University Of Management and Technology

Department Of Architecture and Planning

Thesis Report

CIVIC CENTER

By;

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BAHRIA TOWN
LAHORE

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Also, I would like to thank my family my homie Sallu dada and friends back home K.S.A who have been a constant source of encouragement dur ing the course of study.

1 ABSTRACT

The thesis project proposes to explore into the design possibilities for the Civic Center for Bahria town Lahore and extract the richness of the site conditions into architecture through means of computational design. The computational design approach will provide a degree of variance which will be an interesting thing to explore in terms of defining spaces, program and systems. The design would hinge on to one of the major centers of Lahore and aim to enhance social permeability through means of forms and articulation of spaces. It would cater to all classes of people and help in promoting small local businesses thereby weaving into the social and cultural fabric of Pakistan.

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CHAPTER 1: INTRODUCTION

A civic center is the chief administrative, entertainment and cultural center of the town as a whole. A civic center represents the image of the region and its residents. The building is the center of all societies, of all groups and of every activity In order to draft a more iconic image of a Civic Center In order to achieve good results, the new Civic Center is proposed at the heart of the city which is also a financial and commercial magnet. The older building is proposed to be converted into a museum. An efficient, well-organized civic center can best be obtained by the planning for future growth, which characterizes the successful enterprises of an economy. The major goal of this project is to accomplish an integrated design through means of parametric modeling which blends into the existing infrastructure, economy and social fabric and takes cares of sustainability and energy issues.

My project introduces itself as an idea of contemporary architecture. Understanding of form, function and their relation would be exhaustively researched and presented. History is verbatim with reference to desire being a soul catalyst for amazing architecture thus creating inspiring imagery enticing spark to reach zenith. Only a project with exaggerated reality would befit the requirements. A contemporary norms of architecture would be comprehended in order to sensibly compliment and contrast with existing parading and reply with a conclusive design.

1.1 THESIS STATEMENT

Fostering Social Interaction

It is my intent to provide a democratic and vivid urban environment that accesses and connect different socio-economic groups while strengthening urban identity and effecting a change in the negatively perceived public image for civic buildings.

The argument of my thesis lies in the contemptuous behavior directed towards things and in this particular case towards built architecture. Architecture is conceived through form and its expression which when observed lead to some conclusions. Those conclusions can be positive or negative. These conclusions make us believe and comprehend the current architectural situation with a keen sense of form space and functionality. In response, an architect responds by producing a design. The core premise of this

thesis lies in mocking the current paradigm of architecture with a sensible approach towards reengineering the IMAGE of the built architecture.

1.2 AREA OF INTEREST- REASON FOR SELECTION

The project not only deals with design but also gives an opportunity to take care of urban design issues, energy and sustainability requirements. It also allows taking urban growth patterns, economic and social background into consideration. The site has multifarious adjacencies with varied activities, this very condition gives more challenges to the project and gives a scope for better learning of various design, environmental and social issues. The project program is basically categorized into: commercial, institutional and cultural. I intend to propose an architectural design of the cultural block. The reason for designing the cultural block is that its program requirements are quite varied as compared to the commercial and institutional spaces where the spatial elements would mostly be repetitive. Also, designing the cultural block would give a change to integrate outdoor spaces with the indoor spaces. Pakistan has a vast culture and diversity where there are certain types of activities that are particularly arranged in outdoor spaces and the climate/weather patterns allow for holding such events outdoor for most of the year. This would also help in creating a degree of social permeability and allow people from all social and economic classes to be a part of the same event which in other cases will be segregated gatherings had it not been a part of some iconic part of the city- civic center.

1.3 RESEARCH QUESTIONS

• How to approach and cater user group to their satisfaction level on the basis of needs, comfort, luxury and activities?

• What role does architecture play in the lives of human being apart from sheltering?

Does it provide motivation? Degradation? Hospitality?

• How the advancement of technology helped and hindered mankind specifically in fields of art?

• Identify the true identity of architecture? What is architecture for common man?

1.5 OBJECTIVES

Considering the fact that there are so many diverse social and economic situations in the country, it becomes imperative that any design weaves into the existing fabric just the right way. The proposed design will look at the possibility of filtering all kinds of social classes through the site by creating spaces that will be meant only for specific purposes and congregation opportunities and allow inter-mingling of all social classes.

The overall intent of the thesis project may thus be summed up as:

- Designing a public space in contrast to social norms that exist already
- Understanding overlapping of program , activities and then the amalgamation of both
- Provide social permeability

Chapter 2: LITERATURE REVIEW

Literature pertinent to cultural/social values, meanings, and functions related to the built environment. Because the shaping of the built environment throughout the centuries has been and still is linked to the dynamism of culture, it is important to determine if changes in social values results in changes or perceived changes in the built environment.

Social values and symbolic meaning are embedded within the context of the residents' public and private lifestyle. Carr et al (1992) asserts that the public open space mirrors the private and public value because they are cultural settings of daily life patterns and activities.On the other hand, the results also showed that the open space failed to encourage multiple use because of the lack of park security and therefore limit the children's experience of public open space.

2.1 HISTORY AND BACKGROUND

2.1.1 WHAT IS A CIVIC CENTER?

A civic center or civic center is a prominent land area within a community that is constructed to be its focal point or center. It usually contains one or more dominant public buildings, which may also include a government building. Recently, the term "civic center" has been used in reference to an entire central business district of a community or a major shopping center in the middle of a community In this type of civic center, special attention is paid to the way public structures are grouped and landscaped.

In some American cities, a multi-purpose arena is named "Civic Center", for example Columbus Civic Center. Such "Civic Centers" combine venues for sporting events, theaters, concerts and similar events.

In Australia, Civic Centre is used as a brand of Shopping Centre.

2.1.2 ORIGIN OF CIVIC CENTER:

Civic Center was an idea that originated with former Denver mayor Robert W. Speer. In 1904, Speer proposed a series of civic improvements based on the City Beautiful Ideas shown to him at the 1893 World Columbian Exposition in Chicago.

Speer hired Charles Milford Robinson among others to develop plans for the area. Robinson proposed extending 16th Street to the Colorado State Capitol and to group other municipal buildings around a central park area. However, the plan was defeated in a 1907 election.

Undaunted, Speer gathered business leaders who brought in new ideas for the Civic Center including the creation of an east-west axial between the Colorado State Capitol, and swinging the north and south borders of the park into the city grid system.

Figure 1 city civic center

This picture of the City and County Building taken around 1941 shows how the park has changed over the years.

2.1.3 Space and Time

Examining the manifest and latent functions of the activity is related to space and time will lead to the understanding of how activities affect the built form. Looking into the town plaza as a public space, Carr et al (1992) and Jacobs (1993) confirm that public spaces such as plazas, squares, streets and sidewalks are predicated by public life. Their studies recognize the existence of other public spaces that are not used for daily public life. However, in this sense, the town center is a specific instance of a public space where diversity of use generates opportunities for other spin-off activities to be experienced by 17 different user groups who can then attain participation and interaction in a public space.

2.1.4 Sense of Place

In terms of sense of place, Steele (1981) suggests that the way settings are utilized, the settings of special events, exuberant use, choice of location, and use opportunities can facilitate achievement of a sense of place.

2.1.5 Symbolic Meaning of the Built Environment

Lynch (1960) argues that to understand urban environments, we also have to consider the way inhabitants perceive the city because every citizen develops associations with some parts of the built environment, and these images are soaked in memories and meanings. A study by Burgess (1978, 88) reported on perceptions about the urban and regional meaning and images of Kingston and Hull, England. Using social survey methods that emphasized the verbal images of entire cities and experience described by the participants, the results revealed that "the external image of the city is stereotypical, gaining much of its details from cultural attitudes towards the North of England." Meanings, which subsume symbolism, are organized, structured, and processed by the observer in images[1] and schema[2] that are stimulated by non-verbal communication in the environment. (I.e. user decoding the coded environment as a symbol). However, noticing cues in the environment is a precondition for the derivation of meaning According to Lang (1994) "symbolic meanings are meanings associated with an object or a phenomenon, or classes of objects or phenomena. A symbol is something that stands for, denotes or represents some idea, whether spiritual or laic, that is immaterial or abstract" (27-28). It is not only the elements of the environment that communicate symbolic meaning but also the people and artifacts. In human-environment studies human experience of the environment is processed through perception[3] , affectual cognition[4] , and evaluation[5] .

2.2 GENERAL GUIDELINES FOR THE CIVIC CENTER

2.2.1 Design Objectives

The design objective of this section is to concentrate architectural detailing toward building areas that are highly visible to the public, while promoting an environment of common courtyards, public plazas, and open space areas.

The intent of these design objectives is not to reduce the total amount of architectural detail and landscaping used, but to orient such enhancements in highly visible areas within the public realm.

2.2.2 Site Design

Building Orientation

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[1] Images are' individual's mental representation of the parts of external reality known to him via any kind of experience including indirect experience

[2] Schema –"the term stands for the notion, stereotype, plan or map, plan of action or self-concept"

[3] The active process of obtaining information in the environment"

[4] "The process of thinking, learning and remembering that involves mostly giving meaning to the world rather than knowing about it"

[5] Involving feelings and emotions about the environment, motivations, desires and values.

• Building Orientation should facilitate the intended function of the Civic Center area.

• Both the main vehicular and pedestrian entries to Civic Center areas from the stree t should be enhanced with textured pavement, landscaping and accent trees, and appro priate lighting.

• The Civic Center site shall be delivered by the property owner to the City uncerti fied as to compaction (City will recertify the site after taking title).

• The Civic Center site shall contain a nine acre rough graded pad with a maximum 2% slope (the 2% maximum slope criteria shall not apply to the slope internal to t he pad and such slope shall not be included in the net pad area calculations), street access to the perimeter of the site, wet and dry utilities to the perimeter of the site (including an off-
site sewer line, if necessary, to provide sewer service for all of the nine-
acre property at all pad elevations, and connection to project area storm drainage syst em.

• The exact boundary of the site will be determined by the Grading Plan and the Ci ty's Site Plan, and both parties acknowledge that the actual gross acreage offered for dedication to the City will exceed nine acres, will run to certain property line and right-of-
way boundaries, and will include some slope banks adjacent to the Civic Center pad. Acreage calculated with the formula in this paragraph shall be referred to as "Net Acres.

2.2.3 Visible Edges

• Highly visible Civic Center building edges around the Civic Center area should be designed to provide a pleasant aesthetic, complementing the style of surrounding buildi ngs.

Mechanical & Functional Equipment

• Outdoor storage shall not exceed the height of surrounding walls.

• Ground mounted equipment, such as transformers and heating units, if otherwise vi sible to the public, should be screened with walls and/or landscaping. • No utility ap purtenances shall be allowed directly within a pedestrian area.

Civic Center Buildings:

The following design guidelines provide guidance and direction for the design of spec ific building uses on the Civic Center site, and cover site design, construction materia ls, appurtenances, and site elements. They do not, however, provide direction for any particular architectural style.

Civic Center and governmental buildings should be designed and constructed to be of a high quality, with form, massing, and style that complements that of its surroundings.

2.2.4 Location

Buildings may be oriented around an open space such as a central courtyard or plaza.

Pedestrian connections between office buildings and the uses that they serve shall be convenient, direct, and well-lit for the user.

Building entries for vehicular and pedestrian use shall be clearly demarcated and easily accessible, and shall be designed to minimize pedestrian and vehicular conflicts.

Civic Center and governmental buildings shall have an adjacent buffer area of landscaping, around their perimeter with the exception of entry points. Vehicles may not encroach in this area.

2.2.5 Architecture

The design of Civic Center and governmental buildings shall complement the design of its surroundings. Horizontal and vertical articulation shall be used to visually reduce the massing of the structure.

The building entrance should be clearly distinguishable and easily seen as a major focal point on the building.

The materials and colors used shall reflect those used in accompanying buildings, and be of an equally high quality.

2.2.6 Pedestrian Access

Multiple points of pedestrian access shall be designed for the Civic Center and governmental buildings, and be fully incorporated with the walkways and stairways, parking, open areas, and nearby buildings.

Pedestrian walkways, elevators, escalators, ramps, and stairways shall be well-lit for safety. Where walkways connect through parking lots they should be of sufficient width, excluding car overhangs.

2.2.7 Rooftops

The roofs of the Civic Center and governmental buildings should be designed to be integral with the overall building design and should complement the style and character of the buildings.

2.2.8 Parking Structure

Parking structures, where applicable, shall be designed and constructed to the same level of quality as the buildings they serve. Their design shall be integrated into the site as a whole, making them convenient and accessible for the surrounding Civic Center uses. The maximum height of any parking structure within Serrano Summit shall be the greater of either three stories or 36' in height.

2.2.9 Location

The use of pedestrian connections between parking structures and the uses that they serve shall be convenient, direct, and well-lit for the user. Entries to the parking structure for both vehicular and pedestrian use shall be clearly demarcated and easily accessible and shall be designed to minimize pedestrian and vehicular conflicts.

The parking structure shall be sited so as not to be a predominant feature of the site. In other words, the parking structure should be placed to the side of the major buildings within the Civic Center complex, so as not to screen the major Civic Center buildings to the greatest extent feasible. It should be noted that the parking structure is contemplated to be constructed in a future phase. Site planning on the Civic Center site shall take into consideration that portions of the surface parking lots will need to accommodate a parking structure as the need arises for additional parking.

2.2.10 Architecture

The design of the parking structure shall complement the design of the uses that it serves. The materials and colors used shall reflect those used in accompanying buildings, and be of an equally high quality.

2.2.11 Pedestrian Access

Multiple points of pedestrian access shall be designed into the parking structure, and be fully incorporated with the walkways, stairways, and elevators both within the structure and its accompanying buildings.

Pedestrian walkways, elevators, ramps, and stairways shall be well-lit for safety. Glass elevators and glass enclosed walkways are encouraged to provide a sense of security.

2.3 CIVIC CENTER LANDSCAPING

2.3.1 General Landscape Standards

• Any areas not designed for paving or building shall be landscaped and maintained.

• Planning Area 13 is located adjacent to Serrano Creek and therefore falls within th e "riparian" tree zone. A strong effort shall be made to provide compatible landscape design with native and existing transitional creek areas.

• Landscaping along Civic Center street edges shall be consistent with, and compleme nt, the landscaping of surrounding uses along that street.

• Civic Center landscaping shall make use of street trees having a minimum size of 24" box spaced at regular intervals of between 30' - 40' o.c., while maintaining an average tree spacing of 35' o.c. throughout. As accen ts, plantings of informal clustered massing's of California native trees are encouraged with a minimum size of 15 gallons, where applicable.

• The perimeter landscape of the Civic Center complex shall reflect the character of Serrano Summit and shall strengthen its community landscape theme.

