense of stability, permanence, and cultural significance.

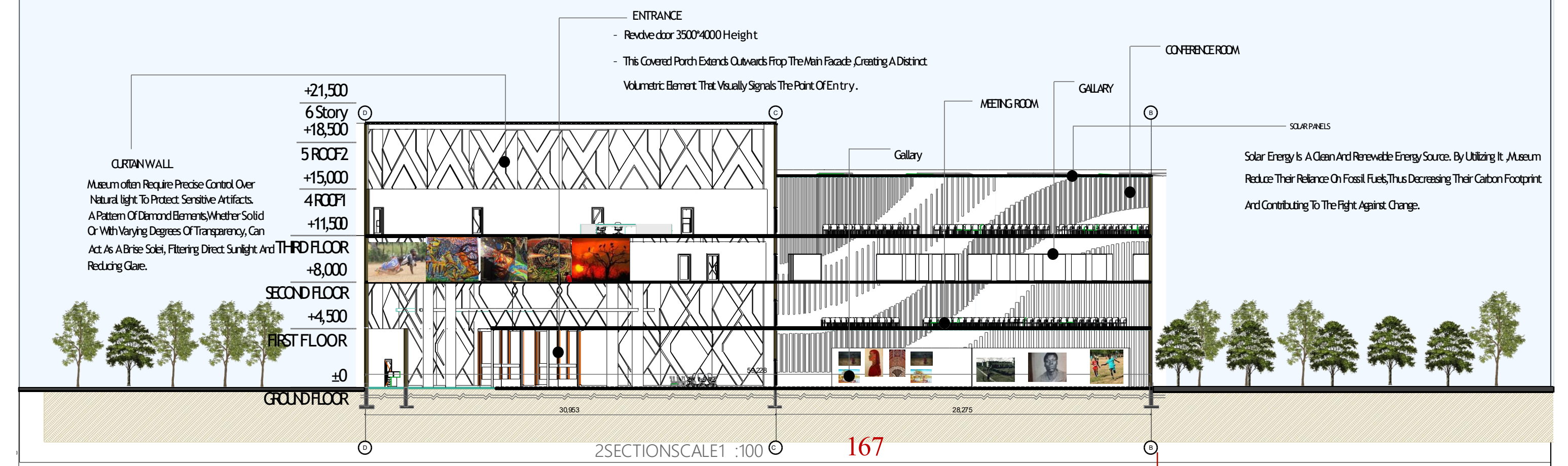
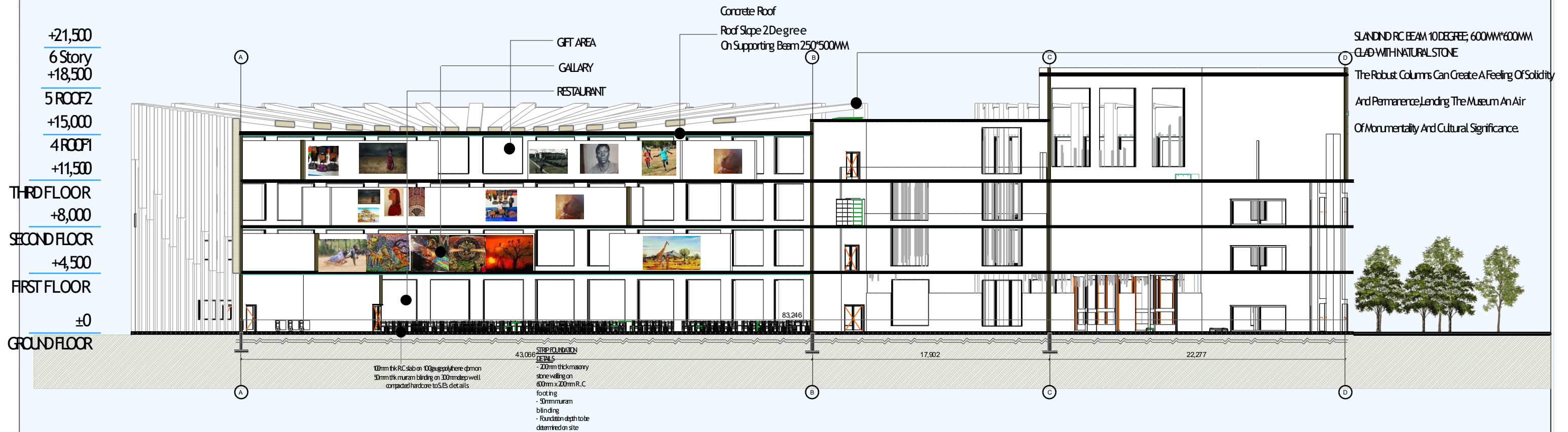
1. ELEVATION SCALE 1:100



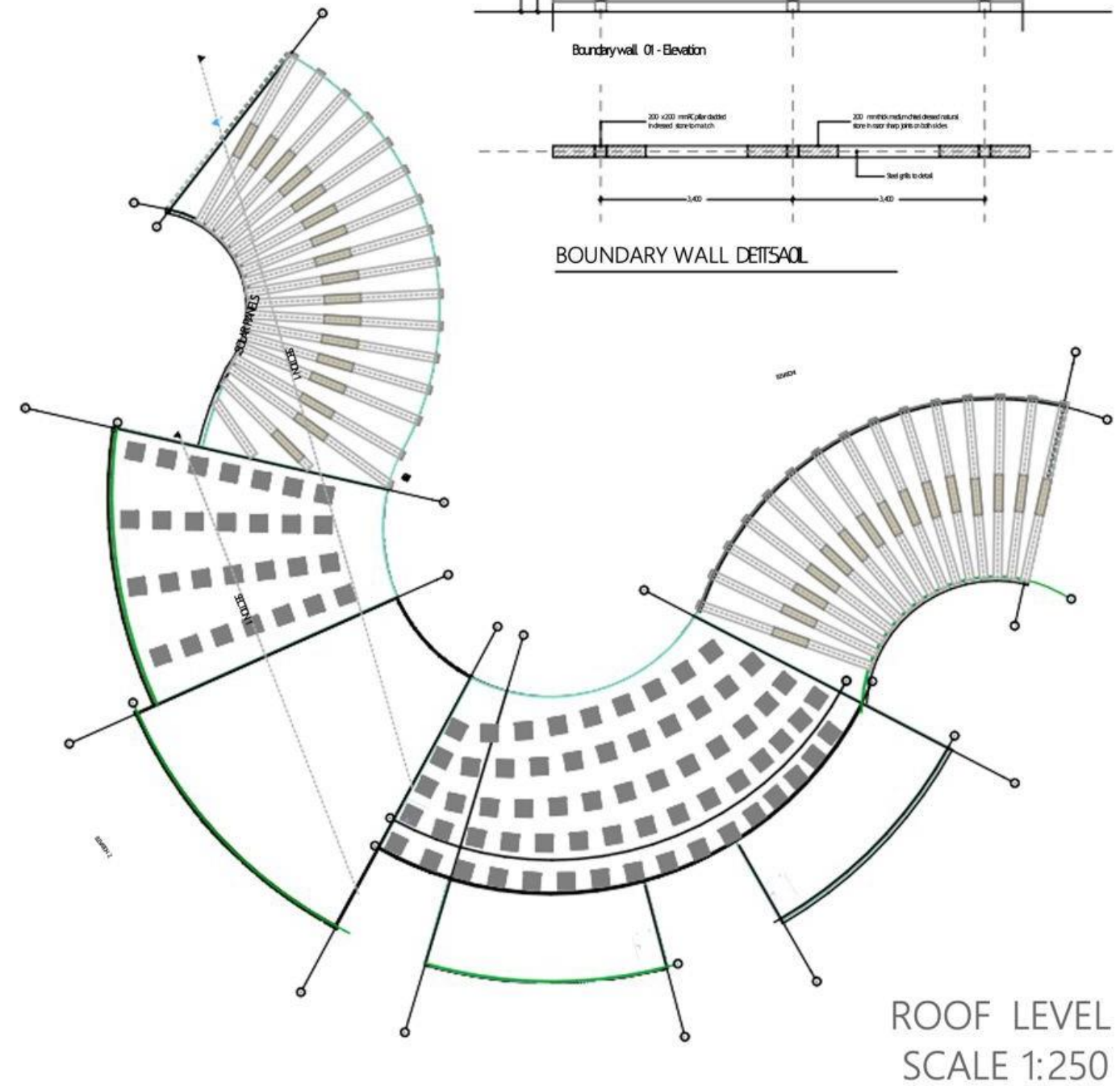
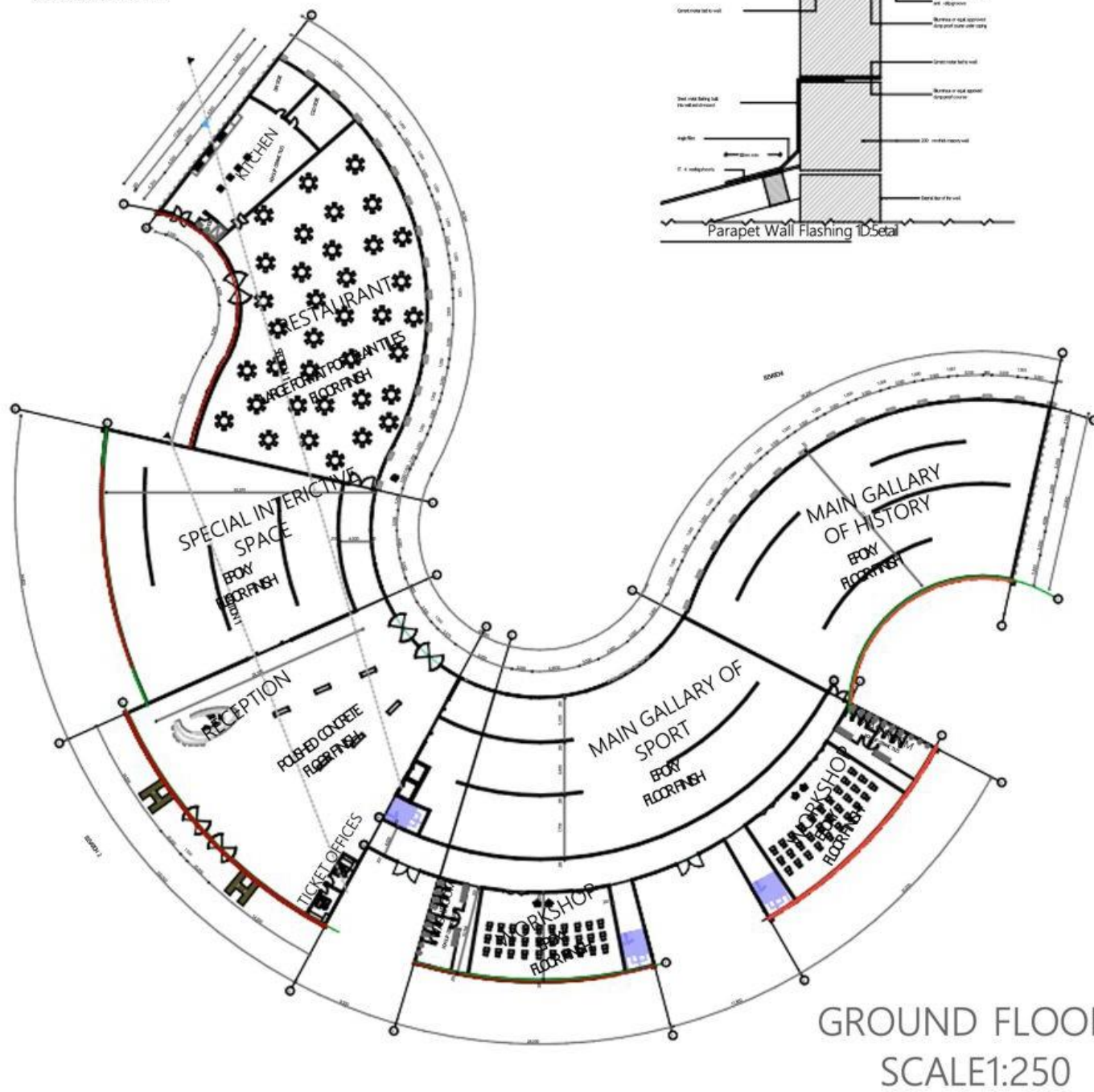
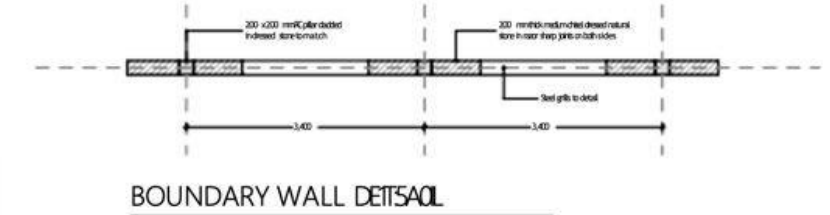
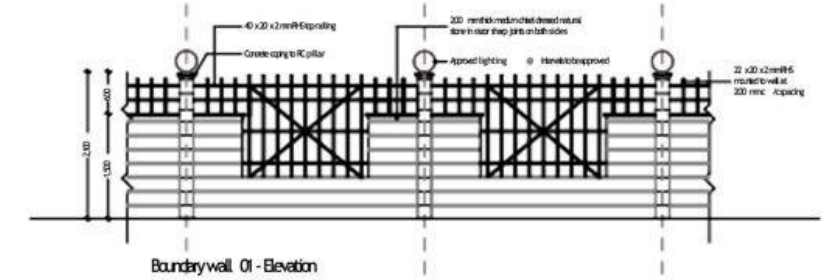
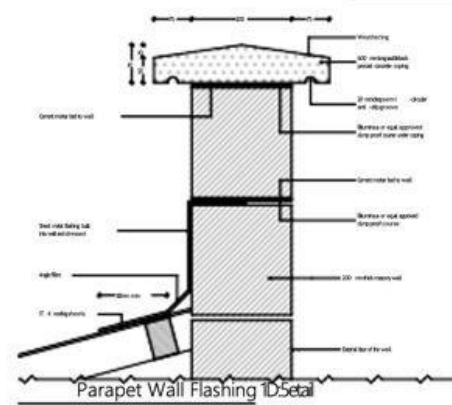
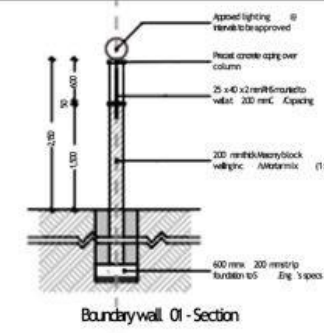
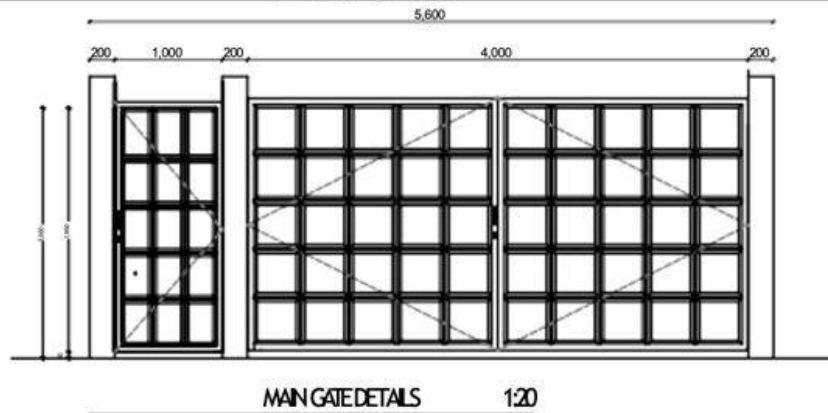
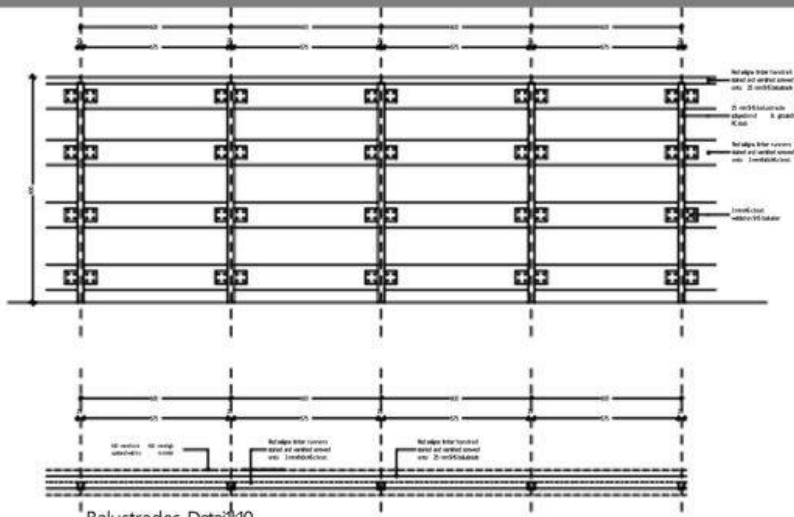
STRUCTURAL EXPRESSION
 The deliberate exposure of the structural frame (column and beams) can be an architectural statement in itself. This aesthetic can align with a museum's role in showcasing knowledge and the principles of engineering and design. The robust columns can create a feeling of solidity and permanence, lending the museum an air of monumentality and cultural significance.

2. ELEVATION SCALE 1:100

SECTIONS



PLANS





NAME: Evans Nguti Murigo
INSTITUTION: Department of Architecture and Interior Design (DAID), School of Engineering and Architecture (SEA)
Kenyatta University (KU)
EMAIL: murigoevans@gmail.com
INSTAGRAM: nafrix.design

BIOGRAPHY:

Evans Nguti is a dedicated student at Kenyatta University, currently pursuing his studies in the School of Engineering and Architecture, within the Department of Architecture and Interior Design. He combines academic work with hands on practice gained through internship at the County Government of Nakuru and Intersamkin Ventures Limited. Evans brings a deep passion for sustainable design and interior architecture.

His strong problem-solving mindset, coupled with excellent communication and organizational skills, positions him as a thoughtful and forward-thinking designer ready to contribute meaningfully to diverse architectural projects while advancing his professional growth.



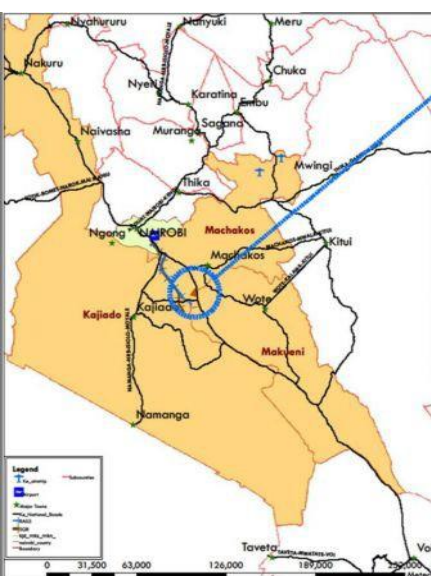
BRIEF ANALYSIS

LOCATION



Kenya

Source: Adapted from J.Amimo (2025).



Lower Eastern

Source: K'Aumu, O.A. Geojurn al 89,243 (2024).



Konza Technopolis

Source: K'Aumu, O.A. Geojurn al 89,243 (2024).

SITE DETAILS

Site Name:
Konza Technopolis
Site Location:
Makueni County
Site Area:
40,684.18 Sqm



Proposed site

Source: Google Earth. (n.d.). [Location map of Konza Technopolis, Kenya]. Retrieved January 28, 2025, from <https://earth.google.com>

SITE JUSTIFICATION

1. Konza Technopolis has been designated as Kenya's digital city with modern infrastructure and technology having being set up.



The Data Centre at Konza
Source: Konza Technopolis, 2024

2. Availability of land still to be utilised in accordance with the planning of the city. The site allocated was within the recreation zone.



PROJECT DESCRIPTION

The project involved the design of a futuristic museum that is unique and innovative to give a place that tells the journey of technological advancements and scientific discovery in Kenya and Africa, while at the same time provide an avenue for innovations, learning and engagements and help to achieve Konza's goals as a technology hub.

PROJECT AIM

To design a futuristic museum that is unique and innovative to give a place that tells the journey of technological advancements and scientific discovery in Kenya and Africa, while providing an avenue for innovations, learning and engagements and help to achieve Konza's goals as a technology hub.

PROJECT JUSTIFICATION

1. Support infrastructure

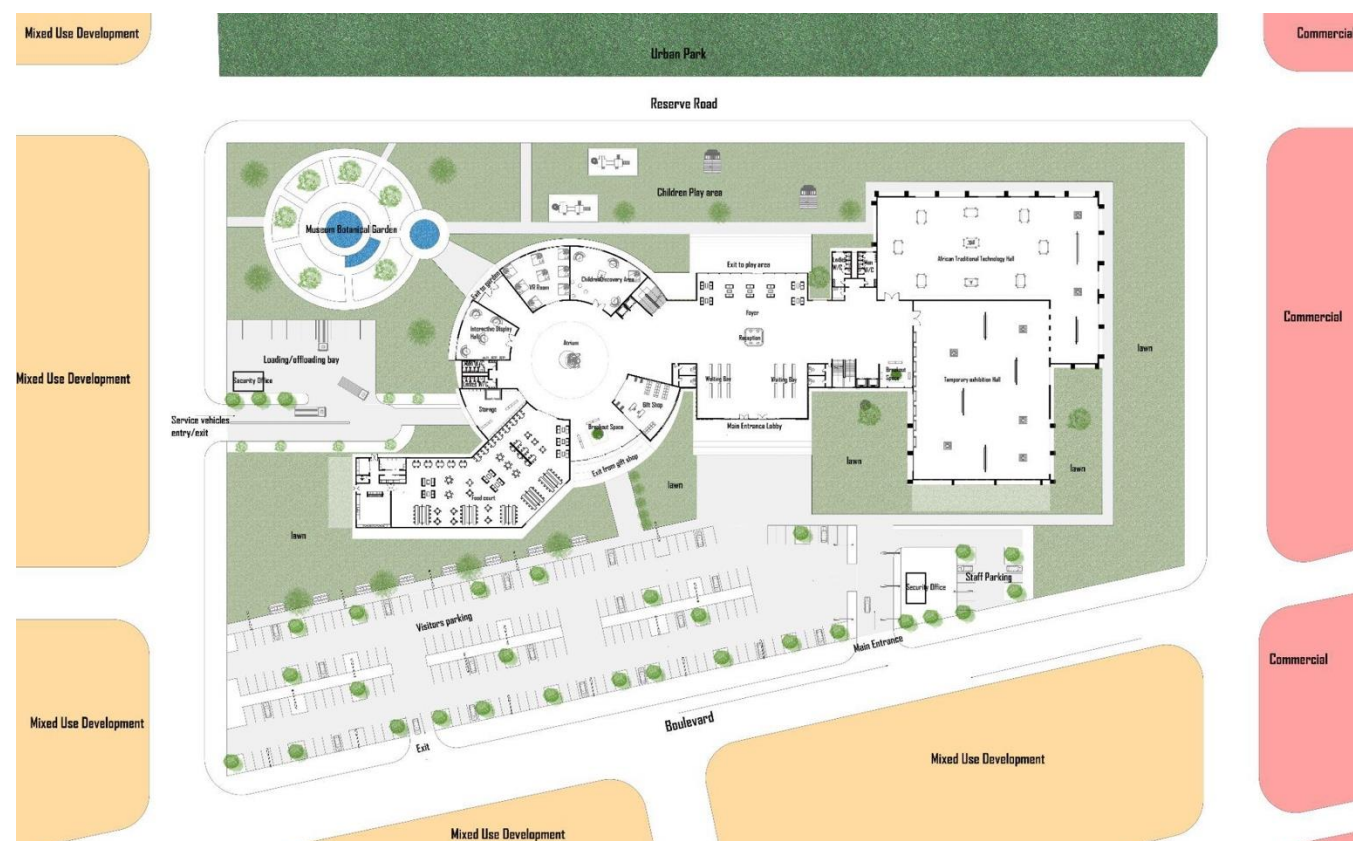
Konza Technopolis has well laid out infrastructure that would support the viability of the project within the site. The availability of a university would make the proposed project a key hub for academic research and a exhibition area for students innovation.

2. Growth potential of the site

The site is still under development and with this comes the potential for growth. The proposed project should play a role in this by acting as a hge tourist hub for international and local tourists thus increasing economic growth of the region.

3. ICT Vision 2030 goals

The project should help to achieve the Konza goal of creating a smart technopolis that will ensure ICT contributes 10% to Kenya's GDP growth.



Site plan of the Konza Technology Museum, Konza Technopolis, Makueni.
Source: Author, 2025

AREA ANALYSIS

permanent

SPACES	DESCRIPTION	AREA	SPACE NO:	CAPACITY	TOTAL AREA
Exhibition halls	Displays the developed technology	2sqm/person	4 halls	150 pax	1200 sqm
Temporary Exhibition halls	Displays technology in development	1sqm/person	2 halls	150 pax	300 sqm
Children discovery area	Spaces to allow kids interact with the technology	2sqm/person	1 hall	150 pax	600 sqm
Interactive Zones	Areas for hands-on practice	2sqm/person	1 hall	100 pax	200 sqm
Theater	Areas for live demo	2sqm/person		200 pax	
Ticket office	For ticketing	4sqm/office	2 offices		8 sqm
Manger office	For Administration	16 sqm	1 office	3 pax/office	16 sqm
Reception	Help desk	4sqm	1 office	1 pax	4 sqm
Security	Monitor Activities	2sqm/person	1 office	6 pax	12 sqm
Staff area	Changing rooms	2sqm/person	2 rooms	50 pax/room	200 sqm
Gift Shop	Sells collectables	1sqm/person	1 rooms	50 pax	50 sqm
Food Court	Sells snacks and fast food	2sqm/person	1 rooms	100 pax	200 sqm

*Area analysis table for proposed spaces
Source: Author, 2025*

CORE FUNCTIONS

1. Exhibitions halls - exhibitions.
2. Temporary exhibition halls.
3. Children discovery areas.
4. Interactive zones.

SUPPLEMENTARY FUNCTIONS

1. Theater/ lecture room.
2. Administrative offices (ticketing, security, manager, reception.)
3. Staff areas.
4. Parking areas.
5. Restrooms

SUPPORTIVE FUNCTIONS

1. Theater/ lecture room.
2. Administrative offices (ticketing, security, manager, reception.)
3. Staff areas.
4. Parking areas.
5. Restrooms

*Functional relationship diagram for proposed spaces
Source: Author, 2025*

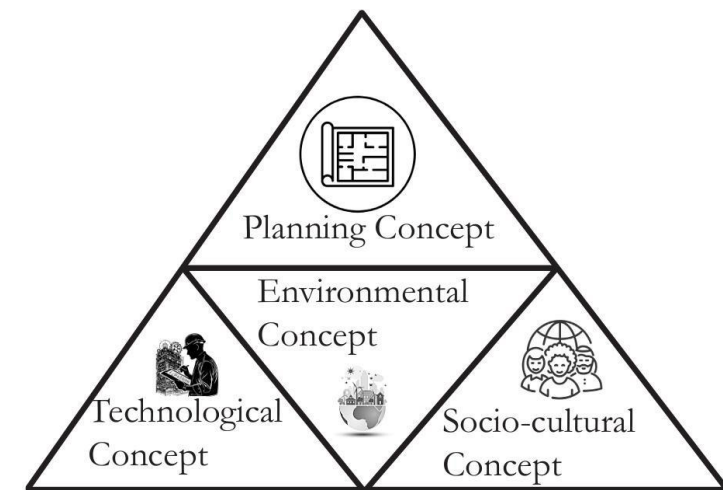
CONCEPT DEVELOPMENT

DESIGN PHILOSOPHY

‘Architecture should speak of its time and place while yearning for timelessness architecture should speak of its time and place while yearning for timelessness’ by Frank Gehry. This design philosophy emphasizes that the design that acts as an archives of time. The museum design therefore should be one that not only tells the story of the present Kenya, but creates a futuristic design that will withstand the test of time.

PHILOSOPHY OF DESIGN

‘Design is never perfect’ Design is about creating elegant solutions to address user needs. However, the design mostly done is for humans who have changing need time from time and the design might need to evolve to meet the new changes time and time again.



The Concept triangle diagram
Source : The Relationship between Imageability and Form in Architecture.

PLANNING CONCEPT

‘Dynamism’ Dynamism embodies the constant evolution, change, and energy that technology itself represents. The aim is to design a museum that would also have the feel of a futuristic design design through:

1. Having contrasting and curvilinear forms in the design to complement each other.
2. Having a fluid facade that can shift based on various conditions and cause certain light patterns.
3. Having interactive and immersive exhibition spaces in the museum.



Museum of the City of New York
Source : <https://www.groupon.com/deals/museum-of-the-city-of-new-york-20>

SOCIO-CULTURAL CONCEPT

‘The Digital Village’ The museum will provide a space where people can come to interact and socialize, show case and market their innovations just as a common village that has a social places including a market place.



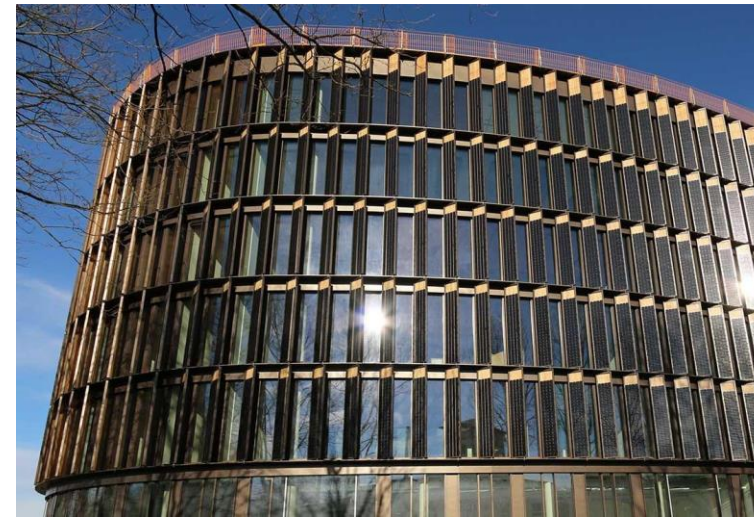
Norman Rockwell Museum
Source : <https://www.nrm.org/visit/>



Computer History Museum
Source : <https://www.thesanfranciscopeninsula.com/listing/computer-history-museum/1051/>

TECHNOLOGICAL CONCEPT

‘The sustainable hub’: the aim is creating a design that uses innovative ways to achieve a sustainable building. It may involve the use of solar panels as a wall cladding and roofing for the car park, having spaces that are adaptable with time, using of innovative building materials among other ways.



New City Hall of Freiburg
Source : <https://a2-solar.com/en/new-city-hall-of-freiburg/>

ENVIRONMENTAL CONCEPT

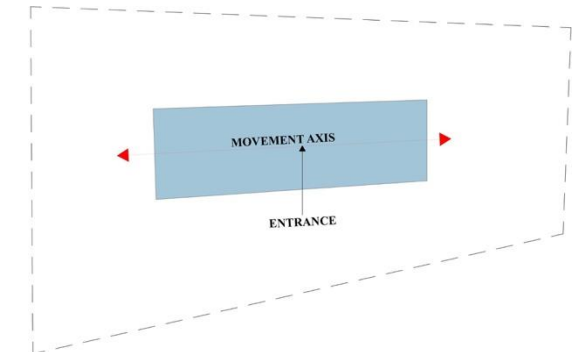
‘The Green Circuit’: The design will incorporate a network of interconnected network of green spaces like a botanical garden, eco-friendly pathways around the building.



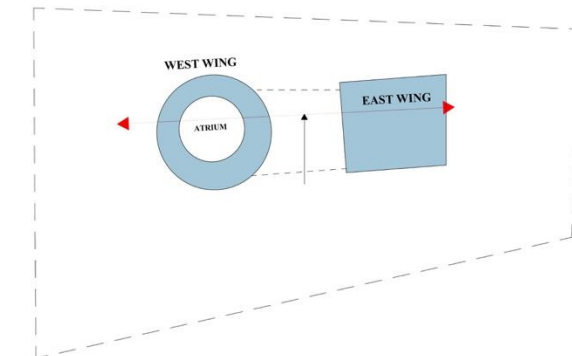
Botanical garden at Nairobi National Museum
Source : <https://www.tranquilkilimanjaro.com/tours/nairobi-botanical-garden-day-trip/>

FORM DEVELOPMENT

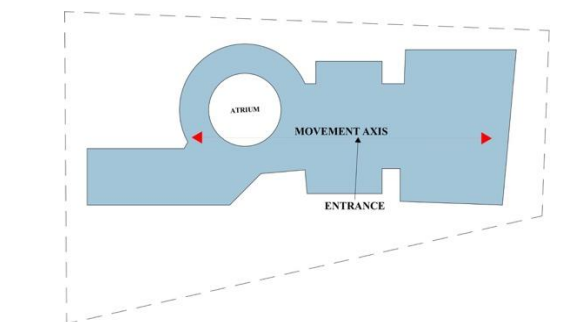
- The design will incorporate a Central axis balanced movement with the entrance at the middle. This gives the visitors a choice to make where to move next. This symmetry in entry direction reflects the duality of scientific learning—structured knowledge on one side, and experiential discovery on the other.



- An atrium at the western wing is like another spatial orientation area where movement culminates, circulates then branches out- for continuous exploration, a reward of the choice made at the entrance



- Introduction of extruded rectilinear shapes to have the permanent exhibition halls that show a sense of order, clarity and containment - symbolic of established technology. These extrusions also show the idea of innovation, pushing out beyond the norm.



- The overall design is an interplay of curvilinear and rectilinear shapes for a dynamic structure. The overall layout of the building mimics a dynamic system where there is no single direction hence one decides where to go from the entrance.

SITE PLAN

1. Main entrance
2. Proposed building
3. Children play area.
4. Botanical garden
5. Loading Bay
6. Outdoor sitting area.
7. Parking space.
8. Main exit

Layout Design: The main entrance and exit are located along the boulevard which is the main road that access the site.

Upon entry one is led to the parking area and then to the building main entrance. At the entry, there are ticketing booths and a

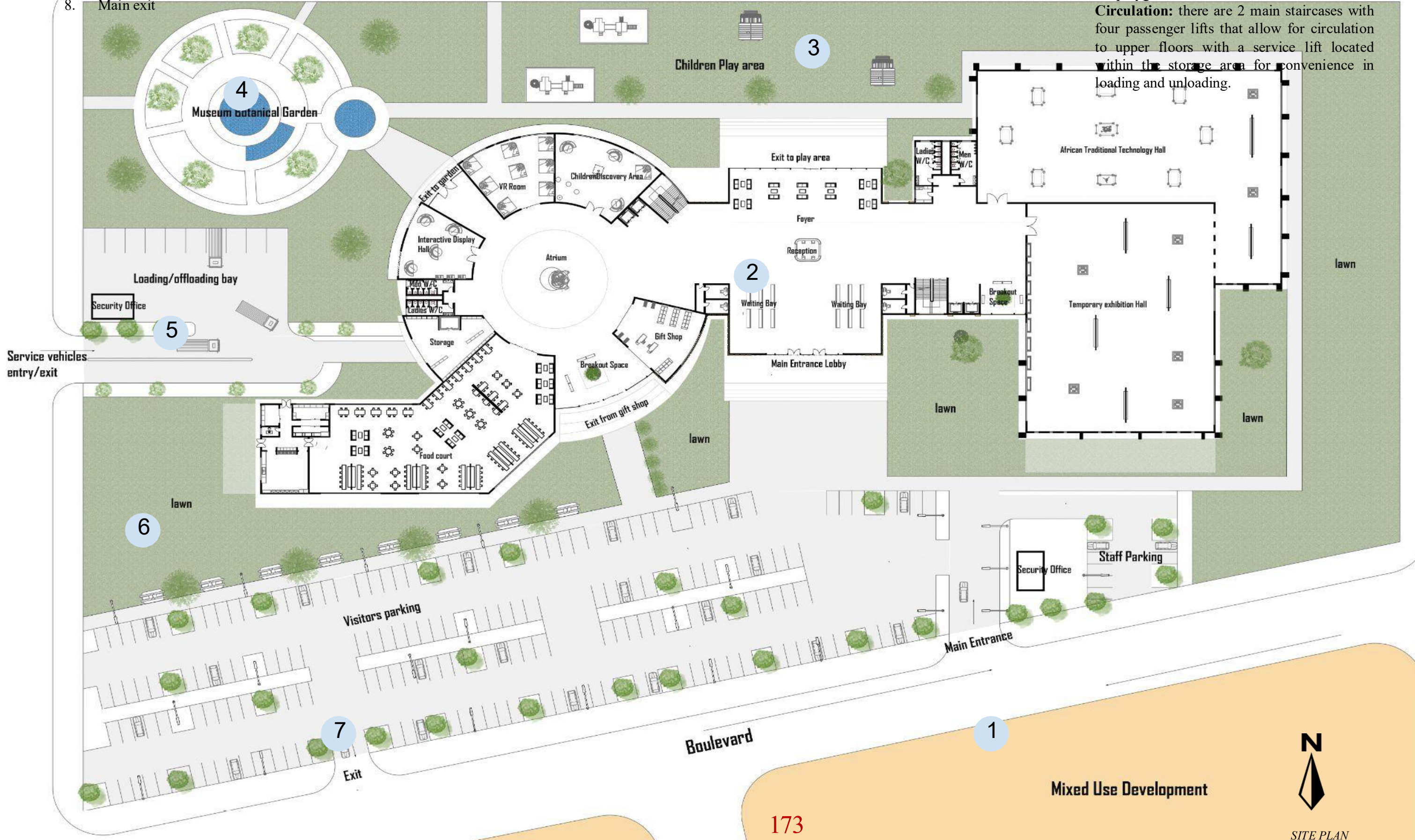
Urban Park

Reserve Road

reception desk within the foyer. The building's atrium is surrounded by exhibition spaces, a food court and a gift shop with two exits; one towards the botanical garden, the other towards the parking lot.

There is also a sitting space that overlooks the children play area allowing for parent supervision without the need of invasion in the playground area.

Circulation: there are 2 main staircases with four passenger lifts that allow for circulation to upper floors with a service lift located within the storage area for convenience in loading and unloading.





LEGEND

1. Main entrance.
2. Reception.
3. Ticketing booth.
4. Sitting area.
5. Gift shop
6. Food Court.
7. Interactive space.
8. Virtual reality room.
9. Children Discovery Area.
10. Temporary Exhibition hall.
11. African traditional technology hall.

GROUND FLOOR PLAN
Source : Author, 2025

Layout Design: the main entrance to the museum leads one to the ticketing booths, reception and the common sitting area that overlooks the children playground. The exhibition halls are laid out in two major categories: interactive halls, and non-interactive halls. All interactive halls surround the atrium of the building and are supported by the food court and gift shop as other interactive spaces with a breakout space between the two. The Children Discovery Area is a hall that allows kids to interact with the technology being exhibited within the museum. The interactive space allows visitors to put into use some of the technology on display within the museum.

The food court would support the museum by providing fast food snacks and drinks to the visitors with the gift shop selling souvenirs and other items. The virtual reality hall provides a space for the visitors to immerse themselves into the virtual world using high tech 3D visualization goggles. The non-interactive halls consist of 2 halls: African Traditional technology hall and a temporary exhibition hall. The African traditional technology hall is used to showcase ancient tools and items used by african during the ancient times before the onset of civilization. The temporary exhibition hall ia a leaseble hall where innovations that are currently under development can be showcased for a specific period of time at a certain fee rate.

The botanical garden within the site provides a space for the visitors to unwind after a long day with the coolness of the waters from the water fountains and the shade provided by the trees in the garden. The children will also enjoy a playground with various playground items while under supervision from their parents from the common sitting area that overlooks the children play area through a glass facade. There facility also has two sets of washrooms on either wings of the building. The washroom facilities are divided into male and female on each wing and are easily accessible from the corridors of the museum.

Each wing also has a staircase and two lifts that act as the vertical circulation cores to the upper floor levels. One wing has a storage facility with a cargo lift within it to allow for ease in loading and unloading and the movement of items to be displayed in the museum from the loading/unloading bay. The breakout spaces provide a space for people to relax within the museum while chatting or interacting with one another.

Layout Design: the vertical circulation on the western wing leads you to more interactive halls within this floor. There is a Television studio hall that provides visitors with an insight to matters news production and technological advancement in the movie production sector. There is a construction technology hall that showcases modern and ancient construction technology used in the architecture and engineering fields. The visitors can also visit the Biotechnology hall that displays modern technology being employed in the medicine field.

This floor houses the administrative sector of the museum. It has the manager's office, a staff breakout area and the museum's server room that stores all data information. The workshop also falls under this category as it is only accessible by staff as they seek to repair items on display or when creating new items for display.

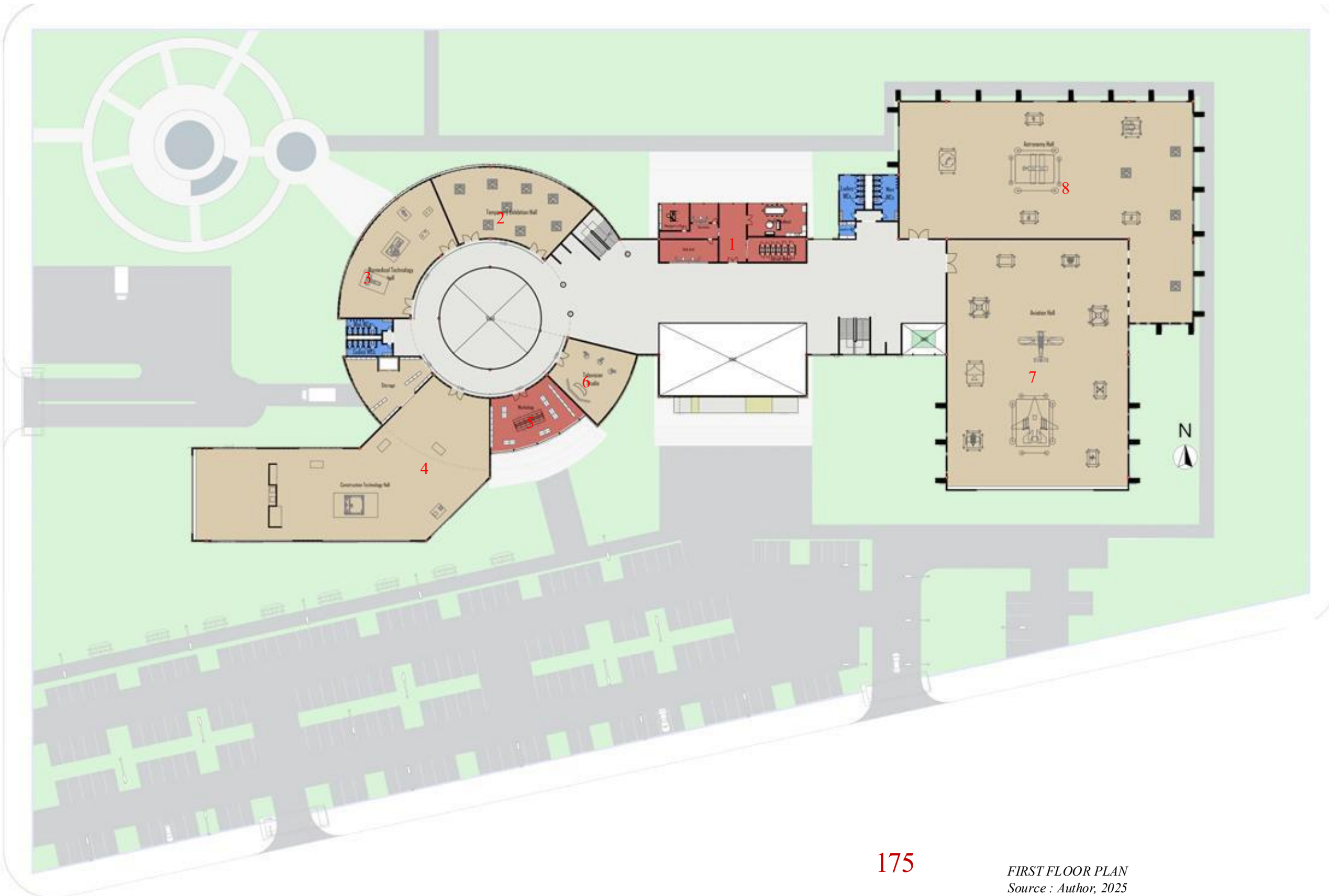
The floor also has two sets of washrooms on either wings of the building. The washroom facilities are divided into male and female on each wing and are easily accessible from the corridors of the museum.