• The design of the Civic Center shall employ water conservation techniques to provi de a sensible and complete landscape solution for the center.

• Underground drainage shall be used to drain landscaped areas.

• Automatic irrigation infrastructure shall be permanently provided in all landscaped ar eas, except for those designed as swales for water quality purposes.

Refuse & Recyclable Material Storage Areas

• Refuse and recyclable materials storage areas shall be enclosed and screened in com pliance with the City of Lake Forest Municipal Code.

• Storage areas should be screened from public view through the use of landscaping, fencing or walls or a combination thereof.

• Where appropriate to the building typology, refuse and recyclable material containers should be integrated into the overall building form to facilitate screening.

• Enclosures shall be finished using materials compatible with the Civic Center archite cture. Gates shall be painted solid metal.

• The location of storage areas shall be conveniently accessible for trash removal by standard refuse disposal vehicles.

• Storage areas that can be overlooked from above should incorporate roof structures to screen the contents of the enclosure from view. Such roof structures should be designed to allow the doors of the refuse container to fully open.

2.3.2 CIVIC CENTER AREA LIGHTING

The Civic Center area lighting component addresses the illumination of the Civic Center area for the purposes of safety, security, and nighttime ambience, including lighting for parking areas, pedestrian walkways, architectural and landscape features, and any additional exterior areas

• Exterior lighting within a parking lot, service area, or other intentionally lit area should be located and designed to minimize direct glare outside of the specific area.

• Lighting sources shall be shielded, diffused, or indirect in order to avoid glare to pedestrians and motorists. Lighting

fixtures should be selected and located to confine the area of illumination to within the boundaries of the Civic Center area.

• Pedestrian paths should be lighted by pole, directed up lighting, or bollard-type fixtures that are in scale with the pedestrian, typically no more than 16‘ for pole lights or 3‘ in height for bollards. All lighting fixtures shall be designed

To resist vandalism.

• A balance of lighting for building users and lighting of architectural features should be emphasized to provide user-friendly interior and exterior schemes with the main consideration being the aesthetic effect of the lighting design.

• Night lighting and security lighting shall be sensitively designed to ensure that no off-site glare is directed toward neighboring uses and that the overall intensity of the site lighting is not excessive. The use of excessive nighttime security lighting is discouraged, with other security measures being considered, instead.

• Downward-directed building illumination placed below the horizontal building line helps reduce glare and adds an aura of class to the façade.

• Skyward-directed lights designed to attract attention, such as searchlights or moving lights, are prohibited.

• Lighting near to and adjacent to open space areas shall be designed to minimize s ky glow and glare in order to minimize light pollution and be sensitive to Serrano C reek.

• Street lights should be located between street trees to provide light that is uninterru pted by tree canopies.

• Freestanding lighting styles shall be post, column, or double column types.

• Building signs illuminated above or below by spotlights are permitted.

• Lighting fixtures, poles, wattage and lens for all site, walkways, parking lot, and str eet lights shall match community lights for overall community continuity.

TABLE 8-1
SUMMARY OF LIGHTING DESIGN CRITERIA

USE	LIGHT LEVELS*	UNIFORMITY RANGE	DISTRIBUTION	LIGHT SOURCE
Roadways	0.4	20:1	Full Cutoff	Metal halide, induction
Roundabout	0.5	15:1	Full Cutoff	Metal halide, induction
Pedestrian Walkways	0.5	10:1 Primary 15:1 Secondary	Full Cutoff or Cutoff	Metal halide, induction
Plazas	0.5	15:1	Full Cutoff or Cutoff	Metal halide, induction
Entries	1.0	15:1	Full Cutoff, Cutoff, or Semi-Cutoff	Metal halide, compact fluorescent, LED, induction
Landscape			Shielded	Metal halide, compact fluorescent

Table 1 lighting design criteria

2.4 How to Design a Modern Civic Centre

Today, a civic center can be a symbol of modern democr acy and a natural gathering place for the citizens. But h ow do you infuse that in architecture?

There was a time when a city hall should affirm the power of municipal authorities -

and infuse citizens with awe via a monumental building with tall doors, a large hall and a minimal interaction with its surroundings. Today, luckily, we are far from tha t symbolism of power, and a civic center should be so much more.

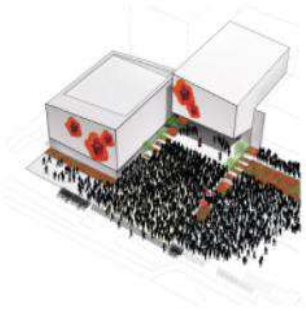
Here are three key thoughts to consider:

2.4.1 Obliterate the building/street boundary

To strengthen the idea that a civic center is for the people, avoid creating a building that feels closed. A modern civic center should have an inviting interior and exterior pedestrian scale, an animated street presence and a square for broad civic use. Create a space that can host yoga in the morning, ball games on a big screen, work lunches, holiday markets, play dates, civic gatherings and other events that will make it a natural meeting point for the public. For the new civic center in Etobicoke, Toronto, we created a cascade of smaller built forms and spaces in a myriad of scales to make the building address the civic square and feel accessible. We also analyzed the local microclimate conditions thoroughly to create shelter in the right places - prolonging the outdoor season with at least 5 weeks to foster an (even more) engaging public realm.

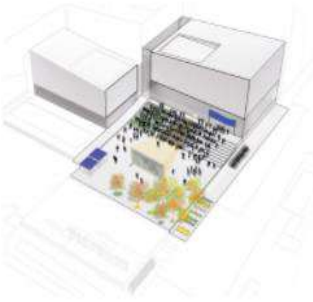
Designing for Civic Use

Councillor Battle: Similar to a DJ battle, Councillors and members of the Public can meet and exchange opinions. Civil Governance in a fun way.

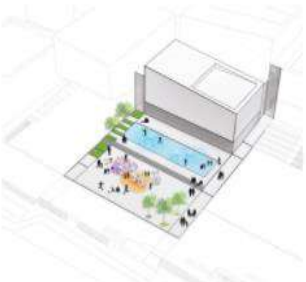


Remembrance Day: The Council Chamber is decorated with poppies, speeches are held on the Civic Square and coffee and tea is served in the gymnasium.

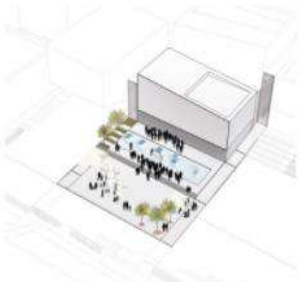
Outdoor Yoga: Saturday morning, a great way to start the weekend.



Baseball Game: The Toronto Blue Jays are followed closely by families in the neighbourhood.



Fun in th Sun: kids can play in the water feature and crawl on the Play Art sculptures. The sculptures are made by different artists and are rotated every 6 months.



Ice Sculpture Festival: Every year different teams from the neighbourhood challenge each other in the Ice Sculpture Festival.

Lunch on the Square: People working in the offices can enjoy lunch under the trees on the Civic Square while kids from the kindergarden are using the Westwood sign as a climber.

Holiday Market: An anually returning event the whole Square is buzzing with life each December.

2.4.2 Embrace the open democracy

A civic center or city hall is a physical manifestation of democracy in the sense that it reflects some contemporary currents and structures in society. To reflect and honor this, civic centers as well as city halls must be open, inviting and transparent. Use glass sections to ensure the citizens' as well as the politicians' insight into each other's everyday lives, and send the citizens straight into the heart of the building, when they're contacting the municipality – do not let them enter a front desk in the foyer only. Make sure the administrative functions are visible.

Figure 2 interior view

2.4.3 Care for the community with multi-functionality

A modern civic center should have the character of a community center, where culture, **business life, healthcare and administration fuse** and profit via common facilities and locations. Multiple functions ensure life and activity throughout the day and the week – even after hours. The civic center becomes a symbol of a lively community. In Etobicoke, a community recreation center, swimming facilities, **a public library,** offices and a **child care center** is placed together with the **city council hall**. If the citizens have a strong incentive to use the town hall and its facilities they will take greater ownership it. This will strengthen local democracy. Offer the **house to the public for weddings and other private events.** In this way, everyone, regardless of age, gender and social background, receives free, equal access to democracy.

Chapter 3 Concept

3.1 POROSITY IN ARCHITECTURE

"For Architecture to take a deeper role as a humanizing cultural factor, we need works cast in matter itself –
no words can help. We need it to have monumental force that gives man hope, c onfidence, and self-discipline –
we need it to have social awareness and compassion for the human tragedy. Arch itecture must be deeply rooted in place and circumstance; it requires a delicate sens e of form; it must support human emotions".

Alvar Aalto, Eliel Saarinen's State Funeral Speech, 1950

My inspiration for the design concept can be found on Aalto's text "Architecture in Finland" written in 1941. Aalto specifies that a building is like a living organism tha t can adapt to expansion and change. Therefore, instead of imposing a volume, a lig ht sloped canopy, constructed with wood columns and glulam beams, dematerializes its presence, merging the front landscape with the back courtyard and the topography. T he courtyard, accessible from the lower level, has been created with the intention of providing a new egress and to give natural light to staff related areas such as the ne w storage space and technical room.

3.2 Porosity: The Architecture of Invagination

As a highly-
respected Australian artist and architect, Richard Goodwin aims to change our view of cities as collections of individual buildings.

Porosity: The Architecture of Invagination changes our view of cities as collections of individual buildings. By prejudicing public space and finding previously undefined pu blic spaces within them—"Chiastic Space"—
it presents ideas for a radically transformed western city. By studying, defining and i ndexing these spaces, Goodwin has found "what a building desires" to do next in its determination to facilitate new technologies, new building-to-
building connections and demands on its program.

Although the term "Porosity" is now widely used, Goodwin's pioneering use of the te rm since the 1990s remains unique. He uses it as a way of describing an urban exp erience, which turns architecture inside out and de-
emphasizes the obsession with facades. By licensing public space as needing to be eq

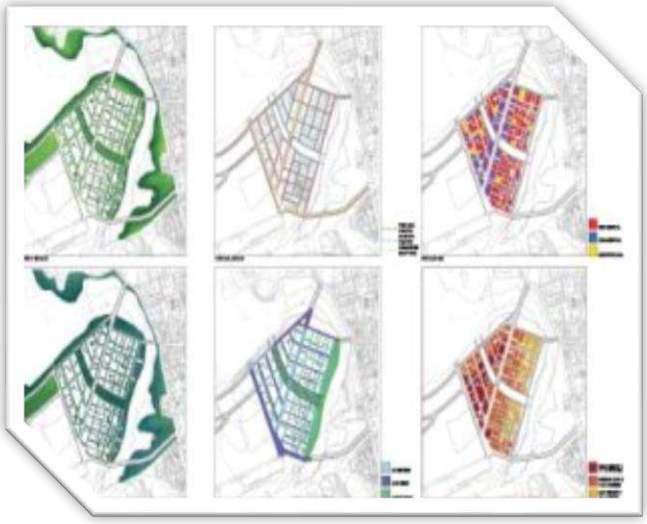
ual to private in any city equation and accepting the need of growing cities to have multiple ground planes, Goodwin's research and art/architecture practice challenges architecture to accept continual change as the only sustainable alternative. This complexity and flux will lead to an architecture driven by its interior and its connection to the city's public spaces as the title provokes.

Figure 3 porosity in buildings

Figure 4 porosity on building exterior

Figure 5 porosity in interior

Figure 6 porosity on building exterior Figure 7 porosity on building exterior



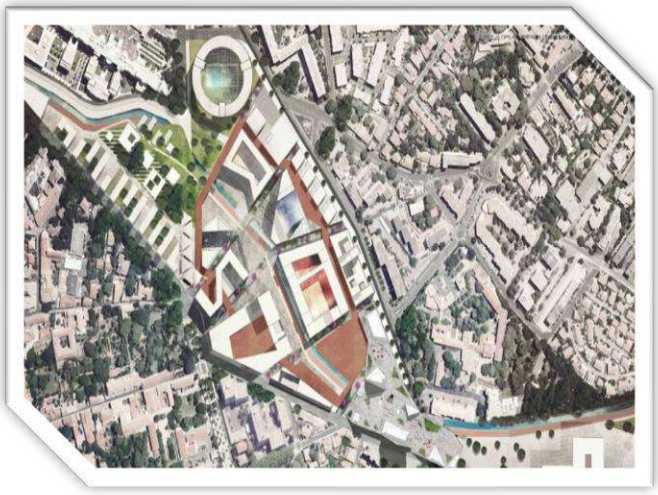


Figure 8 urban porosity Figure 9 urban porosity

Chapter 4: CASE STUDIES

4.1 Seattle public library

Rem koolhas , Seattle, Washington

Total area 362.987 square feet

The building is divided into eight horizontal layers, each varying in size to fit its fu nction. A structural steel and glass skin unifies the multifaceted form and defines the public spaces in between the carpeted ‘’living room’’ contains the fiction stacks whil e non-fiction is located on the “Dewey ramp”; a four-
story ramp that allows people to browse through books in a continuous sequence. Th e reading room, on the top floor, has views of Puget Sound and the surrounding mo untains.

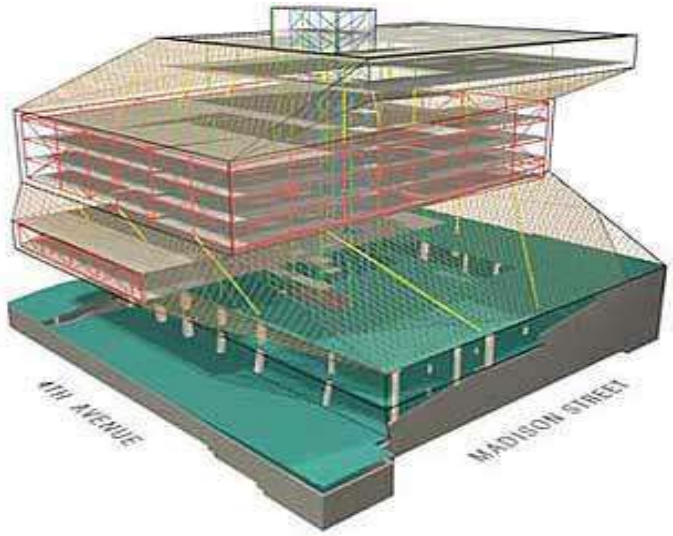


Figure 10 Seattle public library Rem Koolhaas wireframe diagram

Koolhaas sees the new library as a custodian of the book, a showcase for new infor mation, a place for thought, discussion and reflection -
a dynamic presence. The fact that the contents of a whole library can be stored on a single chip, or the fact that a single library can now store the digital content of all libraries, together represent potential rethinking: new forms of storage enable the s pace dedicated to real books to be contained; new forms of reading enhance the aura of the real book. The first operation has been the "combining" and consolidation of the apparently ungovernable proliferation of programs and media. By combining like

with like, we have identified five platforms, each a programmatic cluster that is architecturally defined and equipped for maximum, dedicated performance. Because each platform is designed for a unique purpose, they are different in size, density, opacity. The in-
between spaces are like trading floors where librarians inform and stimulate, where the interface between the different platforms is organized - spaces for work, interaction, and play.