The eastern wing of the floor has the aviation hall where a small plane, drones and other aircrafts are on display providing visitors with an opportunity to interact with aircrafts at a first hand basis.

There is also the astronomy hall that showcases matters related to space. This hall displays several planets and spaceships that give an insight to the technology being deployed in the exploration of the space and the universe at large.

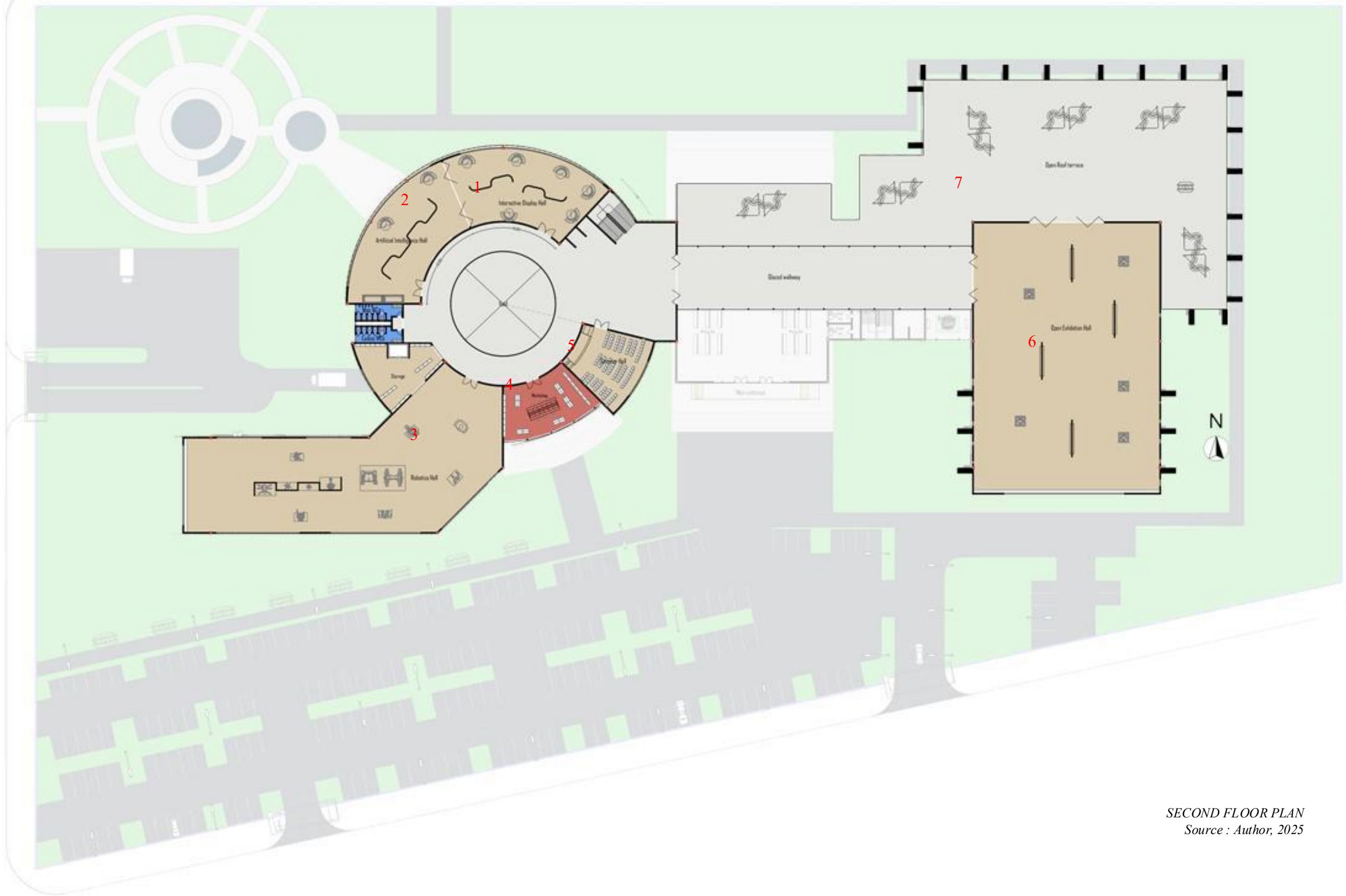
Each wing also has a staircase and two lifts that act as the vertical circulation cores to the upper floor levels. One wing has a storage facility with a cargo lift within it to allow for ease in loading and unloading and the movement of items to be displayed in the museum from the ground floor.

The breakout spaces provide a space for people to relax within the museum while chatting or interacting with one another.



LEGEND

1. Administrative offices.
2. Temporary Exhibition hall.
3. Biotechnology hall.
4. Construction technology hall.
5. Workshop.
6. Television studio.
7. Aviation hall.
8. Astronomy hall.



LEGEND

1. Interactive display hall.
2. Artificial intelligence hall
3. Robotics hall.
4. Workshop.
5. Seminar hall.
6. Open exhibition hall.
7. Open roof terrace.

SECOND FLOOR PLAN
Source : Author, 2025

Layout Design: The interactive display hall allows visitors to put into use some of the technology on display within the museum. The artificial intelligence hall showcases the various A.I tools in place and allows visitors to use them using the computers provided within the hall. These two halls can be joined into one by opening the bi-folding doors creating one large interactive hall. There is also the robotic hall within the western wing that has displayed several robotic innovations. The seminar hall in this floor is where visitors and others can hold a formal sitting to discuss certain matters.

The western wing is then connected via a glazed walkway that leads to an open exhibition hall. The glazed walkway allows visitors to have a view of the site and the surrounding landscape from a vantage point. The Open exhibition hall is used to exhibit several innovations at the same time, meaning that it is most suitable for students participating in the ‘Science congress’ competitions that harness the best innovations within schools in Kenya. There is an open roof terrace with sitting areas that allows the visitors to enjoy unobstructed views of the surrounding landscape, particularly the urban park to the North.

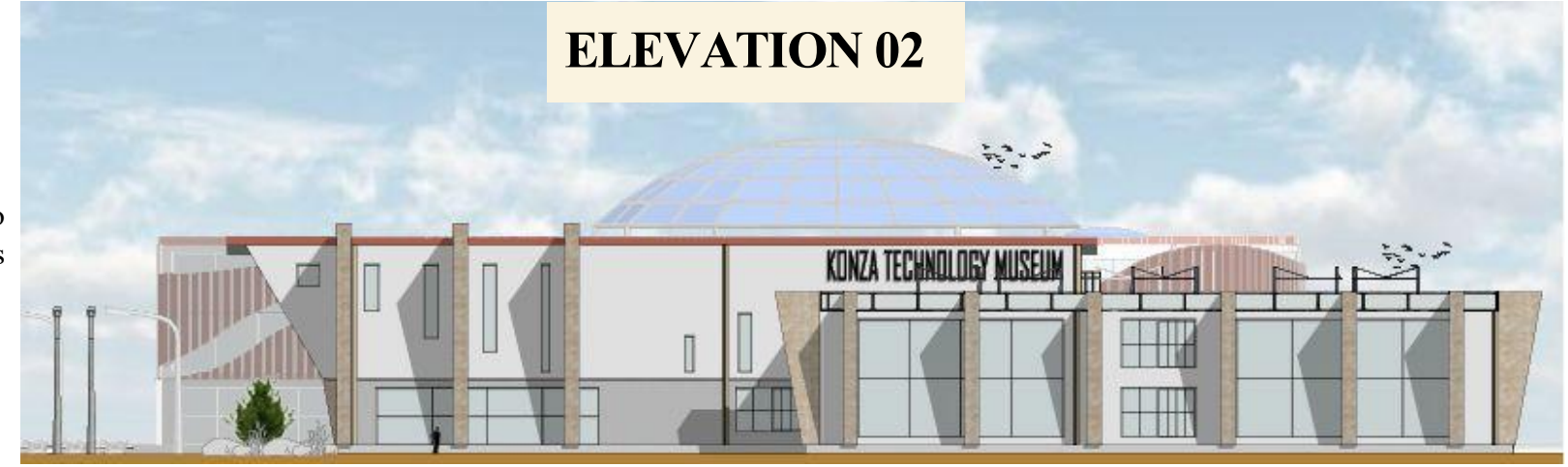
Unlike other floors, the second floor has only one set of washroom facilities that serves the visitors. The washrooms are divided into male and female. The atrium is covered using a dome shaped glass covering that allows for light penetration to the floors beneath while at the same time protect from rain. The workshop in this floor is still only accessible by the staff. It is used as a repair area or where other technological developments are being done for display within the museum.

ELEVATIONS

ELEVATION 01



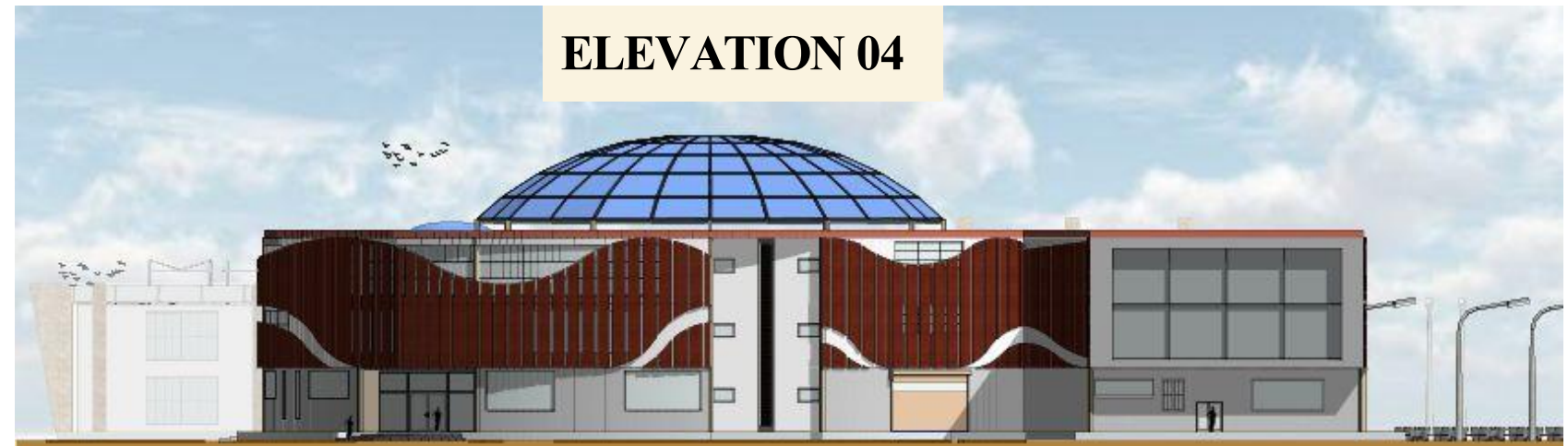
ELEVATION 02



ELEVATION 03



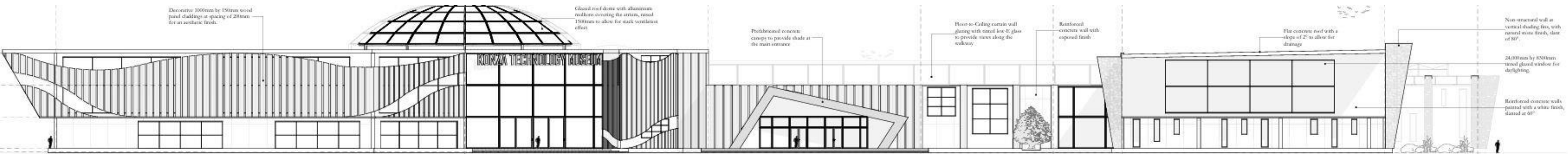
ELEVATION 04



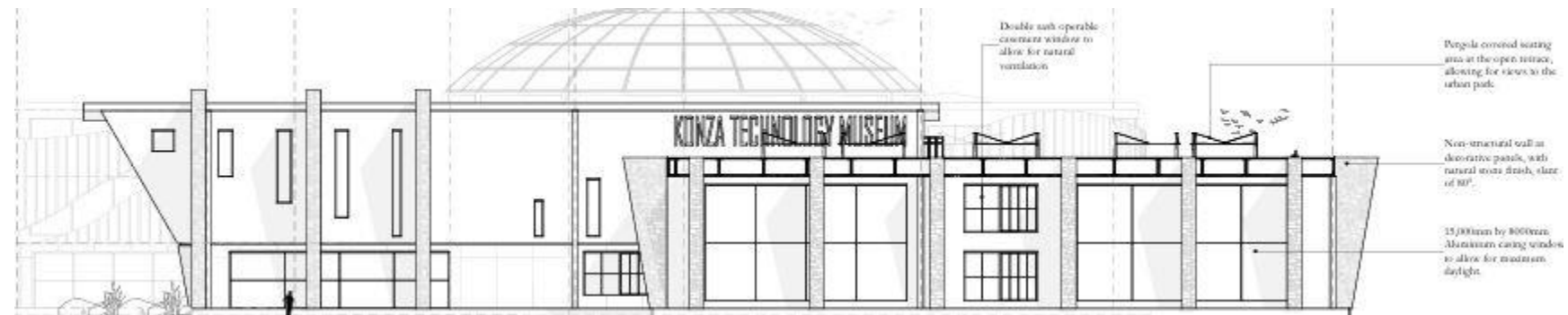
Material Choice: The main materials used in the project are: timber, glass and prefabricated concrete.

Color: the colors used in the proposed project were to replicate a savannah like environment that is predominant within Konza Technopolis.

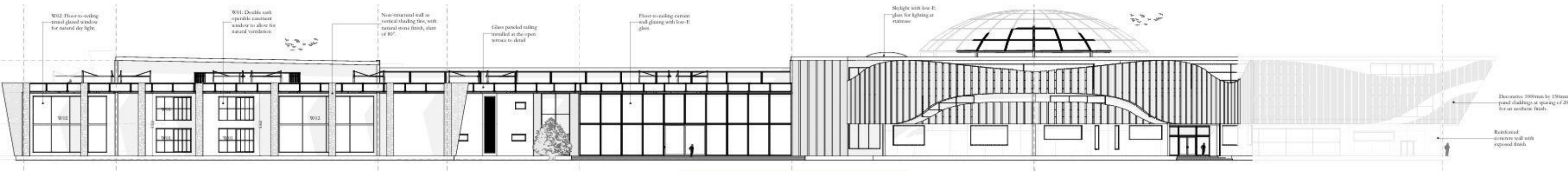
WORKING ELEVATIONS



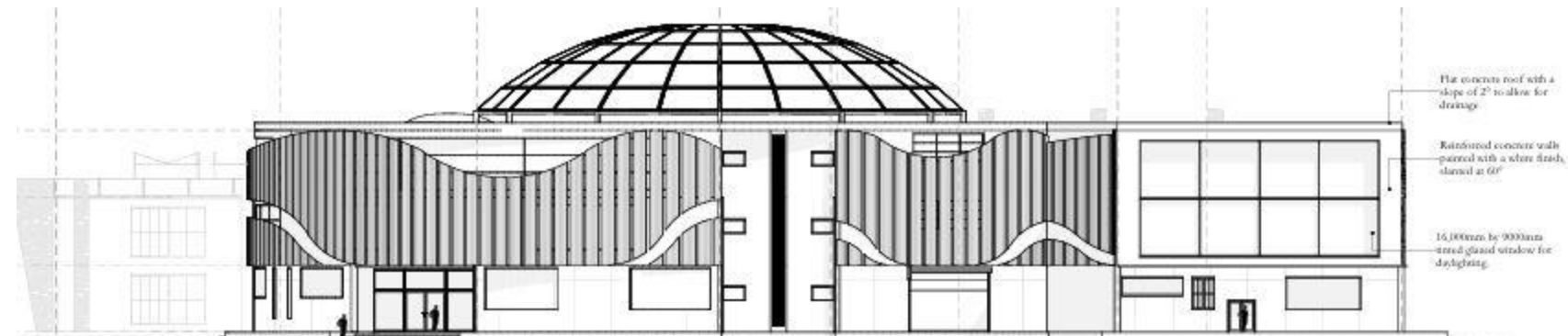
ELEVATION 01



ELEVATION 02

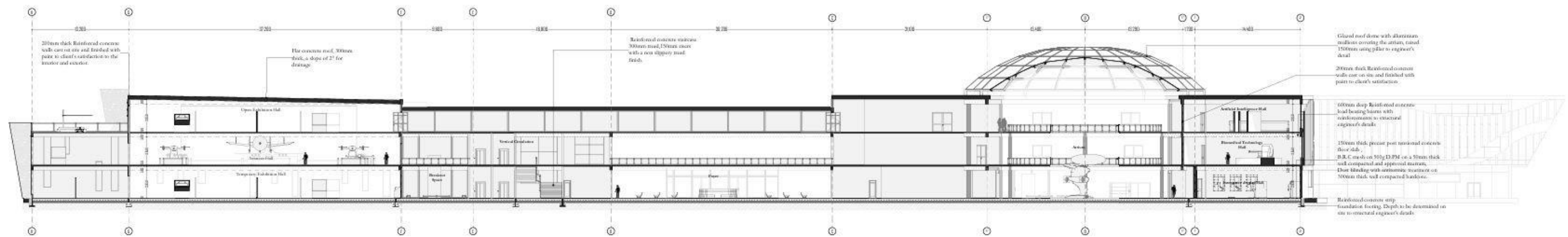
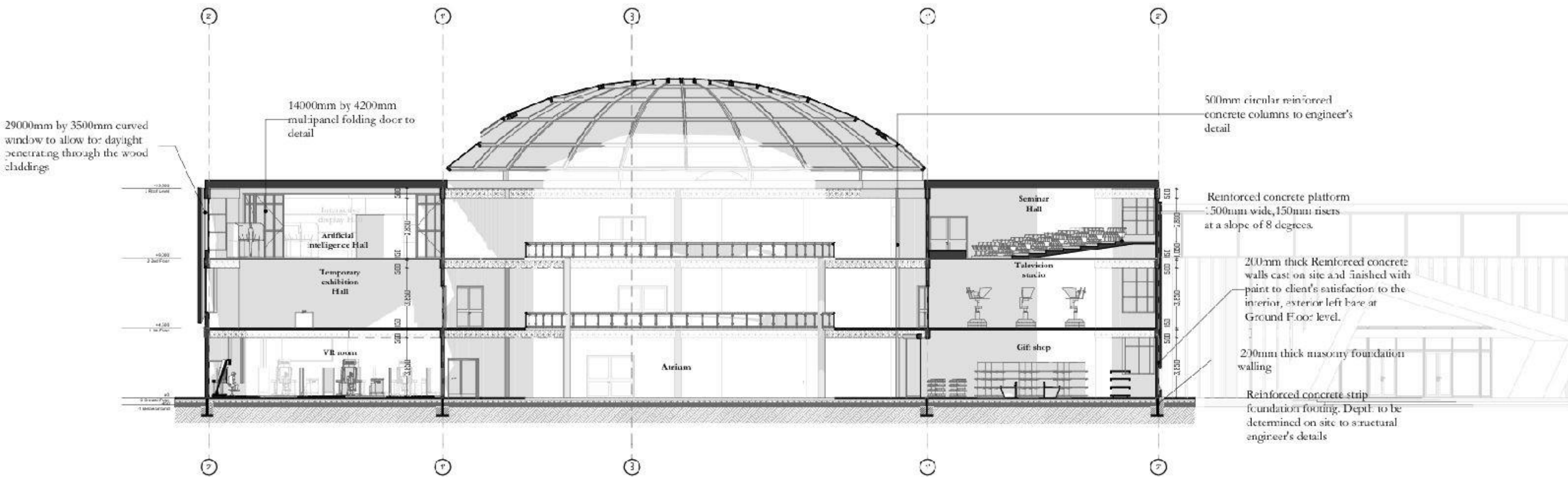


ELEVATION 03



ELEVATION 04

SECTIONS



SECTION DRAWINGS
Source : Author, 2025

3D VIEWS



Robotics Hall
Source : Author, 2025



Aviation Hall
Source : Author, 2025



Food Court
Source : Author, 2025



Workshop
Source : Author, 2025

3D VIEWS



Parking lot view
Source : Author, 2025



Loading bay view
Source : Author, 2025



Front facade view
Source : Author, 2025

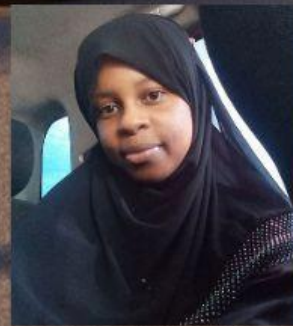
B. LIBRARY

**B.A.S YEAR IV CONTRIBUTING STUDENT RESEARCHERS
AND DESIGNERS - 2024/2025**

Hadija Mvita Mwinyi

JERICHO COMMUNITY LIBRARY

BY HADIJA MWINYI MVITA



NAME: Hadija Mwinyi Mvita
INSTITUTION: Department of Architecture and Interior Design(DAID),
School of Engineering and Architecture(SEA),
Kenyatta University(KU)
EMAIL ADDRESS: hadijamvita@gmail.com

BIOGRAPHY

HADIJA MWINYI IS A FOURTH-YEAR ARCHITECTURE STUDENT IN KENYATTA UNIVERSITY WITH A PASSION FOR DESIGNING SPACES THAT ENHANCE THE WELL-BEING OF COMMUNITIES. DESIGN IS NOT JUST ABOUT CREATING BUILDINGS, BUT IS ABOUT SHAPING INCLUSIVE, SUSTAINABLE AND HEALING ENVIRONMENTS WHERE PEOPLE CAN THRIVE. THE DESIGN OF JERICHO LIBRARY IS GUIDED BY THE BELIEF THAT ARCHITECTURE PLAYS A ROLE IN COMMUNITY WELL-BEING. SHE THEREFORE STRIVED TO CREATE A DESIGN THAT ENCOURAGES SOCIAL INTERACTION, PROMOTE ACCESSIBILITY, AND FOSTER A SENSE OF BELONGING. HADIJA HAS HAD PRACTICAL EXPERIENCE AT LOCUS STUDIO, AS WELL AS A.D DESIGN & ARCHITECTS, MOMBASA, WORKING ON DIFFERENT PROJECTS SUCH AS A RESIDENTIAL BUILDING IN NYALI. SHE IS COMMITTED TO CONTRIBUTE TO PHYSICAL SPACES THAT EMPOWER COMMUNITIES, SHAPING A HEALTHIER, MORE CONNECTED BUILT ENVIRONMENT.

PROJECT DESCRIPTION

PROJECT NAME: THE JERICHO COMMUNITY LIBRARY
 LOCATION: JERICHO PLAYGROUND IN MAKADARA CONSTITUENCY, NAIROBI
 SITE AREA: 26,680 sq. m

PROJECT JUSTIFICATION

ESTABLISH A "NEW PLACE" WITHIN THE AREA.

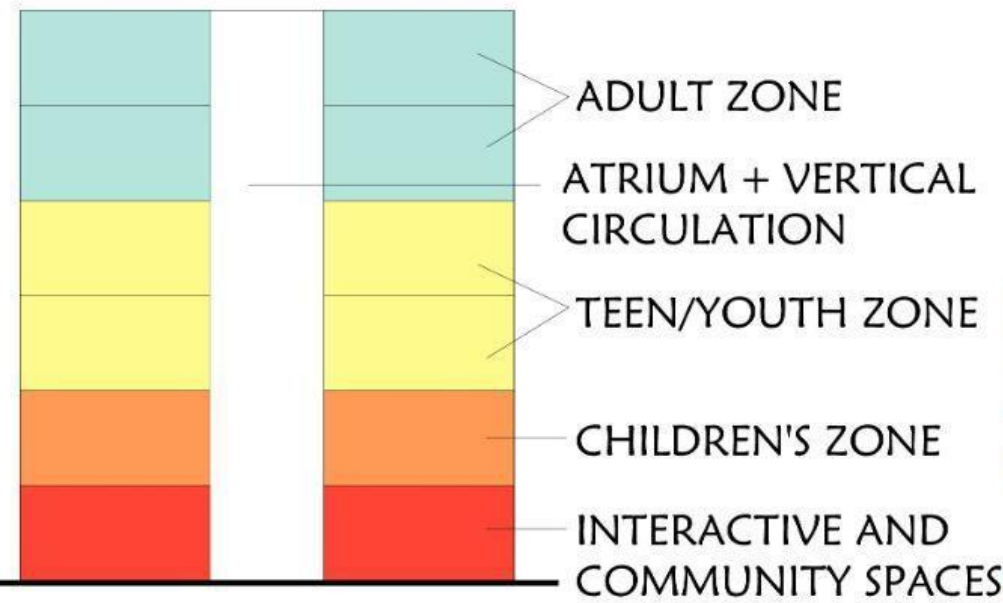
A COMMUNITY-CENTERED LIBRARY WOULD SERVE AS AN ESSENTIAL RESOURCE TO ACCESS EDUCATIONAL MATERIALS, TECHNOLOGY, AND A NEUTRAL SPACE WHERE INDIVIDUALS FROM ADVERSE BACKGROUNDS COME TOGETHER TO SHARE IDEAS AND ENGAGE IN CIVIC DISCOURSE.

A VISION ESTABLISHED TO CREATE A SPACE THAT IS WELICOMING, SAFE AND FLEXIBLE WHILE ENRICHING A CONNECTION BETWEEN PEOPLE AND THEIR COMMUNITY.

SPATIAL REQUIREMENTS

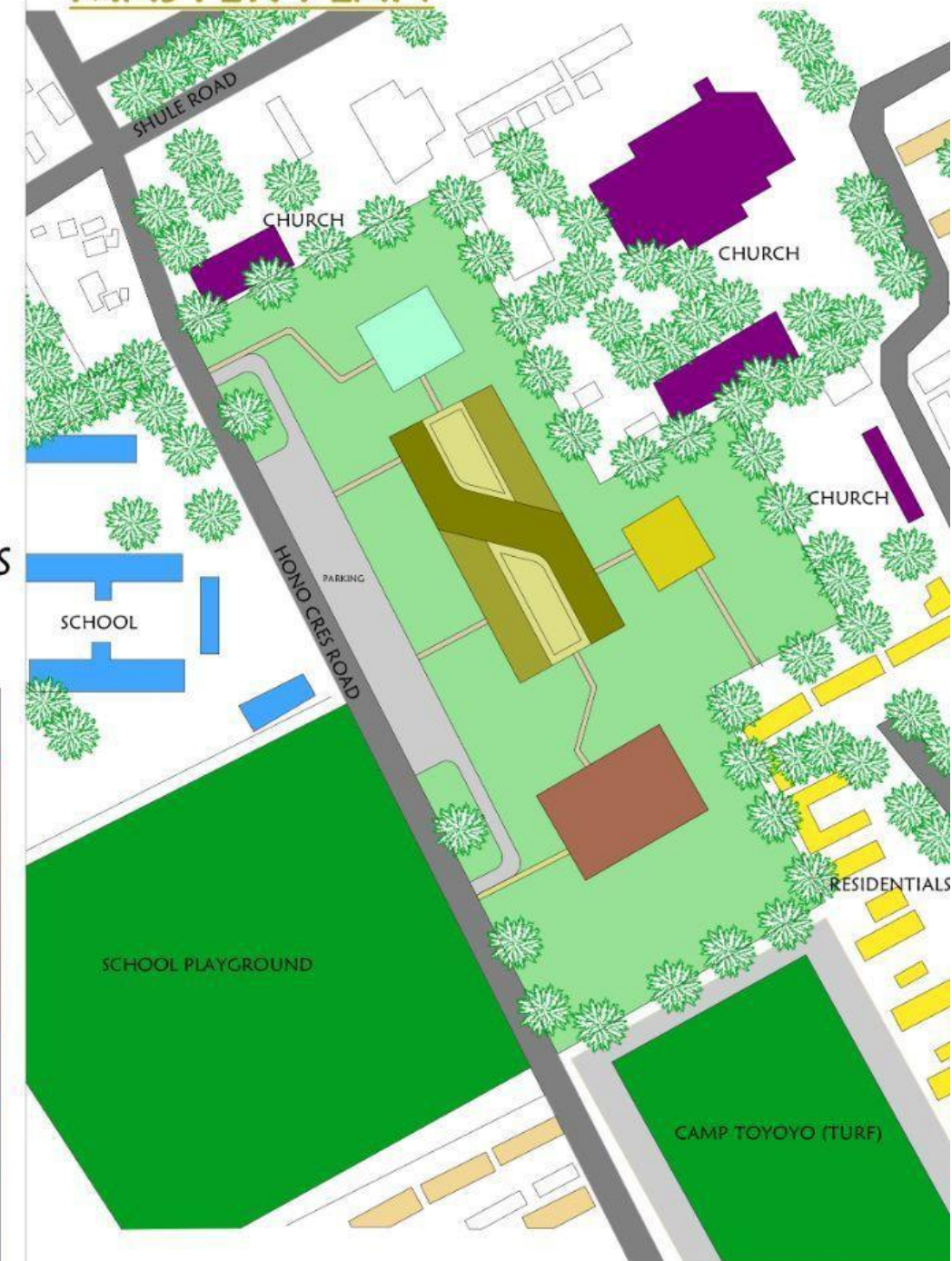
- 1. PARKING AREA
- 2. ENTRANCE HALL
- 3. RECEPTION/CHECK-OUT
- 4. MEETING SPACES
- 5. MULTI-PURPOSE HALL
- 6. RESTROOMS
- 7. READING GARDEN
- 8. STAFF WORKROOMS
- 9. COMPUTER ROOMS
- 10. SOUND ROOM
- 11. CHILDREN'S ZONE
- 12. TEEN/YOUTH ZONE
- 13. ADULT ZONE
- 14. STAFF LOUNGE
- 15. CAFE
- 16. ARCHIVE
- 17. ADMIN OFFICES

SPATIAL ORGANISATION



SPACES	AREAS
MEETING SPACES	100 m ²
MULTIPURPOSE HALL	270 m ²
READING GARDEN	230 m ²
OUTDOOR CAFE	100 m ²
CHILDREN'S ZONE	150 m ²
COMPUTER ROOMS	100 m ²
SOUND/MUSIC ROOM	35 m ²
STUDY ROOMS	25 m ²
READING AND COLLECTIONS	450 m ²
ARCHIVE	200 m ²
ADMIN OFFICE	20 m ²
STAFF LOUNGE	40 m ²

MASTER PLAN



LEGEND

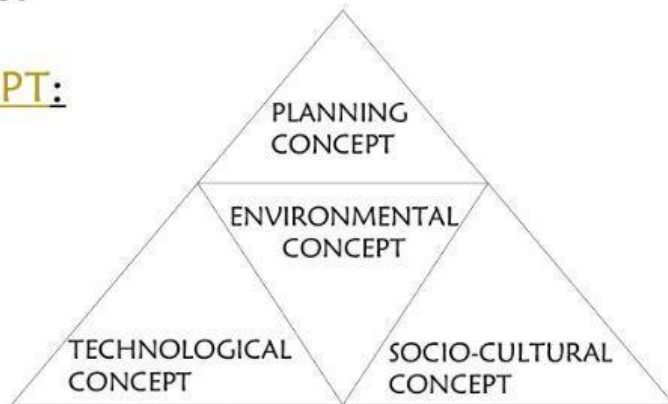
- FOOTPATH
- READING GARDEN
- INFORMAL OUTDOOR AMPHITHEATRE
- OUTDOOR CAFE
- LIBRARY
- LANDSCAPE

JERICHO COMMUNITY LIBRARY

PHILOSOPHY OF DESIGN: "DESIGN COMMUNICATES OBVIOUS FUNCTION". FOR SOMETHING TO BE WELL DESIGNED, THE KEY REQUIREMENT IS THAT A PERSON SHOULD BE ABLE TO EASILY DETERMINE HOW TO USE AND INTERACT WITH IT.

DESIGN PHILOSOPHY: "A DESIGN IS NOT FINISHED UNTIL SOMEONE IS USING IT", BY BRENDA LAUREL. THIS FOCUSES ON THE VALUE OR IMPORTANCE OF HOW USERS CONSUME DESIGNS.

CONCEPT:



1. TECHNOLOGICAL CONCEPT

SUSTAINABLE TECHNOLOGIES; INCORPORATING THESE REDUCES ENVIRONMENTAL IMPACT, AS WELL AS SERVE AS AN EDUCATIONAL TOOL ABOUT SUSTAINABILITY PRACTICES.



2. SOCIO-CULTURAL CONCEPT

THE COMMUNITY HUB; A PUBLIC LIBRARY WITH FLEXIBLE AREAS FOR EVENTS, WORKSHOPS AND MEETINGS, ENCOURAGES SOCIAL INTERACTION AND COLLABORATION AMONG COMMUNITY MEMBERS.



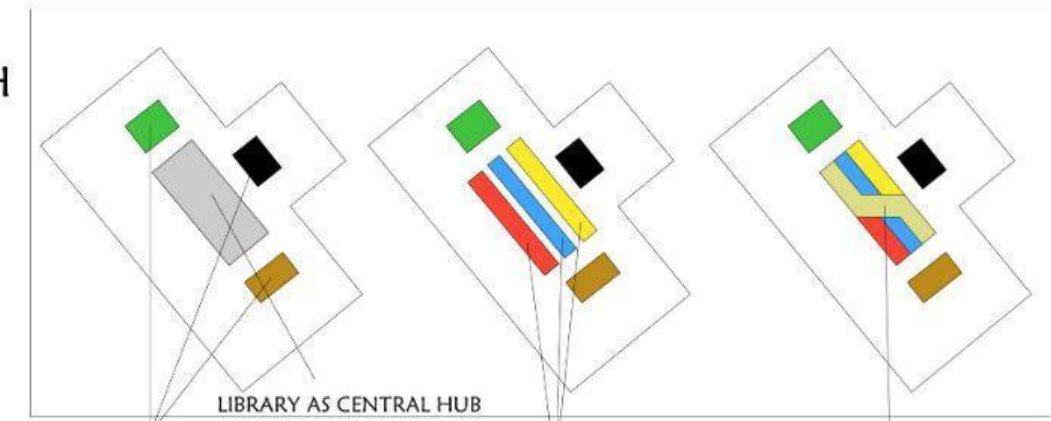
3. ENVIRONMENTAL CONCEPT

GREEN ROOFS AS URBAN CANOPIES; JUST AS TREE CANOPIES FILTER SUNLIGHT AND RAIN, GREEN ROOFS OFFER INSULATION FOR BUILDING AND REDUCE URBAN HEAT ISLANDS.



4. PLANNING CONCEPT

THE MARKET OF IDEAS; THROUGH DESIGN, THE LIBRARY CAN ENCOURAGE MOVEMENT, INTERACTION AND COMMUNITY ENGAGEMENT, MUCH LIKE A "BUSTLING MARKET".

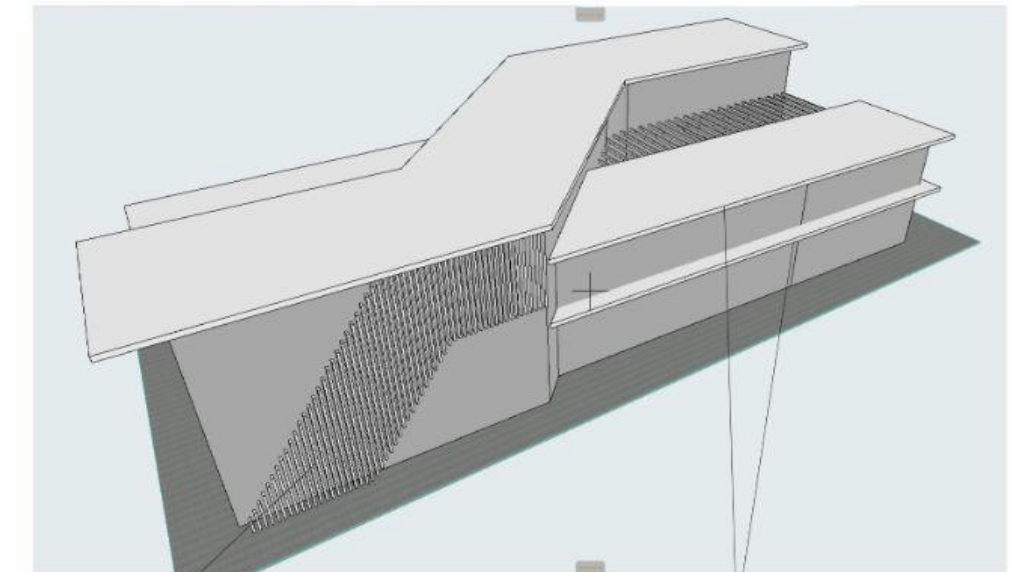


DIFFERENT SPACES REPRESENTING DIFFERENT IDEAS "ACTING AS VIBRANT STALLS" AROUND THE LIBRARY.

DIFFERENT LIBRARY SECTIONS DEDICATED TO VARIOUS ACTIVITIES.

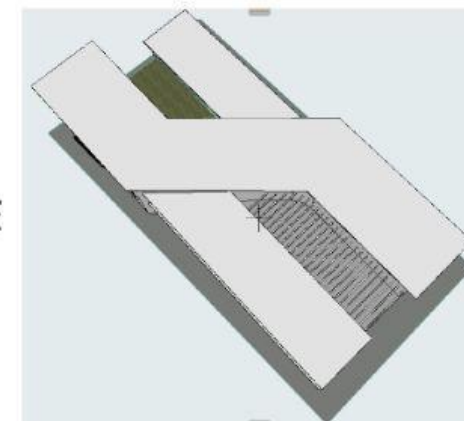
INTERCONNECTING THE DIFFERENT SECTIONS TO ENCOURAGE MORE INTERACTION.

CONCEPTUAL FORM

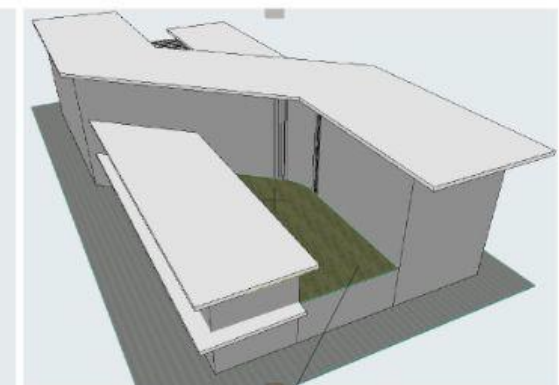


USE OF VERTICAL FACADE ELEMENTS FOR SUNSHADING, AS WELL AS CREATING VERTICALITY.

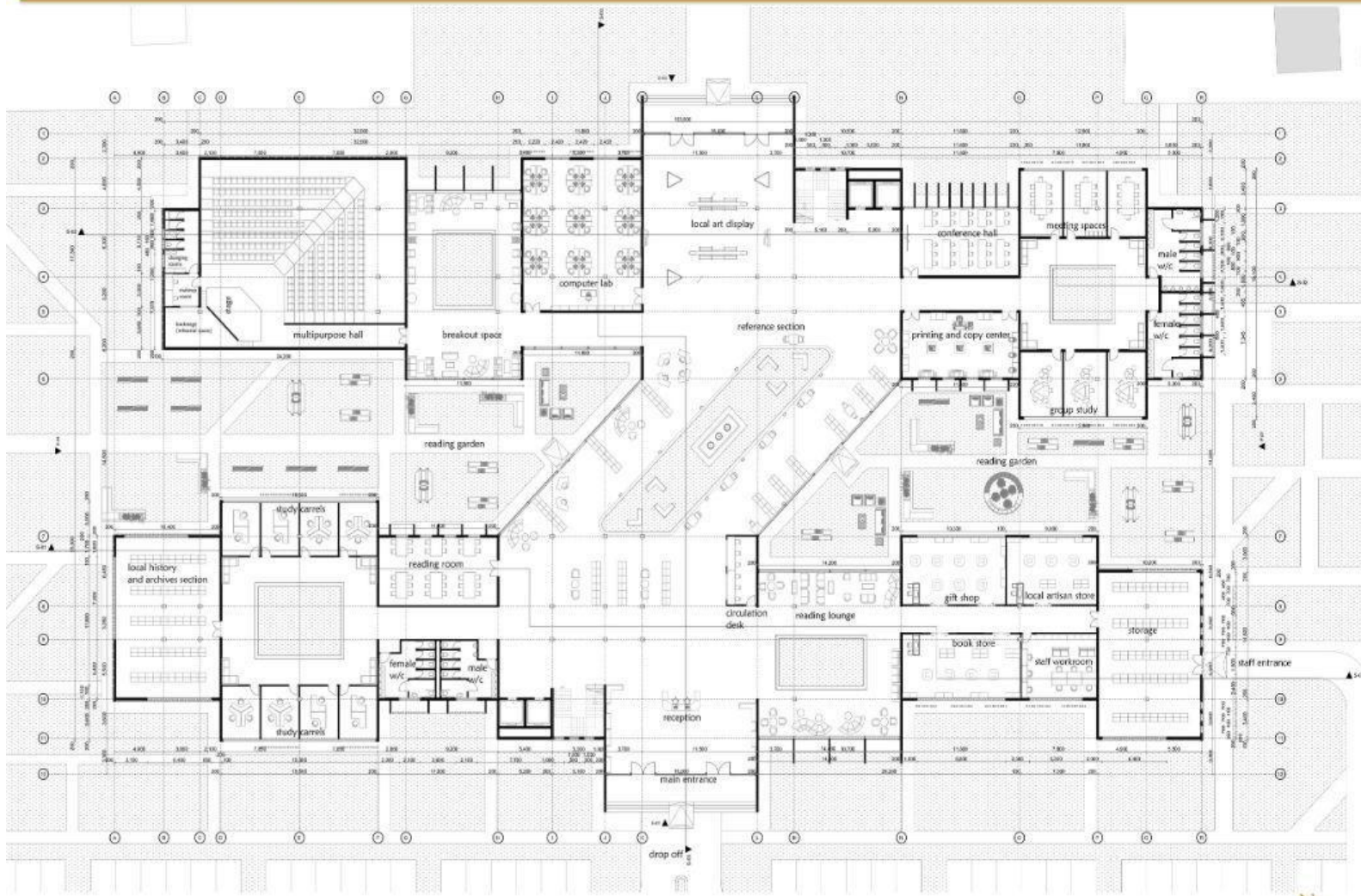
HORIZONTALITY OF THE BUILDING.