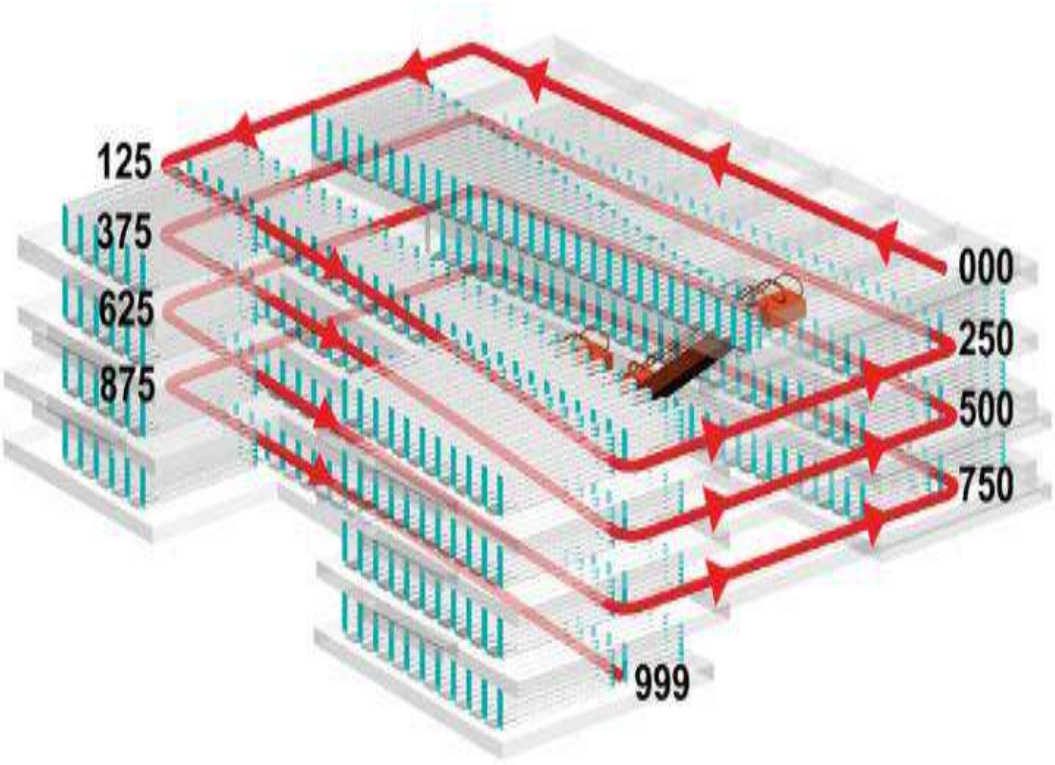


Figure 11 circulation, SPL source Seattle Central Library/ ***Continuous collection***

Analysis:

The cultural block has a program requirement of a 120,000 volume library which amounts to approximately 30000 sq. ft. This case study shows an effective organization of large spaces and connection between stacking, reading, official and other public spaces. It also portrays an effective technique of keeping different functions on differen

t platforms and connecting them by a single circulation ramp. The spaces are well de signed and show amicability to the occupants in terms of comfort, ambiance, sunlight etc.

4.2 Wolfsburg Cultural Center

The Center was designed with the goal of providing a place for meetings and cultu ral activities to balance the monotonous life of a typical industrial city. The building consists of four parts: the municipal library, the dominant element; a small school for adult education; a sector for hobbies and entertainment; and another for club meeting s and community events with terraces and lounges. The building is designed in the f orm of faculty, closed around its central square. The four parts of the Center formed a single building, divided into separate volumes. This game joints characteristic of th e architect, the Center provides its most important features, while separating the areas according to their functions. The link is provided between different units, after succe ssive concatenated units.

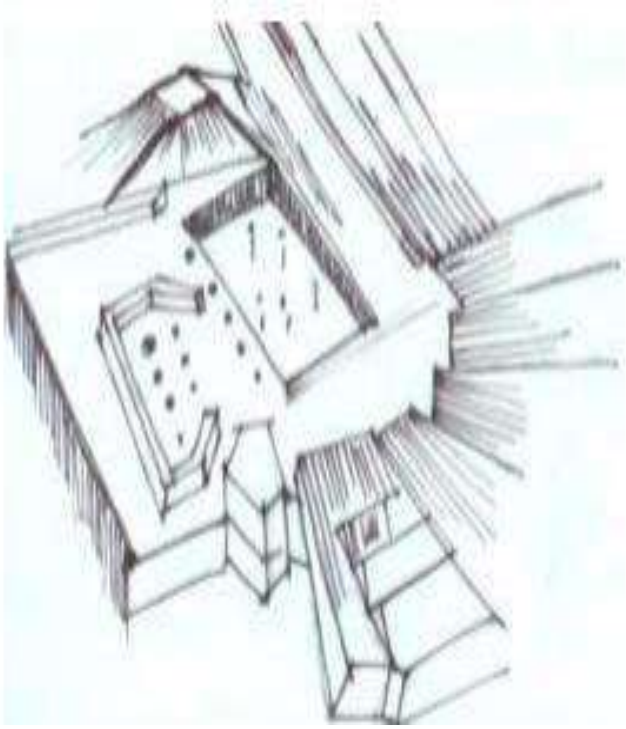


Figure 12 Main Complex-view

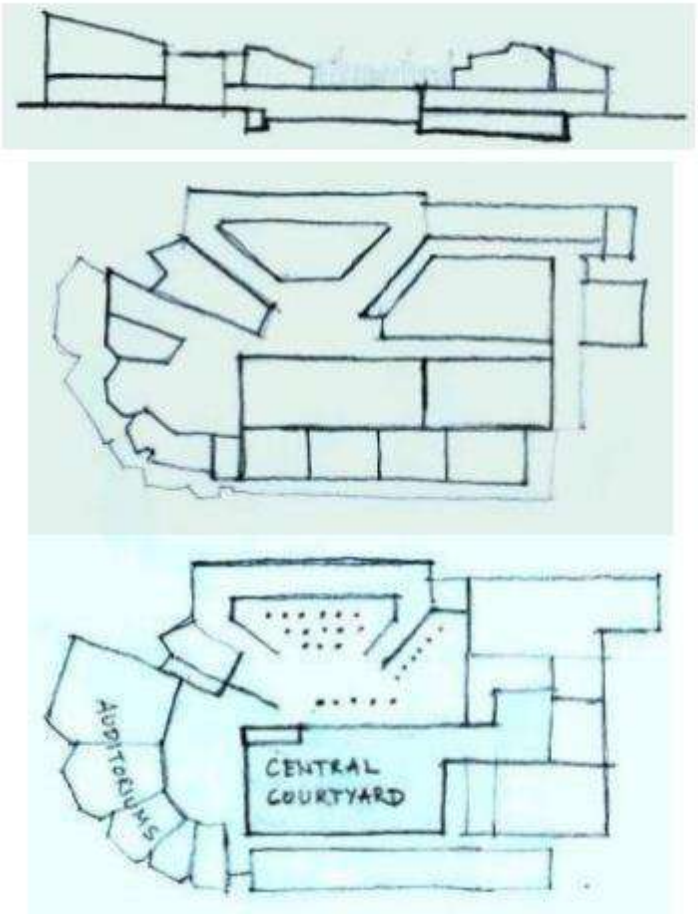


Figure 13 : Section, Plans Source: www.greatbuildings.com

Analysis:-

Designed by Alvar Alto, this building depicts an image of the Greek 'Agora' with a big public space in the center and the building edges as the arcade with multiple p

ublic entrances. The massing of this building seems to be pretty effective in juxta-positioning private and public spaces, indoor and outdoor spaces.

4.3 King Abdullah Civic Center

Dammam, Saudi Arabia

Figure 14 portfolio image view Source: Ai+ architecture.com

Master planning, landscape and architectural design services were provided for the King Abdullah Civic Center, a landmark waterfront development for Dammam and the Eastern Province of Saudi Arabia. The 197,000 square-meter development program includes a civic center and exhibition center, covered stage/theater, marketplace, maritime museum, public library and the King Abdullah Center for Cultural Understanding. Two hotels are planned, one family-oriented and one for business travelers, along with a sports training facility, marina, mosque, amphitheater, gardens, parks and public squares.

Figure 15 interior view Source: Ai+architecture.com

Client: Kingdom of Saudi Arabia Eastern Province and the Municipality of Dammam

Collaboration: Zuhair Fayez Partnership, PA Consultants

4.4 Marin Civic Center

Figure 16 The Marin County Civic Center Source:en.wikipedia.org/wiki

The Marin County Civic Center Administration and Hall of Justice buildings dramatically illus trate the kinship of Wright's architecture to the surrounding landscape. The long horizontal bui ldings gracefully link the crowns of three separate hills. The circular theme is evident throug hout the complex. Exterior balconies run down the outsides of both buildings. The decorative arches create a sense of rhythm and are made of cement stucco on metal laths. Gold spher es outline the entire interior and exterior rooflines. They create the effect of rhythmic unity a nd exemplify the Oriental influence Wright displayed in his work. Wright first used many fea tures now considered commonplace in these buildings. Atriums run down the center of each building. They widen as they rise from ground floor level to the fourth floor, to create an il lusion of upward spiraling ramps. This also creates narrower walkways on the upper floors, where there is less foot traffic. Elevators and stairs link one floor to another. Atrium planting s provide employees and visitors with the 39-
pleasing prospect of either looking inward to the planted, sky-
lit malls or outward to green trees and hills. The building complex abounds with detail. Elab orate grillwork, accents, and appliqués all follow the "flow of pattern" carefully orchestrated b

y Wright. Glass and panel partitions separate the walkways around the atrium from office spaces to create an airy, spacious effect. Art exhibits on the first and third floors contribute to the aesthetic harmony of the interior. The central architectural focus for the building is the 80-foot diameter dome with its 172-foot, slender gold spire. The spire creates a visual punctuation mark that breaks the horizontality of the two buildings. It was originally designed to serve as an exhaust outlet for the furnace and as a radio tower, which was precluded by new technology.

Analysis:-

This study is particularly useful in planning the commercial and the institutional parts of the project. Since this group of buildings consists majorly of offices, it is a good example which shows how to design such repetitive spaces without getting monotonous. It also helps in understanding placement of service cores, atriums and grid layout.

4.5 Javits Convention Center

"The exterior of this mammoth, five-block long building is an assemblage of rectilinear forms, all shaped by a framework of prefabricated steel modules fitted with clear glass. Inside, the structure is supported by tubular steel pillars that resemble chunky champagne glasses. At its south end there's a spectacular 150-foot-high lobby, dubbed the crystal palace. Also housed within the center's 1.8 million square feet is a 2,500 seat auditorium and acres of exhibition halls and meeting rooms."

Figure 17 exterior view Source: - en.wikipedia.org

Analysis:-

This building consists of large exhibit spaces/art galleries which is pertinent to the thesis prog ram and will be helpful in planning similar spaces. It also proves to be a good example wh en it comes to structure and designing unobstructed large spaces.

Figure 18 interior view Source: - en.wikipedia.org

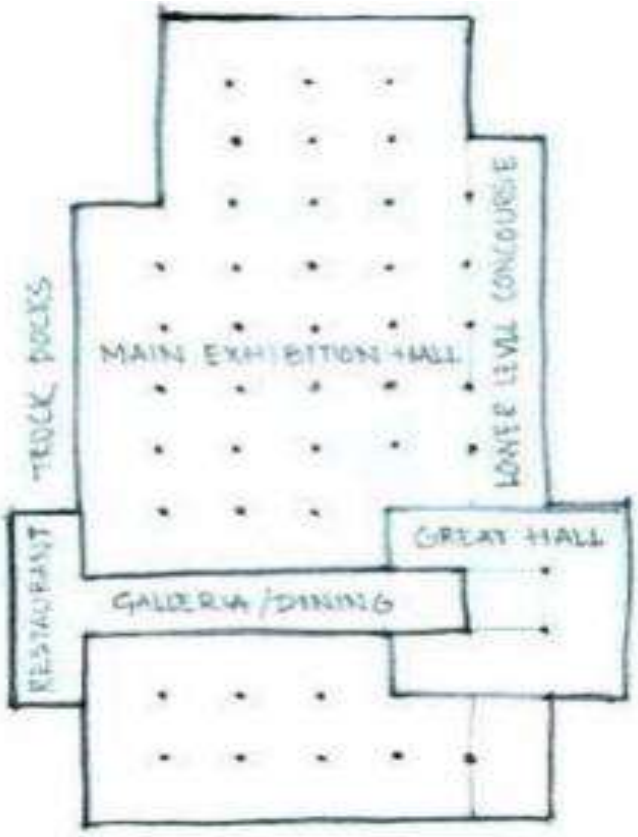


Figure 19 :- Plan –Javits Convention Center Source: www.greatbuildings.com

4.6 Ofunato Civic Center and Library

Chiaki Arai Urban and Architecture Design

Text description provided by the architects. Located in Ofunato, a town on the distinctive Sanriku Kaigan coastline of Iwate prefecture in northeastern Japan, Ofunato Civic Center and Library is a cultural building complex which consists of a main hall with 1100 seats, a library, multi-purpose spaces, an atelier, a tea room, and a studio. In its development, regional workshops and fieldwork have been organized by more than 50 times to make communication among architects, local residents and public officer.

Following those workshops, programs of each function were verified, and a library was added as per requests from its locals. How to represent its local form has also been discussed in order to design a new iconic community space. In workshops, architects were required not to adhere to any particular forms or ideas, and to discern architecture, the form of space, from something ambiguous. Through many events, the power in its creating process of architecture motivated the local involvement in the project. Consequently, it has attracted more than 20,000 people every month in a city of 40,000 people since it was inaugurated.