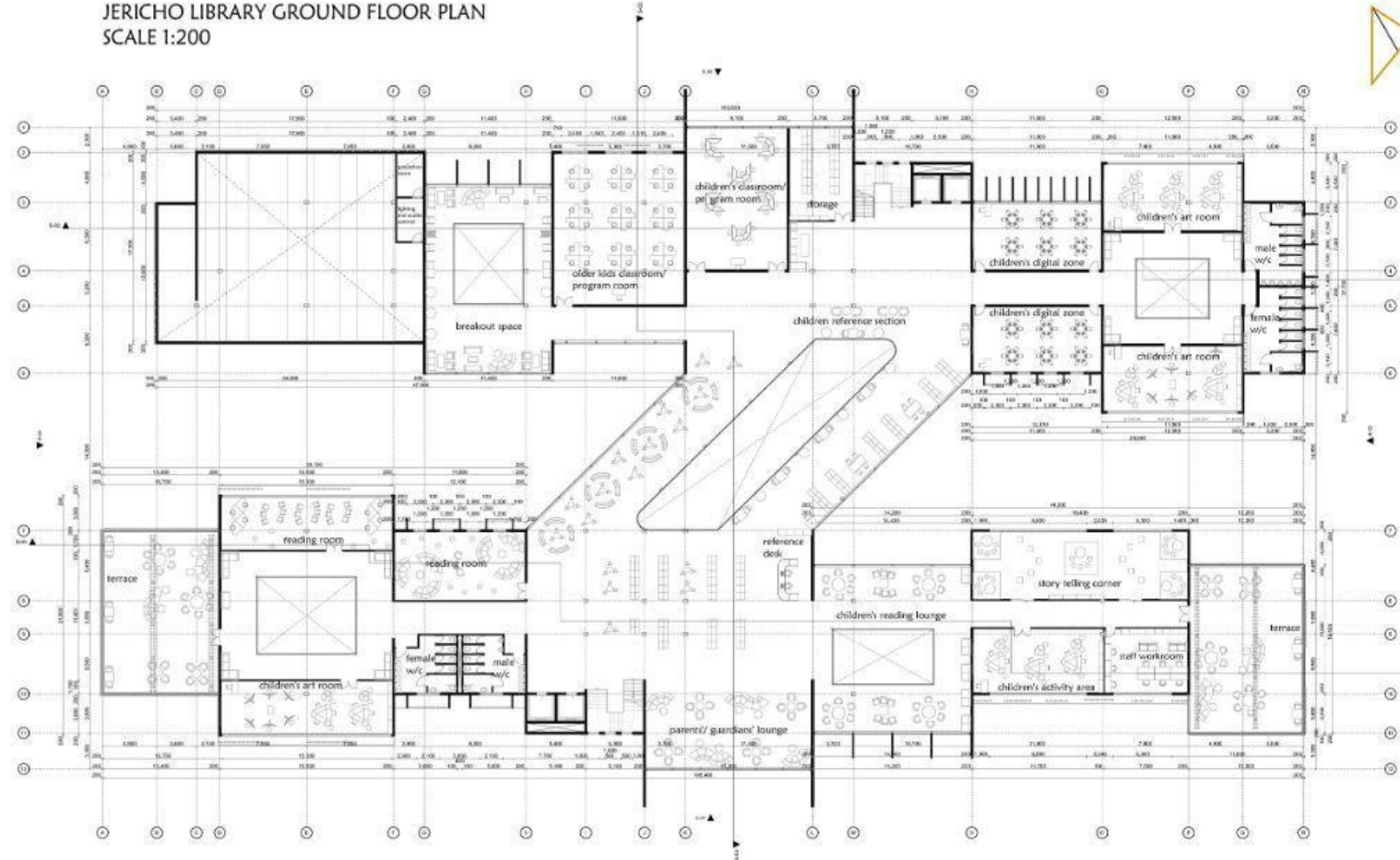
AERIAL VIEW OF THE LIBRARY.



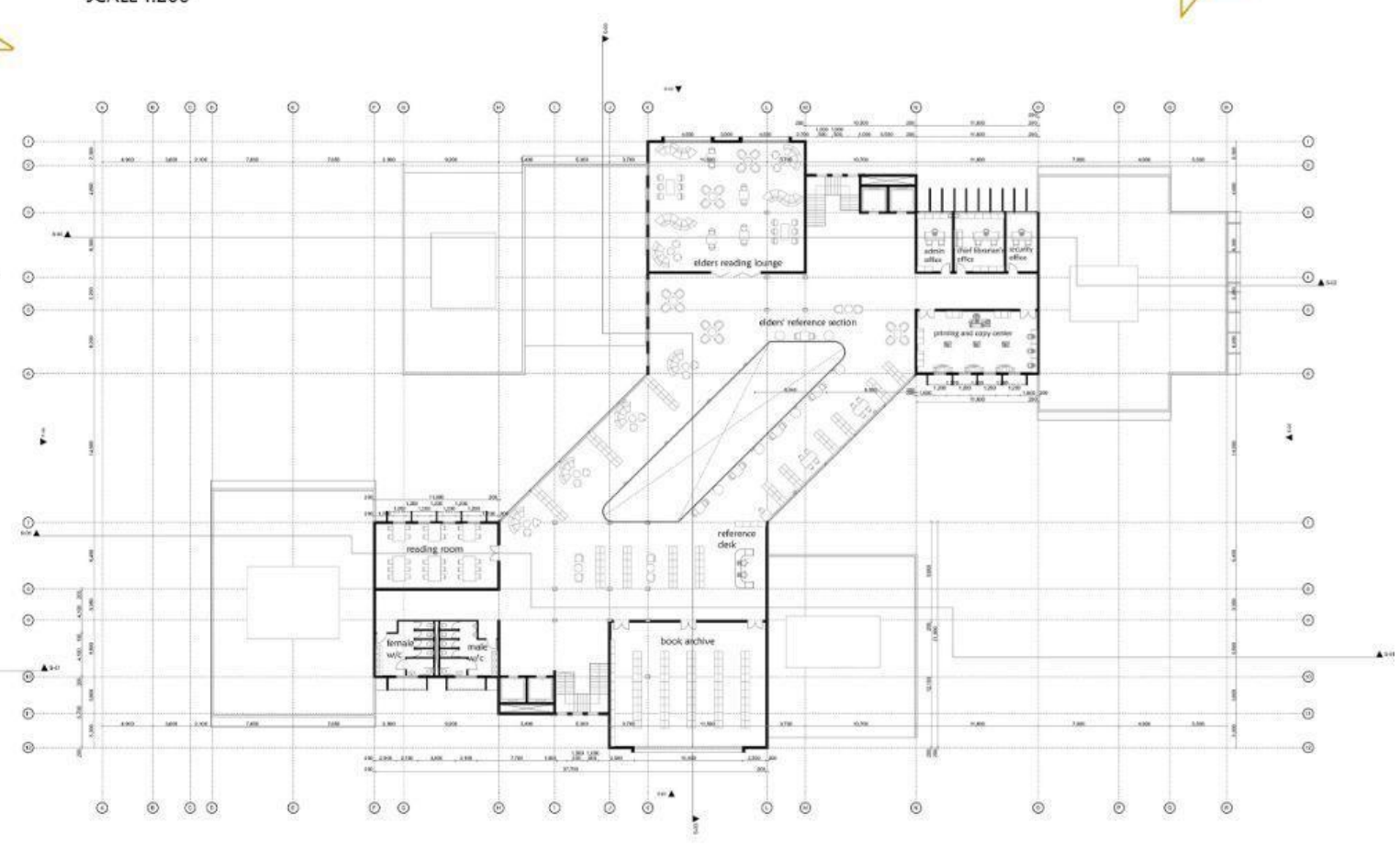
GREEN TERRACE FOR RELAXATION AND ENHANCEMENT OF THE AESTHETIC VALUE.



JERICHO LIBRARY GROUND FLOOR PLAN
SCALE 1:200



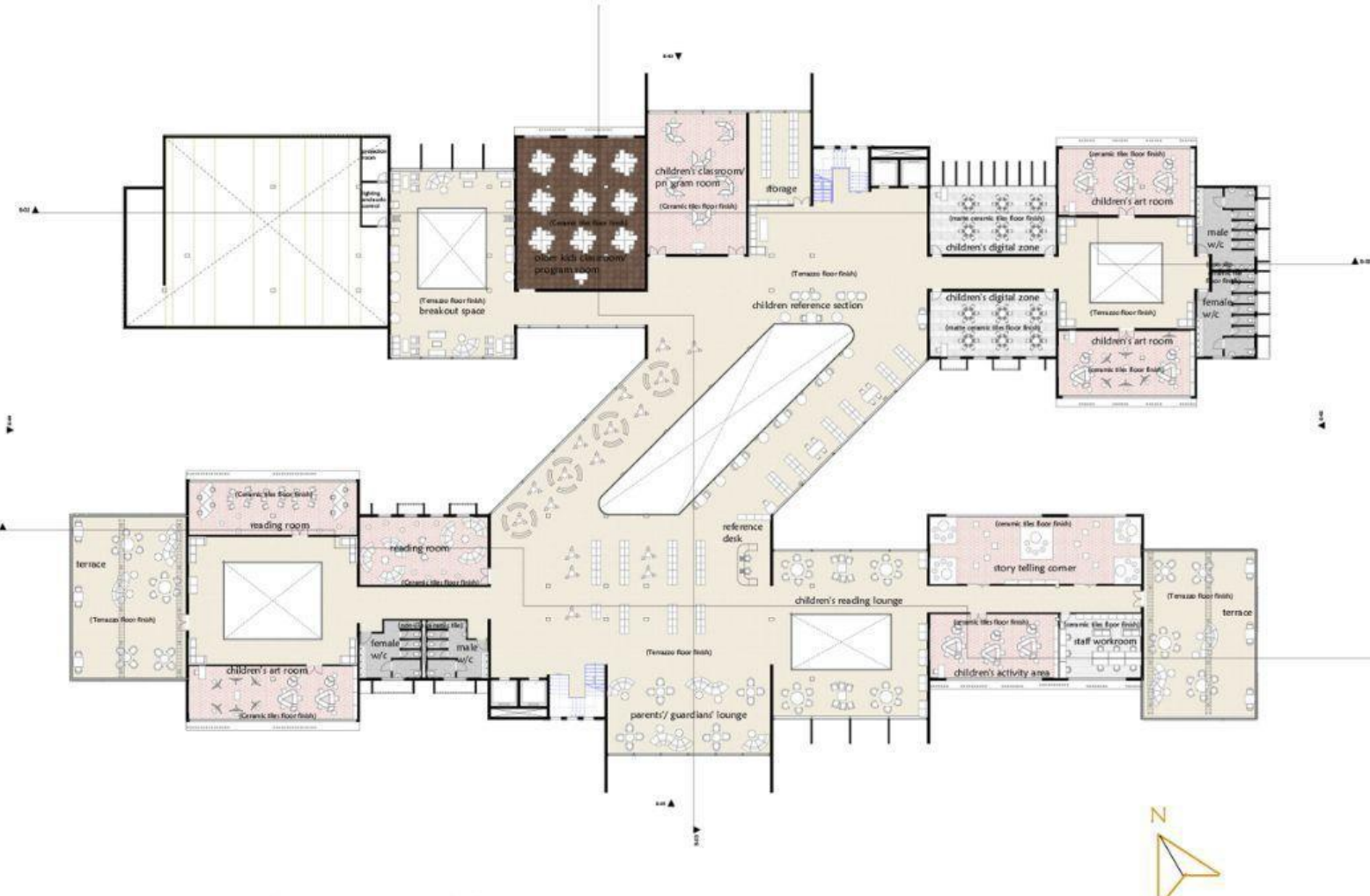
JERICHO LIBRARY SECOND FLOOR PLAN (YOUTH SECTION)
SCALE 1:200



JERICHO LIBRARY THIRD FLOOR PLAN (ELDERLY SECTION)



GROUND FLOOR PRESENTATION PLAN



FIRST FLOOR PRESENTATION PLAN



ELEVATION 01



ELEVATION 03



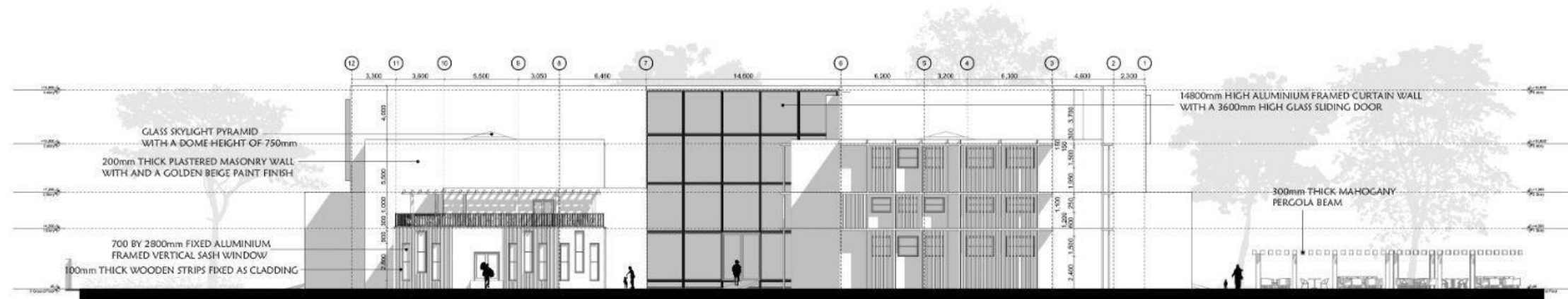
ELEVATION 02



ELEVATION 04



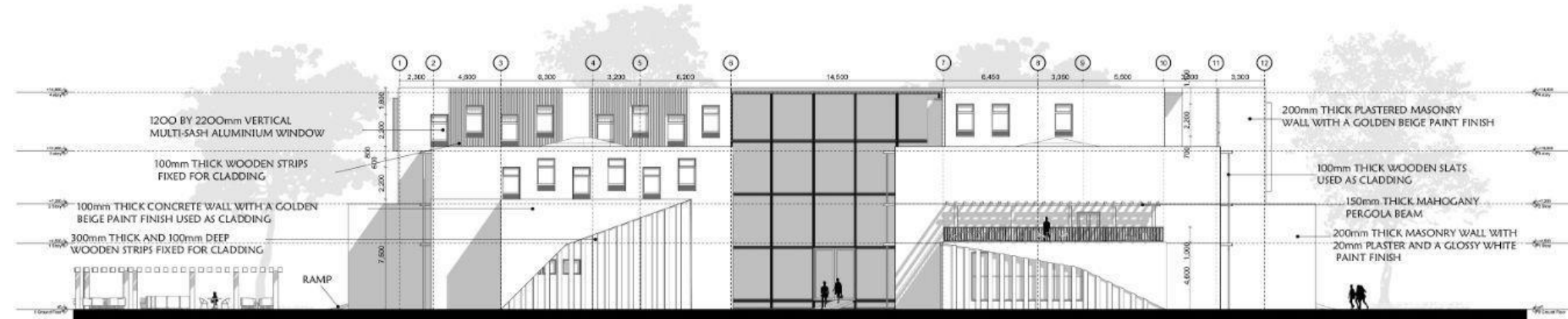
ELEVATION 01



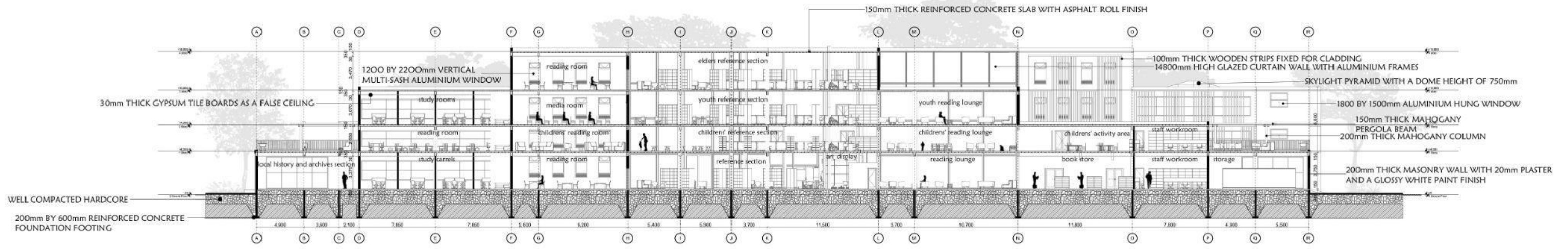
ELEVATION 02



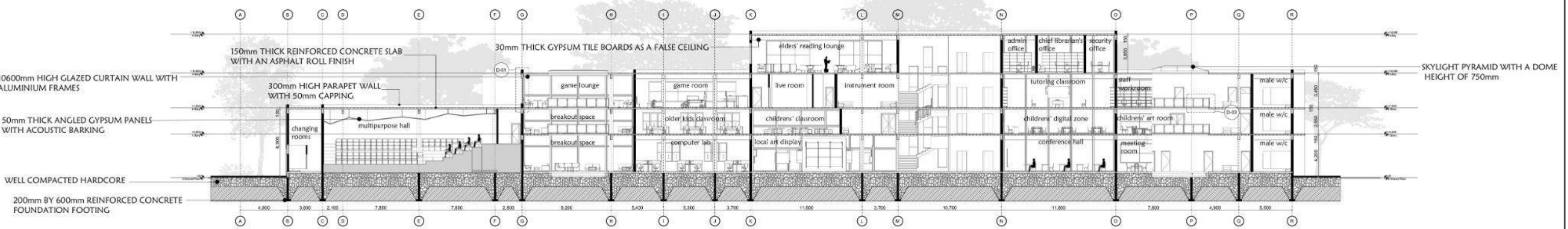
ELEVATION 03



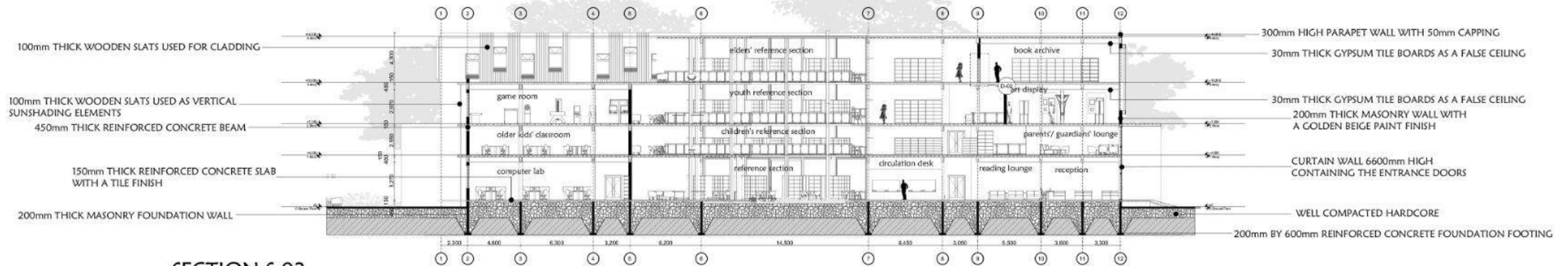
ELEVATION 04



SECTION S-01
SCALE 1:200



SECTION S-02
SCALE 1:200



SECTION S-03
SCALE 1:200

PERSPECTIVES

OUTDOOR READING GARDEN WHERE PATRONS/USERS CAN READ WHILE ENJOYING THE OUTDOORS AND NATURE, AIDING IN CONSUMER WELL-BEING. PARENTS CAN ALSO WATCH THE CHILDREN AS THEY PLAY IN THE PLAYGROUND.



OUTDOOR BREAKOUT SPACE WITH SEATS AND TABLES, WHERE THE PATRONS/USERS OF THE LIBRARY CAN EAT AND INTERACT IN GROUPS. IS LOCATED AT THE BACK OF THE LIBRARY.

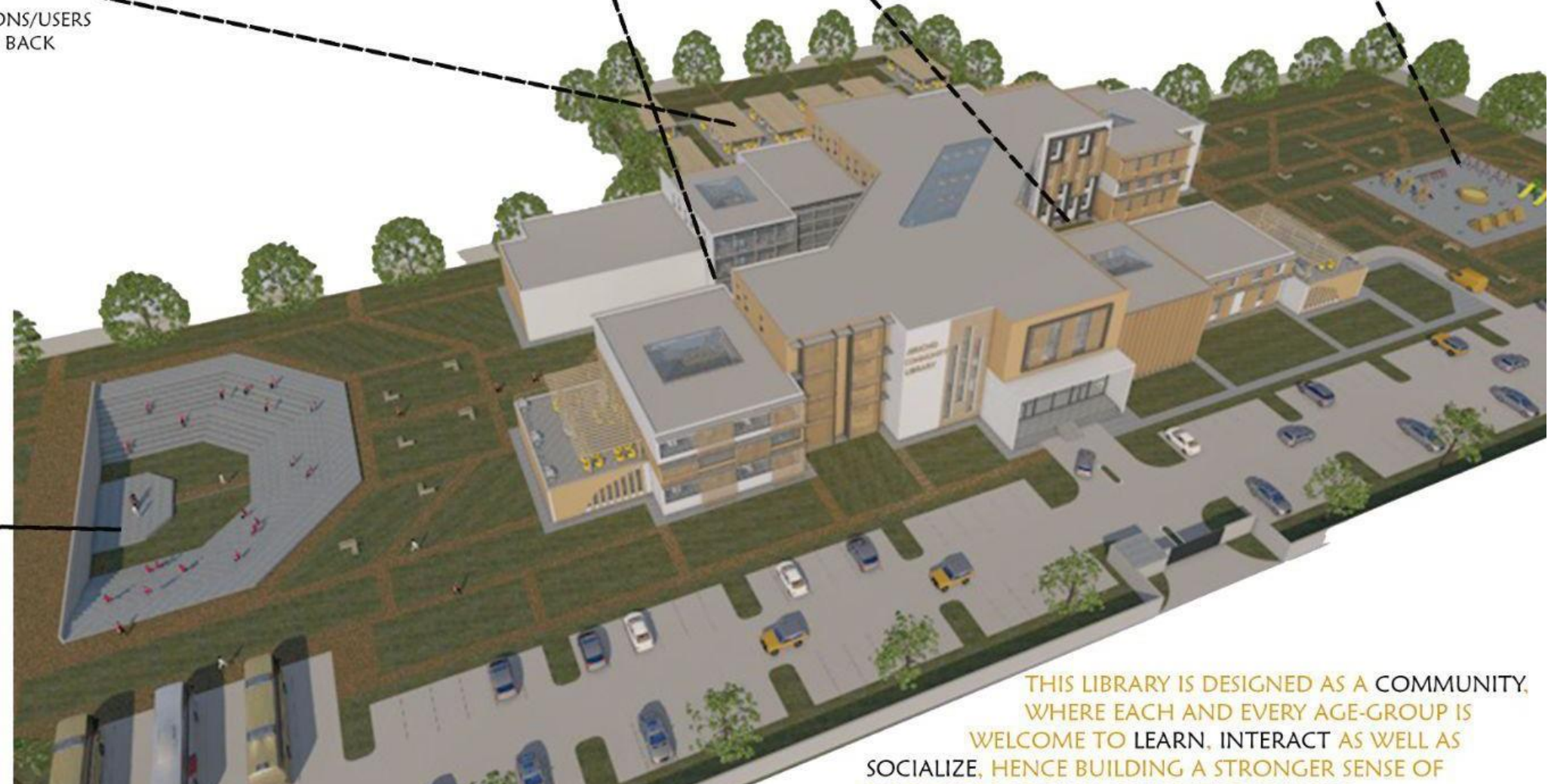
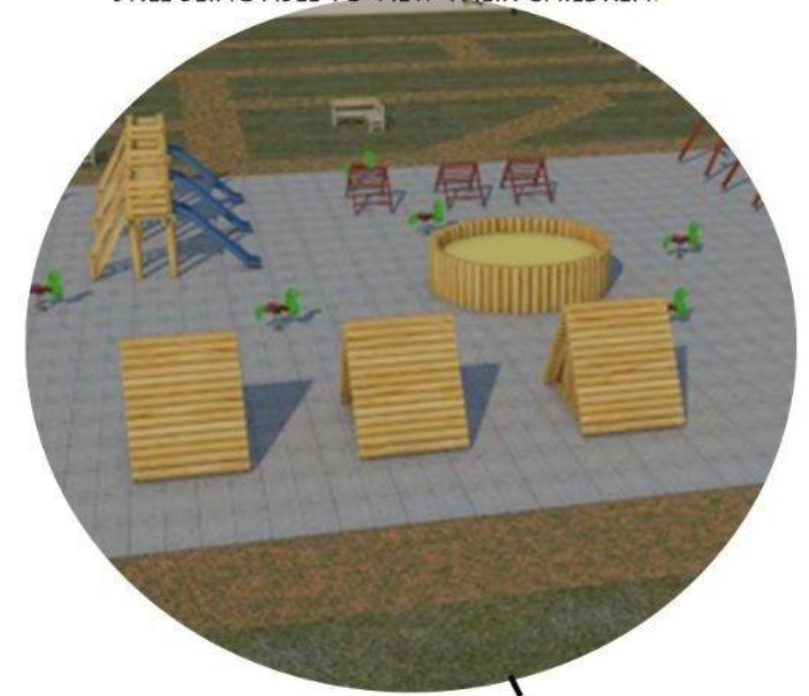


OUTDOOR AMPHITHEATRE ACCESSIBLE FOR PUBLIC EVENTS



JERICHO COMMUNITY LIBRARY

KIDS' PLAYGROUND SURROUNDED BY BENCHES WHERE THE PARENTS CAN SIT AND READ, WHILE STILL BEING ABLE TO VIEW THEIR CHILDREN.



THIS LIBRARY IS DESIGNED AS A COMMUNITY, WHERE EACH AND EVERY AGE-GROUP IS WELCOME TO LEARN, INTERACT AS WELL AS SOCIALIZE, HENCE BUILDING A STRONGER SENSE OF



FRONT PERSPECTIVE



OUTDOOR BREAKOUT SPACE

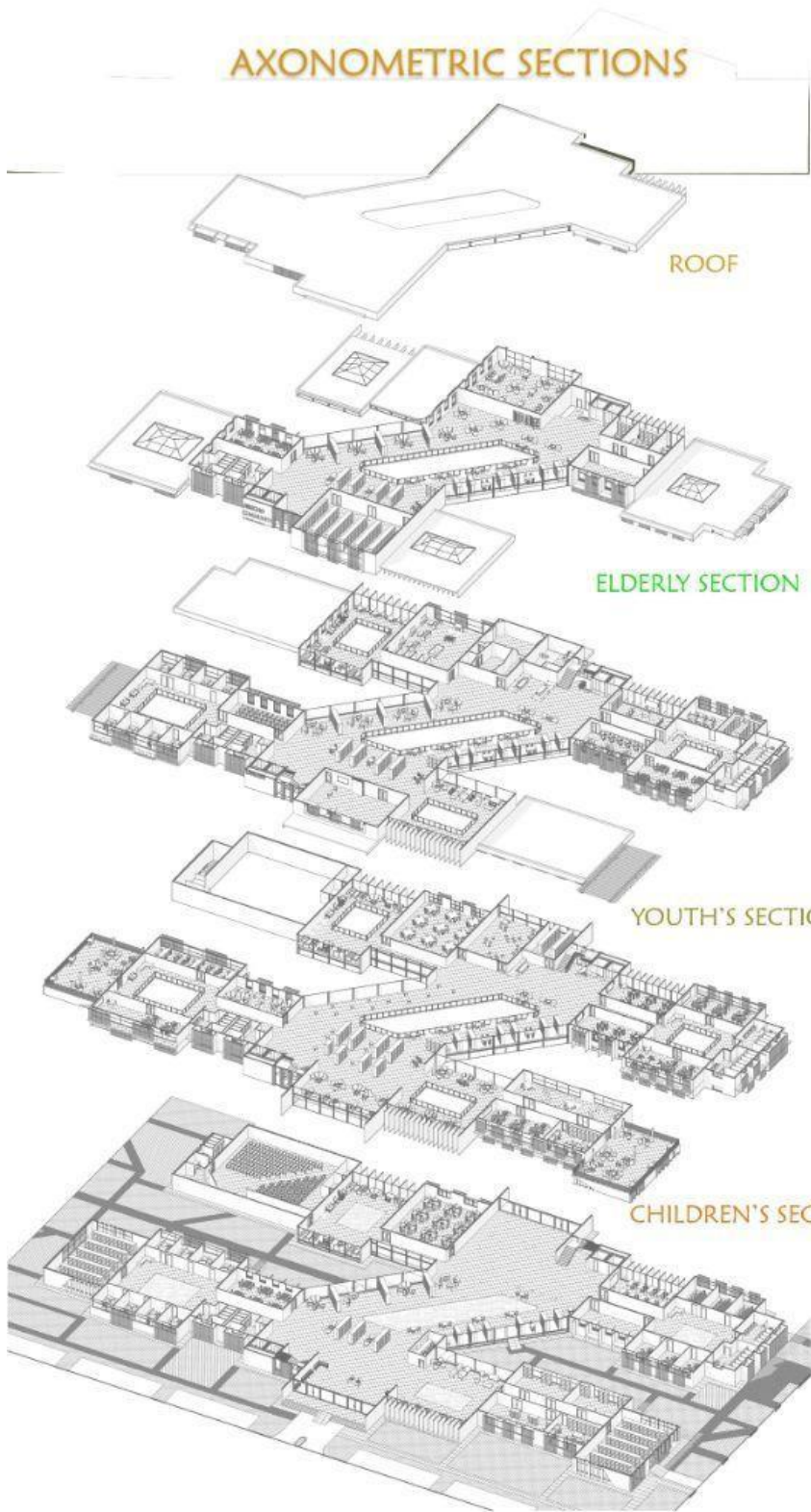


SIDE ELEVATION



KIDS' PLAYGROUND

AXONOMETRIC SECTIONS



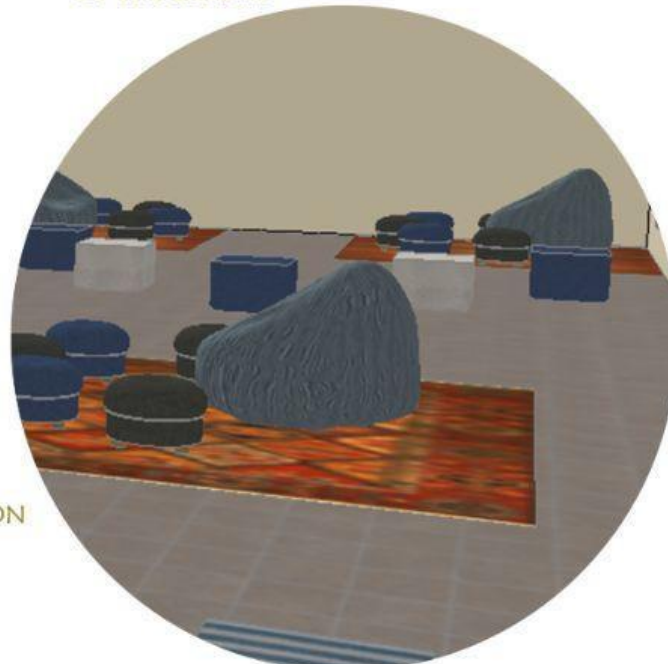
ART ROOM LOCATED IN THE YOUTH SECTION OF THE LIBRARY



PRINTING AND COPY ROOM LOCATED IN THE ELDERLY AND COMMUNITY SECTIONS



READING LOUNGE IN THE ELDERLY SECTION OF THE LIBRARY



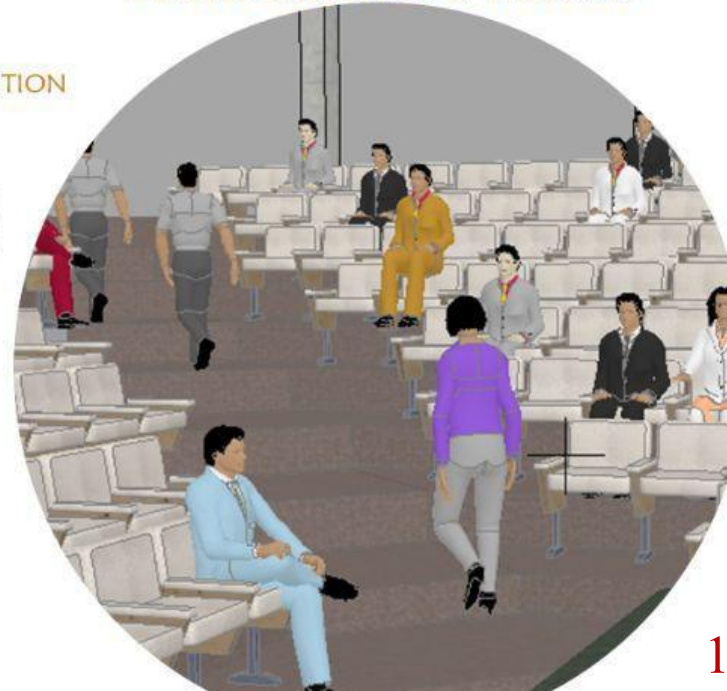
STORYTELLING ROOM LOCATED IN THE CHILDREN'S SECTION OF THE LIBRARY



INSTRUMENT ROOM IN THE LIBRARY YOUTH SECTION



GAME ROOM IN THE YOUTH SECTION OF THE LIBRARY



COMMUNITY AND INTERACTIVE SECTION



C. EXHIBITION

**B.A.S YEAR IV CONTRIBUTING STUDENT RESEARCHERS
AND DESIGNERS - 2024/2025**

Grace Kavata

Joseph Stephen Amimo

Onditi Odiwour

Joe Thuo Njoroge



NAME: Grace Kavata

INSTITUTION: Department of Architecture and Interior Design (DAID), School of Engineering and Architecture (SEA) Kenyatta University (KU)

EMAIL: gkavata001@gmail.com

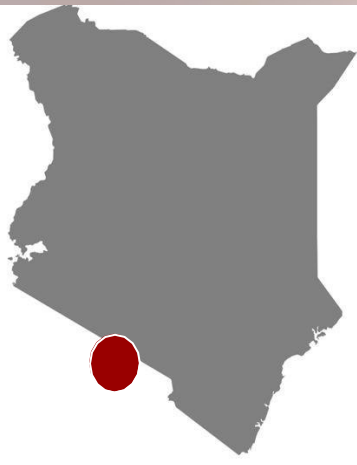
Biography

Grace Kavata is a motivated fourth-year student at Kenyatta University, pursuing her architectural studies. She combines academic excellence with substantial practical experience gained through internships at Nessa Designs Firm. She has genuine passion for sustainable design solutions and innovative construction methodologies. She has the ability to solve problems coupled with strong organizational and communication skills. This positions her as a forward-thinking emerging architect, ready to contribute meaningfully to architectural projects while continuing her professional development

Konza Exhibition Centre



LOCATION



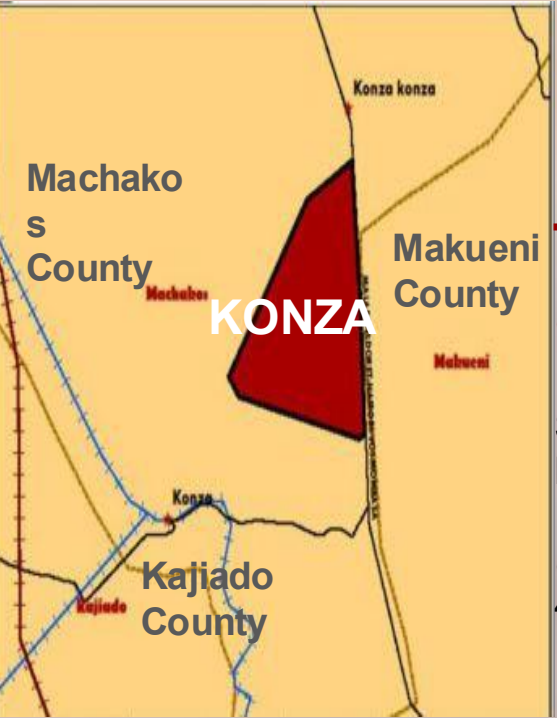
Kenya

Source:
Adapted from
J.Amimo
(2025).



Lower Eastern

Source:
K'Aumu, O.A.
Geojurnal
89,243(2024)



Konza Technopolis

Source:
K'Aumu, O.A.
Geojurnal
89,243(2024).

Project Description

The project involves the design of a Proposed exhibition centre that is focused on **technology and the cultural exhibitions**. The centre includes retail spaces and gaming spots.

The site is Konza Technopolis which is spread within Machakos county, Kajiado and Makueni county

Project Goal

To create an exhibition hall that showcases the evolution and advancement of technology in kenya.

To promote local culture and community engagement.

Site Details

Site Name: Konza Technopolis
Site Location: Makueni County
Site Area: 40,684.18 Sqm

Climate Information

Konza City experiences a tropical savanna climate characterised by warm, dry conditions for most of the year with short, cool, and partly cloudy winters

Temperatures range from 12-28 Degrees Celsius.

Rainfall is mostly during the wet season (April-July). July sees an average of 10.09mm of rain.

The average humidity at Konza City is 71%.

PROJECT JUSTIFICATION

1. Strategic Location and Infrastructure

Planned Smart City Design & Proximity to Major Transport Hubs hence accessibility for both local and international exhibitors and visitors.

2. Target Market Alignment

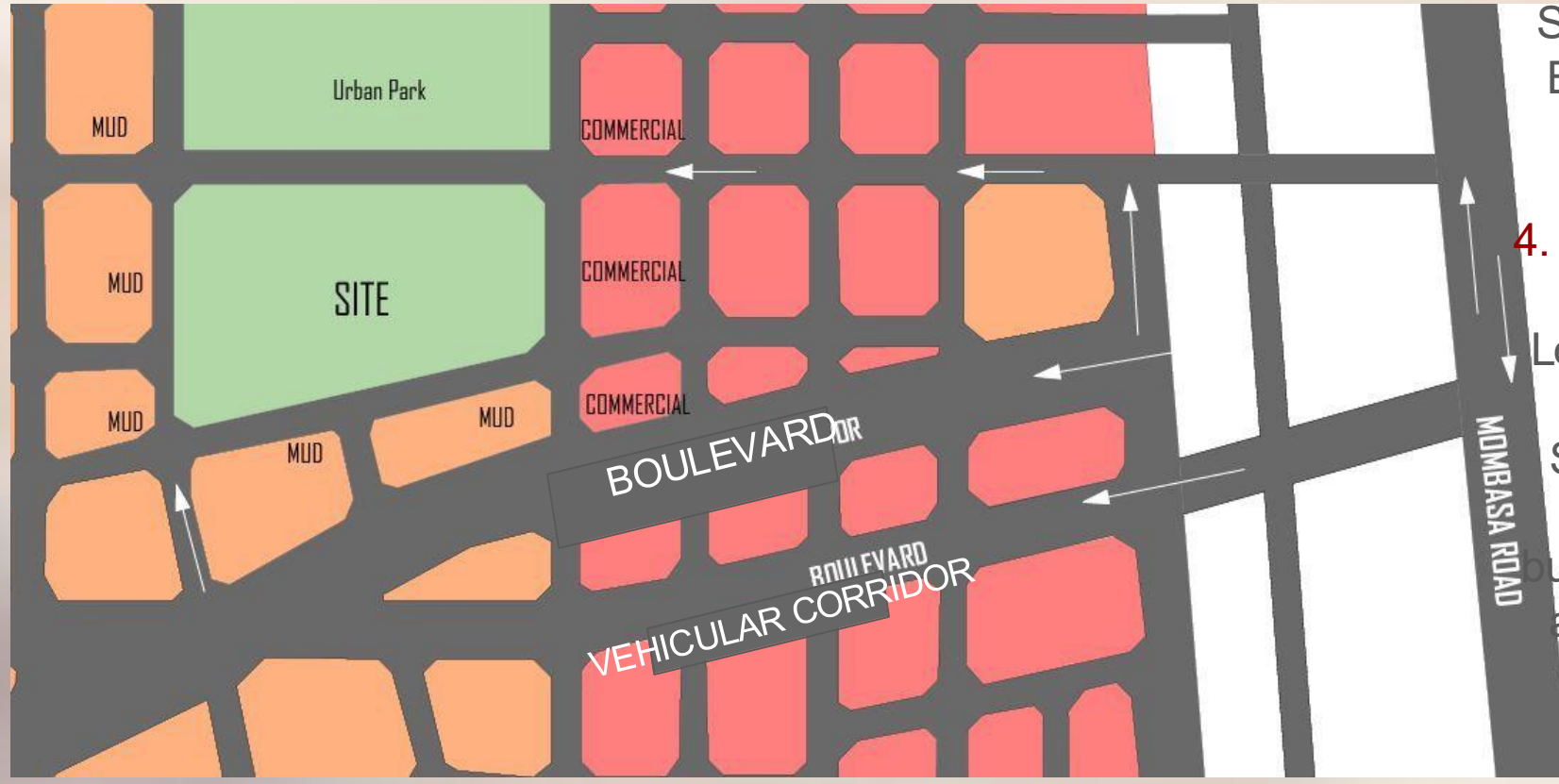
Tech and Innovation-Focused Audience & Synergy with Existing and Planned Institutions such as universities, data centers, and business incubators.

3. Economic and Policy Incentives

Special Economic Zone (SEZ) Benefits & Government and Private Sector Backing.

4. Future-Proofing and Growth Potential

Long-Term Urban Growth and Planning & Green and Sustainable Design Options. The city promotes green building codes, which may also attract international events focused on sustainability.



Spatial Requirements

Zone	Space
ADMINISTRATIVE AREAS	<ul style="list-style-type: none"> -EXHIBITION MANAGER -ADMIN ASSISTANT -ACCOUNTANT -HUMAN RESOURCE -CUSTOMER SERVICE REPS -TOUR GUIDES -TECHNICAL SUPPORT STAFF -RECEPTION -SECURITY OFFICERS -SURVEILLANCE OPERATORS -TECHNICIANS -CLEANERS KITCHEN BREAK OUT SPACE
MEETING AREAS	<ul style="list-style-type: none"> -WORKSHOP -BALLROOMS -AUDITORIUM
MAIN EXHIBITION	<ul style="list-style-type: none"> -CULTURAL ART DISPLAYS -DIGITAL ART DISPLAYS -SMART CITY TECHNOLOGIES EXHIBITION -MULTI-USE EXHIBITION -OUTDOOR EXHIBITION
COMMON SPACES	<ul style="list-style-type: none"> VR GAMING SPOTS RETAIL SPACES [GIFT SHOP] -cultural art, -electronics & -digital equipment RESTAURANT OUTDOOR SITTING

Users Categories

Gender

Male female



Ability

Design for people of all abilities



Age

Kids Teenagers Elderly



Specific Use

Investors Businesses Students



Researchers Gamers Conferences



Client Details

The Primary client is the Government of Kenya. It established as a special entity to facilitate its development.

Konza Technopolis however, engages with various other clients and investors. Konza Technopolis aims to be globally competitive smart city and innovation hub

Site Planning Proximity Diagram



DESIGN CONCEPT

PHILOSOPHIES

"Design should speak of its time and place while yearning for timelessness" by Frank Gehry. Design must be rooted in reality. without a deep understanding of the end user and the reality in which a design will be used, any decision a designer makes is a shot in the dark.



A person in vr glasses.
Source: [istockphoto.com](https://www.istockphoto.com)(2025)

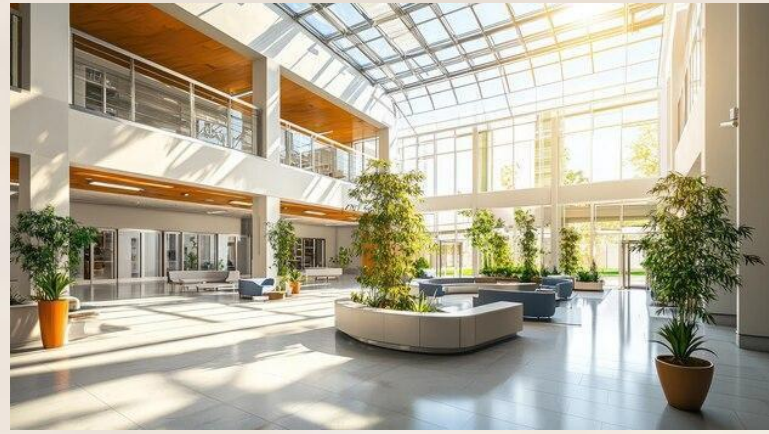
Technological Concept: Smart Infrastructure And Connectivity

Incorporate smart technology to enhance user experience and support the agenda of konza technopolis where the site is located. These include, interactive displays, modular spaces, vr gaming and wifi connection.

Socio-Economic Concept: 'one' Community And Inclusive Growth

through design, to provide flexible spaces for events, workshops, conferences and relaxation. Gathering people before dispersing them to allow interactions. Foster local entrepreneurship and skills development.

Community spaces include; retail spaces, auditorium, games area, restaurant and open spaces.



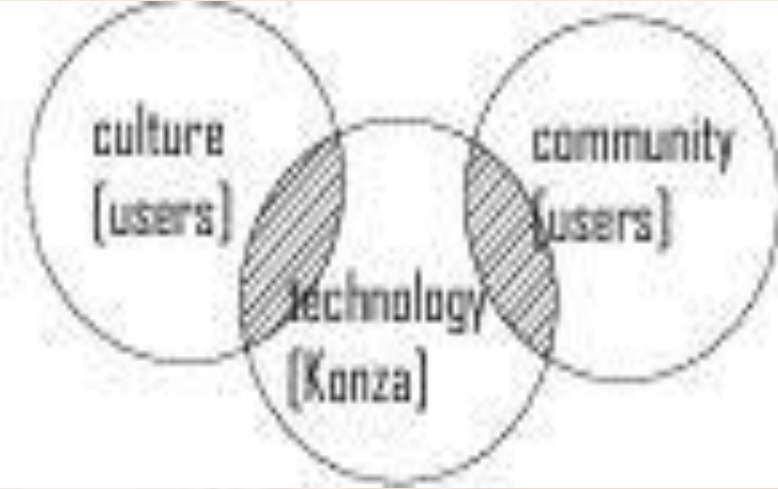
A bright lobby for interactions.
Source: [freepik.com](https://www.freepik.com)(2025)

Environmental Concept: Sustainability And Green Architecture

Design with green spaces around for biodiversity. Large shaded openings for natural lighting and ventilation. Incorporation of solar panels and rain water harvesting.

Planning Concept: Exhibition As A Convergence Hub

Design an exhibition that integrates the 3. Promote the exchange of ideas and interaction while understanding and celebrating cultural diversity. Incorporate adaptable spaces for evolving needs, open spaces and spaces for all people. Incorporate cultural art from kenya for sense of belonging



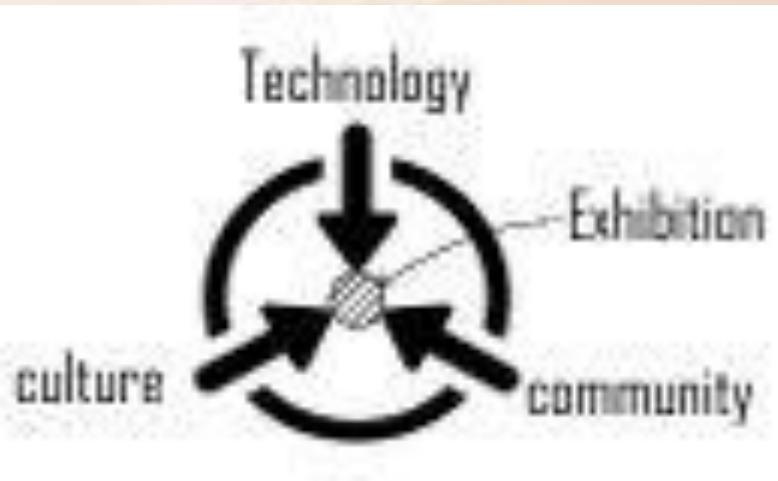
Interactive displays.
Source: Hann. A, [electrosonic.com](https://www.electrosonic.com)(2025)



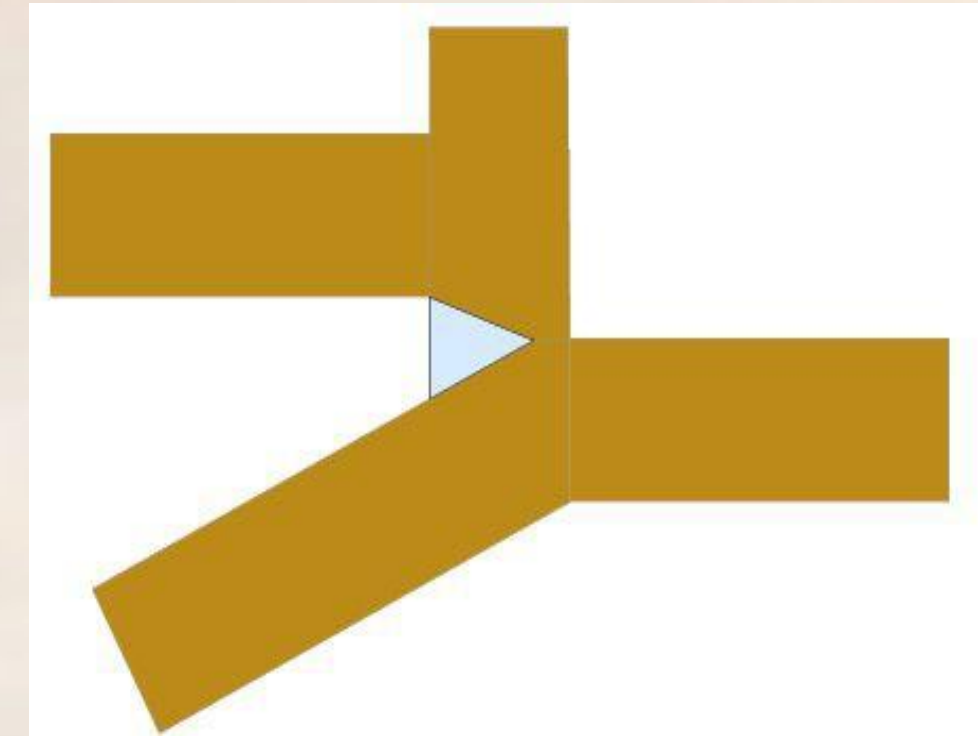
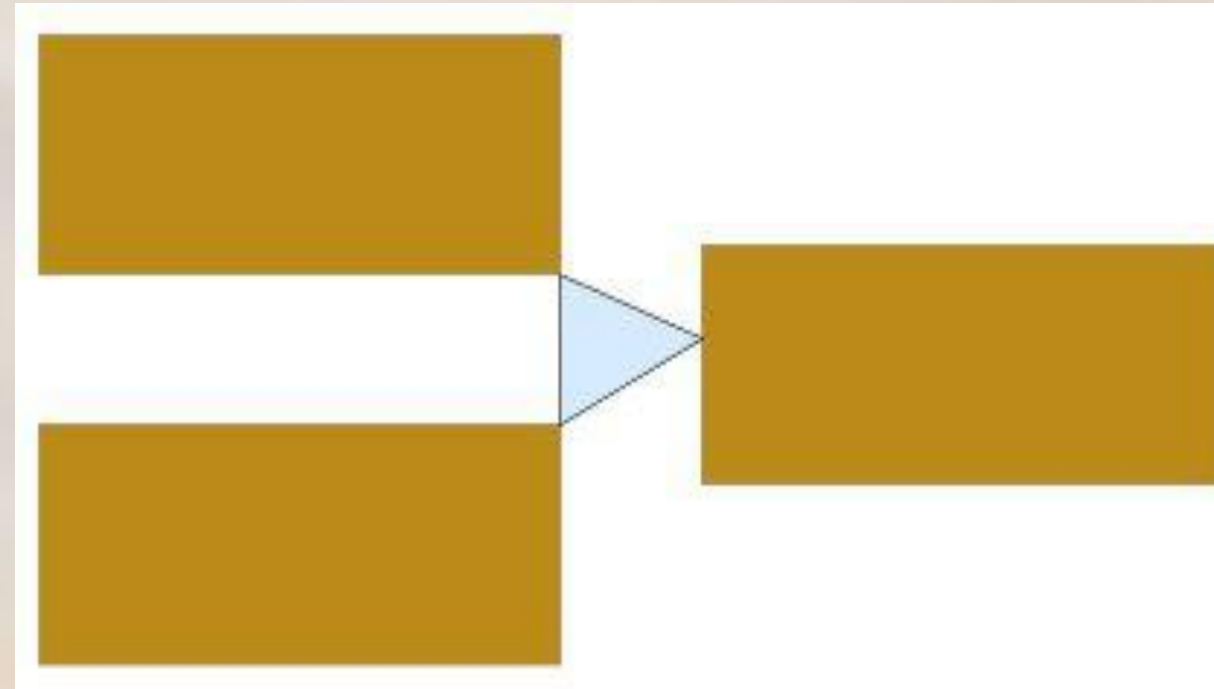
An inviting open space for interactions.
Source: Cruz. M, [illustrach.com](https://www.illustrach.com)(2025)



A rooftop garden.
Source: Adobe stock..com(2025)



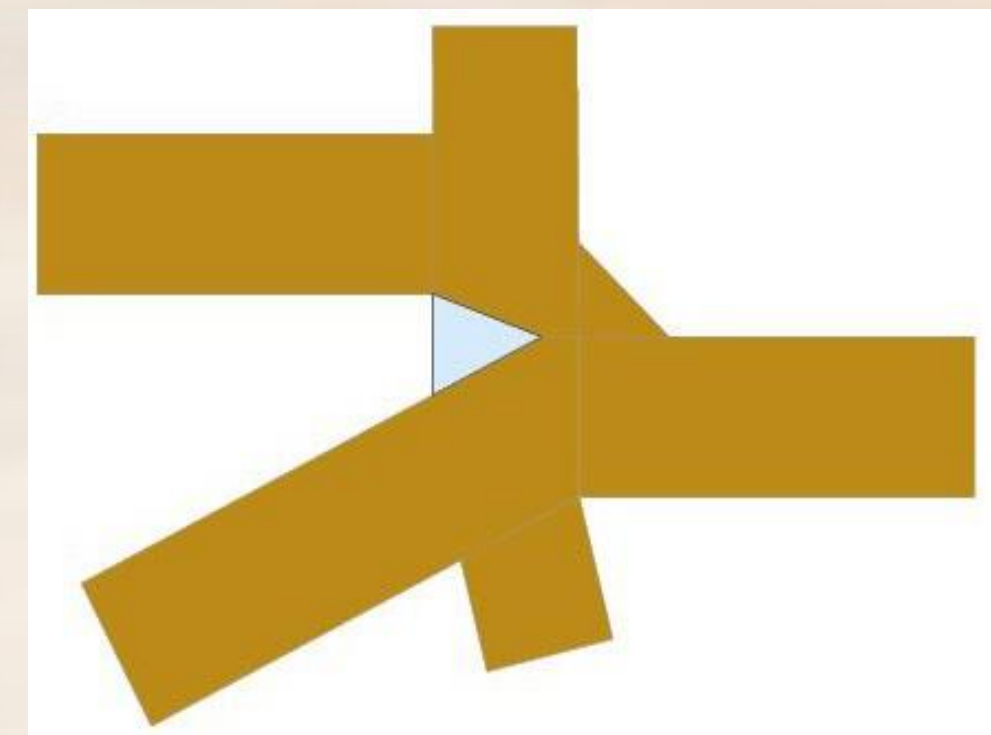
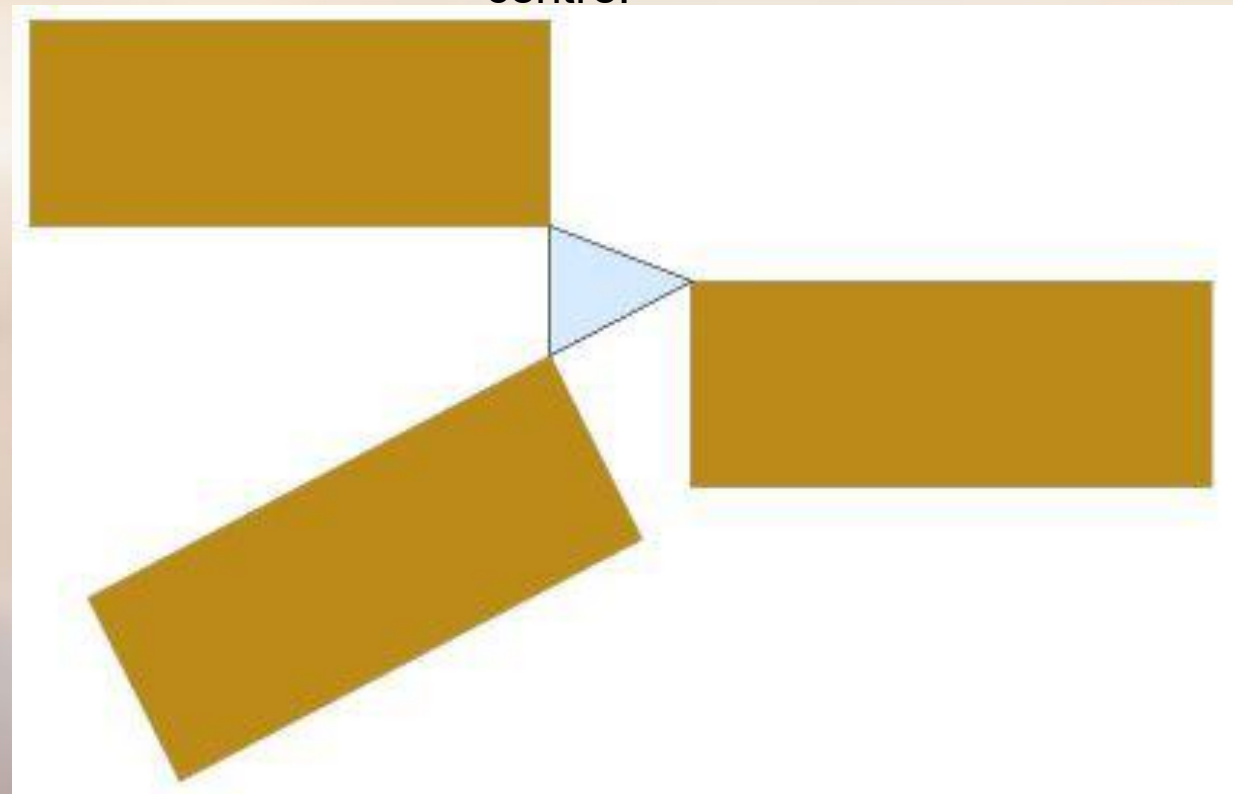
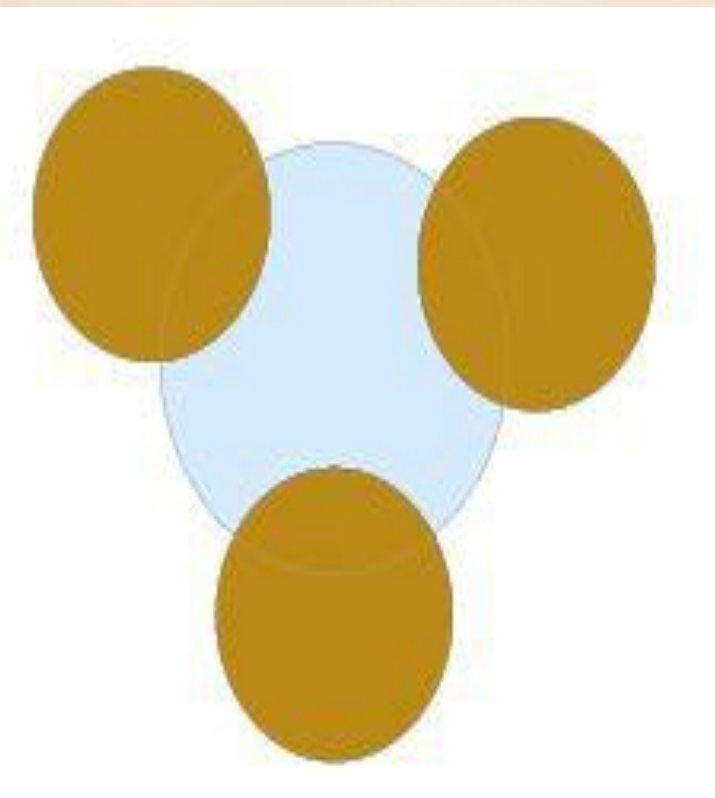
CONCEPTUAL FORM



Derived from my diagram to illustrate the convergence of technology, culture and community.

Converted into blocks to represent various spaces that are all joined together at the centre.

Joined the blocks to form a continuous shape and added other spaces for convenience.

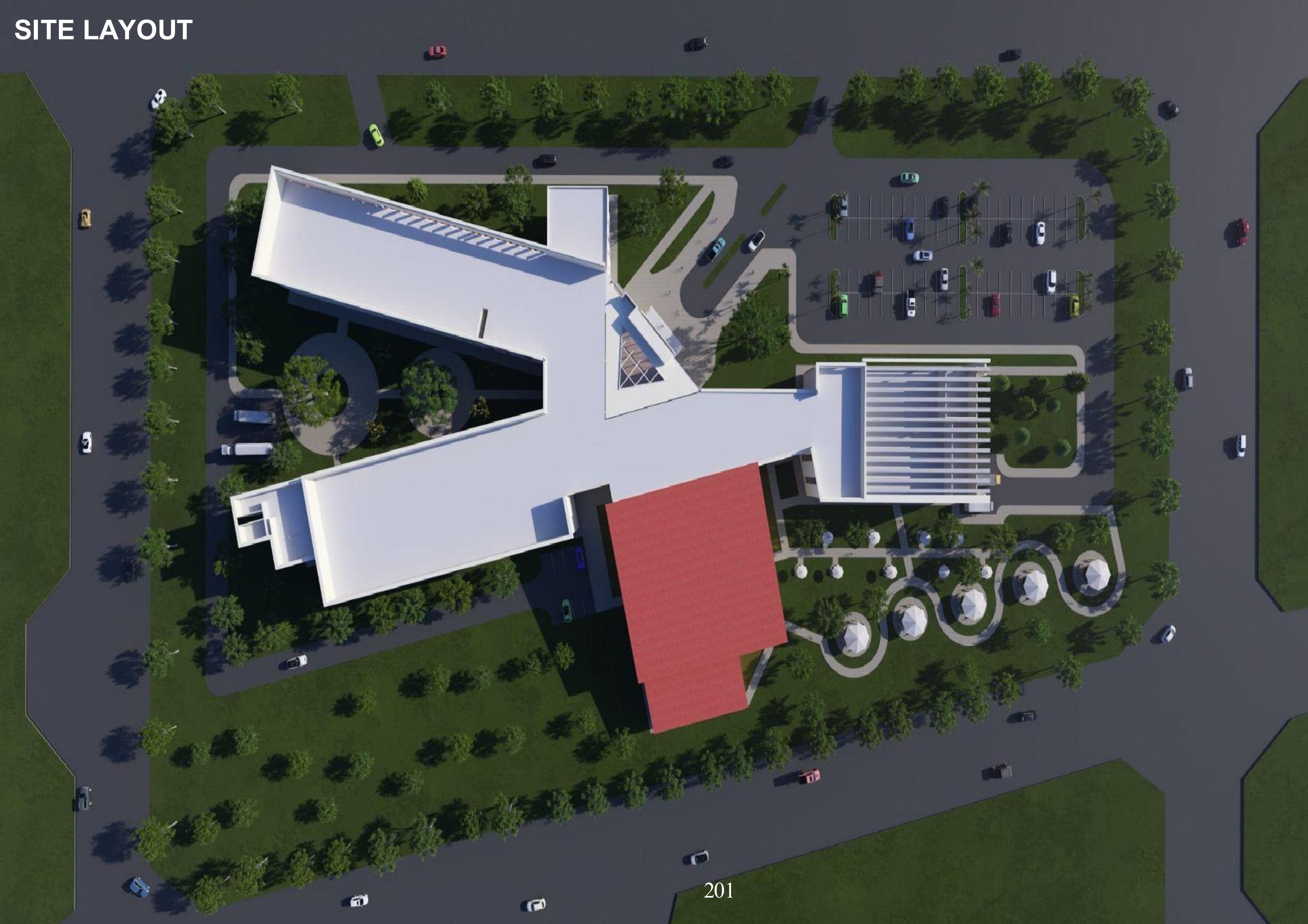


Starting with 3 circles joined at the centre. The circles represent the the 3 aspects above in simpler shapes.

Twisted the lower block to align with the shape of the site and also to open a courtyard-like space that can be used for interactions.

Finally came up with a figure that is well spread out on the site while providing controlled sun shading and natural lighting to spaces. Also collecting people into a single point before dispersing them to various spaces.

SITE LAYOUT



SITE PLAN

- 1. Main Entrance
- 2. Parking
- 3. Drop-off Point
- 4. Main Building
- 5. Outdoor Exhibition
- 6. Loading & Unloading zone
- 7. Reserved Parking
- 8. Outdoor Sitting
- 9. Auditorium
- 10. Exit

Entry/Exit

There's main entry/exit route in the facility. However there are 3 others to enhance movement within the exhibition building;

- To the outdoor exhibition
- To the outdoor seating
- To the reserved parking

Vertical circulation

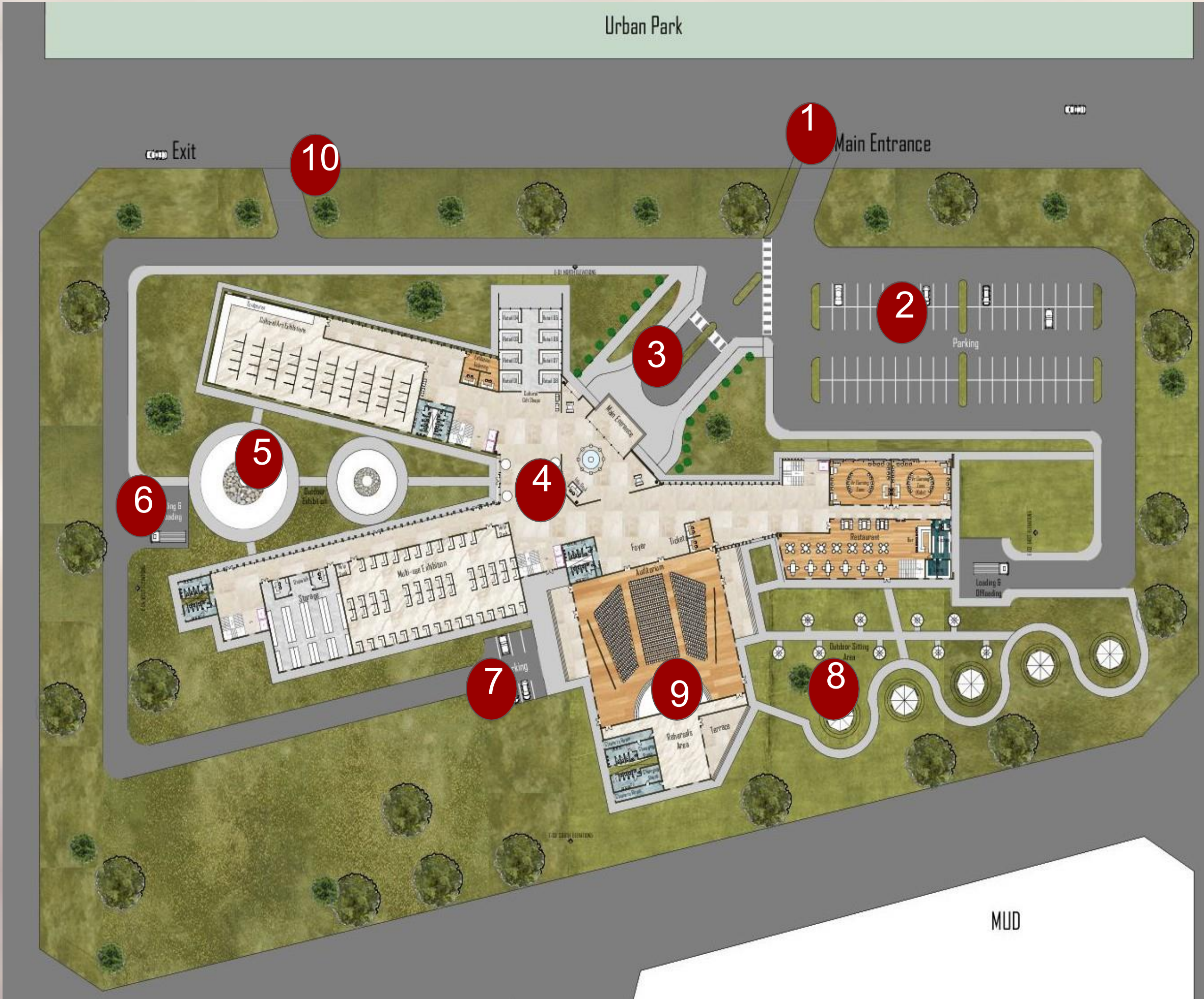
There are 4 staircases coupled with a passenger lift and a service lift at 4 different locations of convenience within the facility.

Support spaces

Storage on ground floor next to the multiuse exhibition

Ticketing spaces for the auditorium and for the art exhibition spaces

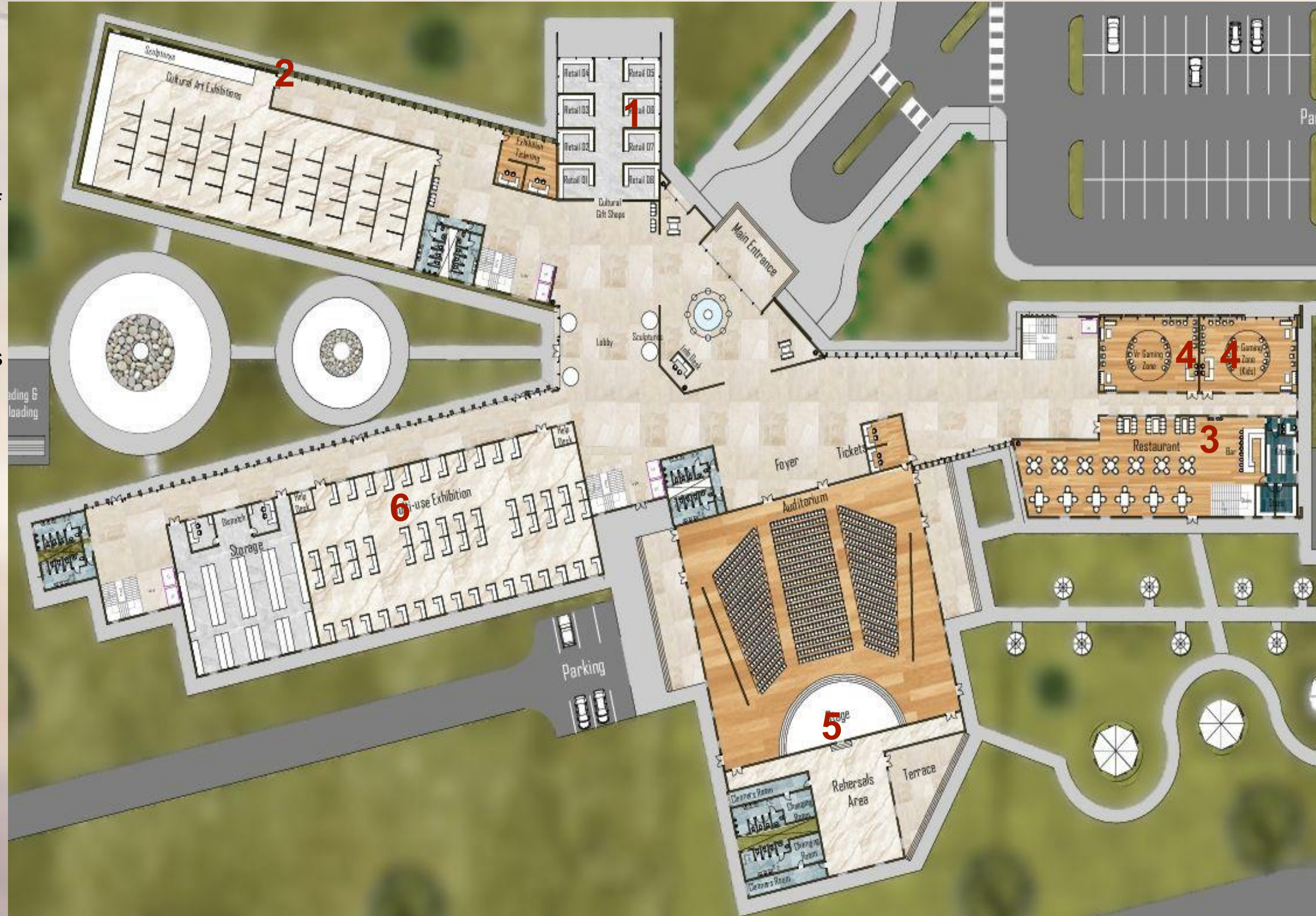
Washrooms strategically placed for both male and female and for people on wheelchair. They also have diaper changing spaces and cleaner's store.



GROUND FLOOR

The Ground floor consists of;

- 1. Retail stalls:** Located close to the main entry/exit for convenience since it is open to all.
- 2. Cultural Art exhibition:** Consists of art from various Kenyan cultural groups, meant to create a sense of belonging of the exhibition to the Kenyan visitors.
- 3. Restaurant:** Together with a kitchen and a bar on first floor, they are meant to provide meals and comfort for all visitors.
- 4. Virtual Games space:** It is a form of recreation for visitors and also residents in the neighbourhood.
- 5. Auditorium:** Serves as a large meeting area with a capacity of 750 people. It has some part of first floor. Can be used for a range of activities even by the community around
- 6. Multiuse exhibition space:** Can be used on different exhibition occasions. It is a flexible space that can be quickly arranged into a open or a meeting space. This makes it more usable and efficient.
- 7. Support spaces:** Includes the storage on ground floor, ticketing areas, sitting areas in the lobby and the washrooms.



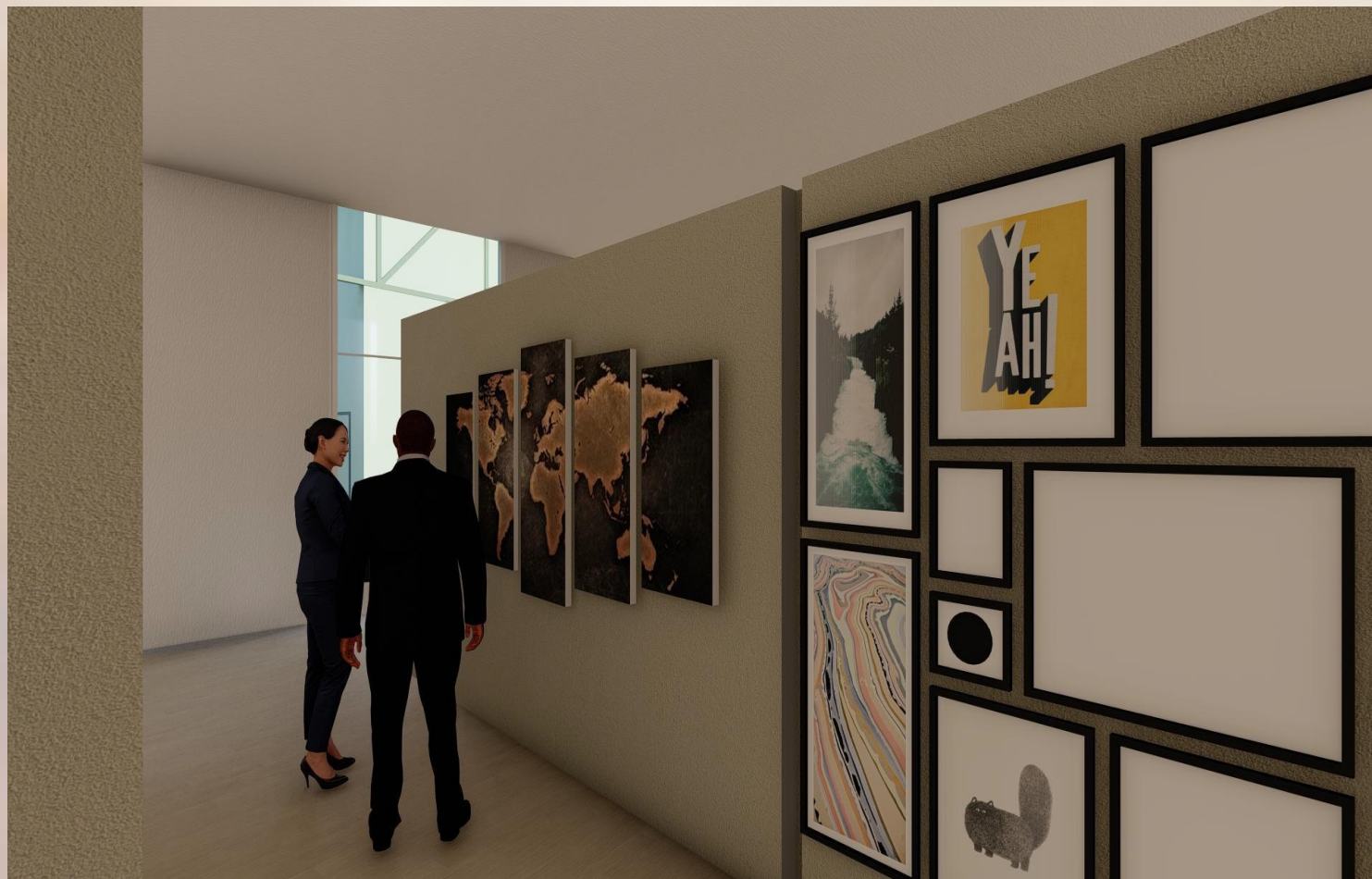
Ground Floor Plan



Art Exhibition



The Entrance Lobby



Art Exhibition



204 An Outdoor Exhibition



A view from the parking



Aerial view of the outdoor sitting space



A view of the front elevation

FIRST FLOOR

Konza Exhibition Centre

The First floor consists of

1. Digital Art exhibition
This consists the display of art on digital forms including screen displays and digital preservations from all all over.

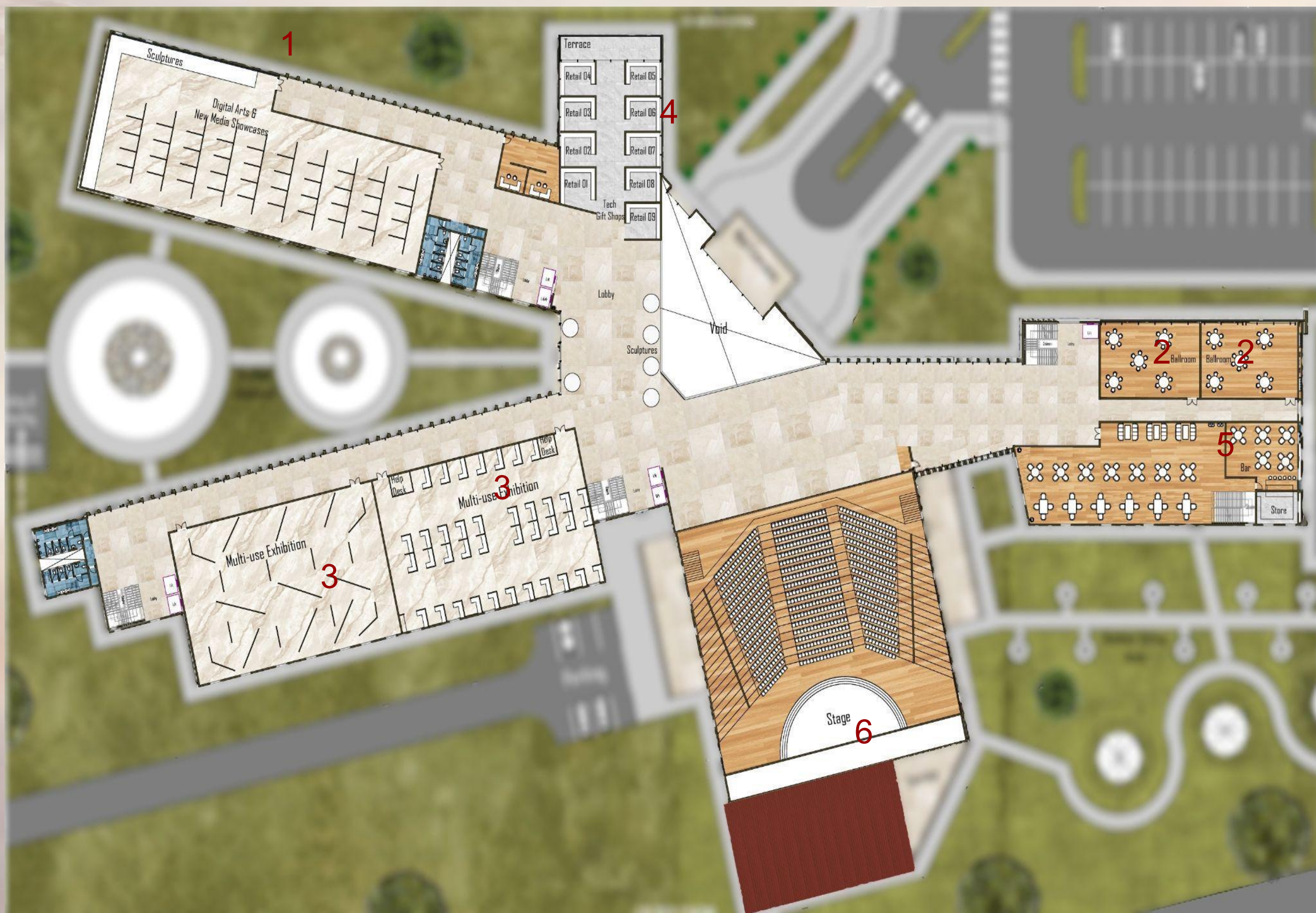
2. Ballroom
Provides a flexible meeting spaces for smaller number of people.

3. Multiuse exhibition space
An adaptable space for exhibitions which can be customized into various arrangements.

4. Retail spaces
Mostly gift shops that deal with electronic goods and tech-based gifts.

5. Restaurant
6. Auditorium

7. Support spaces
Like ticketing spaces, the lobby, washrooms etc



First Floor Plan



A view of the outdoor sitting



A view of the rooftop terrace



A view from the urban park



A view of the rooftop terrace

SECOND FLOOR

The second floor consists of:

1. Smart city technologies exhibition:

Where city models are displayed to showcase various technologies for smart city solutions including those of intelligent transport systems and sustainable urban fabric.

2. Multiuse exhibition space:

An adaptable and flexible space for exhibition and can be converted to a workshop space.

3. Workshops

A flexible space for various workshop activities.

4. Offices

Various offices for the staff, including shared ones and private ones with a break out space that is shared.