Figure 20 exterior view

Figure 21 theater

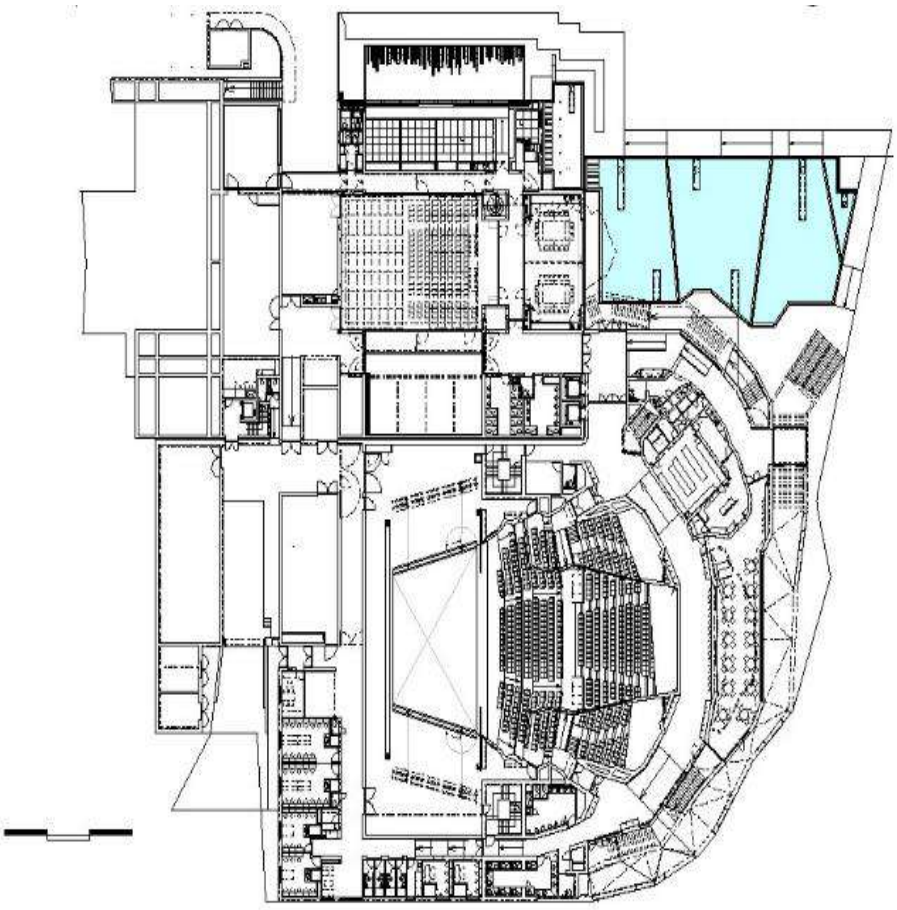


Figure 22 plan

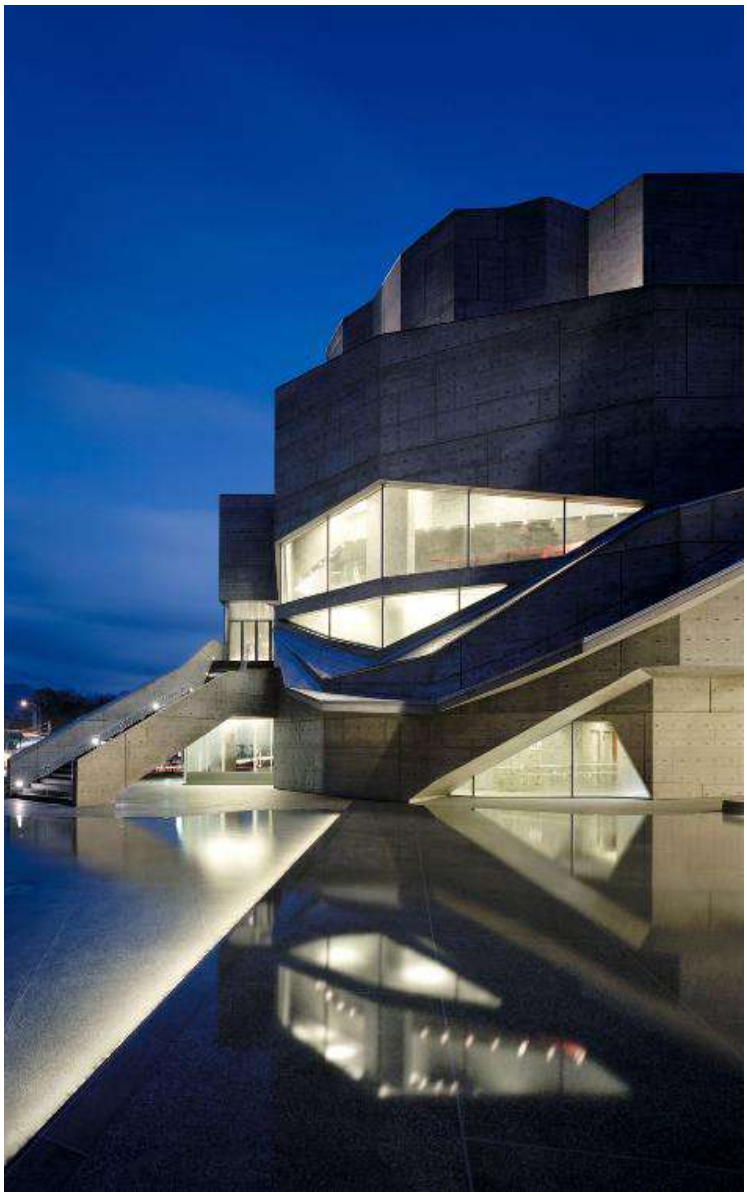


Figure 23 exterior

Figure 24 library

CHAPTER 5: SITE

5.1 MACRO LEVEL

5.1.1 BAHRIA TOWN, LAHORE

THE SITE CATERS THE WHOLE BAHRIA TOWN AT THE MACRO LEVEL WIT H THE RADIUS OF 6071 ‘ i.e SIX THOUSAND AND SEVENTY ONE PEOPLE

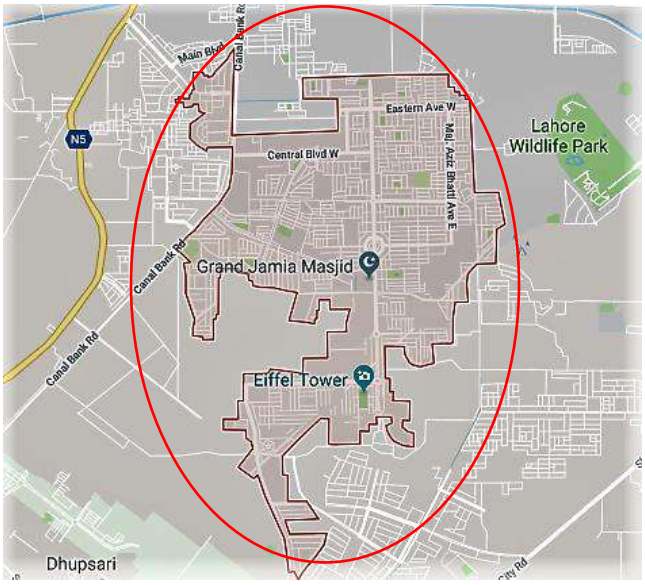


Figure 25 bahria town

5.1.2 BIOME

•Lahore, Punjab, Pakistan is at 31’ 33’N , 74 ‘ 19E, 215M (705 FT) See map.

.Lahore, Punjab has a subtropical steppe/ low-latitude semi-arid hot climate (koppen-feiger classifications).

According to the hold ridge life zones system of bio climate classification Lahore, Pu njab is situated in or near the subtropical thorn woodland biome.

.Average monthly temperatures very by 21.1'C (38'F). This indicated that the cotinent ality type is continental, subtype subcontinental.

5.2 MESO LEVEL

5.2.1 LOCATION OF THE SITE LAHORE BAHRIA TOWN

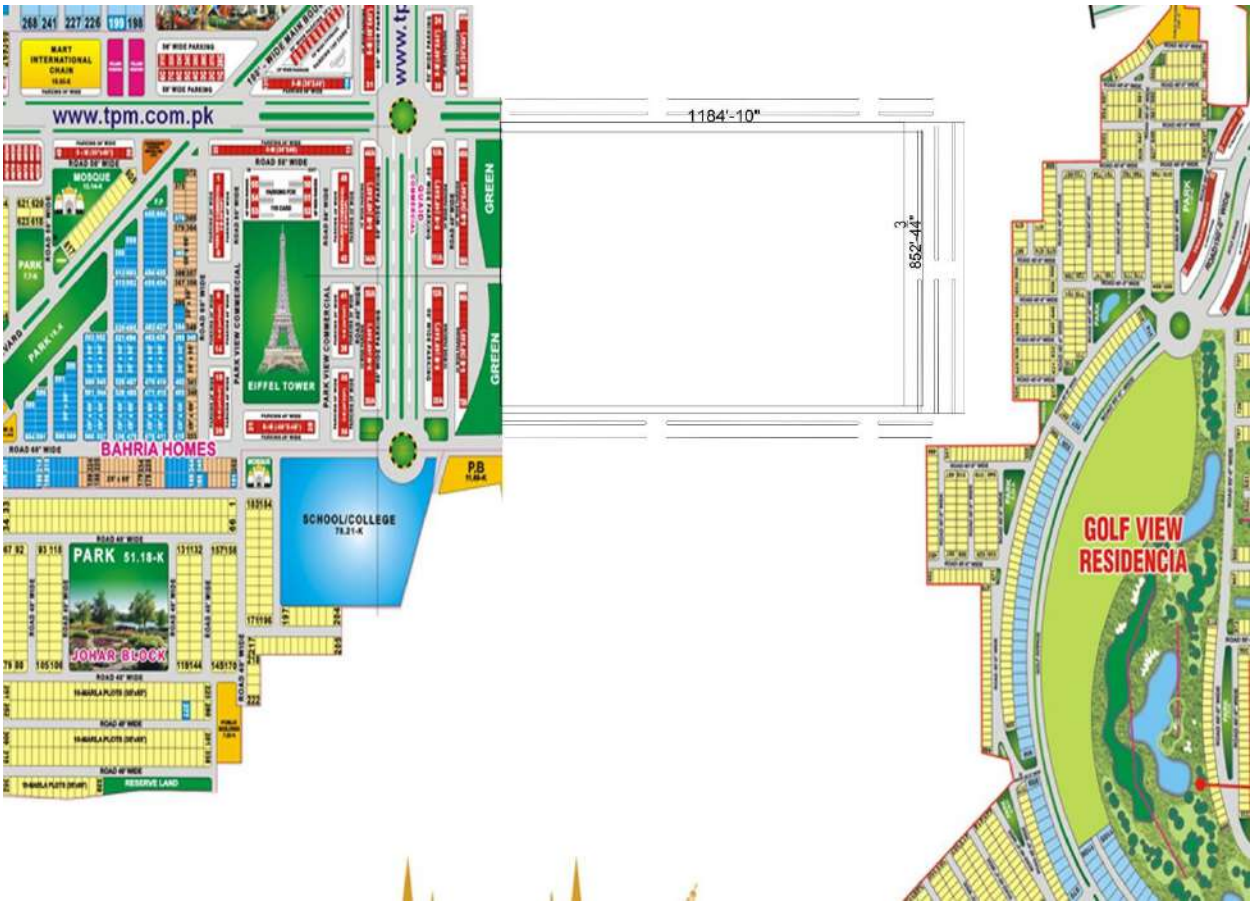


Figure 26 urban developed context of the site Source zameen.com

SELECTED SITE

located on main Blvd. in front of

Eiffel Tower Replica

i.e. catering immediate 500 residents

5.2.2 CONCLUSION: -

hence site is located in a semi commercial and residential context which enables t he site to carry a varied multi-

functional program i.e. semipublic, public and private spaces.

5.3 MICRO LEVEL: -

5.3.1 AREA OF THE SITE

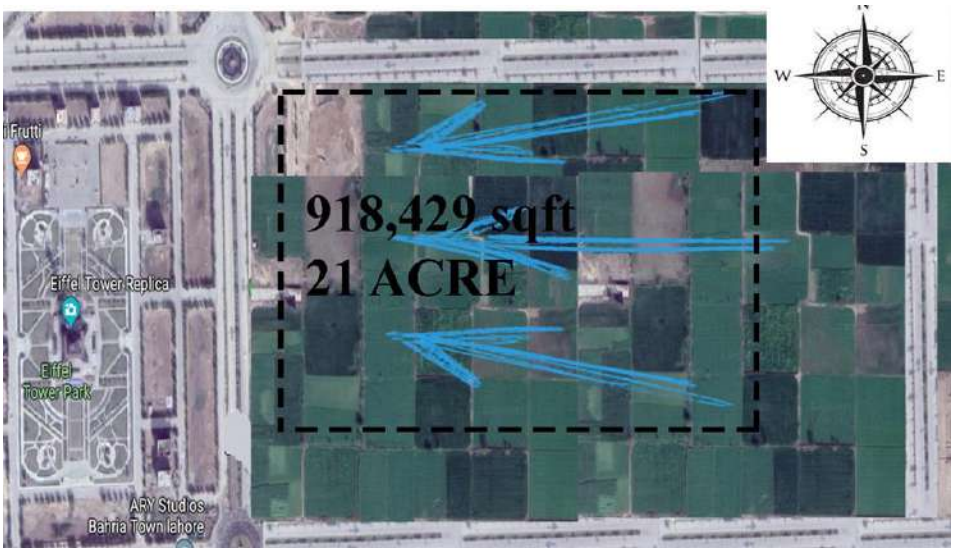


Figure 27 site

5.3.2 ACCESS AND ENTRANCE

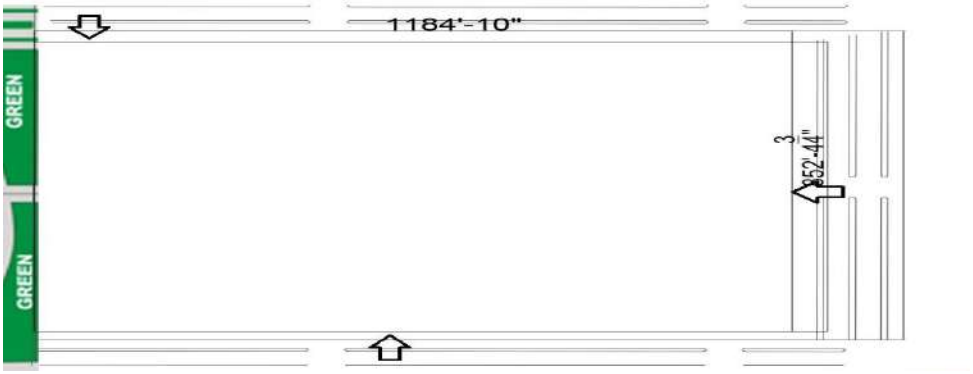


Figure 28 site

5.3.3 MAIN ROAD'S NETWORK AROUND THE SITE

Figure 29 bahria town urban context

Approachable through all major means.