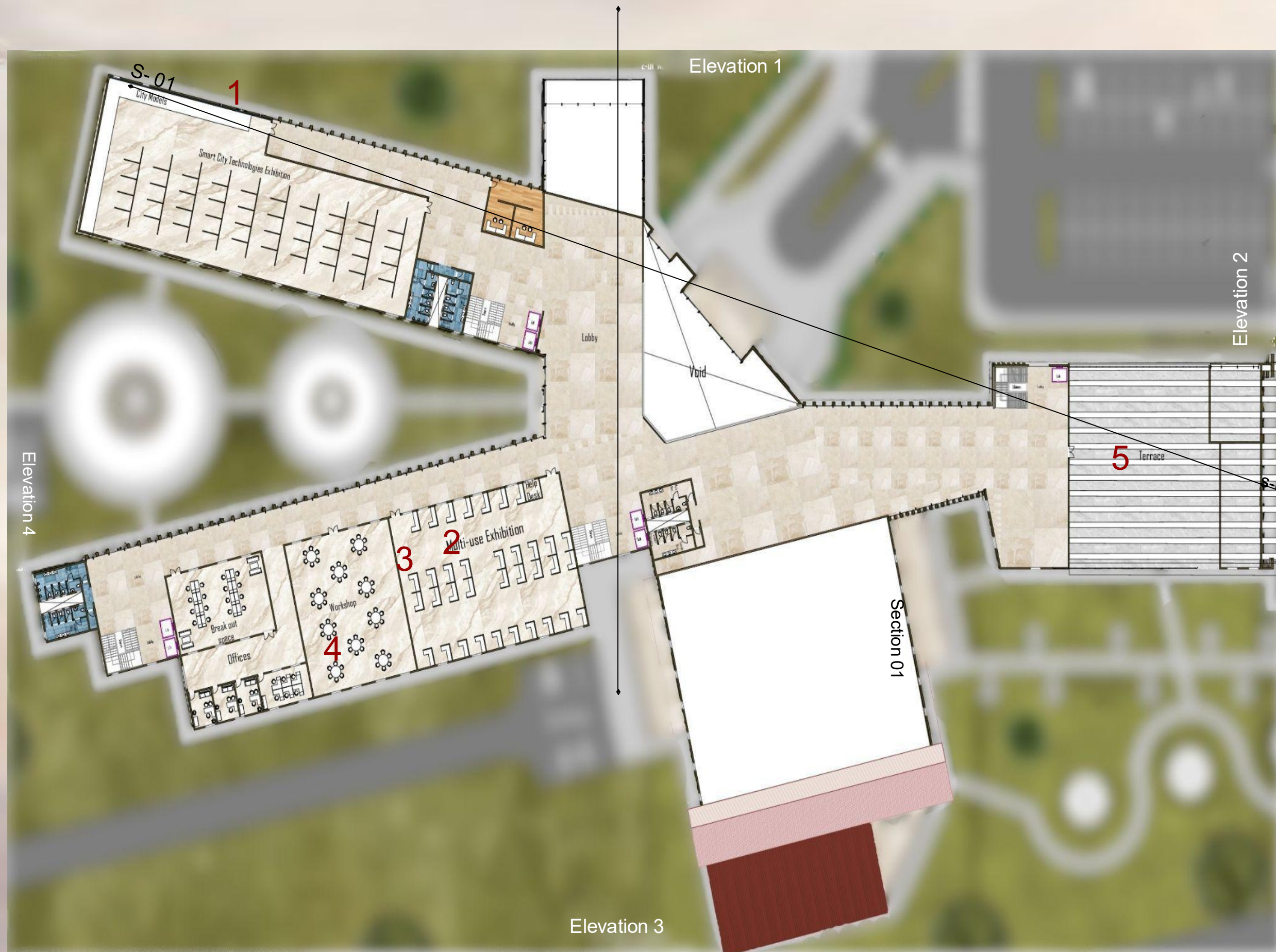
5. Rooftop terrace

A well designed rooftop terrace that can be used for small events and also for meetings.

6. Support spaces

Like ticketing spaces, the lobby, washrooms etc

Konza Exhibition Centre



Second Floor Plan

ELEVATIONS

Elevation 01



Elevation 02



The choice of colour is largely inspired by the colour of savannah grassland that is found in site area.

The materials that have been used majorly include: Stone, Wood, Glass, Concrete and Steel.

Elevation 03



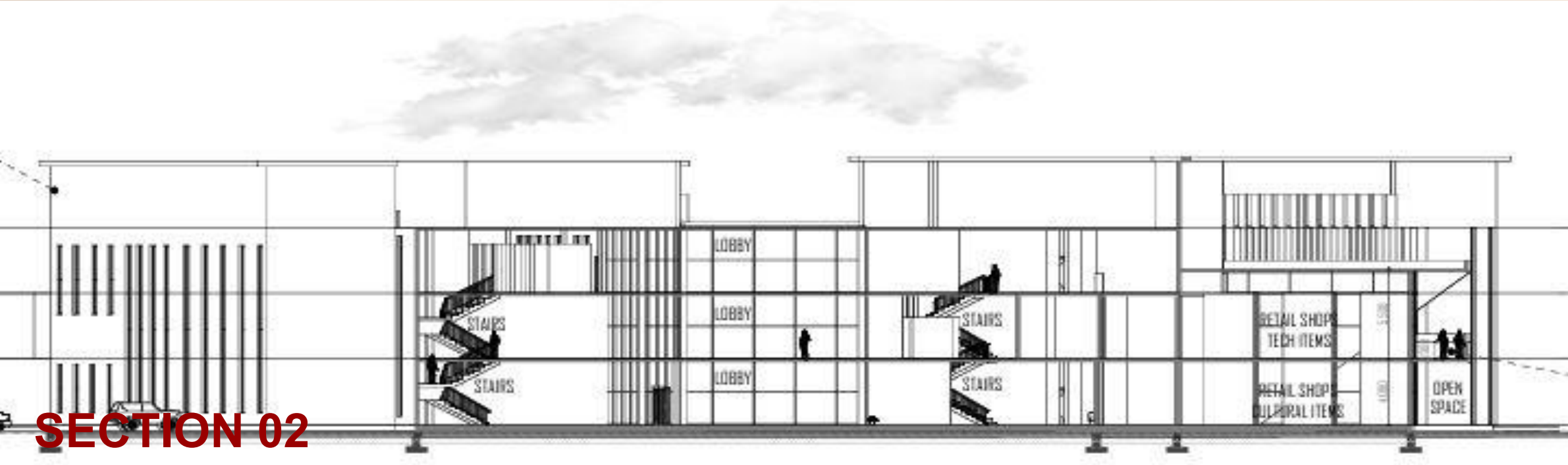
Elevation 04



SECTIONS



SECTION 01



SECTION 02

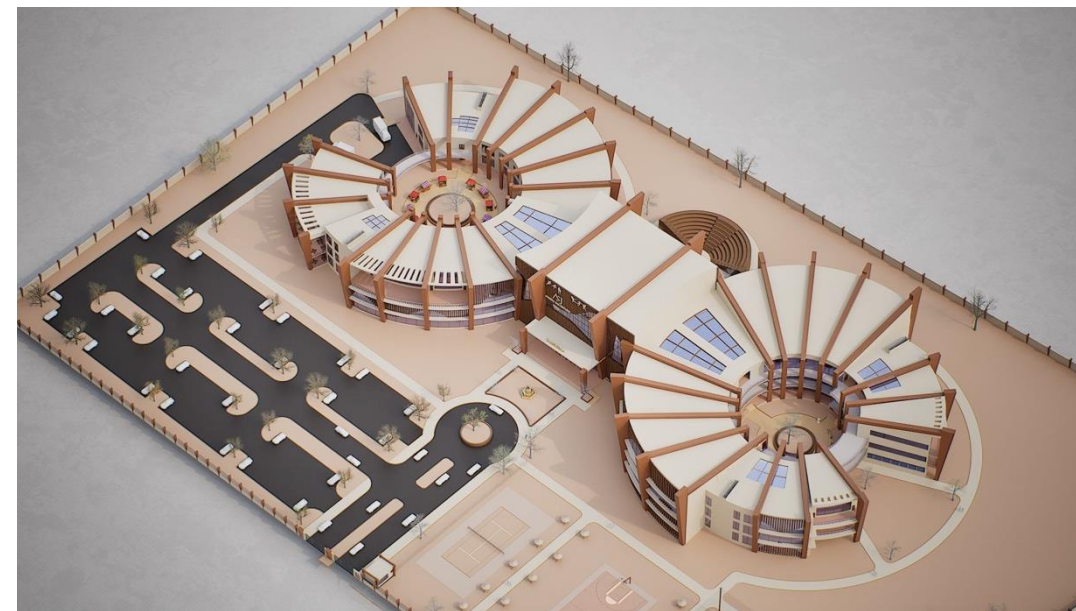


NAME: Joseph Stephen Amimo
INSTITUTION: Department of Architecture and Interior Design (DAID), School of Engineering and Architecture (SEA)
Kenyatta University (KU)
EMAIL: josephamimo754@gmail.com
INSTAGRAM: architecture.with.amimoh

BIOGRAPHY:

Joseph Amimo is a dedicated student at Kenyatta University, currently pursuing his studies in the School of Engineering and Architecture, within the Department of Architecture and Interior Design. He possesses a deep passion for designs that exhibit unique character and effectively address both user needs and site-specific conditions.

Joseph has actively sought out opportunities to gain practical experience, completing attachments at Edon Consultants International Limited firm. His work with licensed architects has significantly honed his abilities in technical drawing, design, 3D visualization, and presentation skills, preparing him for a promising career in the field of architecture.



Digital marquette renders: Aerial views of ASJ Sports Exhibition Hall
Source: Author, 2025

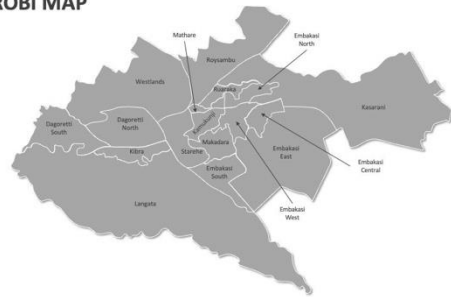
BRIEF ANALYSIS

LOCATION

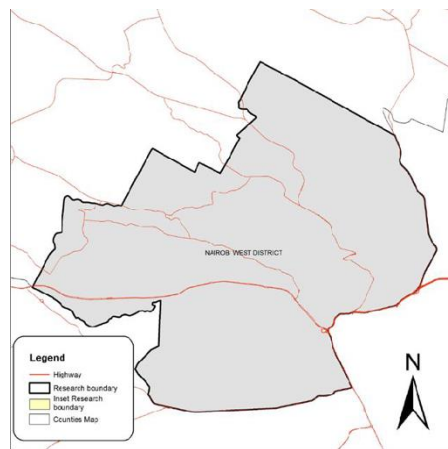


KENYA

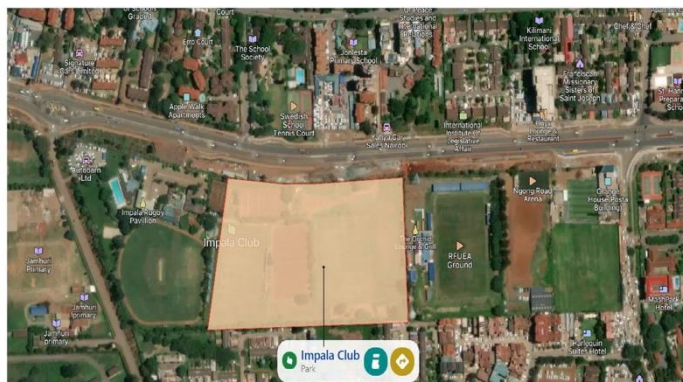
NAIROBI MAP



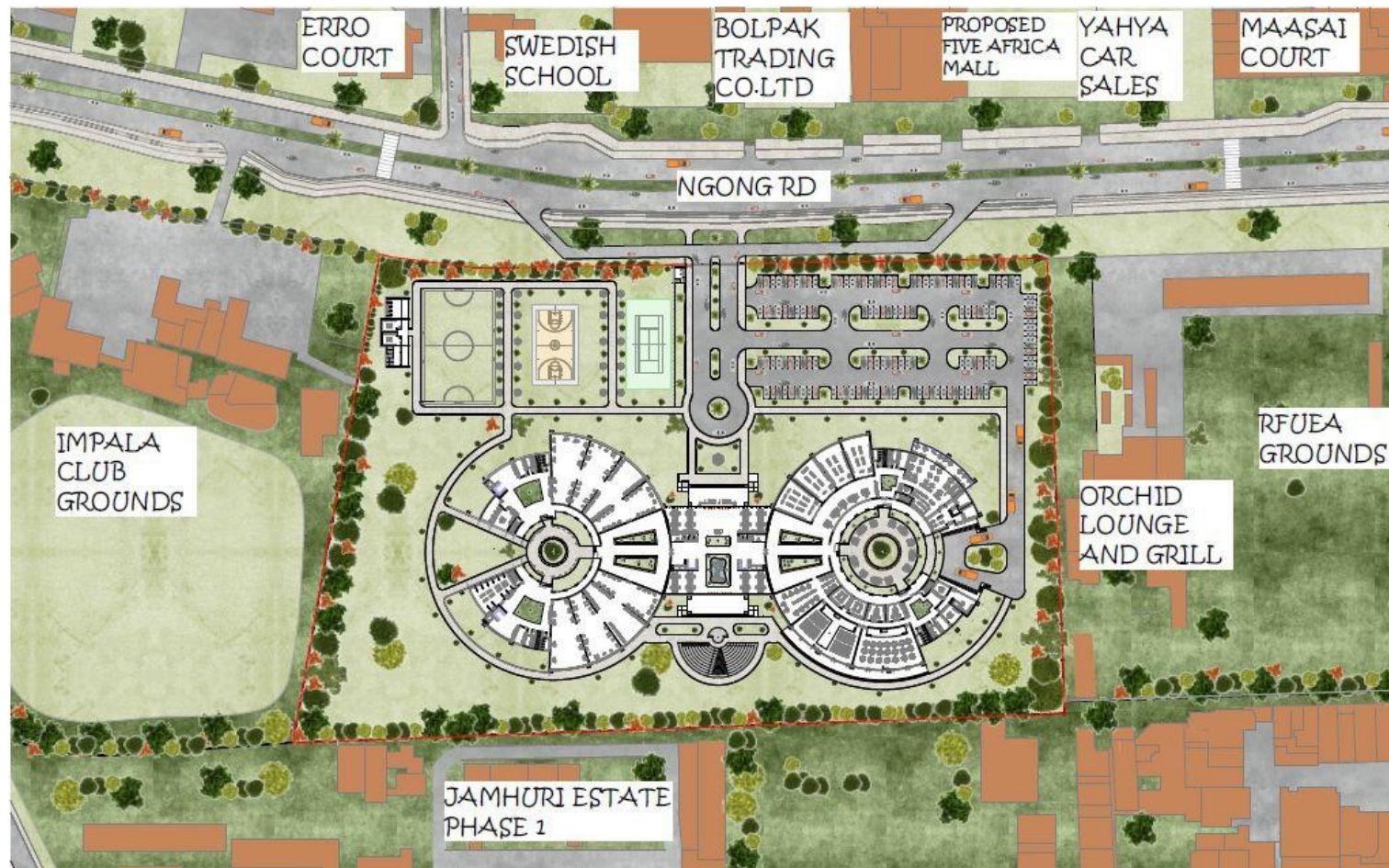
NAIROBI



NAIROBI WEST DISTRICT

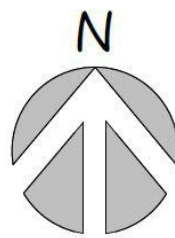


IMPALA CLUB GROUNDS, NGONG RD



Site plan of the Sports Exhibition hall on Impala Club ground, along Ngong Rd, Nairobi.
Source: Author, 2025

SITE DESCRIPTION:




COORDINATES:
1 DEGREE SOUTH
36 DEGREES EAST

LOCATION:
IMPALA CLUB GROUNDS,
NGONG RD, NAIROBI, KENYA

SITE AREA :
54,435.18 M2

PROJECT:
SPORTS EXHIBITION HALL

 -SITE BOUNDARY WALL

SITE IMAGES:



Main entrance to Impala Sports Club Grounds
Source: Author, 2025

The site is located in **Impala Club Grounds** right alongside **Ngong road** in **Nairobi**. The main entrance is easily accessed from the road by both vehicles and pedestrians.



View of vehicular/pedestrian/cyclist access to Impala Sports Club Grounds
Source: Author, 2025

The neighbourhood is known for its upscale residential areas, commercial centres and proximity to sport zones that serves the community in the area.



View of the site from Ngong road.
Source: Author, 2025

The site and its environs has a serene atmosphere, making it ideal for leisure/recreation activities. Its proximity to the road makes it easily accessible to the community around.

PROJECT SELECTION

The project involves the design proposal of a **SPORTS EXHIBITION HALL** in **IMPALA CLUB GROUNDS, NGONG RD, NAIROBI**.

The proposed design will offer space for exhibition of various sports such as; basketball, football, tennis, rugby, athletics and hockey.

Other supportive facilities/amenities to be provided to compliment the exhibition spaces are; retail shops, food court, indoor games, VR room, library and media room.

SITE JUSTIFICATION

1. Impala Ground has a rich history in sports which will benefit site with regards to design of a sports exhibition hall.



Impala Sports Club Grounds

Source: <https://uzamart.com/listing/impala-club>

2. Availability of large area of land which can be used to design an iconic sports exhibition hall.



Impala Sports Club Grounds

Source: Mapbox

PROJECT JUSTIFICATION

Design of a sports exhibition hall

- To celebrate Kenyan sports and inspire future generations.
- To create opportunity to preserve sports heritage of Kenya.

PROJECT AIM AND OBJECTIVES

Aim:

Create a **dynamic** and **engaging multipurpose exhibition hall** that celebrates **Kenyan sports** as well as **servicing local community**.



Celebration of Kenyan Athletes in the Olympics

Source: <https://www.athletics.africa/news/africa/kenya/athletics-kenya-sends-45-athletes-to-paris-2024-olympic-games-18281?amp=1>

Objectives:

Create a design that **features interactive exhibits** that are engaging to all visitors, incorporate **sustainable** and **environmental friendly** construction, features **functionality** and **adaptability** of various spaces as well as **integrates exhibition hall design seamlessly** with its **surrounding environment**.



Open exhibition space.

Source: <https://www.discoverbucksmuseum.org/>

CATEGORY OF USERS

Gender

Male



Female



Age

Children



Youth



Adults



Elderly



Specific use

Athletes



Facility staff



Visitors/Tourists



VIP



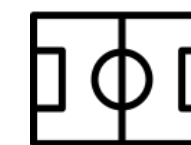
Businesses



FACILITIES TO BE PROVIDED

Outdoor

Football turf



Tennis court



Basketball court



Outdoor theatre



Indoor

Exhibition spaces



Retail spaces



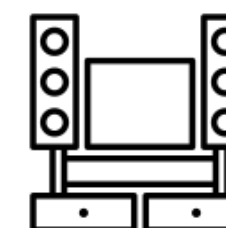
Administration



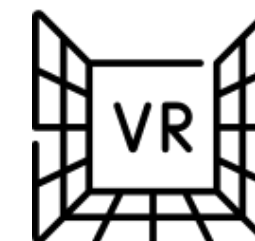
Library



Media room



VR room



Gaming lounge



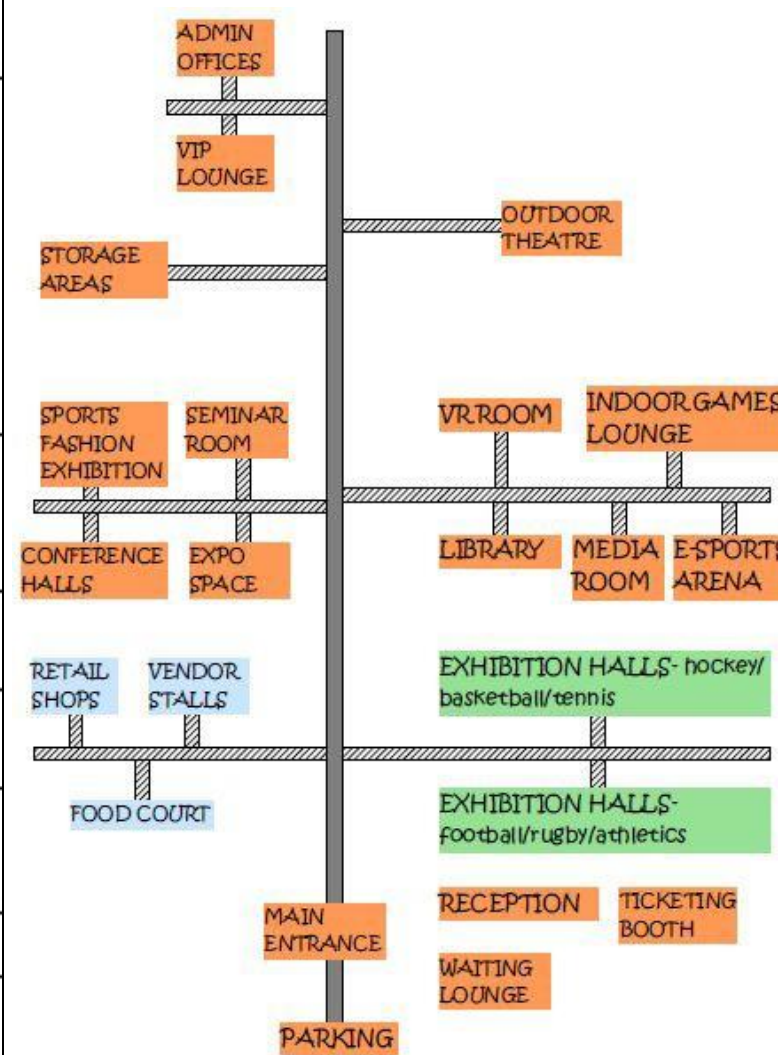
Indoor sports



AREA ANALYSIS: (MINIMUM AREAS)

CATEGORY	SPACES	REMARKS	ACTIVITIES	REQUIREMENTS	CAPACITY	AREA
1. CORE SPACES/ FUNCTIONS	EXHIBITION SPACES -FOOTBALL -RUGBY -ATHLETICS -BASKETBALL -TENNIS -HOCKEY	SPACE FOR SHOWCASING EXHIBITS. CONSIST OF THEMATIC ZONES TO EXHIBIT: -DIGITAL EXHIBITS WITH INTERACTIVE DIGITAL SCREENS -OBJECT EXHIBITS WITH TROPHIES/ OBJECTS -ART EXHIBITS TO SHOWCASE ART. -SCULPTURE EXHIBITS TO DISPLAY SCULPTURES FOR HALL OF FAME.	-SOCIAL INTERACTION -SHOWCASING EXHIBITS -READING INFORMATION -PHOTOGRAPHY AND SKETCHING -SAMPLING -DEMONSTRATION	-ADEQUATE CIRCULATION -ADEQUATE VENTILATION -CONTROLLED INTERIOR LIGHTING TO EITHER ACCENTUATE EXHIBITS OR AMBIENTLY LIGHT SPACES	- 200 PEOPLE PER EXHIBITION HALL (600 PEOPLE IN ALL EXHIBITION HALLS AT A GIVEN TIME)	3500 SQM
2. SUPPLEMENTARY SPACES/ FUNCTIONS	CONVENTION SPACES -EXPO SPACE	SHOWCASING NEW SPORT PRODUCTS	-DISPLAYING PRODUCTS -TRAINING SESSIONS/WORKSHOPS	-ADEQUATE CIRCULATION -ADEQUATE LIGHTING -ADEQUATE VENTILATION -GOOD ACOUSTIC PROPERTIES	- 30 PEOPLE	250 SQM
	-SEMINAR ROOMS	HOLDING OFFICIAL MEETINGS/ WORKSHOPS	-MEETINGS -WORKSHOPS -SEMINARS	-ADEQUATE CIRCULATION -ADEQUATE VENTILATION -GOOD ACOUSTIC PROPERTIES	- 50 PEOPLE	1500 SQM
	-CONFERENCE ROOM	HOLDING OFFICIAL MEETINGS/ WORKSHOPS	-MEETINGS -WORKSHOPS -SEMINARS	-ADEQUATE CIRCULATION -ADEQUATE VENTILATION -GOOD ACOUSTIC PROPERTIES	- 200 PEOPLE	2500 SQM
	-INDIVIDUALISED COACH TRAINING OFFICES	HOLDING INDIVIDUALISED MEETINGS/ WORKSHOPS FOR TRAINING COACHES	-TRAINING -NETWORKING	-ADEQUATE CIRCULATION -ADEQUATE LIGHTING -ADEQUATE VENTILATION -GOOD ACOUSTIC PROPERTIES	- 3 PEOPLE	120 SQM
	-STORAGE AREAS	STORAGE OF MATERIALS/FURNITURE/ EXHIBITS	-STORAGE FOR GOODS	-ADEQUATE LIGHTING -ADEQUATE VENTILATION	- 20 PEOPLE	150 SQM
	-LOADING/ UNLOADING DOCK	GETTING OFF/LOADING MATERIALS/ EXHIBITS/OBJECTS	-LOADING AND OFFLOADING	-ADEQUATE LIGHTING -ADEQUATE VENTILATION	- 5 PEOPLE	75 SQM
	-RECEPTION SPACE	WELCOMING SPACE FOR VISITORS	-VISITOR GUIDANCE -SEATING AREA	-ADEQUATE LIGHTING -ADEQUATE VENTILATION	- 50 PEOPLE	150 SQM
	-VR ROOM	EXPERIENCE SPORTING VIRTUAL EXPERIENCES	-SPORTING VIRTUAL ACTIVITIES	-ADEQUATE LIGHTING -ADEQUATE VENTILATION	- 20 PEOPLE	200 SQM
	-LIBRARY	LITERATURE ARCHIVES FOR SPORTS HISTORY/EVENTS/ACCOMPLISHMENTS	-READING SPORTS LITERATURE	-ADEQUATE LIGHTING -ADEQUATE VENTILATION	- 30 PEOPLE	200 SQM
	-MEDIA ROOM	DIGITAL ARCHIVES FOR SPORTS HISTORY/EVENTS/ACCOMPLISHMENTS	-WATCHING SPORTS DOCUMENTARIES	-ADEQUATE LIGHTING -GOOD ACOUSTIC PROPERTIES	- 90 PEOPLE	200 SQM
	-E-SPORTS ARENA	PLAY SPORTING GAMES USING CONSOLES	-PLAYING GAMES -SOCIALIZING	-ADEQUATE LIGHTING -ADEQUATE VENTILATION	- 90 PEOPLE	200 SQM
	-INDOOR SPORTS LOUNGE	HOST SOME INDOOR PLAY ACTIVITIES IE. BADMINTON/TABLE TENNIS/POOL	-PLAYING GAMES -SOCIALIZING	-ADEQUATE LIGHTING -ADEQUATE VENTILATION -ADEQUATE CIRCULATION	- 30 PEOPLE	200 SQM
	-ADMINISTRATION OFFICES	ACT AS GENERAL ADMINISTRATORS TO ENSURE ALL ACTIVITIES WITHIN THE EXHIBITION HALL ARE MANAGED	-MANAGING -OVERSEE DAILY OPERATIONS -SCHEDULING -COORDINATION	-ADEQUATE LIGHTING -ADEQUATE VENTILATION -ADEQUATE CIRCULATION	- 3 PEOPLE PER OFFICE 20 PEOPLE PER STAFF OFFICE	100 SQM
3. COMPLEMENTARY SPACES/ FUNCTIONS	-FOOD COURT	SERVE VISITORS WITH FOODS AND DRINKS	-EATING -DRINKING -SOCIALIZING	-ADEQUATE LIGHTING -ADEQUATE VENTILATION -ADEQUATE CIRCULATION	- 200 PEOPLE	200 SQM
	-RETAIL SHOPS	OFFER BUYING AND SELLING OF SPORTS MERCHANDISE/ SOUVENIRS	-BUYING -SELLING -NETWORKING	-ADEQUATE LIGHTING -ADEQUATE VENTILATION -ADEQUATE CIRCULATION	- 50 PEOPLE PER SHOP	225 SQM
	-VENDING STALLS	STALLS THAT OFFER BUYING AND SELLING OF SPORTS MERCHANDISE/ SOUVENIRS	-BUYING -SELLING -NETWORKING	-ADEQUATE LIGHTING -ADEQUATE VENTILATION -ADEQUATE CIRCULATION	- 9 PEOPLE PER STALL	100 SQM
TOTAL AREA						8700 SQM

FUNCTIONAL RELATIONSHIP DIAGRAM:

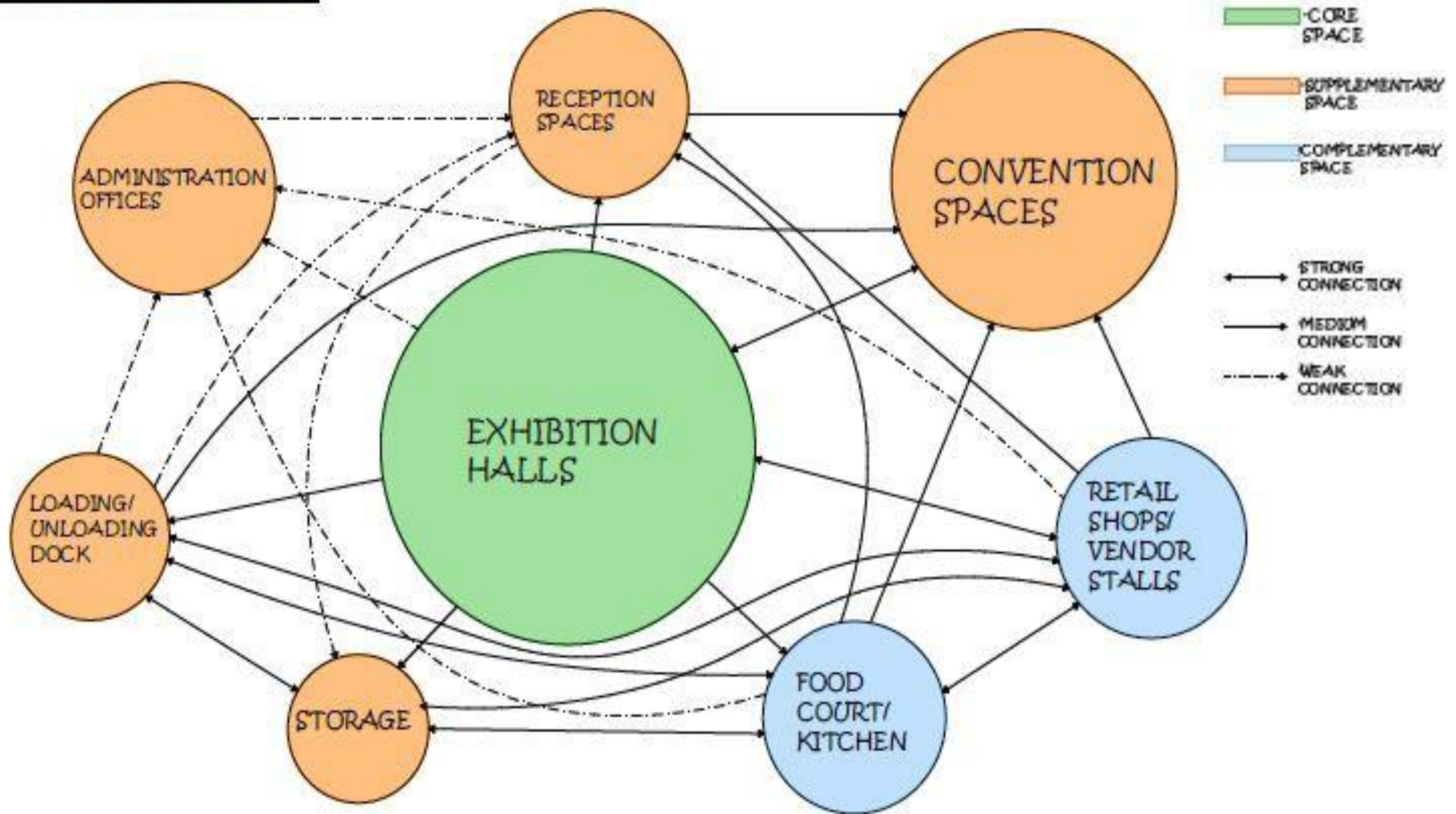


LEGEND:

- MAIN PATH
- SECONDARY PATH
- CORE SPACE
- SUPPLEMENTARY SPACE
- COMPLEMENTARY SPACE

Functional relationship diagram for proposed spaces
Source: Author, 2025

BUBBLE DIAGRAM:



Bubble diagram for proposed spaces.
Source: Author, 2025

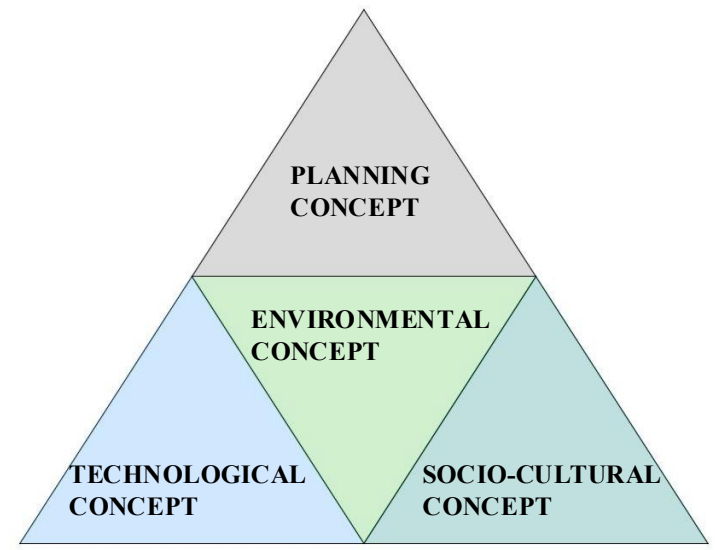
CONCEPT DEVELOPMENT

DESIGN PHILOSOPHY

“Form follows function,” by Louis Sullivan. The design will aspire to prioritize purpose and functionality, aesthetics to emerge naturally from building’s use.

PHILOSOPHY OF DESIGN

“Design must be rooted in reality,” by Dieter Rams. The designer must fully be aware of the users and the reality/context in which they are and the activities so as to ensure the design meets their needs.



The Concept triangle diagram
Source : The Relationship between Imageability and Form in Architecture.

PLANNING CONCEPT

“Intuitive wayfinding,” this concept focuses on creating organized spatial planning to encourage natural movement and exploration.



Exhibition space reserved for sculptures
Source : <https://www.metmuseum.org/essays/roman-statu>

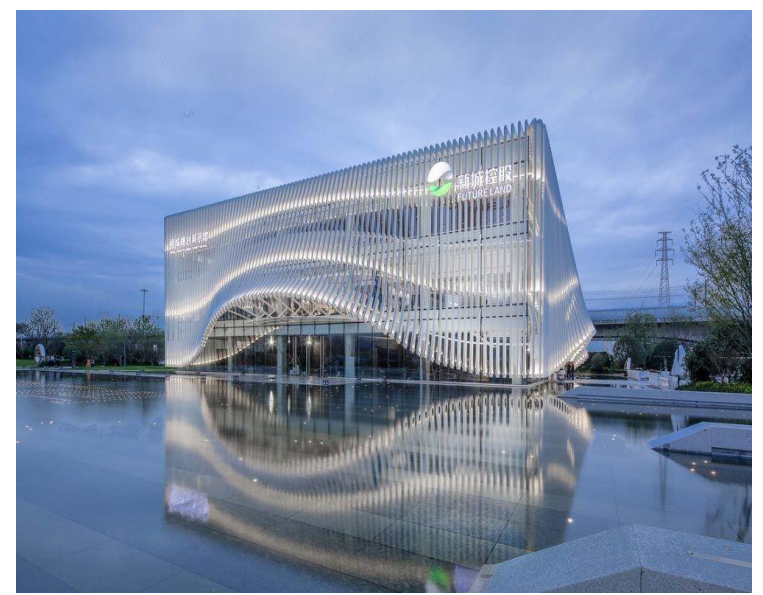
TECHNOLOGICAL CONCEPT

“Dynamism,” this concept focuses on creating adaptable and flexible spaces that can be reconfigured for various activities at different times.



Dynamic Exhibition space
Source: <https://www.therakishgent.co.uk/pages/exhibit-spaceshifters>

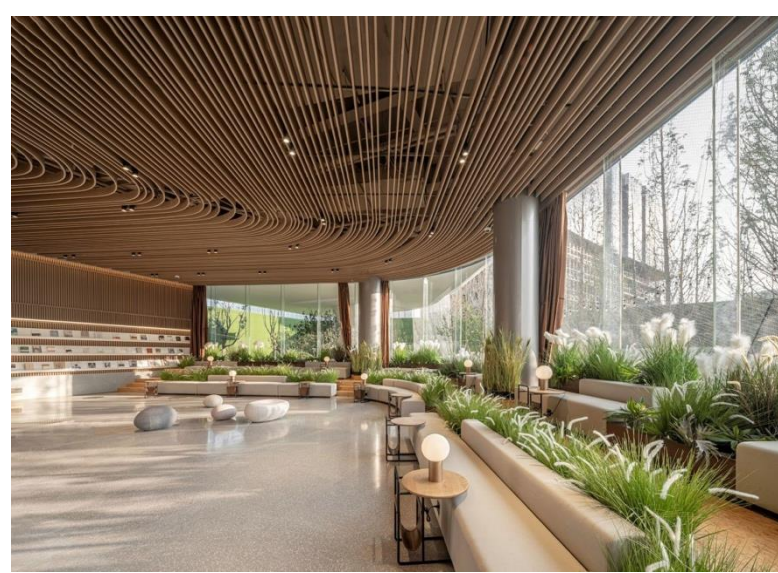
It also aims to create interesting dynamic feel on building form by us of kinetic architecture mimicking movement in sports.



MOC Exhibition centre
Source: <https://parametric-architecture.com/elegance-grace-lacime-architects-raises-the-curtain-to-an-elemental-exhibition-hall/>

ENVIRONMENTAL CONCEPT

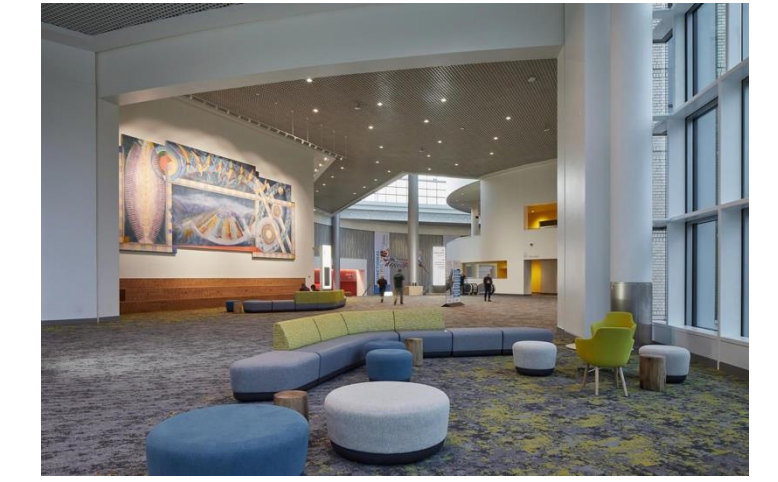
“Eco-consciousness,” this concept aims to preserve the green nature of existing site by minimizing building footprint, incorporation of green spaces within the building, maximizing on energy efficiency and enhancing sustainable measures as much as possible.



Strong sculptural elements and lush greenery for Karv One's exhibition hall.
Source: <https://www.materialsource.co.uk/strong-sculptural-elements-and-lush-greenery-for-karv-ones-exhibition-hall/>

SOCIO CULTURAL CONCEPT

“Sense of Place,” this concept aims to create spaces that bring people together and give them that sense of belonging to the society. It also aims to evoke this sense by incorporation of elements of culture that make the society feel they belong when they use these spaces.



Lobbies overlooking Exhibition hall at Oregon Convention Centre
Source: <https://www.oregoncc.org/en/files/mlk-lobby-looking-towards-exhibit-hall-c-oregon-convention-center>

ANALOGY FOR FORM INSPIRATION

“SPORTS”

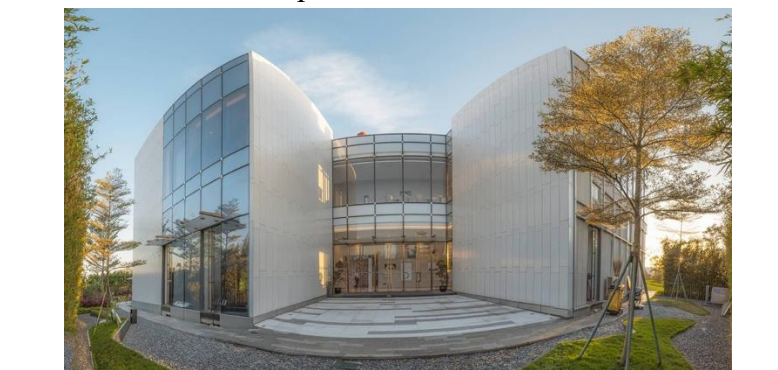
Think about the essence of sports; it is movement, energy, striving and pushing boundaries. Athletes move across fields/tracks/courts. They progress from a starting point to a finish line or one goal to the opposition goal. This inherent dynamism can inspire the building form. By abstraction, one can be inspired by the aspects above to create an interesting form.

1. Flowing forms to capture the aspect of fluidity of movement, this can be brought to life by use of curvilinear forms to encapsulate that flow feel from one space to another.



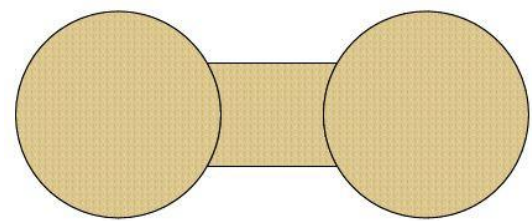
Curved exhibition hall form
Source: <https://www.bbc.com/news/articles/c62zydej279o>

2. Layered progression through layered forms to show progression. You can incorporate rising terraces to add difference in heights to show transition to different space.
3. Open expansive spaces to evoke wide open play fields; incorporate open plan with high ceilings and minimal visual obstruction.
4. Transparency and connectivity between athletes/spectators by using glass in facades to create visual connection between interior spaces and exterior spaces.

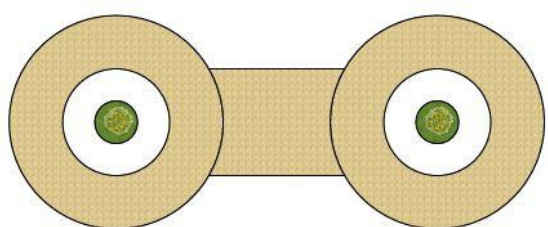
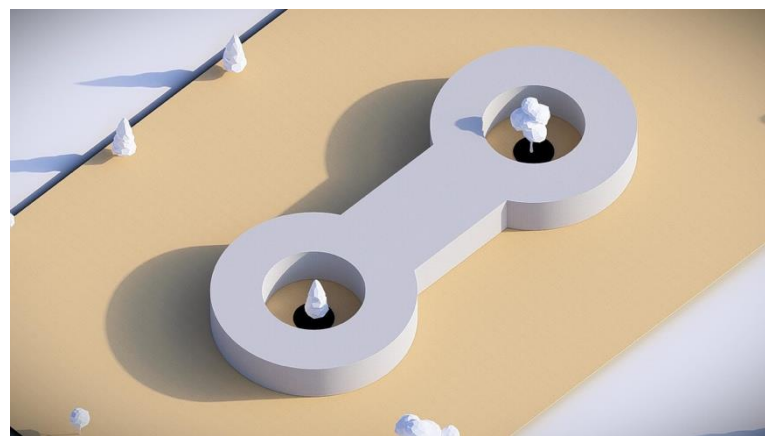


Glazed Hengqin Grandmix exhibition centre
Source: <https://www.lepochina.com/hengqin-grandmix-exhibition-centre-in-glazing-terracotta.html>

FORM DEVELOPMENT



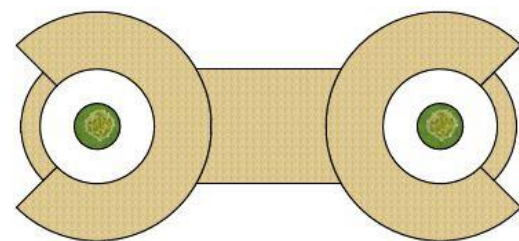
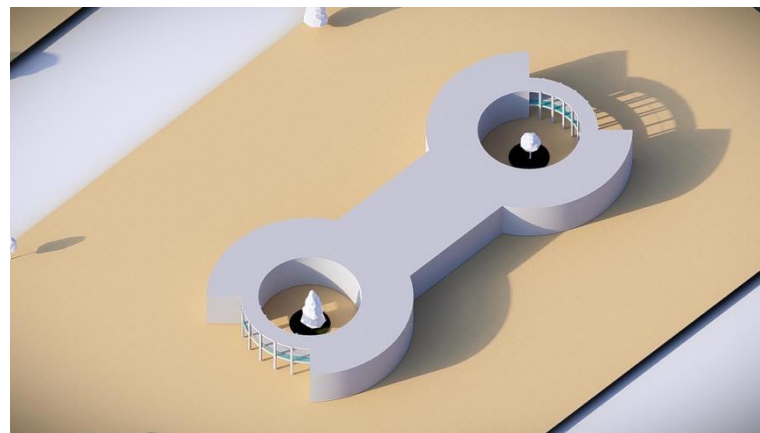
- Use of connected circular shapes to mimic curvilinear forms which invoke intuitive wayfinding for the public.
- The circles act as different wings to house different functions with the connector acting as a transition space.