Distance of site from Central Boulevard 10’

Distance of site from bahria town Main Boulevard 10’

5.3.2 CONCLUSION:-

The site has maximum potential to itself to attract the human traffic towards it and enables the person to travel easily due to wide and vast road network & hub for p ublic of bahria town comprising of more than 3000 residents.

5.4 TOPOGRAPHY:

The topography of the site is mainly flat with very minor undulation.

5.5 VIEWS:

Figure 30 site

Figure 31 site

Figure 32 site view

Figure 33 site view

5.1.1 Analysis:-

Full utilization of the site to the best potentiality and fulfills the requirements of clie nt with basic educational, cultural, entertainment and professional needs.

CHAPTER 6

6.1 PROGRAM REQUIREMENTS

I will follow the program requirements as of the original project proposal. The progra m can be broadly categorized into: commercial institutional, cultural. I will design the master plan for the entire site (21 acres). The program divisions are listed in the re mainder document.

6.2 Area Chart for the entire Project Proposal

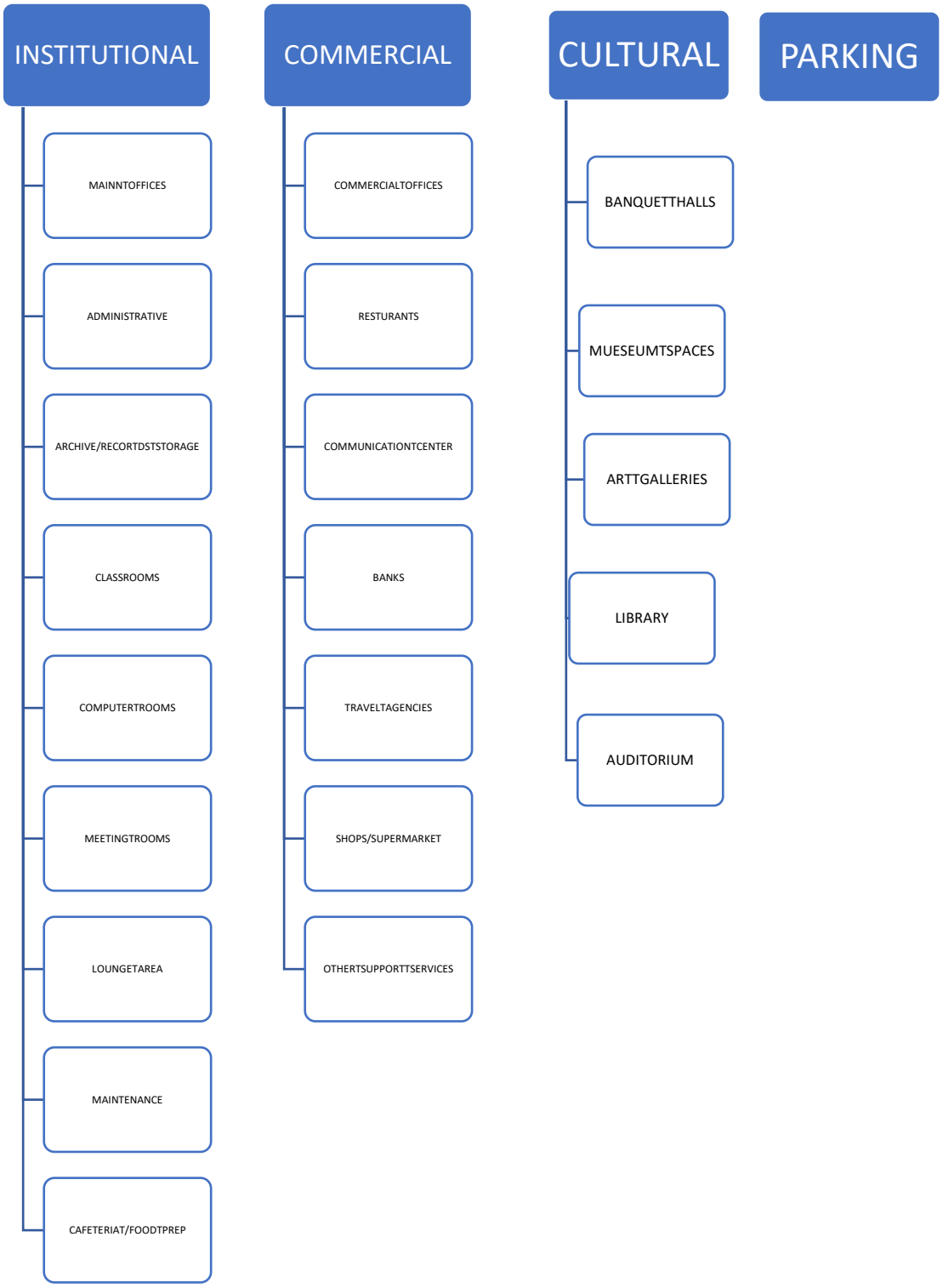
PLOT AREA	**21 ACRE**
TOTAL COVERED AREA	**918,429 SQFT**
INISTITIUTIONAL AREA	**78,876 SQFT**
COMMERCIAL AREA	**51,202 SQFT**
PARKING CAPACITY	**70 VEHICLES**
AUDITORIUM	**9469 SQFT**
LIBRARY	**19364 SQFT**
APPARTMENTS	**35,000 SQFT**
COFFEE SHOP	**1895 SQFT**
OPEN SPACES	**30,000 SQFT**

6.3 Program: Macro and Micro

Macro program deals with the general proposal for the site.

Micro program deals with sub-
programs of the proposal and informs about what all functions are accommodated in

a particular building or a set of buildings. According to the actual proposal, the com mercial and the institutional areas are accommodated into one building, each allocated 50% of space.



6.4 TYPICAL SPACE RQUIRMENTS

Micro program: Cultural Block

6.4.1 LIBRARY

Book volume 1,20,000

Linear feet of shelving 6300 ft

Amount of floor space 8000 sqft

Reader space 4250 sqft

Staff work space 2500 sqft

Men's toilet 800 sqft

Women's toilet 800 sqft

Estimated additional space 6250 sqft

6.4.2 Auditorium

Population served 1000

Vestibule and gallery 2200 sqft

Checkroom 340 sqft

Lobby 2000 sqft

Ticket office 100 sqft

Lounge-rehearsal room 1500 sqft

Administrative 700 sqft

Men's toilet 500 sqft

Women's toilet 500 sqft

Auditorium 11600 sqft

Radio studio 600 sqft

Control room 140 sqft

Director room 40 sqft

Quite room 60 sqft

Projection room 400 sqft

Spotlight booth 800 sqft

6.4.3 ART GALLERY

Public entrance 80 sqft

Lobby 100 sqft

Cloak room 100 sqft

Small meetings/exhibit room 500 sqft

Mec.Room 80 sqft

Work Room 110 sqft

Service Entrance 30 sqft

Collection storage 1200 sqft

Display room 1600 sqft

Offices 150 sqft

Men's washroom 100 sqft

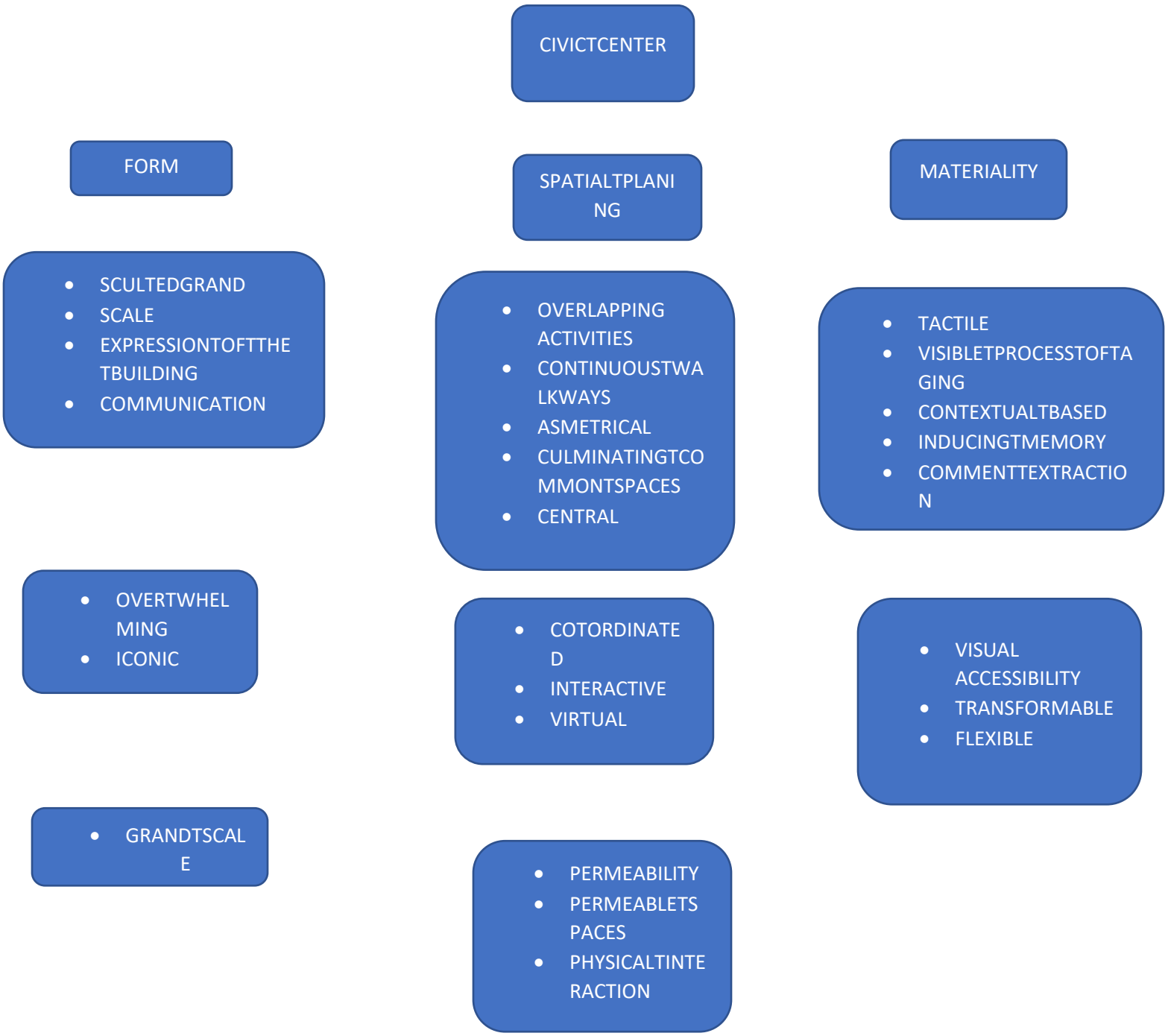
Women's washroom 100 sqft

Floor space 3772 sqft

6.4.4 Parking

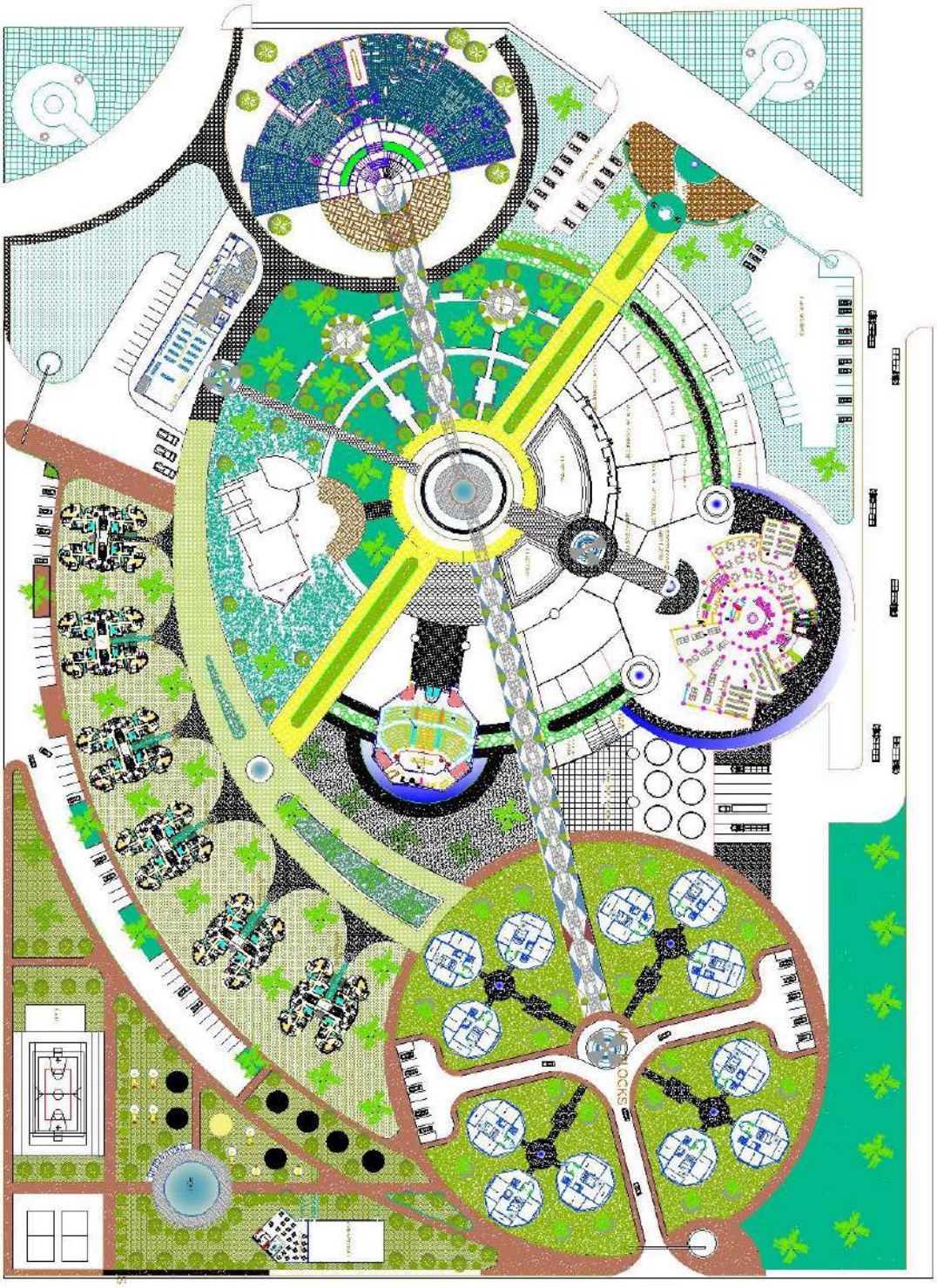
Parking facility 50 % of the parking would be for cultural part and 50 % would be for commercial and cultural space. Parking would be distributed in incidental surface parking zones.