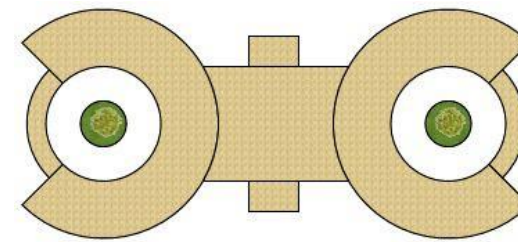
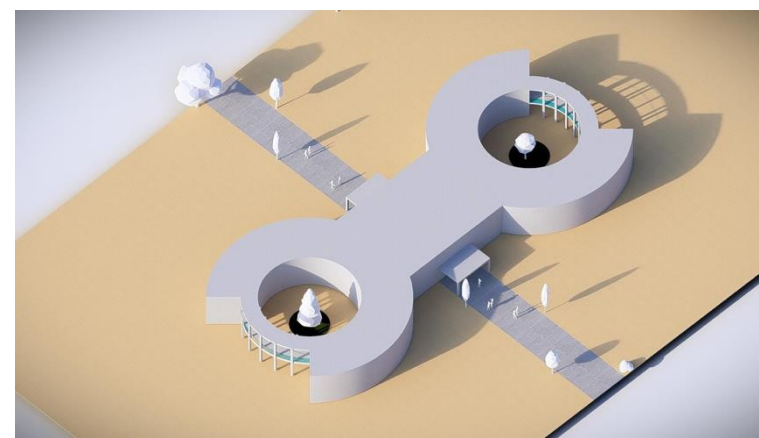
- Creation of courtyards for both circles to improve natural lighting and ventilation of spaces.
- The resultant courtyards can also act as outdoor spaces for various functions



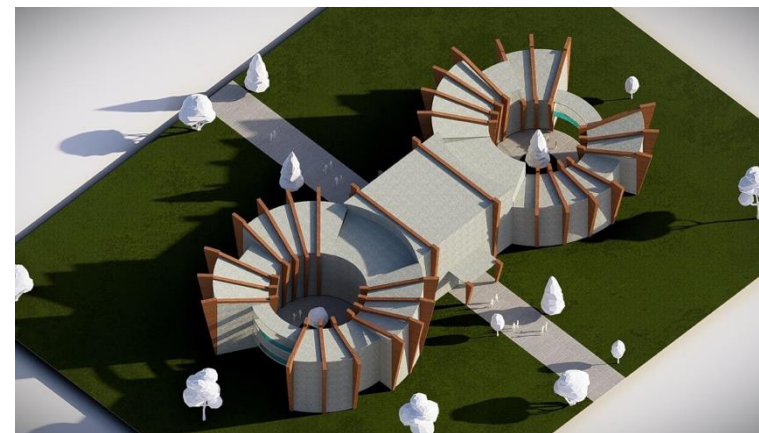
- Opening up the central courtyard to allow views on either side.



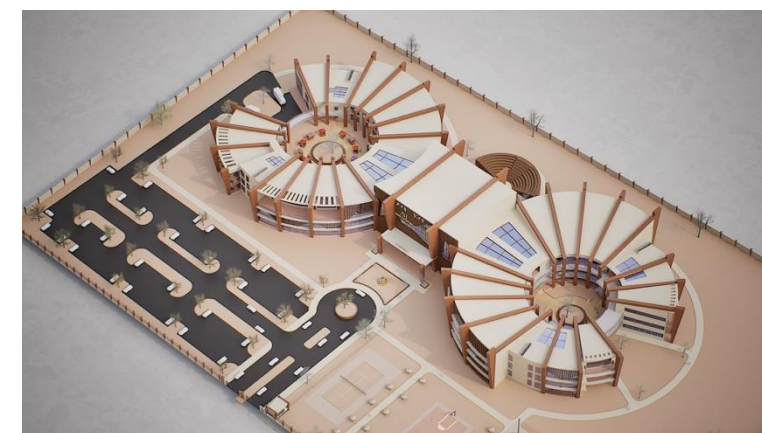
- Addition of skybridges to connect the wings and enhance the fluidity and ease of flow by public.
- The sky bridges also provide views to the central courtyards created as well as adjacent sides.



- Addition of canopies at proposed entrance/exit to help define the entrance for the public.

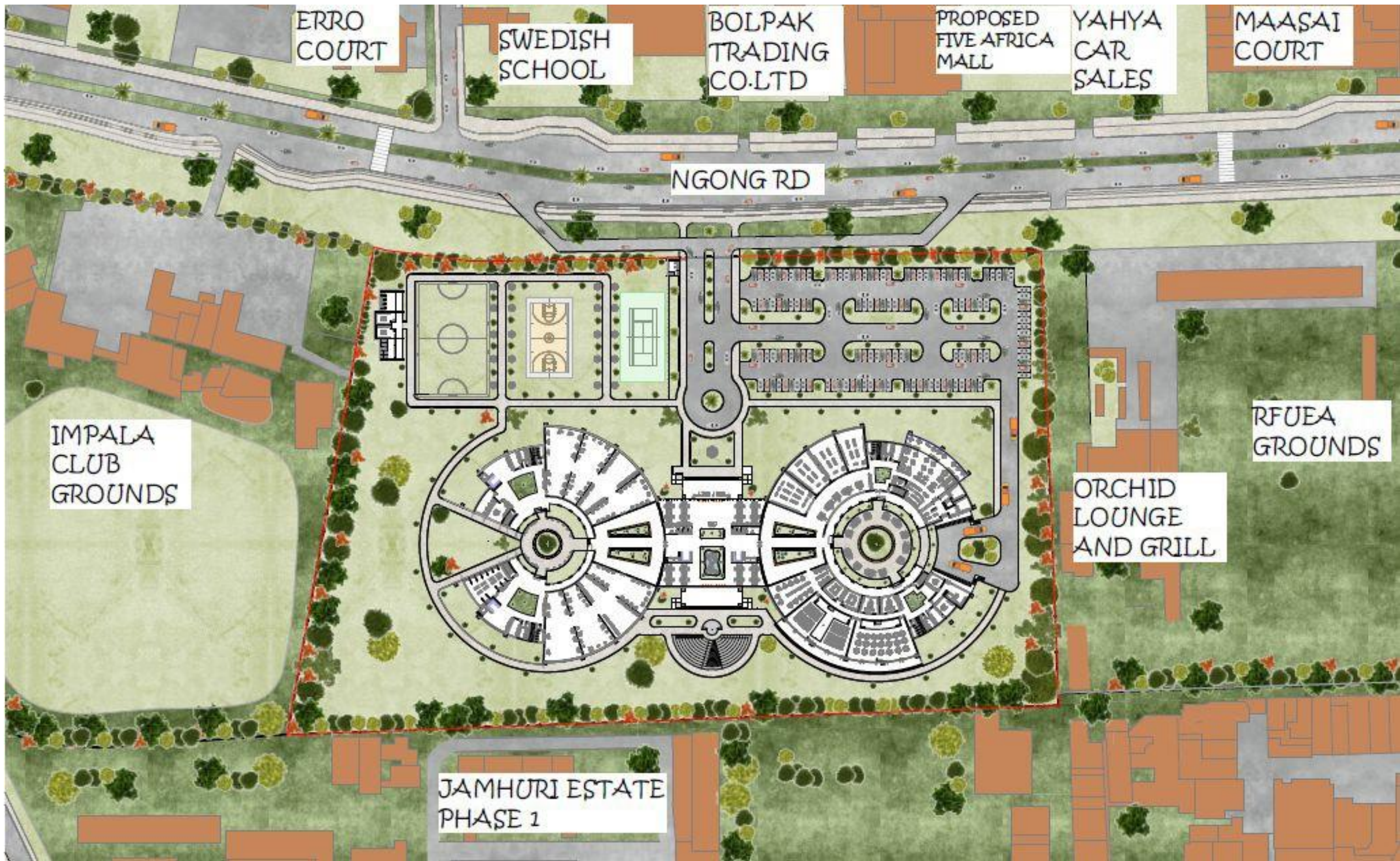


- Addition of vertical /horizontal elements wrapped around building envelope that help enhance kinetic nature of building facade. The form will also have varying heights to enhance movement/ kinetic nature of the facade.



*Aerial Views of final proposed exhibition hall design
Source: Author, 2025*

The final outcome shows the kinetic nature of the facades paired with bold use of horizontal and vertical elements with varied levels and glazing to connect building to the exterior.

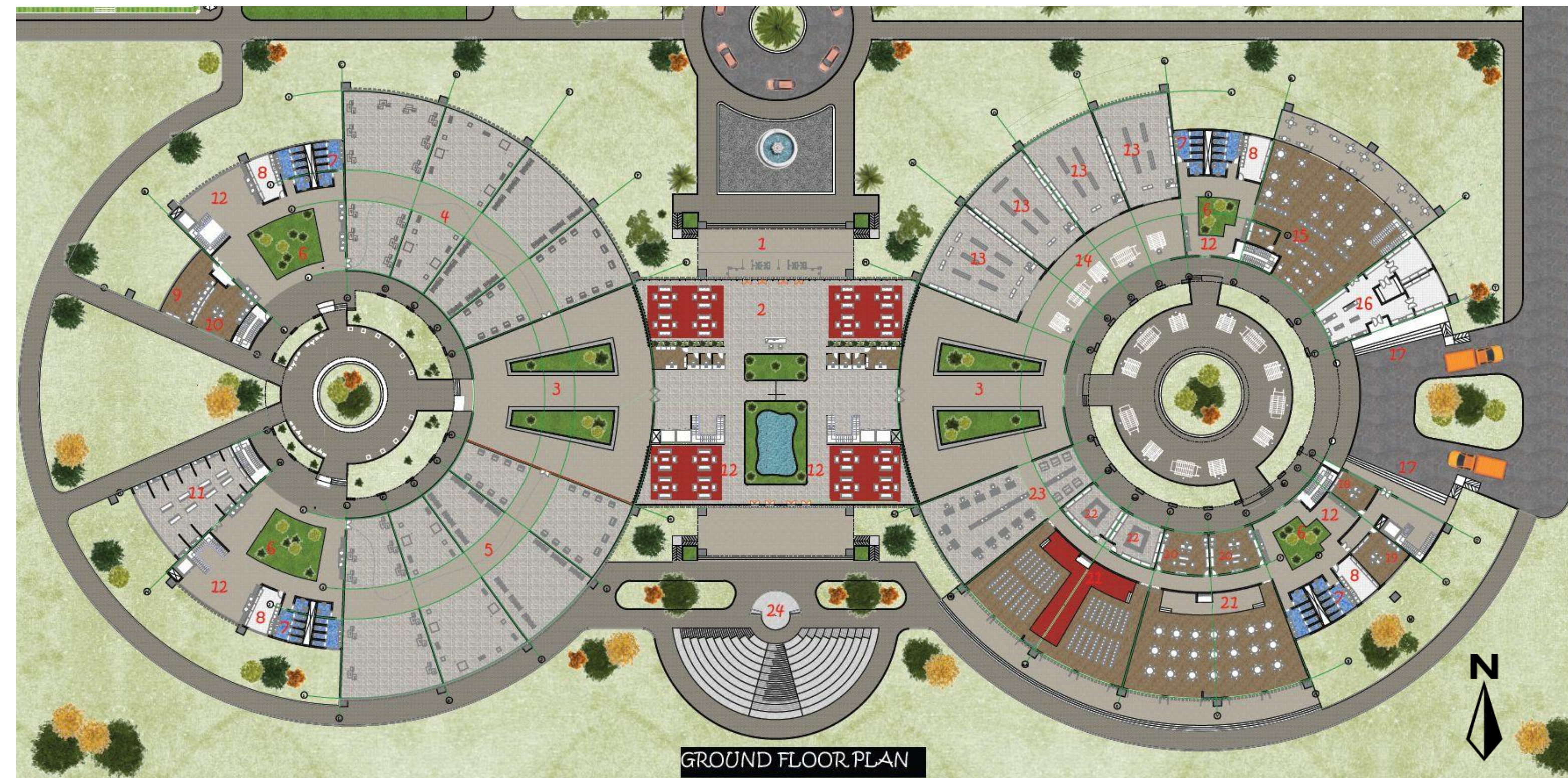


COORDINATES:
 1 DEGREE SOUTH
 36 DEGREES EAST

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GROUND FLOOR PLAN

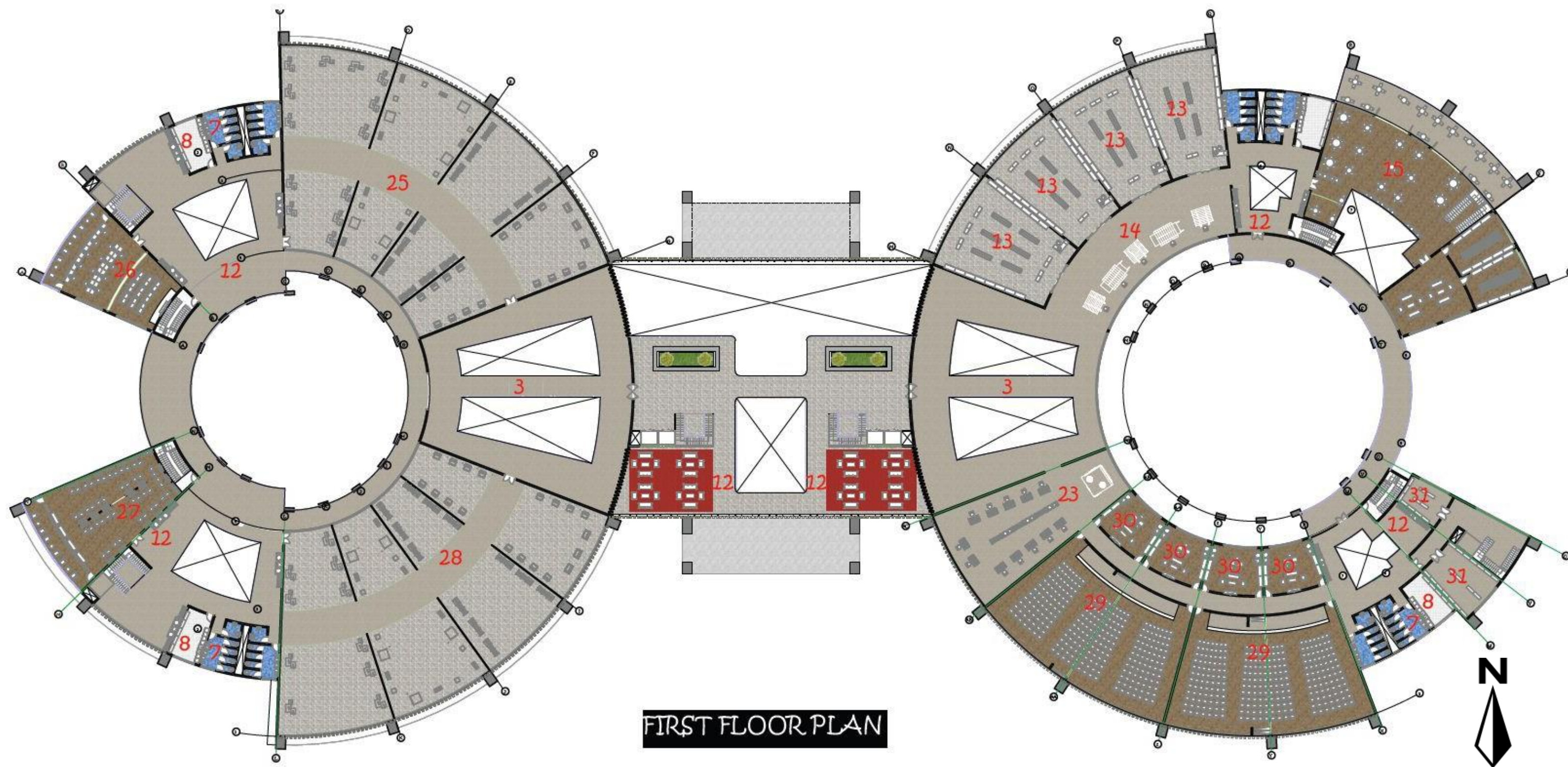
Legend:

- | | |
|------------------------------|------------------------------|
| 1. Main entrance | 13. Retail spaces |
| 2. Reception | 14. Vendor stalls |
| 3. Transition space | 15. Food court |
| 4. Football exhibition space | 16. Kitchen |
| 5. Rugby exhibition space | 17. Loading dock |
| 6. Indoor garden | 18. Logistics manager office |
| 7. Restrooms | 19. Event coordinator office |
| 8. Janitor's room | 20. Guest speaker prep room |
| 9. Security room | 21. Seminar rooms |
| 10. Facility manager | 22. Changing rooms |
| 11. Vr room | 23. Expo showcase space |
| 12. Breakout lobbies | 24. Outdoor theatre |

The main entrance serves the guests/visitors coming to the facility. Upon entry, one encounters the reception area with seating areas for waiting. The information desk has receptionists who guide visitors to their next destinations of interest. The facility has 2 curvilinear wings on either side of a central transition space with adequate seating spaces and a water fountain. The exhibition wing is divided into 4 partitions; object display, art display, interactive screen display and sculpture display of items regarding the specific sports being exhibited.

At one end of the peripheries of the exhibition wing is a security room adjacent to the facility manager's room, who runs activities in the exhibition spaces smoothly. At the other end is a VR room where guests virtually interact with the sports games. The breakout spaces have indoor gardens present, with naturally lit space due to the skylights above them. There are fire exit staircases present; concealed and only usable upon emergence of fire in the facility. The courtyard of this wing is used for outdoor exhibition events where exhibits are displayed around the central courtyard in a circular manner for easy flow of guests.

On the other wing, it consists of retail shops which sell sports merchandise/souvenirs as well as outdoor vendor stalls along the corridor. The food court and kitchen at the end serves guests with foods/drinks/refreshments. The courtyard on this side serves as an outdoor retail space for small businesses. On the other end are the convention spaces where an expo showcase space is present for display of items, a sports fashion exhibition space as well as a ball room to host community events. The back exit leads to the outdoor theatre which acts as an outdoor convention space .



FIRST FLOOR PLAN

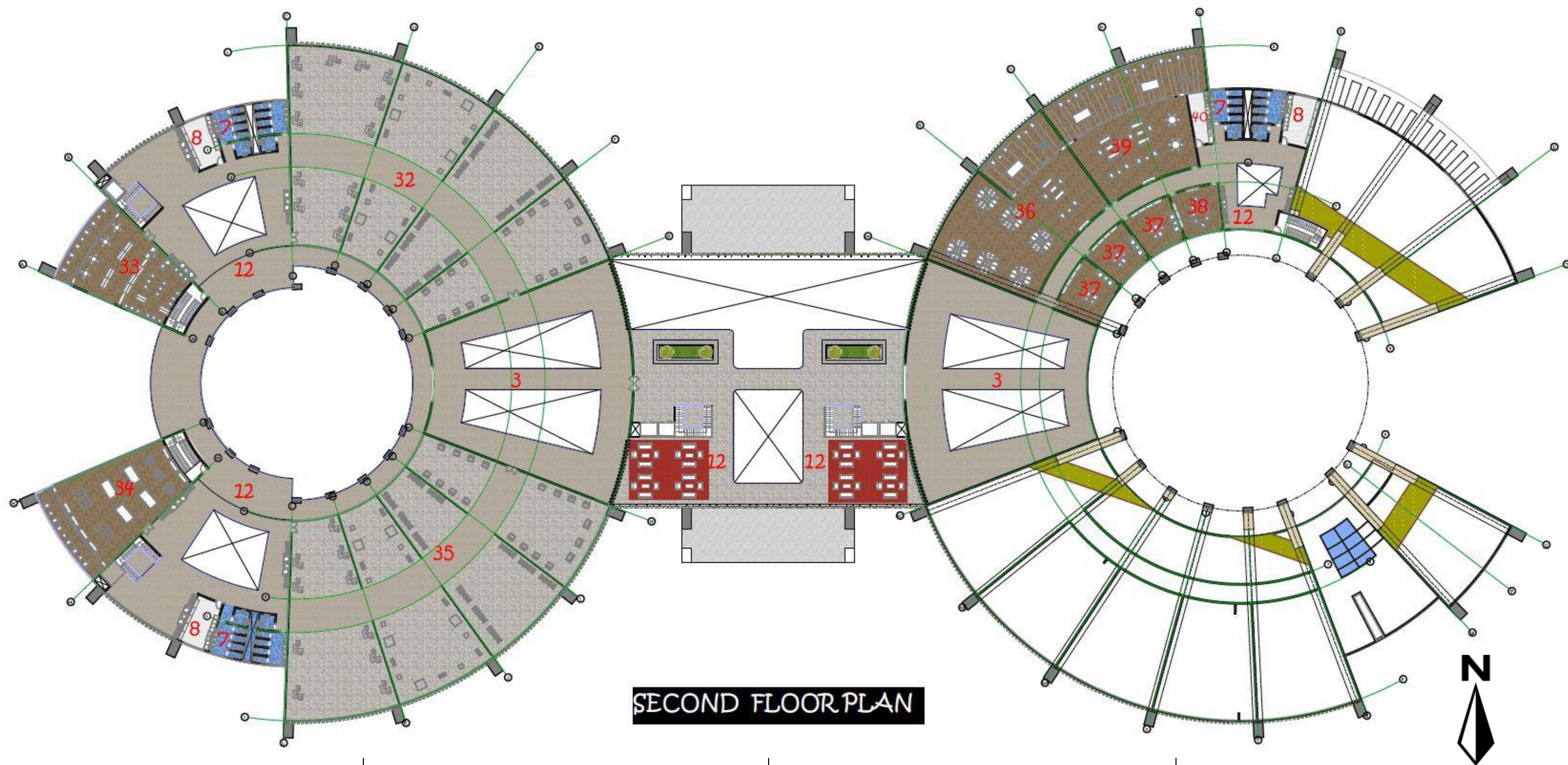
Legend:

- 25. Basketball exhibition space
- 26. Media room
- 27. Esports gaming arena lounge
- 28. Athletics exhibition space
- 29. Conference halls
- 30. Individualised coach training offices
- 31. Storage spaces

On the first floor, the vertical circulation lands you on transition spaces. On the western side(Exhibition wing) are the exhibition spaces and the restrooms for guests to relieve themselves. At one end of the wing is the media room which serves as a digital archive; a place where guests can relive historic Kenyan sporting events in videotape form. At the other end is an indoor esports gaming arena lounge, where guests can play competitive video games of sports and get to experience sports. A skybridge overlooking the central courtyard connects the wing and ensures continuous flow.

On the first floor, the vertical circulation lands you on transition spaces. On the western side(Exhibition wing) are the exhibition spaces and the restrooms for guests to relieve themselves. At one end of the wing is the media room which serves as a digital archive; a place where guests can relive historic Kenyan sporting events in videotape form. At the other end is an indoor esports gaming arena lounge, where guests can play competitive video games of sports and get to experience sports. A skybridge overlooking the central courtyard connects the wing and ensures continuous flow.

On the other wing(Eastern), there are additional retail shops and vendor stalls which sell sports souvenirs/merchandise. At the end is a mezzanine floor that serves the food court, offering more space for guests. On the other side is additional convention spaces, with individualised coach training offices where guests can have one on one sessions with high profile coaches regarding certain sports. The Conference halls are large rooms which can hold conferences and meetings. At the end are storage areas for the storage of items/objects.



SECOND FLOOR PLAN

Legend:

- 32. Tennis Exhibition space
- 33. Library
- 34. Indoor sports Lounge
- 35. Hockey Sports exhibition space
- 36. Staff workstation
- 37. Admin offices
- 38. Boardroom
- 39. VIP lounge
- 40. Kitchenette

On the second floor, the vertical circulation lands you on a transition space.

On the western wing, there are exhibition hall spaces as well as restrooms that serve guests who need to relieve themselves. The Janitor's room is where the cleaners store their cleaning equipment.

At the end of one of the peripheral points of the wing is a library, which acts as a literature archive for important Kenyan sporting events. Guests can come here to read of prolific sporting events

The skybridge connects the wing and provides a vantage view to the courtyard below as well as neighbouring sites.

At the other peripheral end is an indoor play area which hosts indoor sports such as table tennis, darts, foosball which enrich guests with sports and sporting events. A balcony is also provided to serve as a breakout space and provides serene views of the environment.

The central transition space accommodates seating for guests with atrium overlooking entry foyer as well the water feature.

It also overlooks the theatre on the backside given the glazed curtain wall.

The planters along the corridor accommodate greenery which serves to aerate the space as well as improve the aesthetics.

At the other wing is the administration zone which hosts the following:

A staff workstation where facility staff have designated workstations as well as a breakout space with balcony.

Adjacent to the staff workstation is a VIP lounge which serves very important guest who visit the facility. At the end is a small kitchenette which serves the administrators.

The other offices present are the General manager's office, Finance manager's office and Exhibitor services manager's office.



ELEVATION 1:



ELEVATION 2:



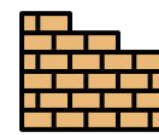
ELEVATION 3:



ELEVATION 4:

The elevations the facility present an interesting form rooted in dynamism and sustainability as well.

Materiality:



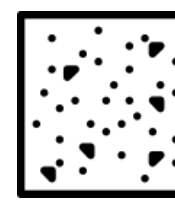
Stone- For the slanting beams/columns on the facade, provides contrast to the white painted concrete walls



Wood- For the vertical panel screen acting as a shell structure which creates a kinetic feel on the facade. The structure is fixed onto aluminium brackets.



Glass-For the windows as well as the railings. The elevations have very expansive glazed windows to allow influx of natural light into the facility.



Concrete-For the walls of the facility.



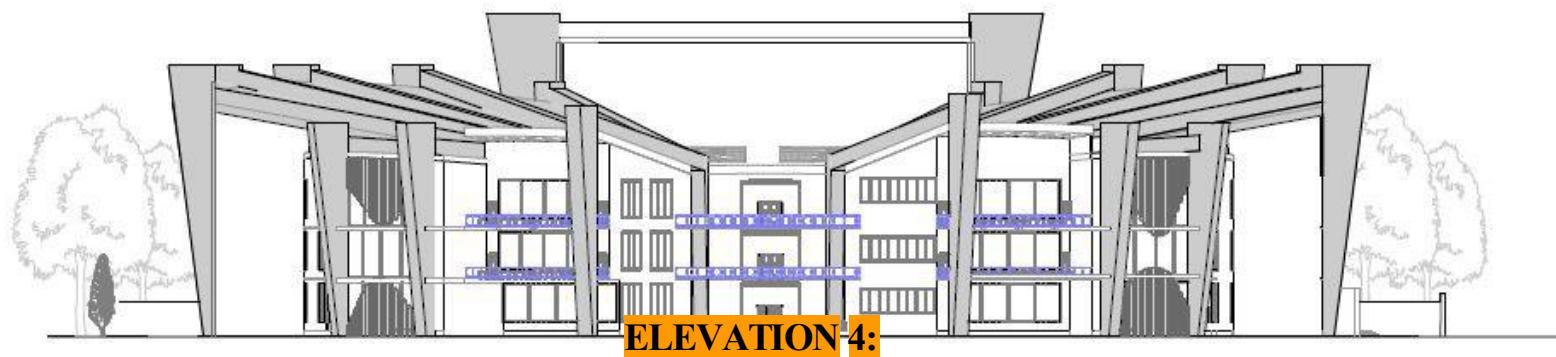
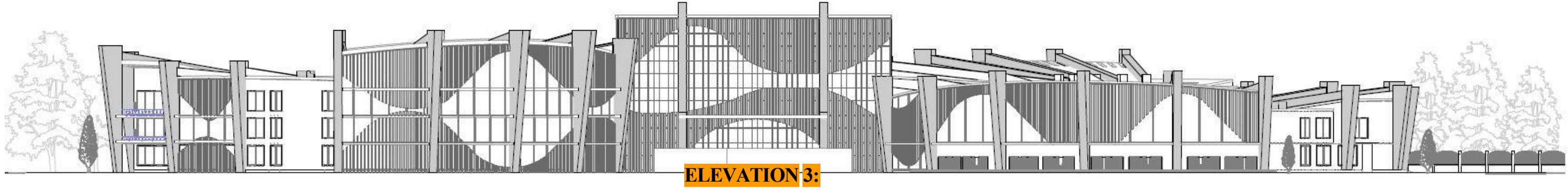
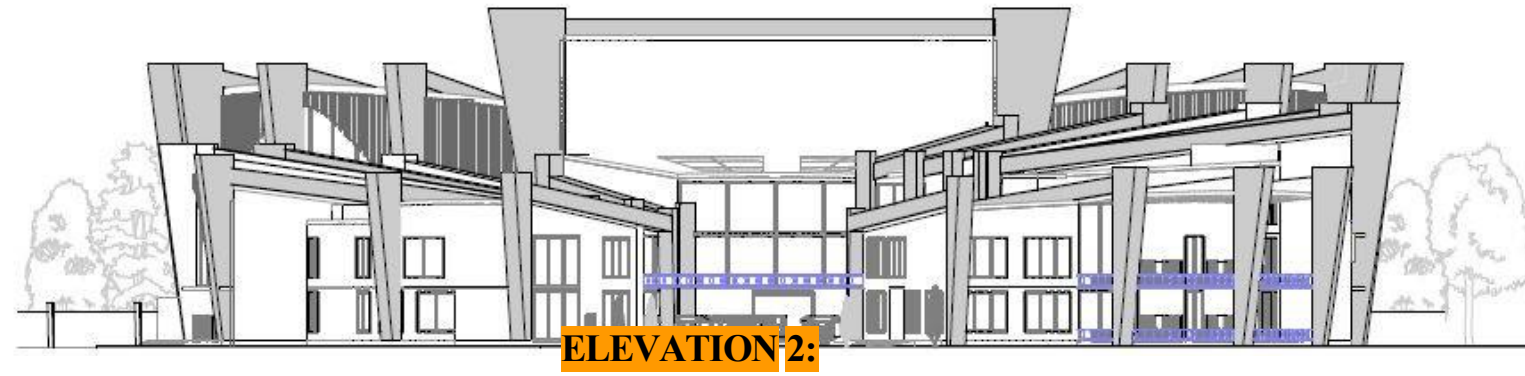
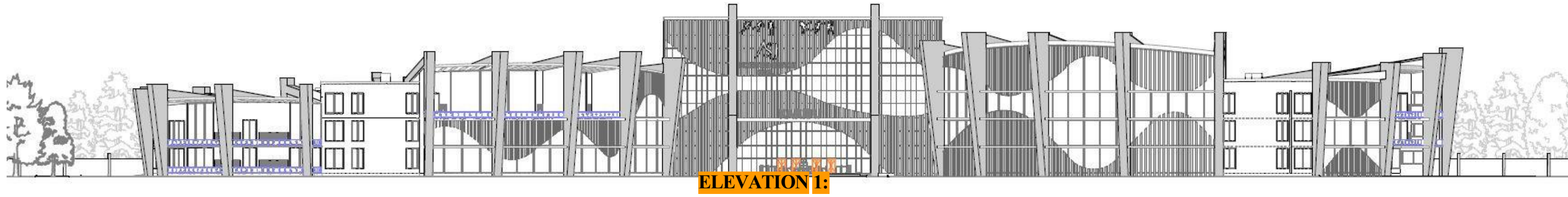
Steel- For the railings. They are the handles of the glass railing

The elevations also features varying heights in the facility which creates an interesting form.

The central transitional space is of a larger scale to offer the grandness of the space as well as outline the entrance/exit. The Facility name also identifies the space and offers that 'welcome feel' to the space.

The slanted beams on the shed roof pour into the central courtyards on either side and are connected to the slanting columns on the building facade. This stone clad columns offer the illusion slanting of the building as well as movement along the building exterior.

The sky bridges connect the building ensuring continuous flow of spaces. They have glass railings to keep visitors safe while crossing the bridge. The sky bridges offer vantage position for views into the courtyard as well as the surroundings (Impala Club Grounds)





SECTION 1:



SECTION 2:

3D VIEWS: EXTERIOR



Vehicular entrance to the ASJ Sports Exhibition hall
Source: Author, 2025

Pedestrian entrance to the ASJ Sports Exhibition hall
Source: Author, 2025

Parking space of the ASJ Sports Exhibition hall
Source: Author, 2025

Loading dock area
Source: Author, 2025

Main entry to the site has an entrance lane that leads to the parking spaces and an exit lane that leads you out of the site.
 A strip of greenery separates the lanes.

There are pedestrian paths on either side of the lanes where pedestrians can walk in order to access the main building.

The parking space can accommodate about 200 vehicles when full. The parking lot has strips of greenery to allow planting of vegetation which enable cooling and increase the aesthetics.

The loading and unloading dock allows dropping of cargo needed in the facility exhibition spaces/convention spaces/retail spaces.



Football astro turf
Source: Author, 2025

Outdoor theatre view
Source: Author, 2025

Outdoor Exhibition courtyard view
Source: Author, 2025

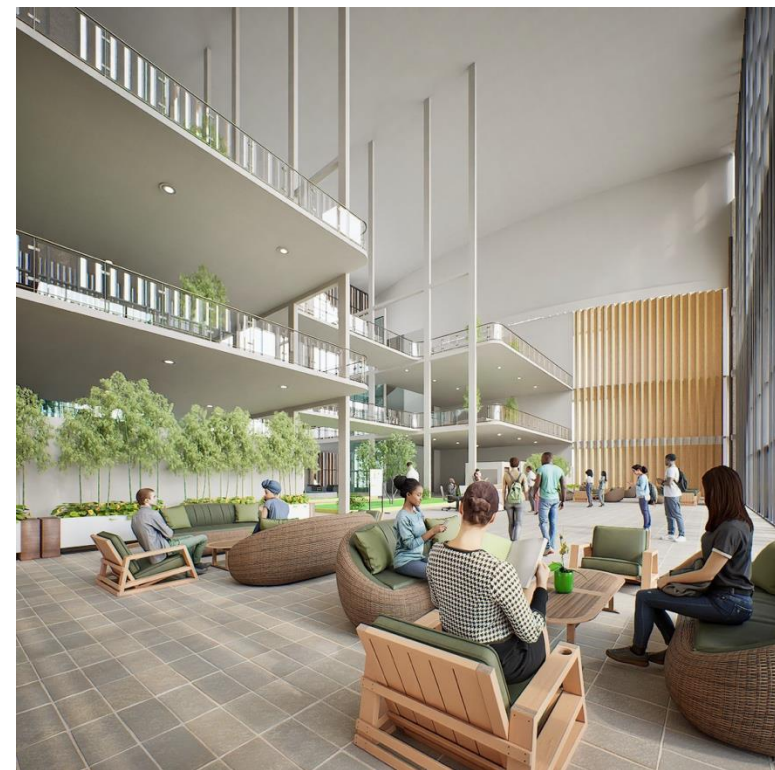
The football turf is a space for playing football. The artificial grass space is fenced around with a wire mesh fence.

The outdoor theatre is located on the backside of the facility and has seating spaces all fixated on a stage where speaker talks.

The outdoor exhibition courtyard is an outdoor space for outdoor exhibits where guests circle around to view items/objects.

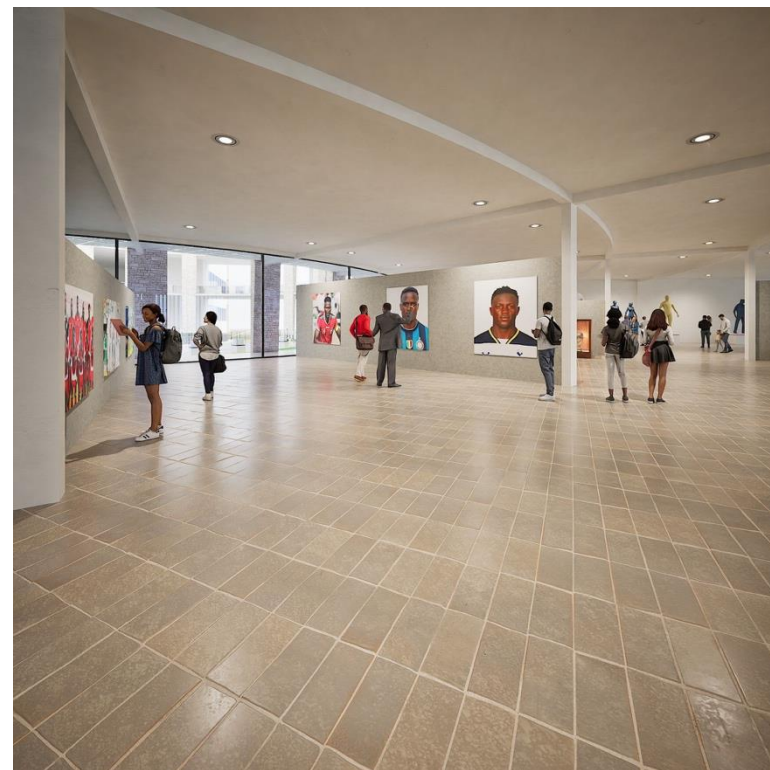
The sky bridges connect both wings and offer stunning views into the courtyard as well the surrounding areas. The well landscaped areas of the site make for a beautiful and inviting scenery which is aesthetically pleasing.

3D VIEWS: INTERIOR



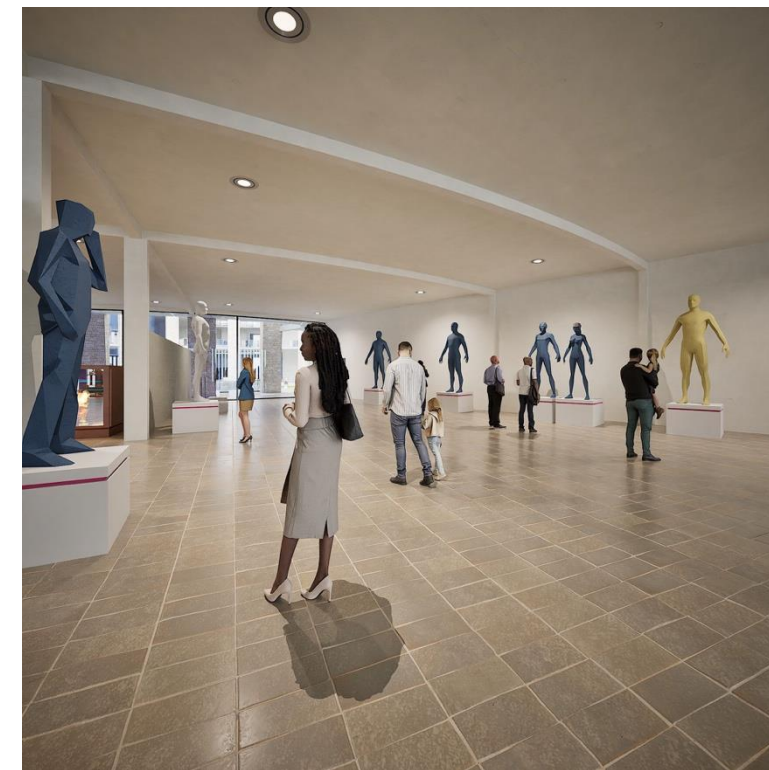
Main entrance and waiting bay area
Source: Author, 2025

Main entry to the building has a reception space with available seating areas for guests as they wait for service from the information desk. The grand foyer space defines the main entrance to the building.



Football exhibition: Art display
Source: Author, 2025

The art display exhibition space has art pieces of famous athletes/ sporting activities hang; where guests go around to view them



Football exhibition: Sculpture display
Source: Author, 2025

The sculpture display exhibition space has sculpture pieces of famous athletes displayed on podiums; where guests go around to view them.



Esports Gaming arena Lounge
Source: Author, 2025

The Esports gaming arena lounge is a lounge area with dedicated screens and gaming consoles for playing video game competitions regarding sports.



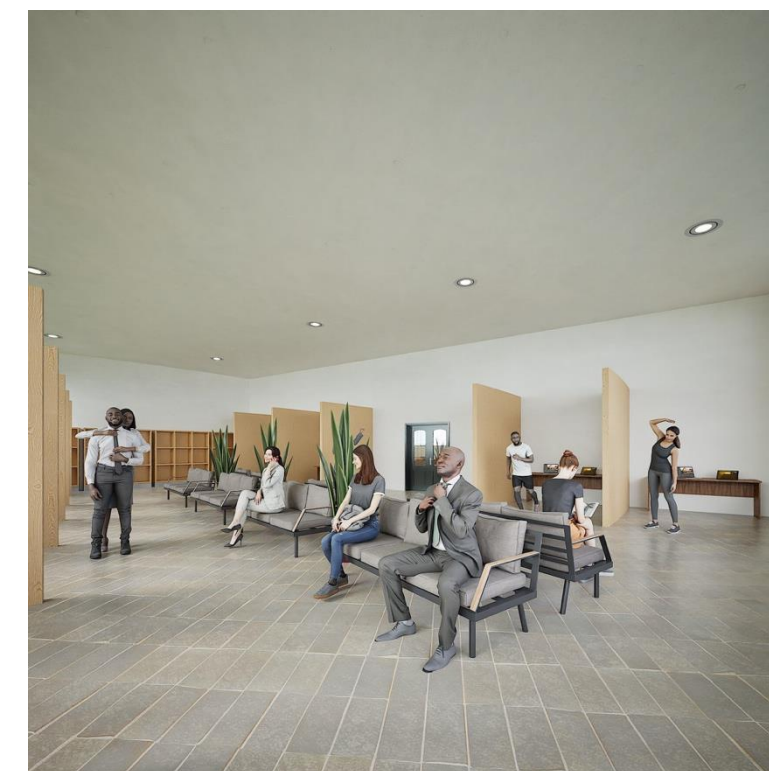
Transition space
Source: Author, 2025

The transition spaces are atrium spaces that lead to various spaces and are well lit from the skylights above. They have seating benches for guests as well.



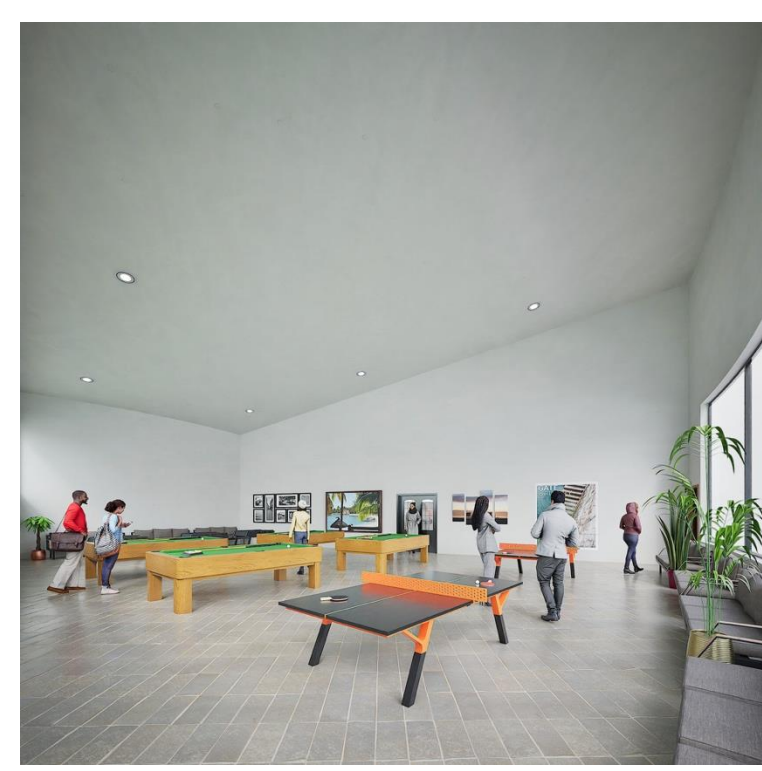
Football exhibition: Object display
Source: Author, 2025

The object display exhibition space has objects/trophy pieces/souvenirs of sporting activities displayed; where guests go around to view them.



VR Room
Source: Author, 2025

The VR Room has VR pods where a table placed has a wifi router and a kinect from a VR controller, where guests can play sports virtually.



Indoor sports lounge
Source: Author, 2025

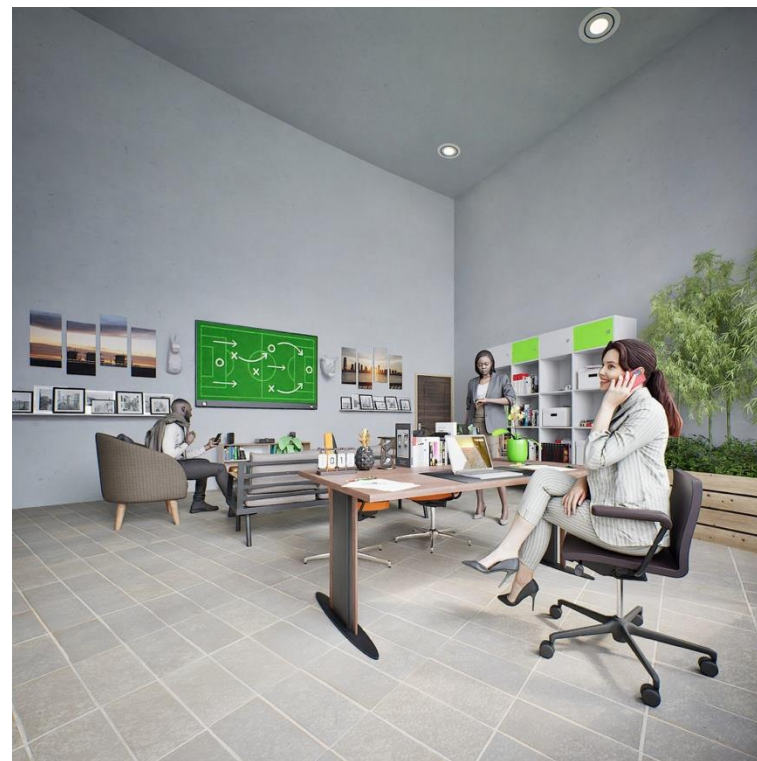
The Indoor sports lounge is a space with indoor game equipment laid out, such as table tennis, pool, darts.

3D VIEWS: INTERIOR



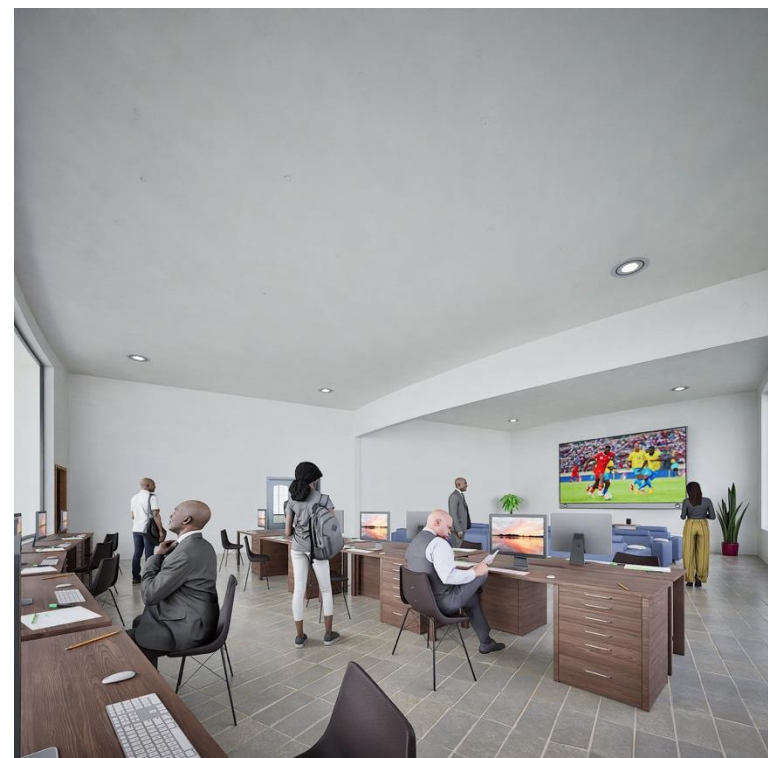
Vendor stalls along corridor
Source: Author, 2025

These vendor stalls serve as outdoor retail spaces and are situated along the corridor and sell sports merchandise and souvenirs. They are adjacent to the indoor retail shops.



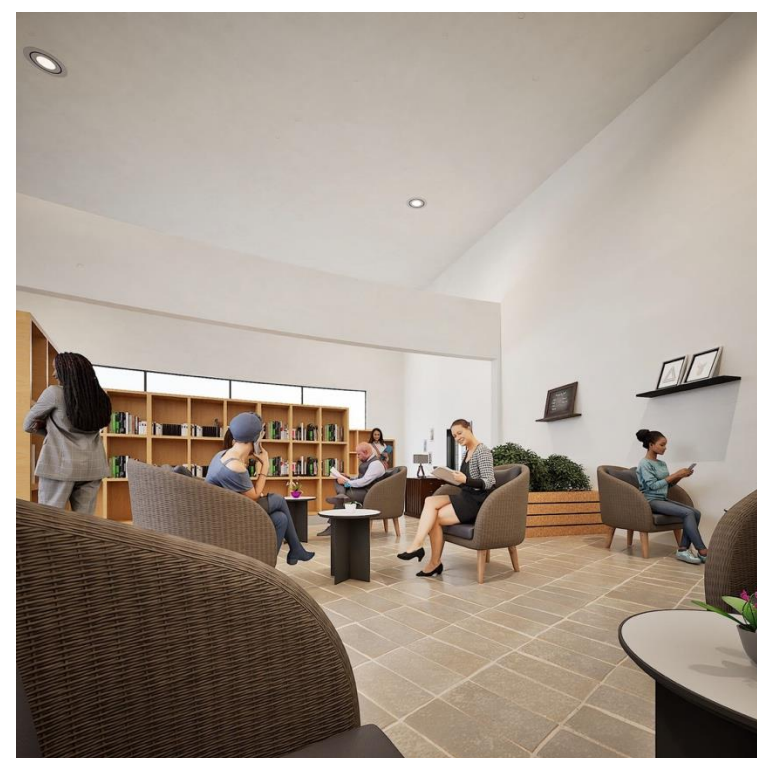
Individualised coach training offices
Source: Author, 2025

The individualise coach training offices are spaces where coaching lessons occur at a one-on-one level, where one learns from experience sports coaching personnel.



Media room space
Source: Author, 2025

The media room serves as a space where one can trace the digital archives of former sporting events. On one side is a dedicated screen with sofas while on the other side is cyber space for individual viewing.



Library space
Source: Author, 2025

The library serves as a space where one can trace the literature archives of former sporting events. The room has storage shelves for the books/magazines/journals with dedicated seating areas within the space.



Indoor Sports Exhibition space
Source: Author, 2025

The sports fashion exhibition space is a convention space that can partly serve as a fashion exhibition space. It consists of two seminar rooms conjoined together due to the use of folding doors which when folded allows for a bigger space altogether. The bigger space allows for arrangement of seats facing an elevated platform which serves as the runway for sports models showcasing different sports gear and clothing.

The seminar rooms have folding doors at the back and can be opened to allow the seminar space pour out to the backside with the outdoor theatre.



BIOGRAPHY

Theophilus Onditi is an emerging architect and spatial thinker whose work explores the intersection of architecture, community, and culture. Currently completing his Bachelor of Architectural Studies, Theo brings a deeply human-centered approach to design — one that prioritizes cultural memory, spatial inclusivity, and environmental responsiveness.

Theo believes that “good design is obvious, but great design is transparent.” This philosophy came to life in his most defining academic project: a Cultural Exhibition Center for Jericho, Nairobi. Conceived on a site historically used as a community football ground, the project reimagines neglected public space into a vibrant cultural landmark — one that houses exhibition halls, a museum tower, workshop hubs, an amphitheater, therapeutic gardens, and commercial spaces for local artisans.

Architecture is a journey — not about instant mastery, but steady growth. Each project becomes a chance to learn, adapt, and deepen his understanding of space, people, and purpose. With every sketch, model, and built form, Theo finds meaning not just in the outcome, but in the process — embracing the evolving nature of design and enjoying every step of becoming the architect he envisions.



JERICHO EASTLANDS EXHIBITION CENTER 4TH YEAR STUDIO PROJECT



INTRODUCTION

This project proposes the development of a vibrant cultural exhibition center in Jericho, Eastlands, Nairobi. Recognizing Nairobi's rich tapestry of traditions and contemporary expressions, and acknowledging the project site's current significance as a community football ground, this initiative aims to create a dedicated space for celebrating and showcasing the city's diverse culture. The center will serve as a platform for local artists, a hub for community engagement, and a landmark destination that enhances the cultural vibrancy of Eastlands while respecting and potentially integrating the

PROJECT OBJECTIVES/ GOALS

Overall Goal: To establish a vibrant and architecturally significant cultural exhibition center in Jericho, Nairobi, that celebrates, promotes, and educates the public on the rich and diverse culture of Nairobi, while fostering community engagement and respecting the site's existing social context.

Specific Objectives:

- To design and develop flexible and engaging exhibition spaces capable of showcasing a wide range of Nairobi's cultural expressions, both traditional and contemporary.
- To create a mini-museum component within the center dedicated to preserving and interpreting key aspects of Nairobi's history and cultural heritage.
- To incorporate amphitheater spaces suitable for performances, cultural events, and community gatherings, fostering a dynamic public realm.
- To establish workshop areas designed to facilitate hands-on learning, cultural skills transfer, and artistic creation.
- To integrate commercial centers that support local artisans, cultural enterprises, and enhance the visitor experience, contributing to the project's sustainability.
- To create a cohesive and interconnected ecosystem within the center that encourages interaction, learning, and a deeper understanding of Nairobi's culture for visitors of all ages and backgrounds.
- To ensure the architectural design reflects the essence of Nairobi's culture, blending tradition and modernity while being sensitive to the local context.
- To contribute to the socio-economic development of the Jericho area through cultural tourism and local enterprise support.
- To maintain a connection with the site's existing community spirit and explore opportunities for integration.

BACKGROUND AND CONTEXT

Site Analysis: The project site in Jericho, Eastlands, Nairobi, is currently a community football ground, indicating its local social and recreational importance.

Cultural Significance of Nairobi: Nairobi is a vibrant hub of diverse cultures, reflecting Kenya's rich heritage and contemporary evolution through its arts, history, and traditions. However, dedicated spaces showcasing this richness are limited, especially in Eastlands.

Identified Need/Opportunity: This project addresses the lack of cultural infrastructure in Eastlands by creating a vital exhibition center. This offers an opportunity to promote local arts and heritage, foster community engagement, acknowledge the site's history, and enhance the cultural vibrancy of the area.



JERICHO EASTLANDS EXHIBITION CENTER 4TH YEAR STUDIO PROJECT

SPACE ANALYSIS



MAIN SPACES

The exhibition center's core will feature dynamic exhibition spaces, meticulously designed to host a wide array of cultural showcases. These versatile areas will adapt to diverse artistic expressions, from contemporary art installations to traditional craft displays, providing a continually evolving platform for local and international talent. Beyond the rotating exhibits, a central and deeply engaging mini-museum will be dedicated to interpreting Nairobi's rich history and heritage. This permanent fixture will offer visitors a journey through time, tracing the city's origins, its colonial past, its struggle for independence, and its vibrant present. Through interactive displays, historical artifacts, and compelling narratives, the mini-museum will illuminate the pivotal moments and influential figures that have shaped Nairobi into the bustling metropolis it is today.

COMPLEMENTARY SPACES

Supporting the main exhibition areas will be the essential administration block, crucial for ensuring the efficient management and smooth operation of the entire center. This dedicated space will house the teams responsible for everything from daily logistics and visitor services to strategic planning and financial oversight, truly the nerve center keeping everything running seamlessly. Alongside this, visitors will find well-equipped workshop spaces.

These aren't just practical areas; they're dynamic environments designed to foster cultural learning, artistic creation, and deep community engagement through hands-on activities. Here, the center will host everything from traditional craft classes and contemporary art workshops to educational programs for all ages, making creativity and learning accessible to everyone.

SUPPLEMENTARY SPACES

To truly round out the visitor experience and cultivate a dynamic cultural ecosystem, the center will feature a dedicated commercial wing. This isn't just about retail; it's a strategic space designed to offer exciting opportunities for local enterprises.

Imagine vibrant stalls and boutiques showcasing Kenyan crafts, unique Nairobi-themed merchandise, and perhaps even a café serving up local delicacies. It will be a place where visitors can take a piece of Nairobi's culture home with them, while also directly supporting the city's entrepreneurial spirit.

Alongside the commercial wing, a versatile amphitheater will provide a fantastic venue for performances, community gatherings, and public events. From traditional dance troupes and musical concerts to open-air film screenings and civic dialogues, this space will be a lively hub where Nairobi's diverse talents can shine and its people can connect. Rounding out these offerings is a dedicated cinema house. This isn't just any cinema; it will be a platform for showcasing Nairobi's stories through film, highlighting both local and international cinematic works that resonate with the city's rich narrative.

CONCEPT DEVELOPMENT



TECHNOLOGICAL CONCEPT

Digitally Enhanced Culture: Strategic technology will enrich visitor engagement and center operations. Interactive displays and multimedia will enhance exhibitions. Efficient systems will manage the building. Modern AV for the cinema. Technology aims to amplify culture and accessibility.



PLANNING CONCEPT

Interconnected Cultural Journey: The planning envisions a seamless flow between the exhibition, learning, commercial, and performance spaces, creating a dynamic and adaptable environment that encourages exploration of Nairobi's culture and fosters community engagement, while thoughtfully incorporating the site's history as a social hub.

ENVIRONMENTAL CONCEPT

Eco-Conscious Cultural Harmony: The design prioritizes sustainability and contextual sensitivity. Natural light and ventilation will minimize energy use. Local, sustainable materials will reduce impact and connect to the surroundings. Indigenous landscaping will enhance the environment. Water conservation will be implemented for a low-carbon, welcoming cultural space.



SOCIO-CULTURAL CONCEPT

Inclusive Cultural Heartbeat: This design envisions an inclusive cultural heart for Jericho, celebrating Nairobi's diversity. Accessible spaces and workshops will encourage interaction. The amphitheater will host community events, and local artisans will be supported commercially. The center aims to educate, connect, and empower the community through culture.

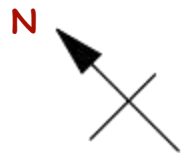
DESIGN PHILOSOPHY: Good design is obvious, great design is transparent

While easily understood and functional (obvious), becomes truly exceptional when it fades into the background, allowing the user to effortlessly achieve their goals without consciously noticing the design itself (transparent). It's about seamless integration and intuitive experience.

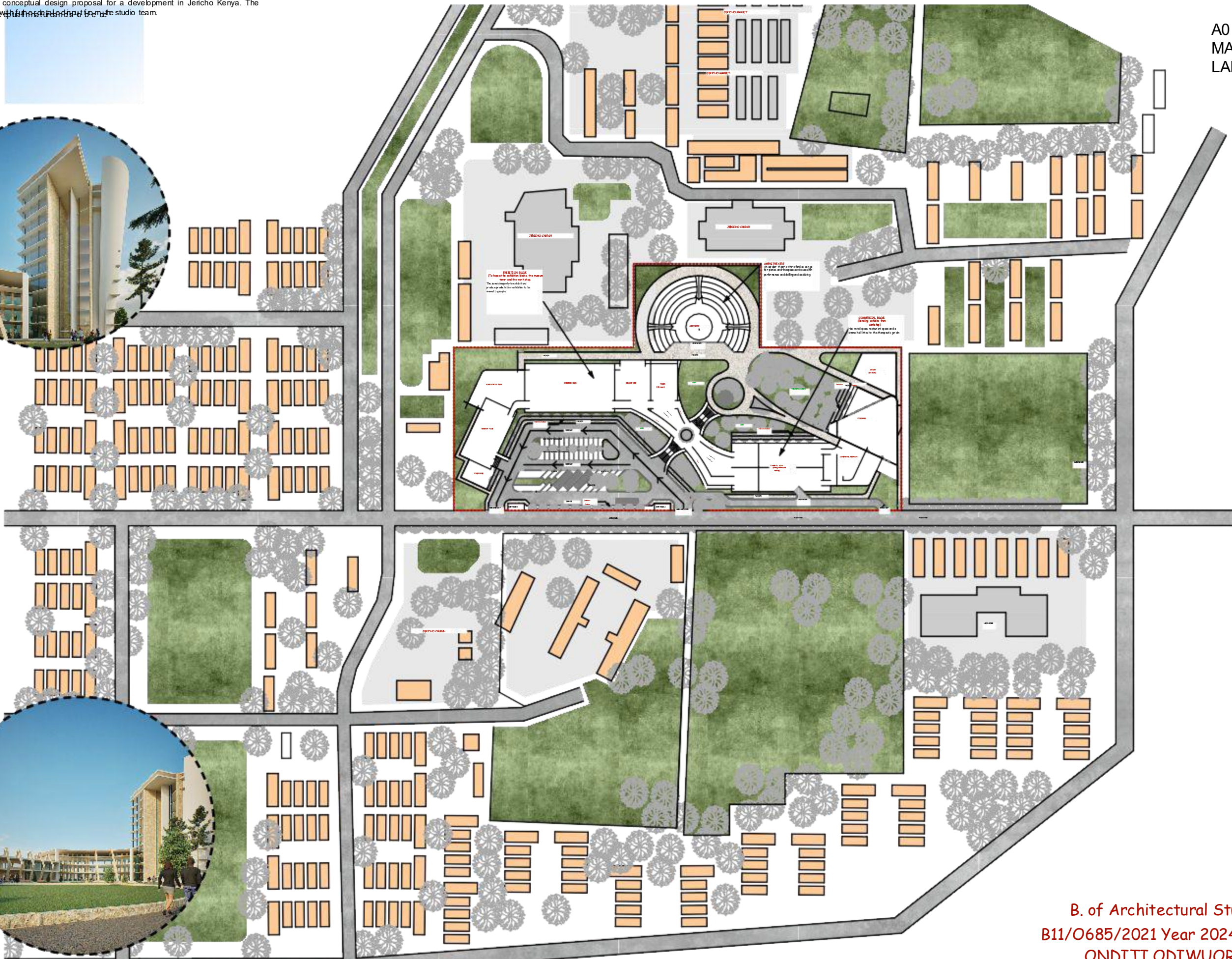
PHILOSOPHY OF DESIGN: Design is never perfect, its a fluid and interpretive process.

Design is never perfect, it's a fluid and interpretive process" means that design isn't about achieving an unattainable flawless outcome. Instead, it's an ongoing journey of exploration, adaptation, and subjective understanding. Solutions evolve as needs change and different perspectives shape the final form.

This document is submitted as a conceptual design proposal for a development in Jericho Kenya. The submission is developed with the studio team.

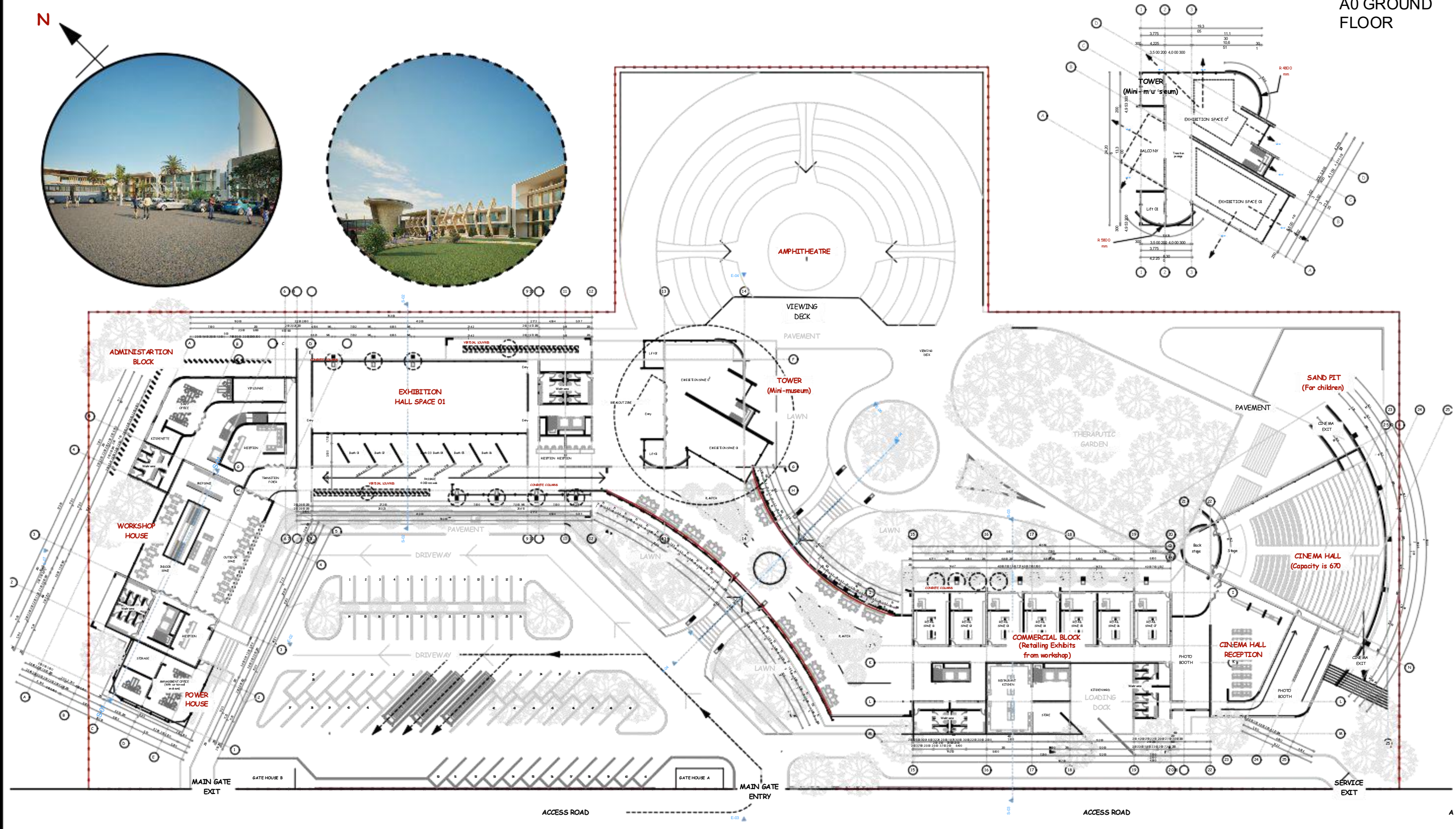


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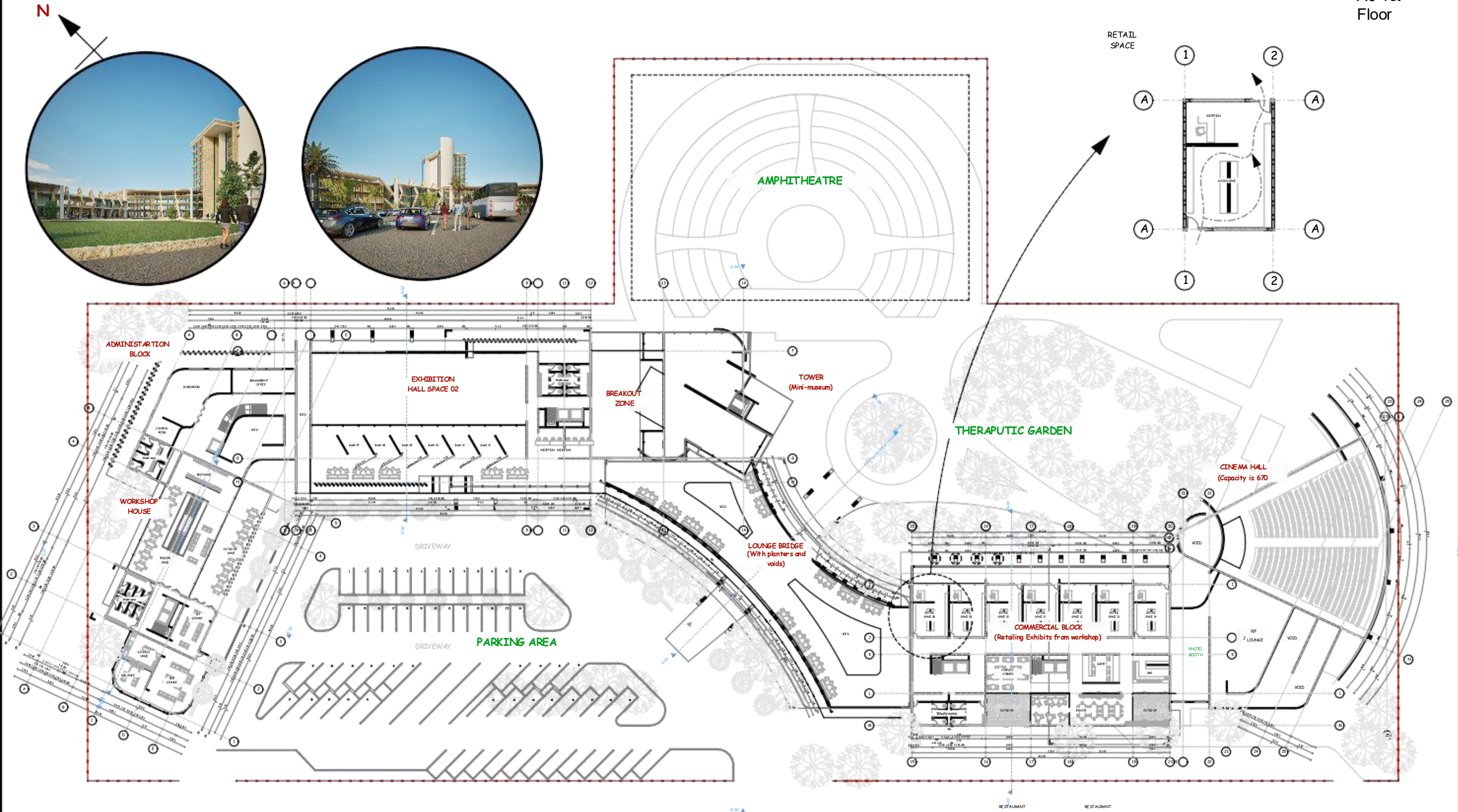
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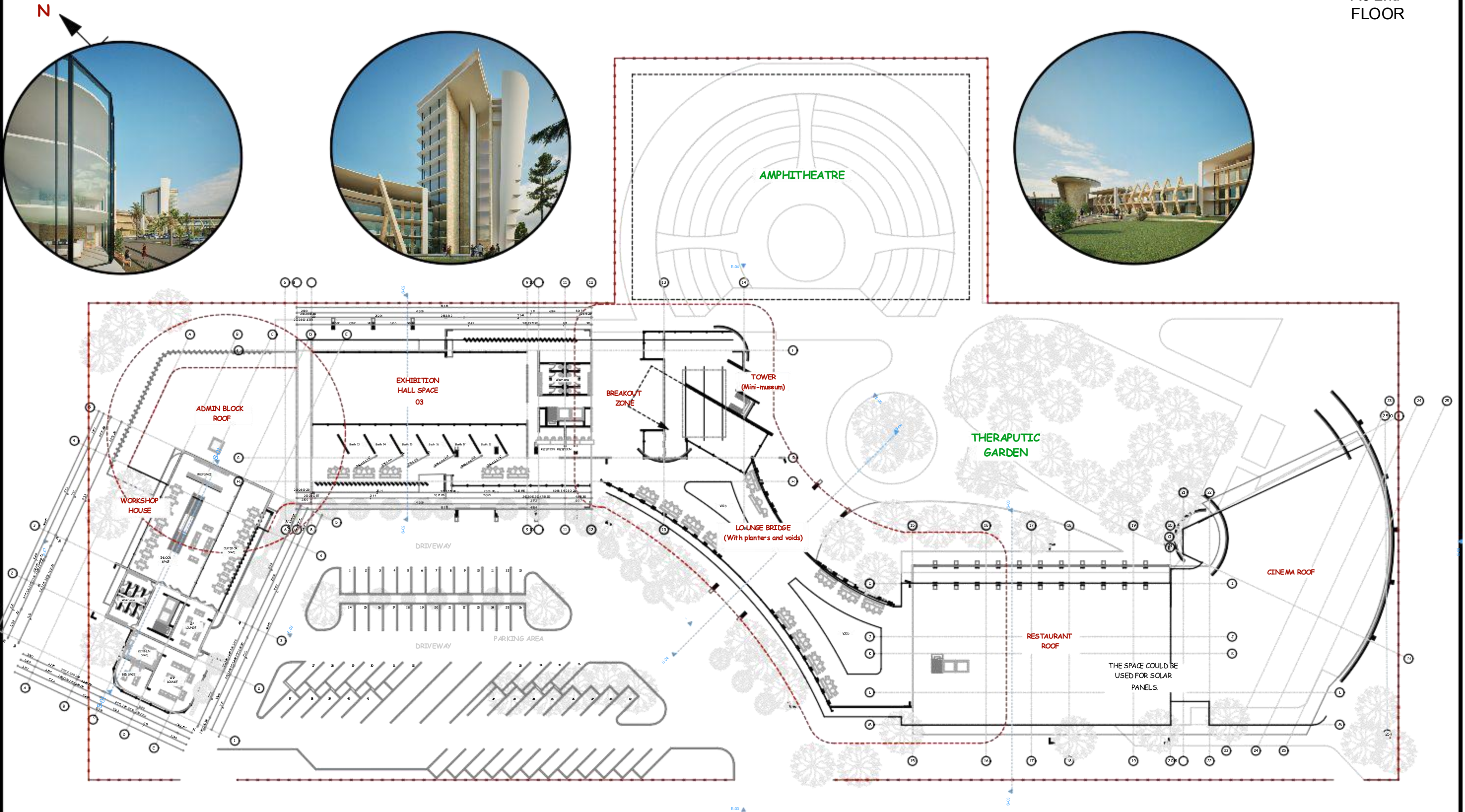
A0 1st
Floor



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A0 2nd
FLOOR



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ONDITI ODIWUOR

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LOUVERS DESIGN

To effectively manage solar heat gain during the extended hot period from October to January, vertical louvres are strategically integrated into the facade. These elements not only optimize thermal comfort but also enhance the complex's modern, sophisticated, and calming visual presence.

GLASS FACADE

The building's facade is articulated through a deliberate juxtaposition of elements: curtain walls, selected for their minimal glare, are juxtaposed against louvred and planar surfaces. This interplay creates a captivating dance of light and shadow, simultaneously emphasizing the building's modernity and its nuanced response to solar conditions.

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ROOF DESIGN

The flat roof design prioritizes a contemporary visual language while simultaneously emphasizing the site's narrow, longitudinal character, creating a seamless integration between building and landscape.

VIEW FROM THE GATE

CANTILEVRED FLOOR SLABS

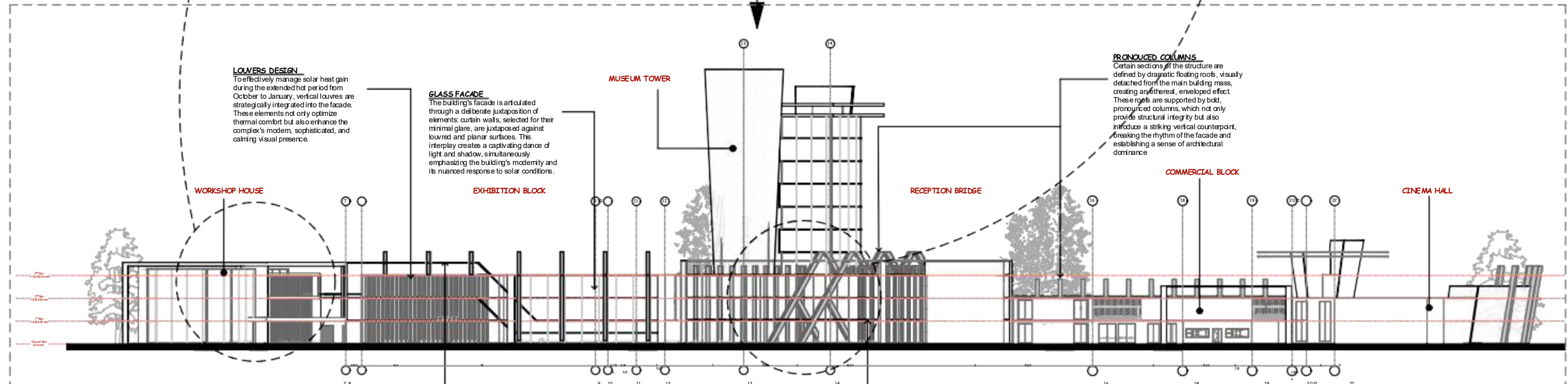
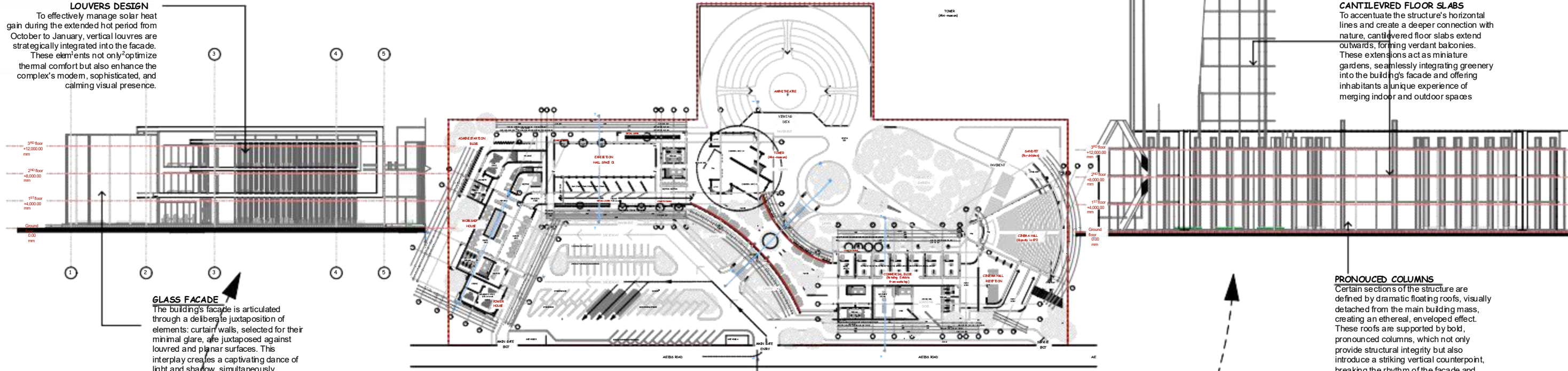
To accentuate the structure's horizontal lines and create a deeper connection with nature, cantilevered floor slabs extend outwards, forming verdant balconies. These extensions act as miniature gardens, seamlessly integrating greenery into the building's facade and offering inhabitants a unique experience of merging indoor and outdoor spaces.

PRONOUNCED COLUMNS

Certain sections of the structure are defined by dramatic floating roofs, visually detached from the main building mass, creating an ethereal, enveloped effect. These roofs are supported by bold, pronounced columns, which not only provide structural integrity but also introduce a striking vertical counterpoint, breaking the rhythm of the facade and establishing a sense of architectural dominance.

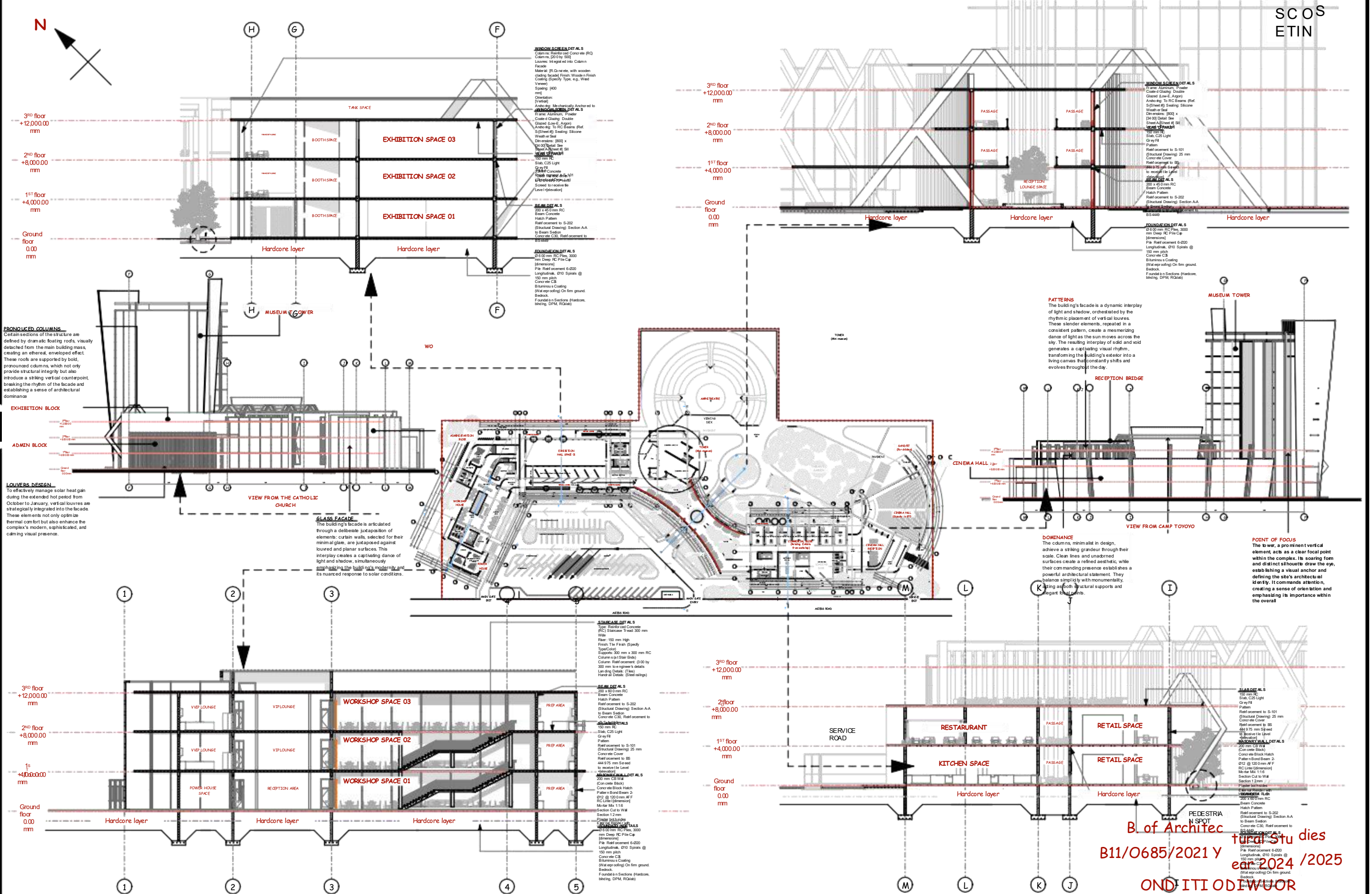
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PATTERNS
 The building's facade is a dynamic interplay of light and shadow, orchestrated by the rhythmic placement of vertical louvers. These slender elements, repeated in a consistent pattern, create a mesmerizing dance of light as the sun moves across the sky. The resulting interplay of solid and void generates a captivating visual rhythm, transforming the building's exterior into a living canvas that constantly shifts and evolves throughout the day.

DOMINANCE
 The columns, minimalist in design, achieve a striking grandeur through their scale. Clean lines and unadorned surfaces create a refined aesthetic, while their commanding presence establishes a powerful architectural statement. They balance simplicity with monumentality, acting as both structural supports and elegant focal points.

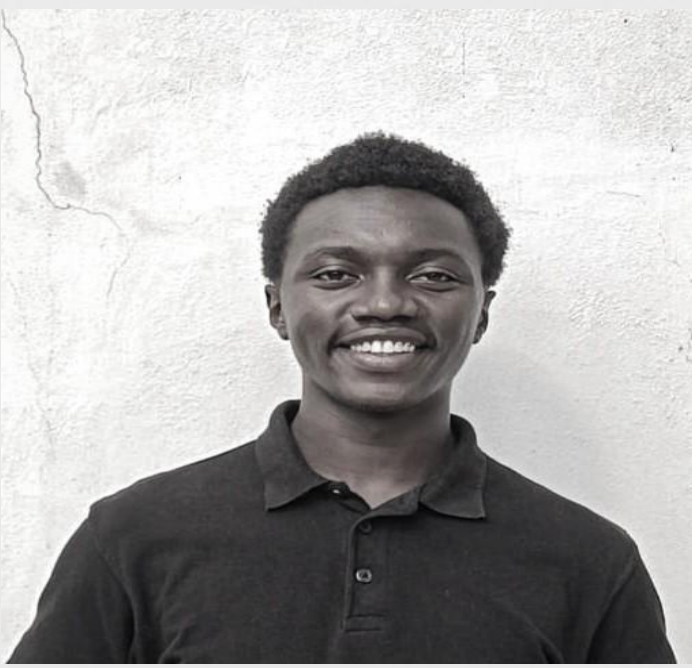
POINT OF FOCUS
 The tower, a prominent vertical element, acts as a clear focal point within the complex. Its soaring form and distinct silhouette draw the eye, establishing a visual anchor and defining the site's architectural identity. It commands attention, creating a sense of orientation and emphasizing its importance within the overall

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3D
REPRESENTATION
S





NAME: Joe Thuo Njoroge

INSTITUTION: Department of Architecture and Interior Design (DAID), School of Engineering and Architecture (SEA)

Kenyatta University (KU)

EMAIL: joethuo2017@gmail.com

Biography

Joe Thuo is an architecture student at Kenyatta University, pursuing his studies within the School of Engineering and Architecture, Department of Architecture and Interior Design. With a strong academic foundation and a growing body of design work, he is committed to exploring architecture as both an artistic and social discipline.