6.5 DESIGN STRATERGY



CHAPTER 7: - Design

7.1 MASTER PLAN



7.2: - Library

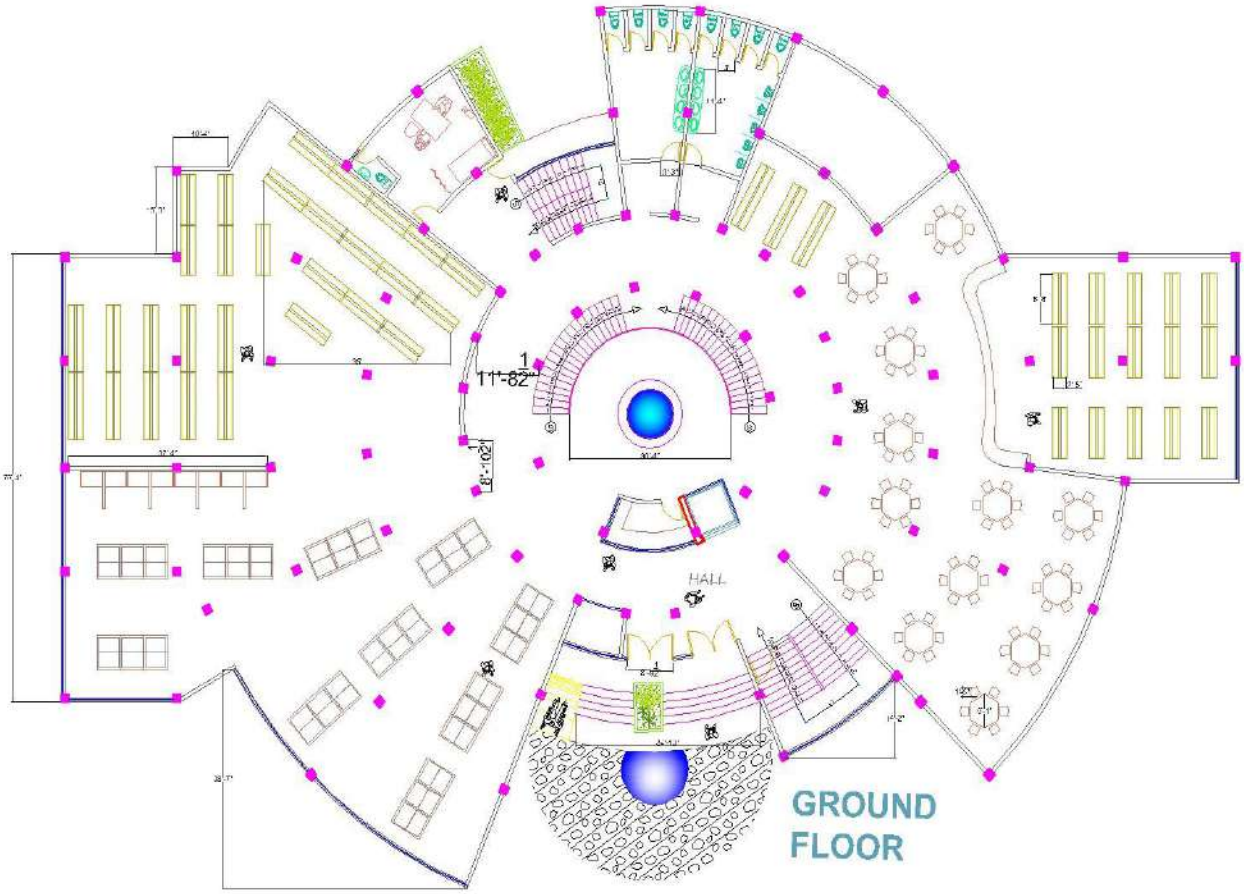


Figure 34 library plan

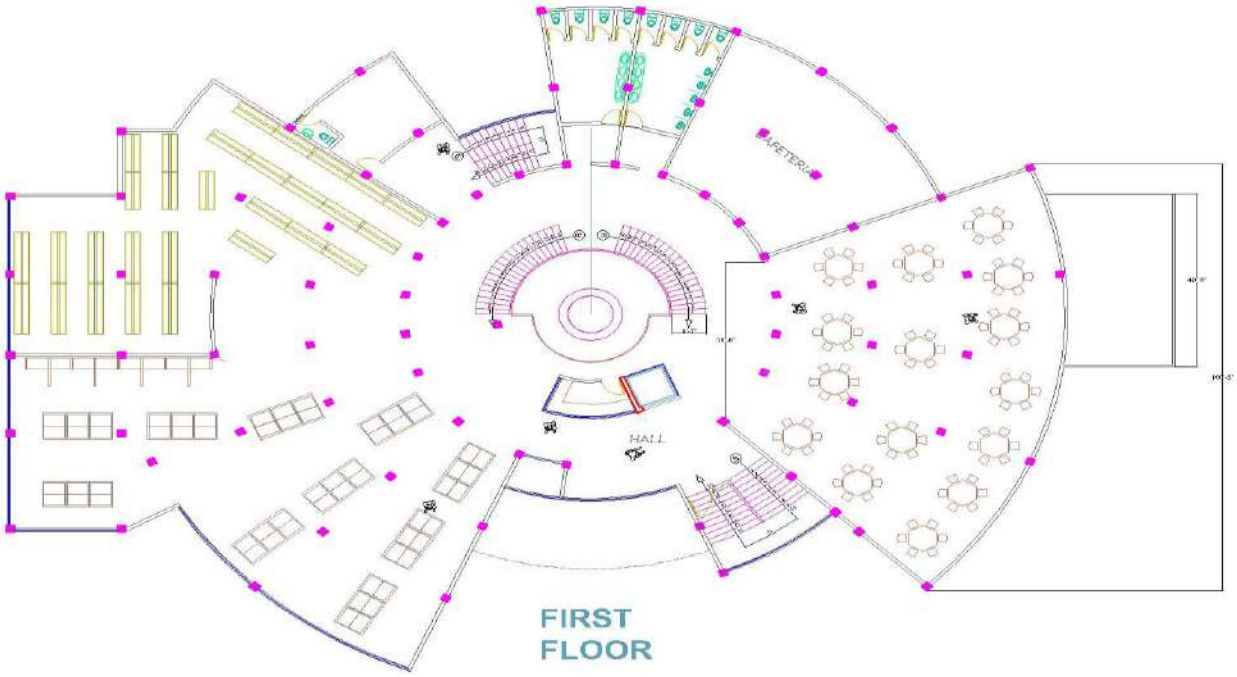


Figure 35 floor plan

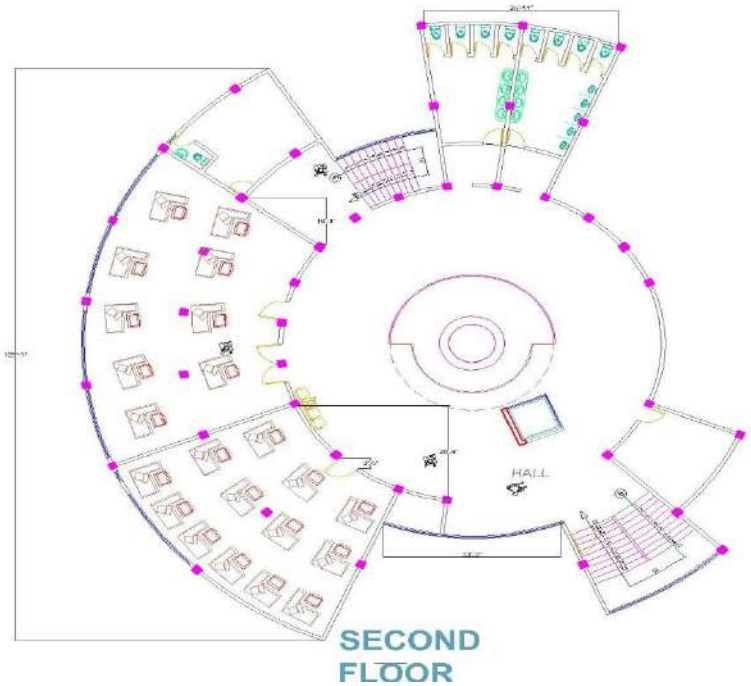


Figure 36 floor plan

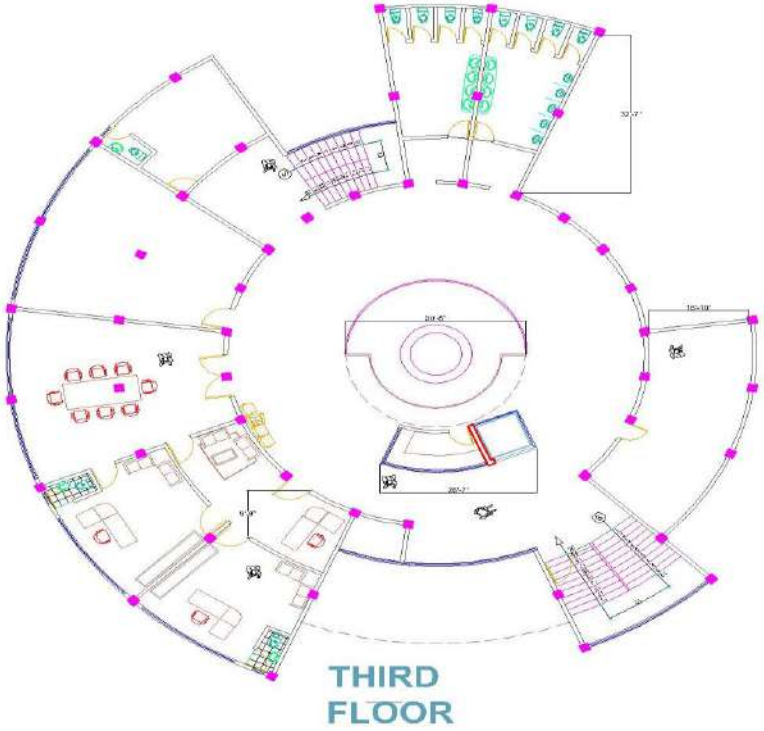


Figure 37 floor plan

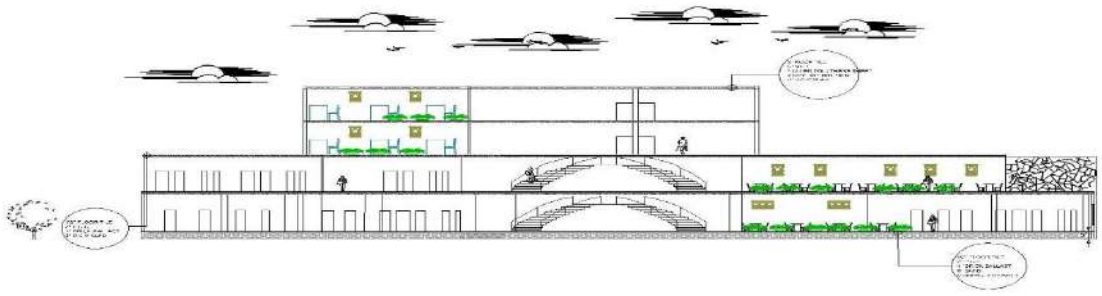


Figure 38 library section

Figure 39 library interior view

Figure 40 library interior view

7.3 Auditorium