Beyond his formal studies, Joe has developed a passion for 3D visualization, using digital tools to translate architectural ideas into immersive and compelling visual experiences. His interest in visualization extends beyond representation, serving as a medium through which he refines his design thinking and communicates architectural concepts to diverse audiences.

Through his academic journey and creative pursuits, Joe continues to shape his vision as a designer, aspiring to contribute meaningfully to the built environment in Kenya and beyond.



FORM DEVELOPMENT

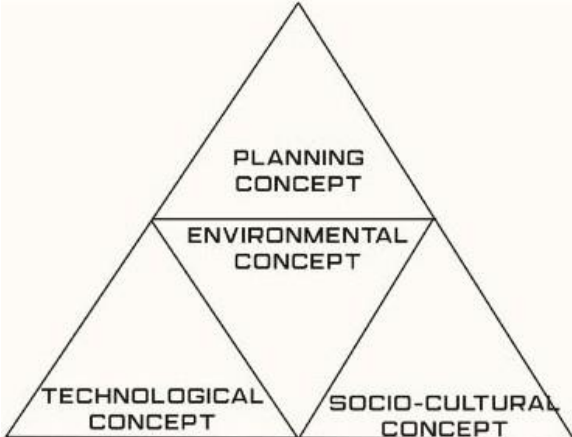
DESIGN PHILOSOPHIES

"Form Follows Function", Louis H. Sullivan:
 The activities of the building are well represented into the form of the building goal.
 The aim of the design should focus on the activities of the building and this should be well translated to the design both inside and the outside including the facades and the landscape design.

PHILOSOPHY OF DESIGN

Design must be rooted in reality
 Design changes with time its adaptable to the environment change social change or change in the market goal.
 The aim is to come up with a design that is going to be rooted in the existing features and able to adapt to the changing needs and trends respecting the cultural and physical location and time.

FORM DEVELOPMENT



Planning Concept: Convergence is the central organizing principle, creating flexible, interconnected spaces that encourage flow and interaction between diverse activities (cultural exhibits, tech demos, sustainable living showcases). Zoning strategically places related functions for synergy.

Environmental Concept: Convergence integrates human activity with ecological responsibility. The design prioritizes sustainable materials, energy efficiency, water conservation, and biophilic elements, aiming for a harmonious relationship with the environment.

FORM EVOLUTION



Basic form
 There are 4 main zones that contribute to convergence;
 Main Cultural Exhibition
 Interactive Tech Area
 Sustainable Living Exhibition
 Green Building Exhibition

Vertical and horizontal extrusion
 Each zone has a unique activity that brings people together.

Final form
 All zones are connected together to form the final form of the exhibition center

Technological Concept: Convergence leverages technology to enhance the visitor experience and knowledge sharing. Interactive displays, VR/AR, smart building systems, and connectivity are integrated to create engaging and informative environments across all exhibition themes.

Socio-Cultural Concept: Convergence celebrates Kenyan heritage while fostering global exchange. The hall provides platforms for cultural expression, community engagement, and dialogue, promoting understanding and showcasing the interconnectedness of local and international cultures.



MASTER PLAN

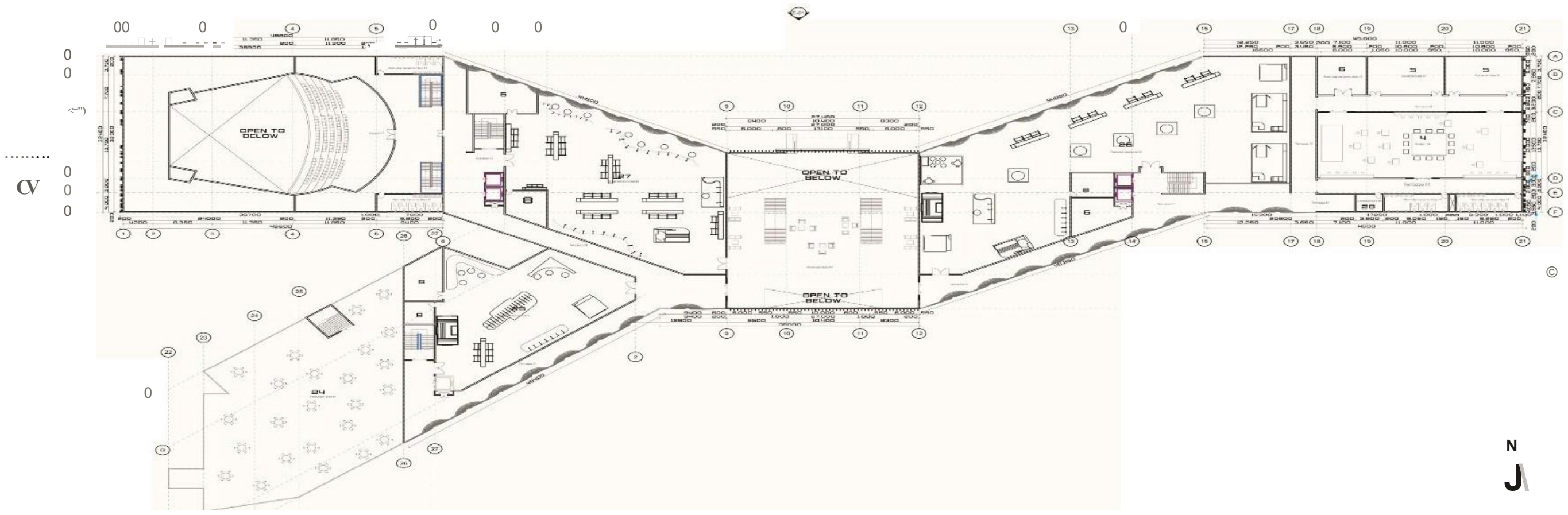
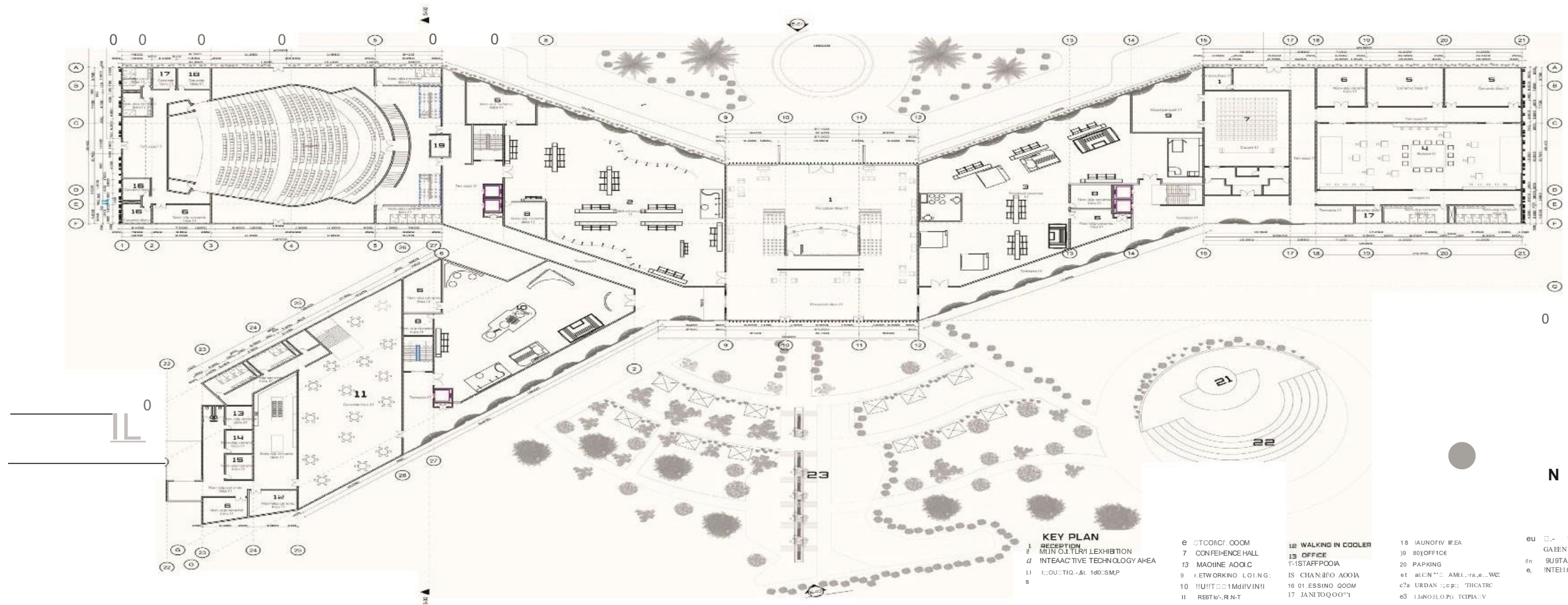
MASTER PLAN

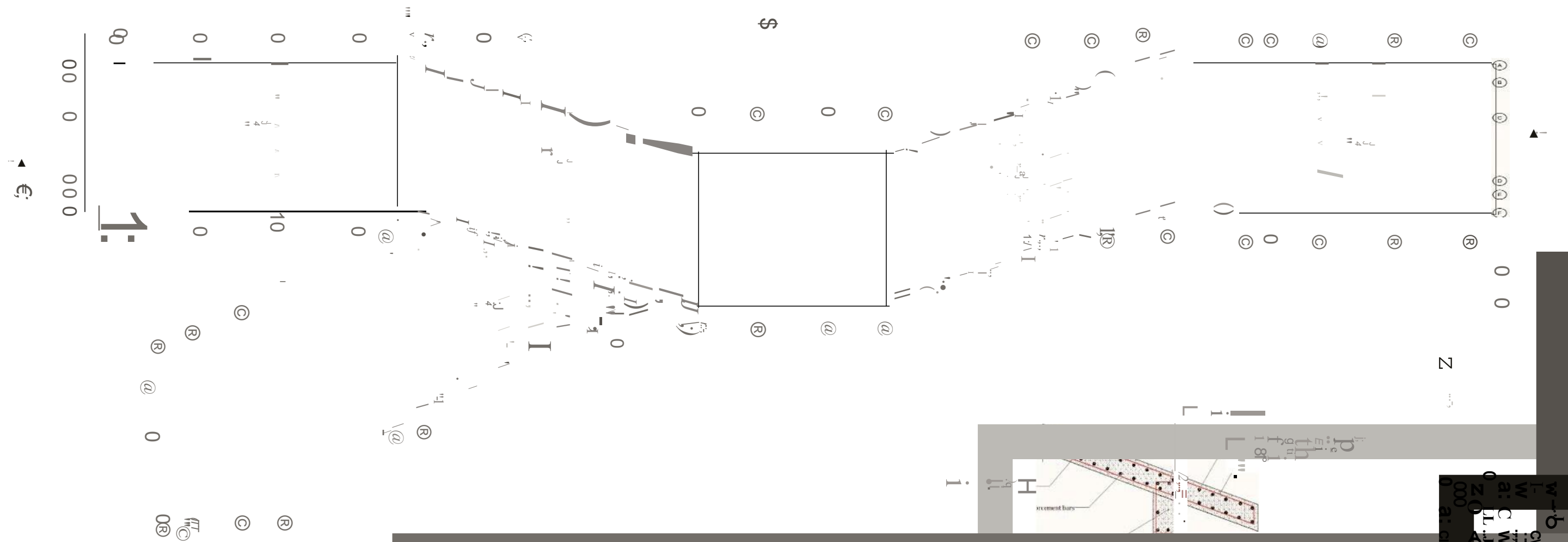
This master plan of the exhibition center at Konza City is strategically positioned within a well-structured grid system that integrates green and commercial zones. At the northern edge of the site, a landscaped park provides a natural buffer and public gathering space that enhances the vibrancy of the project. The plan incorporates mixed land use development, ensuring a balance of commercial, cultural, and recreational functions to stimulate activity throughout the day. The exhibition center itself acts as the focal point of the precinct, complemented by surrounding commercial plots that will support retail, hospitality, and service-oriented programs, creating a dynamic hub for innovation, culture, and economic exchange in Konza.



SITE PLAN

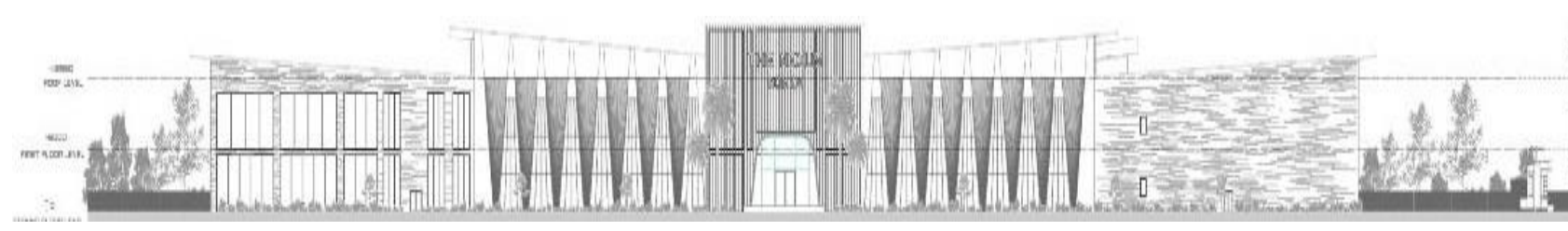
This site plan for the exhibition center in Konza City is designed to balance functionality and landscape integration. At the northern edge, a well-organized parking area provides convenient access, leading visitors through a central entry plaza with a welcoming fountain. The plan also incorporates a carefully landscaped topiary garden, offering shaded pathways and green spaces that create a relaxing environment for users. To the east, an open-air amphitheater provides space for cultural events, performances, and community gatherings, reinforcing the project's role as both a civic and cultural hub within the city.



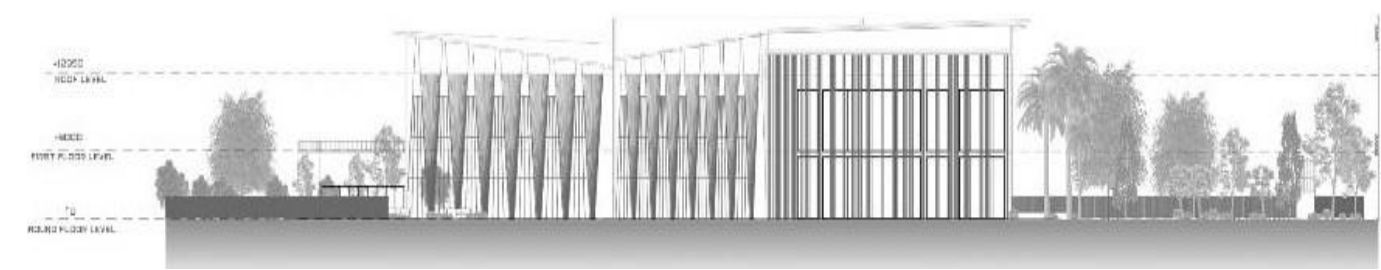




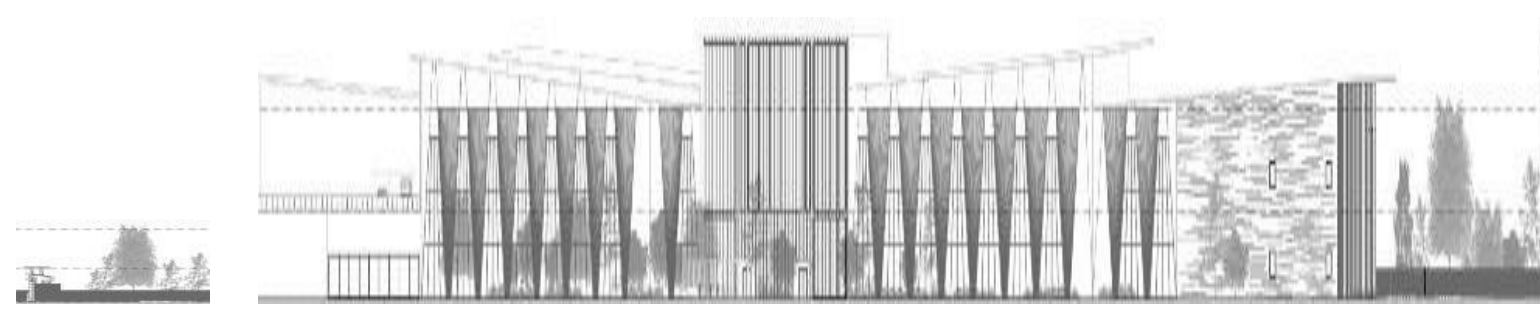
LANDSCAPE TOPIARY



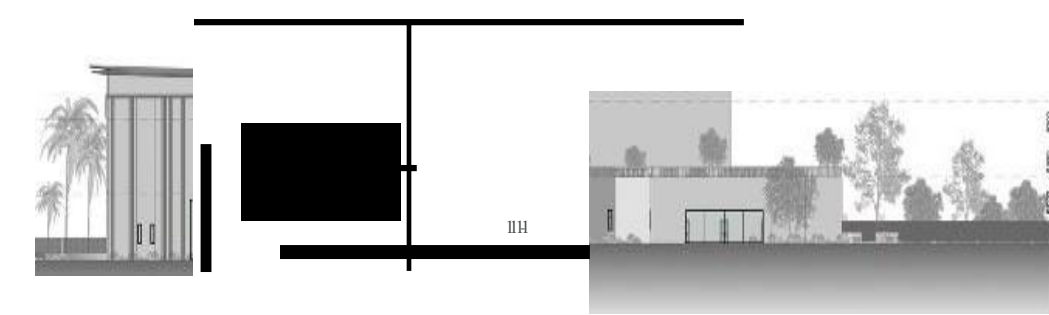
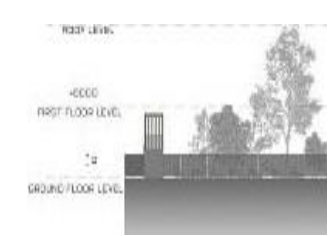
E-01
SCALE 1:200



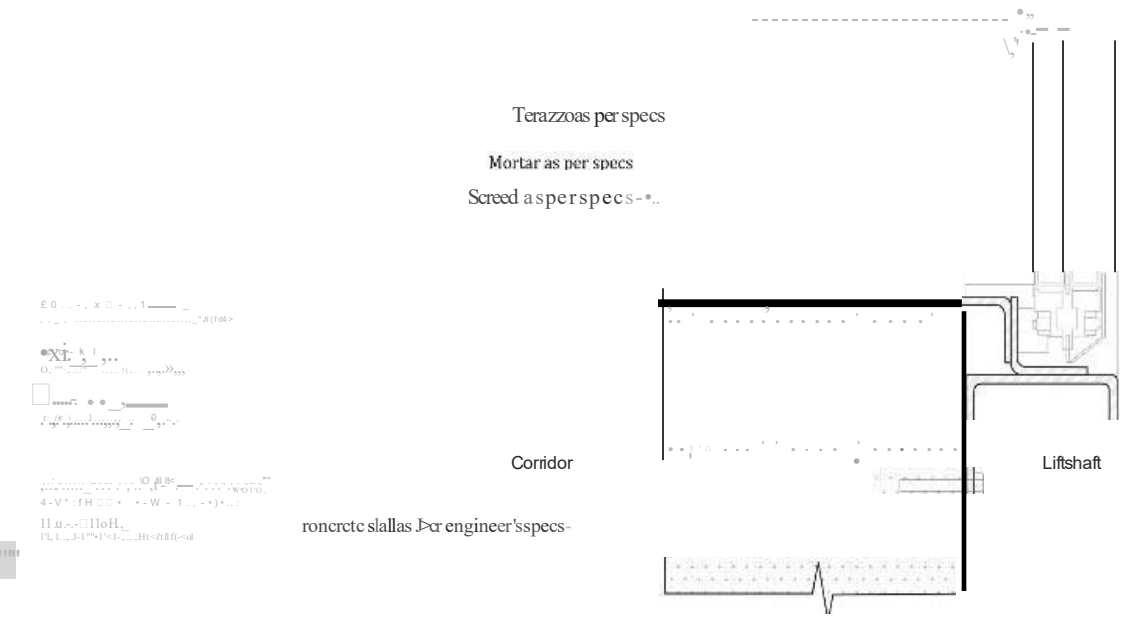
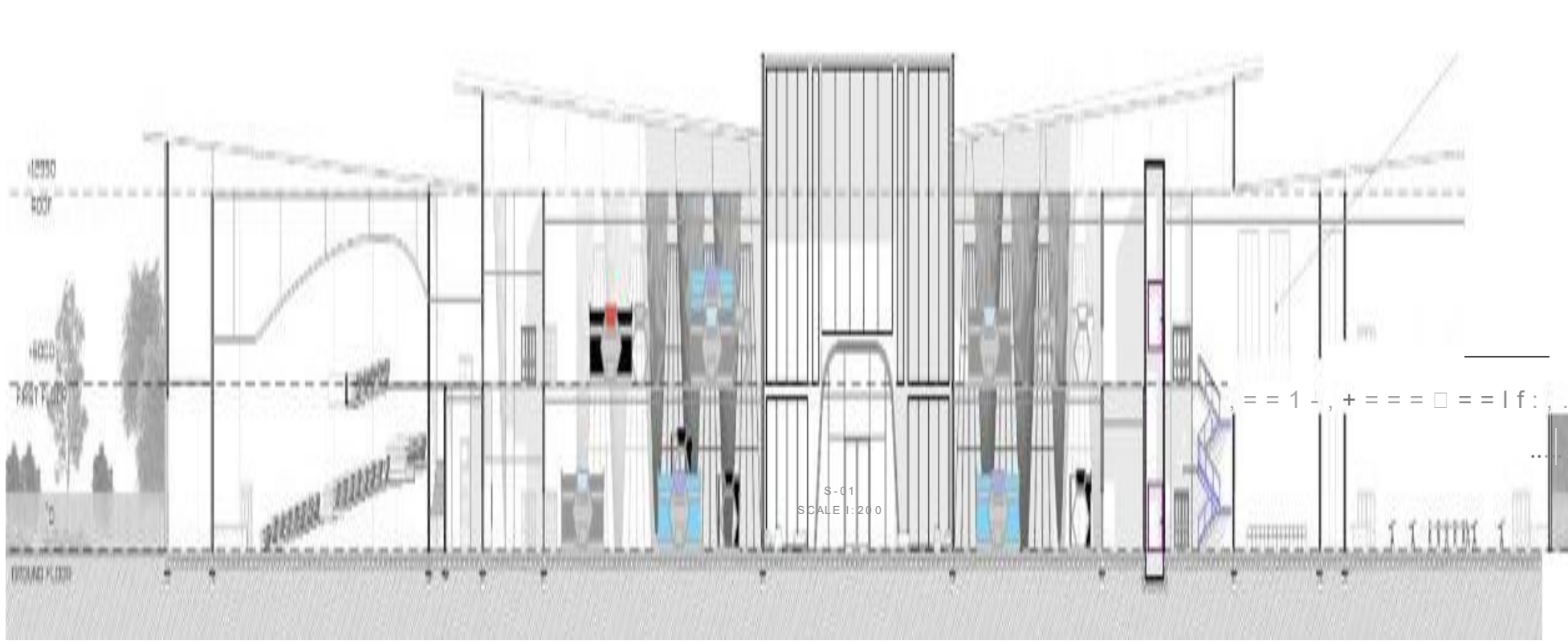
E-02
SCALE 1:200



E-03
SCALE 1:200

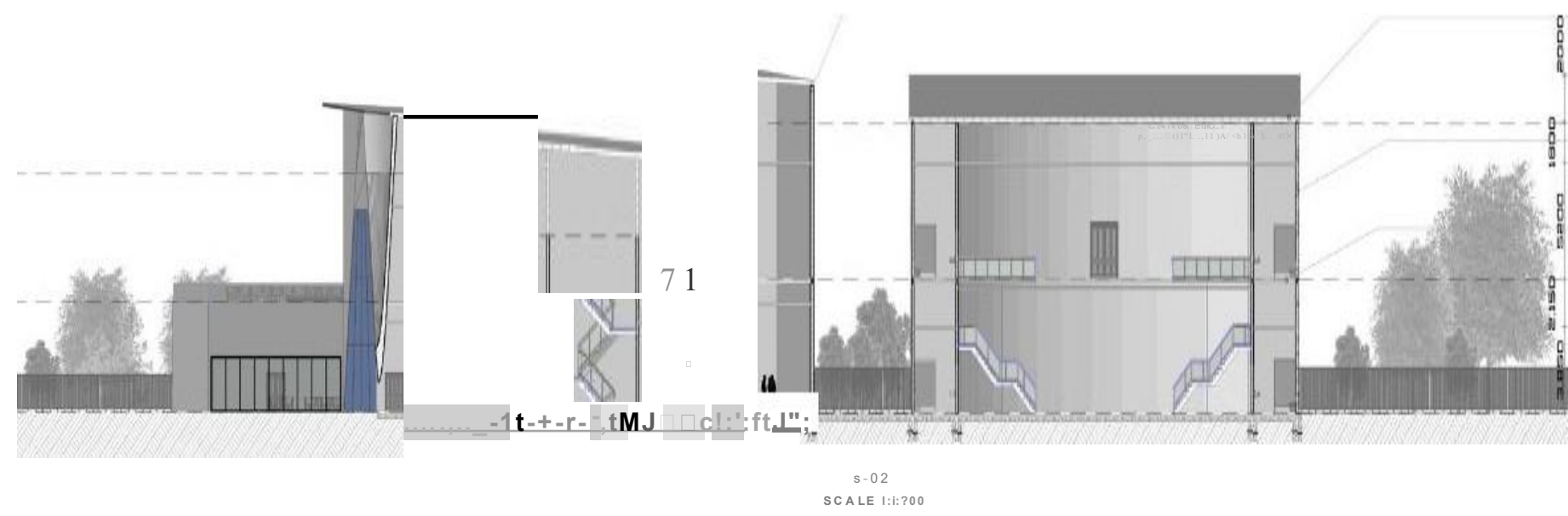


E-04
SCALE 1:500

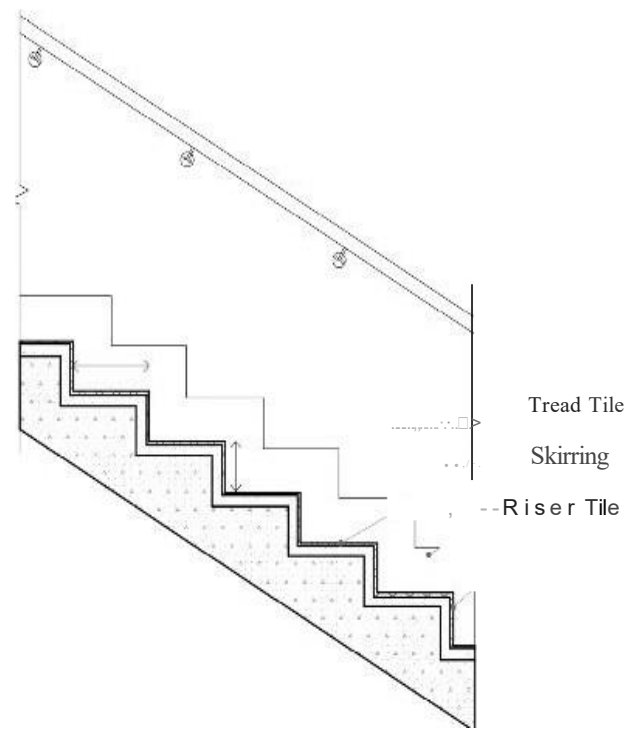




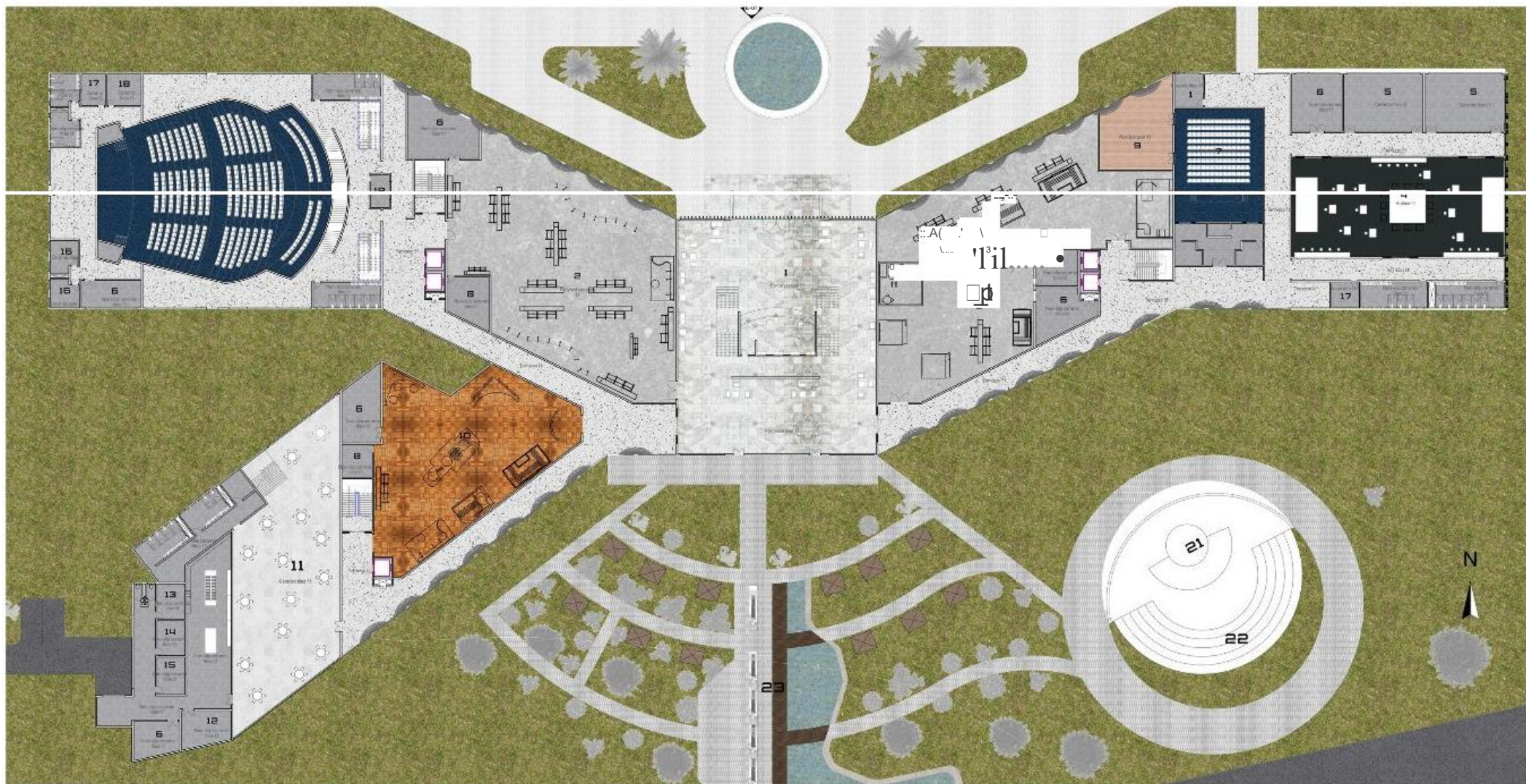
OPEN AIR AMPHITHEATRE



100mm thick reinforced concrete slabs with three thick rubber
 feet with waterproofing and heat insulation to detail wall out to
 400mm thick parapet wall around stage area.



STAIRCASE DETAIL
SCALE 1:20

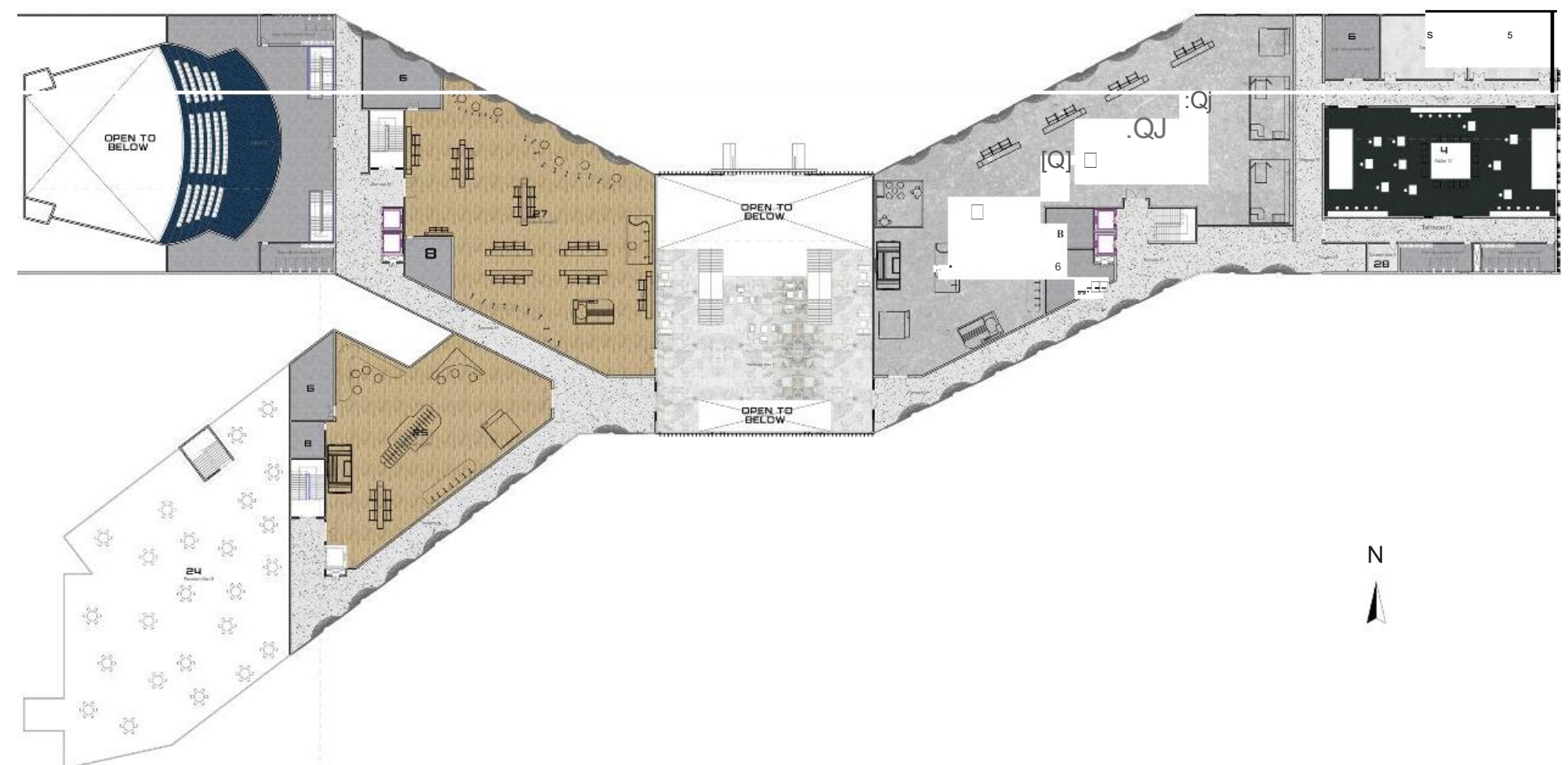


INTERACTIVE CULTURAL ZONE

GROUND FLOOR PRESENTATIONAL FLOOR PLAN



NETWORKING LOUNGE



FIRST FLOOR PRESENTATIONAL FLOOR PLAN

Kenyatta University continues to stand at the forefront of higher education in Africa, driven by its commitment to excellence in teaching, research, and community engagement. Over the past year, the University has expanded its investment in infrastructure and digital learning platforms to enhance both in-person and remote study experiences. This focus has ensured that students benefit from world-class academic programmes delivered in an environment that promotes creativity, innovation, and collaboration. As of April 2025, Kenyatta University maintained its high global standing, ranked among the top institutions in Africa for research output, industry partnerships, and alumni impact. The University's emphasis on practical, hands-on training remains central to its mission, enabling graduates to seamlessly integrate into the workplace with industry-ready skills. Strong links with corporate partners, NGOs, and government agencies have led to expanded internship and employment opportunities for students, ensuring that they remain competitive in the global job market.

The Department of Architecture & Interior Design (DAID) has strengthened its role as a leader in sustainable design education, responding to emerging trends and global environmental priorities. In partnership with the School of Engineering and Architecture, the Department has introduced new courses in advanced building technologies, smart city planning, and climate-resilient design, equipping students to address modern urban and rural challenges. The curriculum continues to integrate sustainability principles into every stage of the design process, with an emphasis on energy efficiency, renewable materials, and community-focused development. The department's project-based learning model remains a core feature, giving students real-world problem-solving experience through studio-based projects, industry collaborations, and fieldwork. DAID's faculty—comprising experienced academics and practitioners from Kenya and abroad—have enhanced research and innovation output through collaborative projects, exhibitions, and publications. The Department's modern facilities, including design studios, workshops, laboratories, and digital fabrication labs, have been upgraded to support advanced learning needs. This environment nurtures a new generation of architects and interior designers who are equipped to contribute meaningfully to the evolving built environment, both locally and internationally.

THE TEAM



Dr. Rehab Hamdi Elnaggar (PHD), EEE-EES

Rehab Hamdi Elnaggar is a lecturer, architect and urban designer with 25 years of academic and professional experience. She has been a lecturer at Kenyatta University since 2021. Dr. Elnaggar began her academic journey by earning a Bachelor's degree (BSc Hons) in Architecture and Urban Design from Ain Shams University in 1997. She furthered her education by obtaining a Master's degree (MSc) from the same institution in 2007 and a PhD from Cairo University in 2015.

Dr. Elnaggar's teaching career spans nearly two and a half decades, including her tenure at Arab Academy for Science, Technology and Maritime Transportation (AASTMT) from 2000 to 2019 and at AI Shorouk Academy from 2016 to 2019. Throughout these years, she has demonstrated an unwavering commitment to education and the advancement of architectural knowledge. In parallel with her academic endeavours, Dr. Elnaggar has developed a robust professional practice. Since her graduation, she has designed and supervised the implementation of numerous significant and specialized projects, ranging from hospitals and residential towers to resorts, schools, private residences, showrooms and a variety of interior design projects. Her dual career as an educator and practicing architect highlights her dedication to both the academic and practical dimensions of architecture and urban design.



Prof. Arch. Paul Mwangi Maringa (PHD), CBS, FAAK, MKIP

He is an Adjunct Professor of Architecture and Planning at JKUAT, KU and UoN, with 36 years of academic and professional experience. He has taught various courses, published widely, and served as editor for academic journals, and research books. Maringa has also worked as a consulting architect/planner for government and private firms. He is a registered architect and member of several professional bodies. Additionally, he has held senior expatriate roles in Kigali, Rwanda, serving as Ag., Deputy Vice Chancellor AA in KIST; technical expert & master trainer, associate project team leader (SCE) & Senior Expert project management and planning in WDA. He was a long serving State Officer - Principal Secretary in Kenya's Ministry of Transport, Infrastructure, Housing, Urban Development, and Public Works, in three of its five state departments. He has considerable expertise in sustainability, urban growth management, and TVET planning.

Google Scholar: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Paul+Mwangi+Maringa&oiq=

Orcid: <https://orcid.org/0009-0007-3471-8028>.

ResearchGate: <https://www.researchgate.net/profile/Paul-Maringa-2/publications>

Academica.Edu: <https://jkuat.academia.edu/PaulMwangiMaringa>

Amazon:

https://www.amazon.com/Books-Prof-Paul-Mwangi-Maringa/s?rh=n%3A283155%2Cp_27%3AProf%2BPaul%2BMwangi%2BMaringa



Arch. Robinson Manguro

Robinson Manguro is a registered Architect with 19 years of practical experience in architectural design, supervision and project management within the East African region (Kenya, Uganda, Rwanda, DR Congo and Tanzania). He is a PMP Certified Project Manager with 10 years' experience at senior management level and has participated in International Conferences, Trainings and Workshops. He holds a masters in Architecture for Health from Sapienza University of Rome, a master of Arts in Project Planning and Management as well as a bachelor of Architecture from the University of Nairobi. He has a passion in healthy designs and affordable housing. He also has keen interest in education and is currently engaged as an adjunct lecturer at Kenyatta University department of Architecture. He has a passion for mentoring young people and has lectured at Kirinyaga University, the Technical University of Kenya and Maseno University.



Landscape Arch. Regina Wango Kasau

A Landscape Architect and Lecturer at Kenyatta University, Department of Architecture & Interior Design, specializing in Environmental Design. With a robust academic foundation, that includes a Master's degree in Architecture (Environmental Design option) and a Bachelor's degree in Landscape Architecture, Regina conveys a profound understanding of how built and natural environment intersect to effect ecological and human wellbeing. Her works emphasize the incorporation of sustainable principles into landscape and architectural design, specifically regarding how spaces can support emotional well-being. Among her published works include:

1) Inmates' perception of environmental factors affecting psychological well-being: a case of Kamiti maximum security prison in Nairobi, Kenya. *Journal of African Interdisciplinary Studies*, 8(10), 121-140.

2) The built environment of Kamiti maximum security prison, Nairobi: implications for rehabilitation and psychological well-being. *East African Journal of Interdisciplinary Studies*, 8(1), 176-191. <https://doi.org/10.37284/eajis.8.1.2865>.

3) Thermal comfort in urban open spaces in the tropics: a case of Nairobi County, Kenya. *Innovare Academic Sciences*.

Students' thesis supervised:

1) Impact of inclusive design on gender diversity in sports grounds: a case of Stima Sports Club, Nairobi, Kenya.

2) The role of biophilic design enhancing recovery of drug addicts in rehabilitation centres in Murang'a County.

3) Influence of architecture on human-wildlife coexistence in safari lodges: a case of Nanyuki, Kirinyaga County, Kenya.



DAID FORUM FOR RESEARCH AND DESIGN SOLUTIONS

2024/25, Vol. II, Studio IV,
Design of Museums, Libraries and Exhibition Halls,
Chapter Three: Design Solutions.