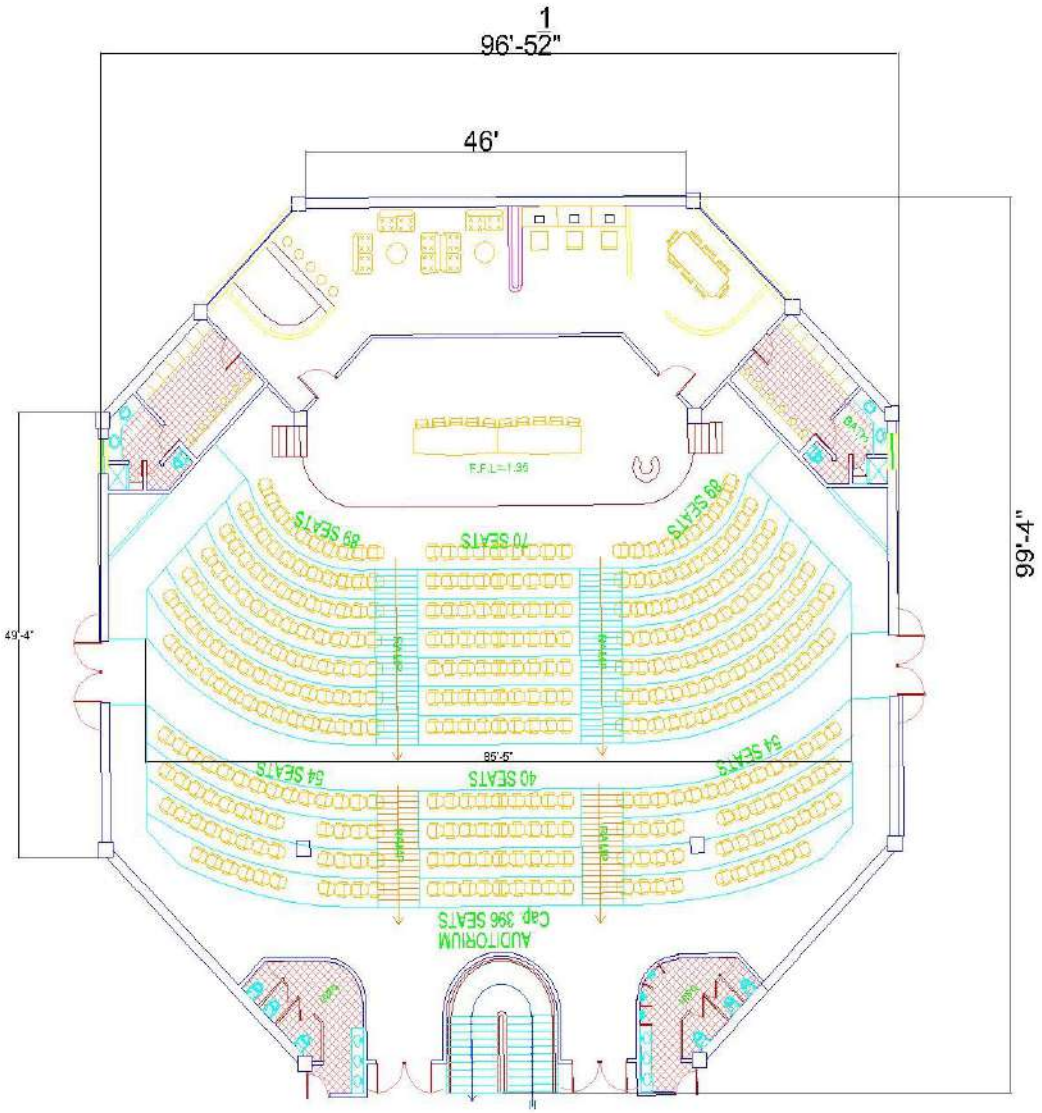


Figure 41 floor plan

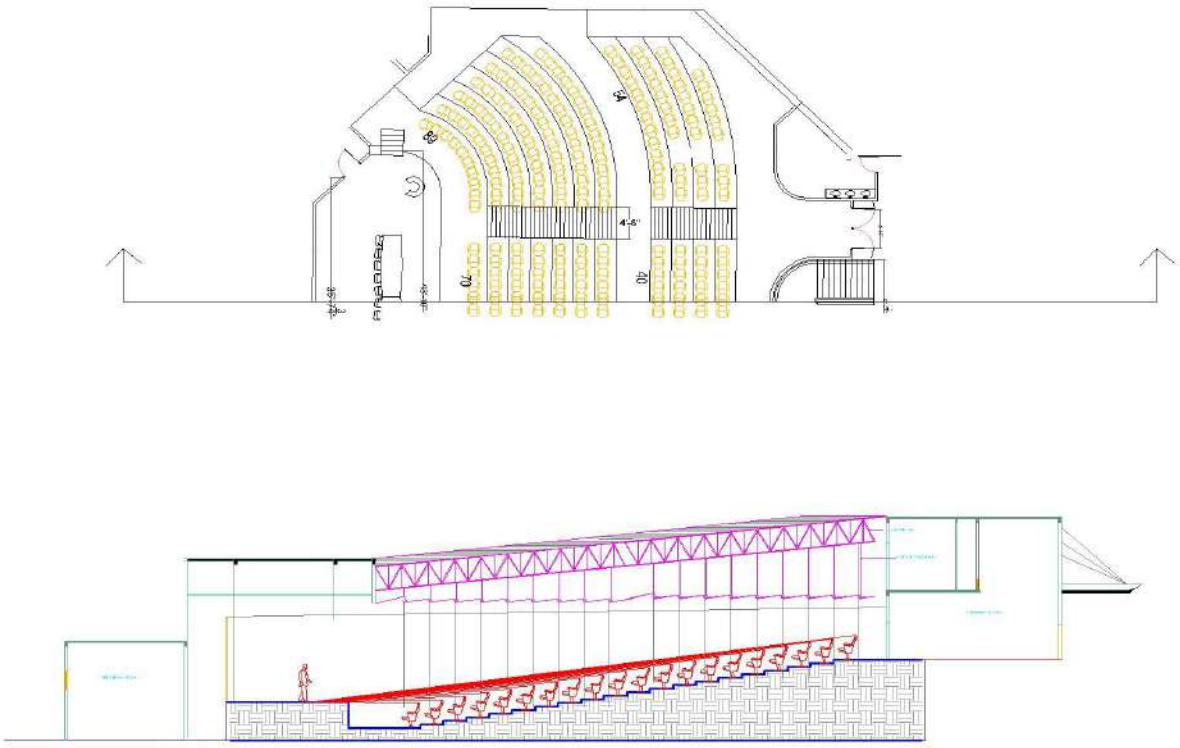


Figure 42 section

Figure 43 interior view

7.4 Apartments

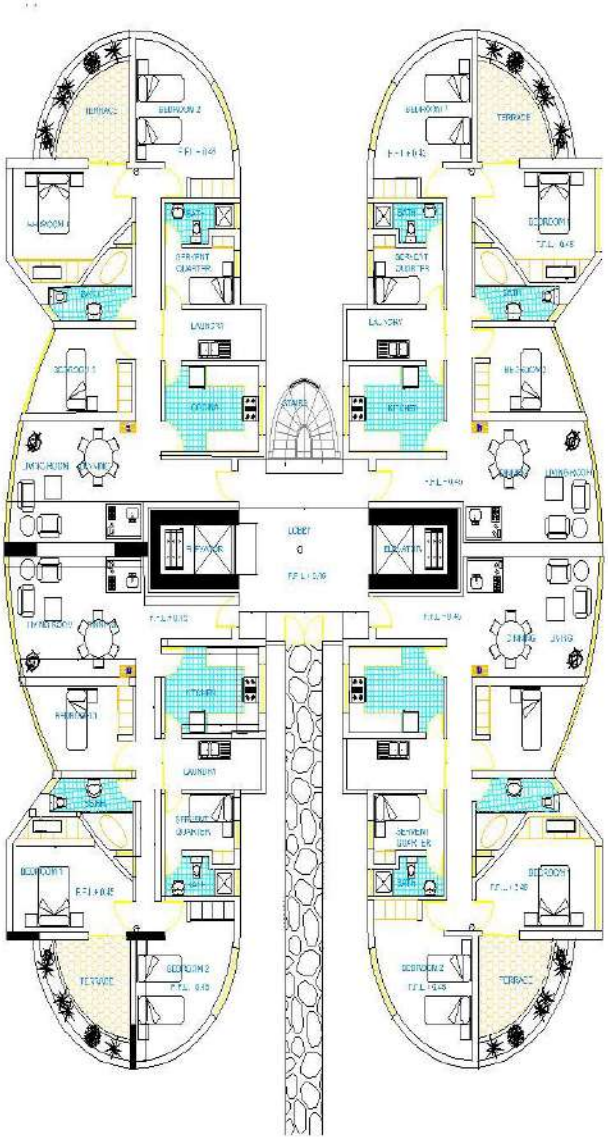


Figure 44 floor plan

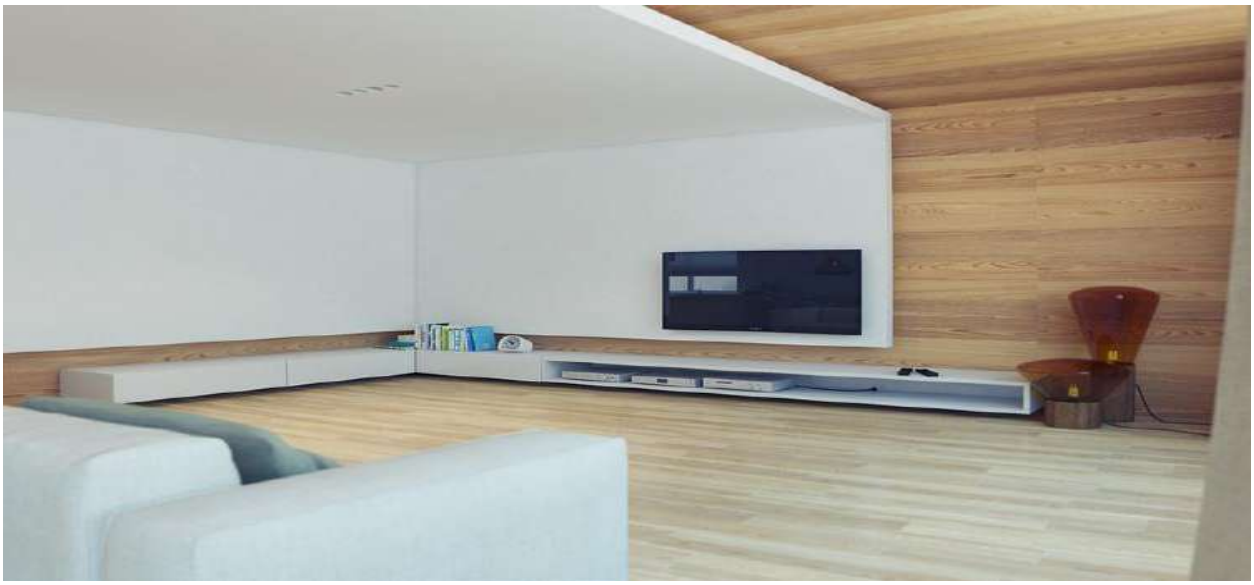


Figure 45 Living space interior view

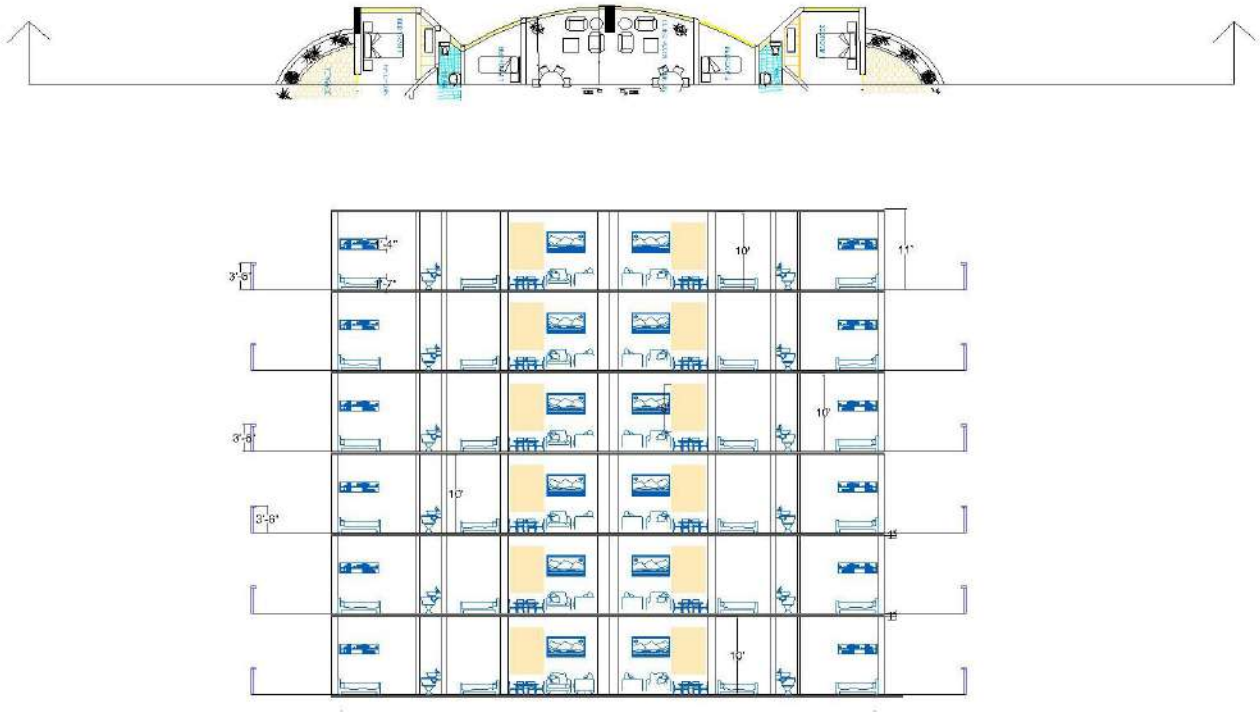


Figure 46 section

Figure 47 Dining interior view

Figure 48 Section

Figure 49 Living area interior view

7.5 Coffee shop

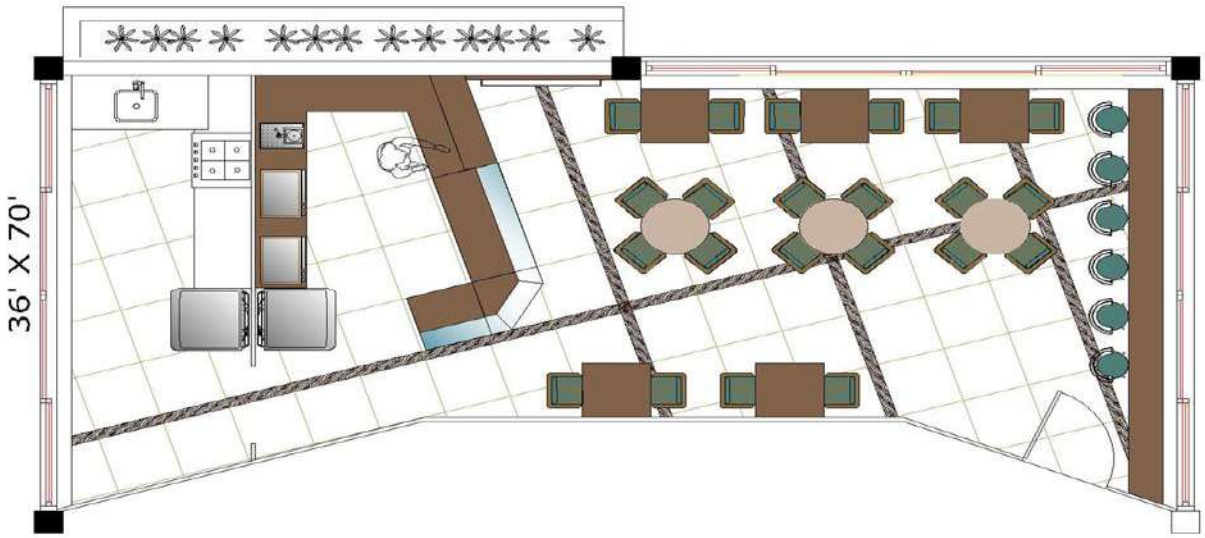


Figure 50 floor plan

Figure 51 interior view

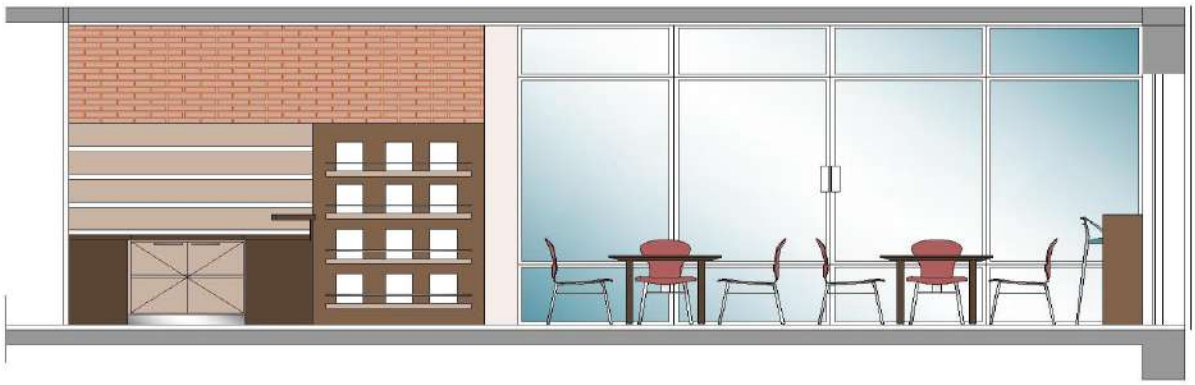


Figure 52 Sitting area in coffee shop

Figure 53 Interior view

Chapter 8: - 3d Renders

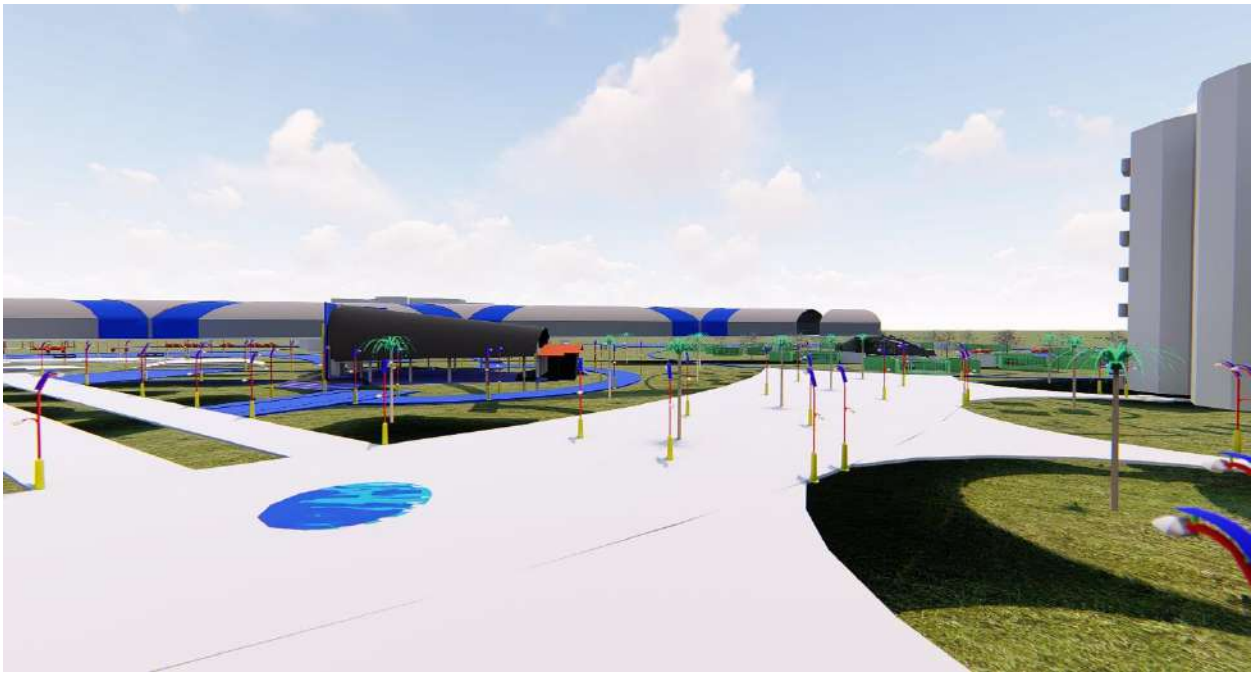


Figure 54 3d view

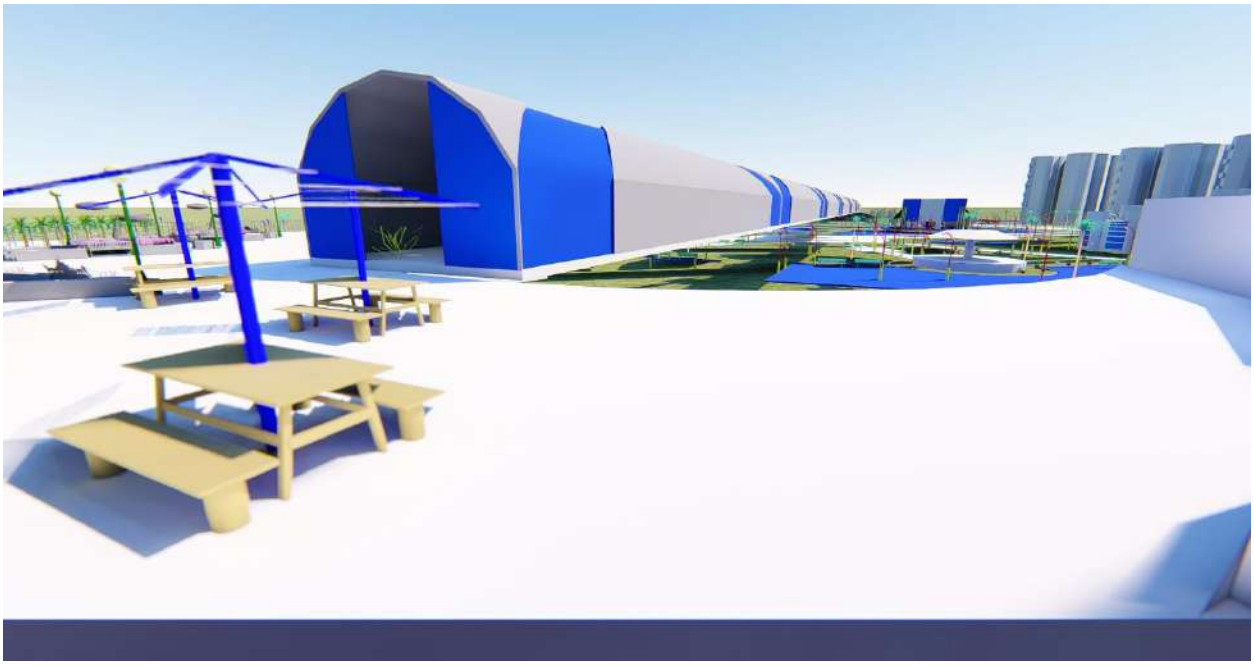


Figure 55 outdoor sitting

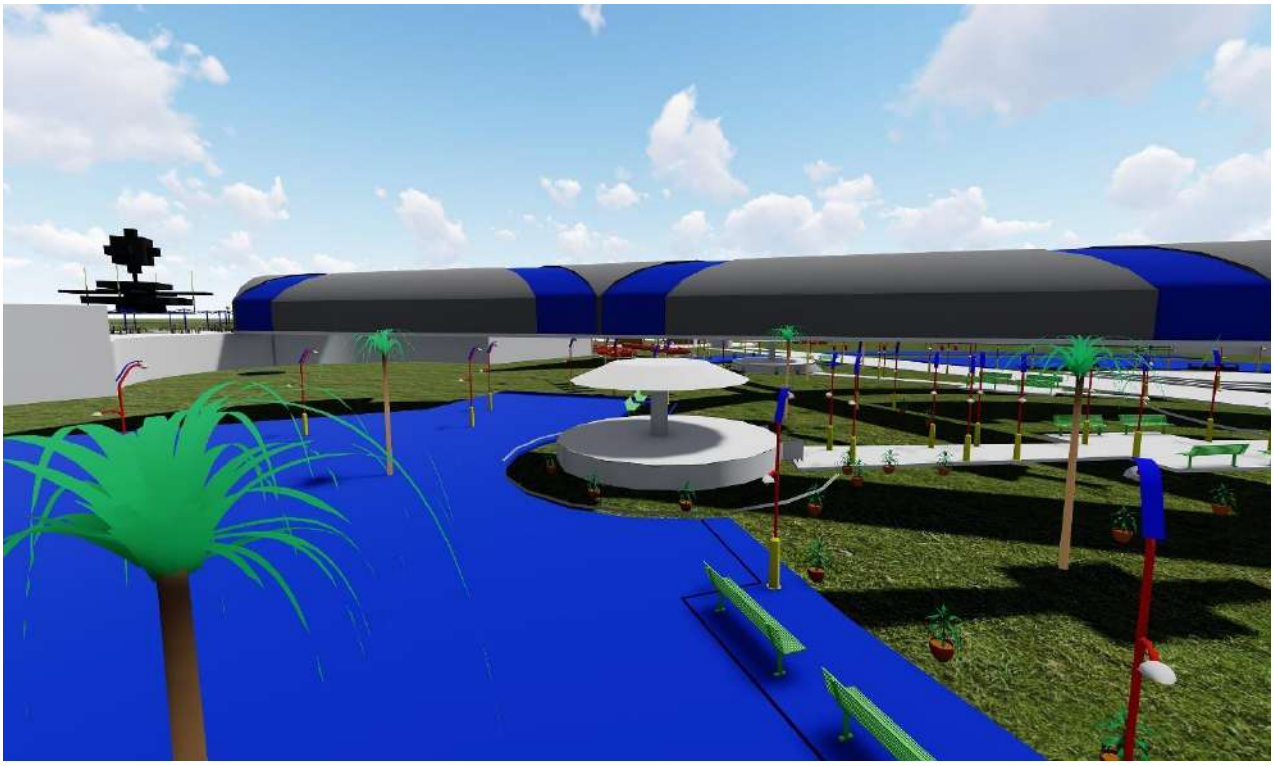


Figure 56 3d view

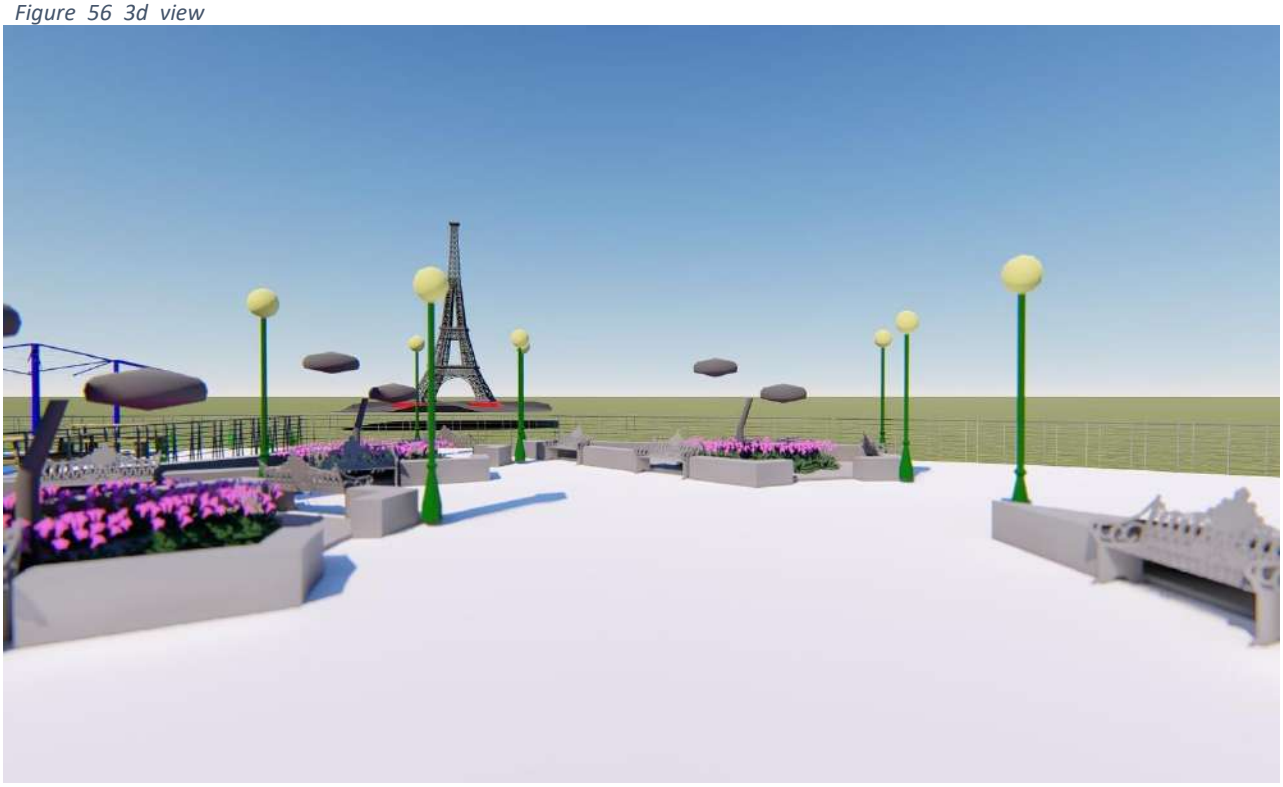


Figure 57 outdoor sitting

Figure 58 3d view

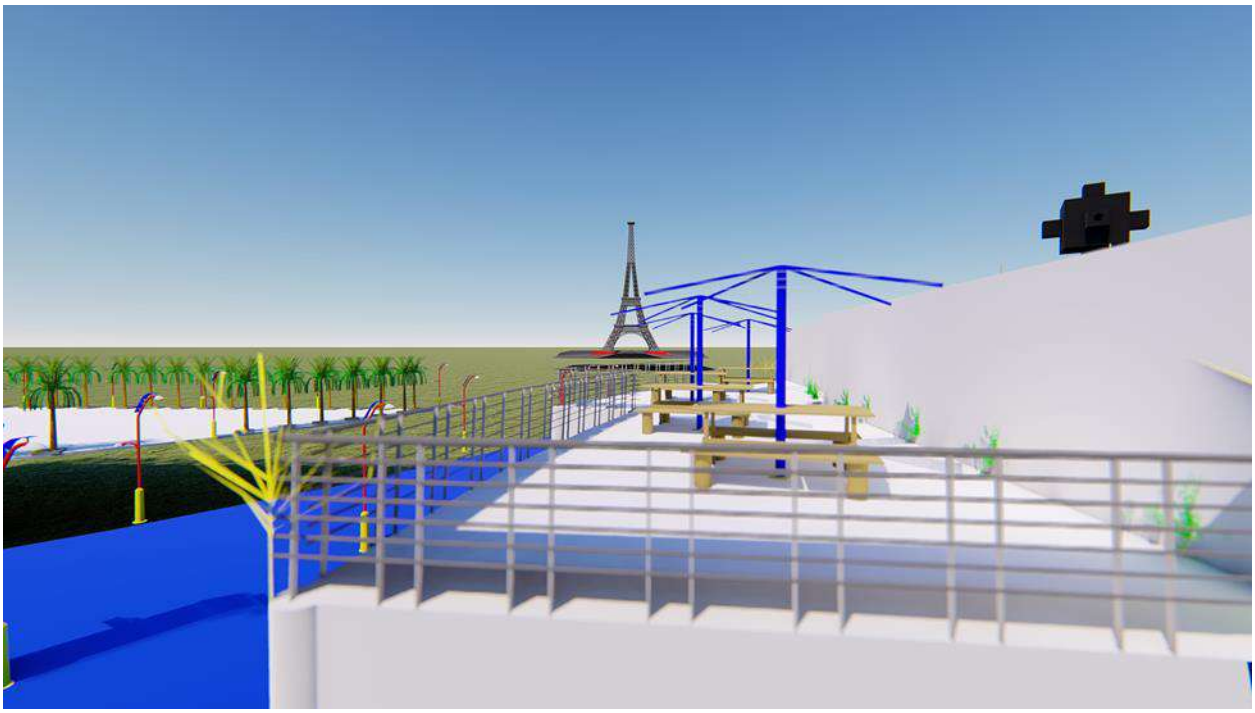


Figure 59 3d view

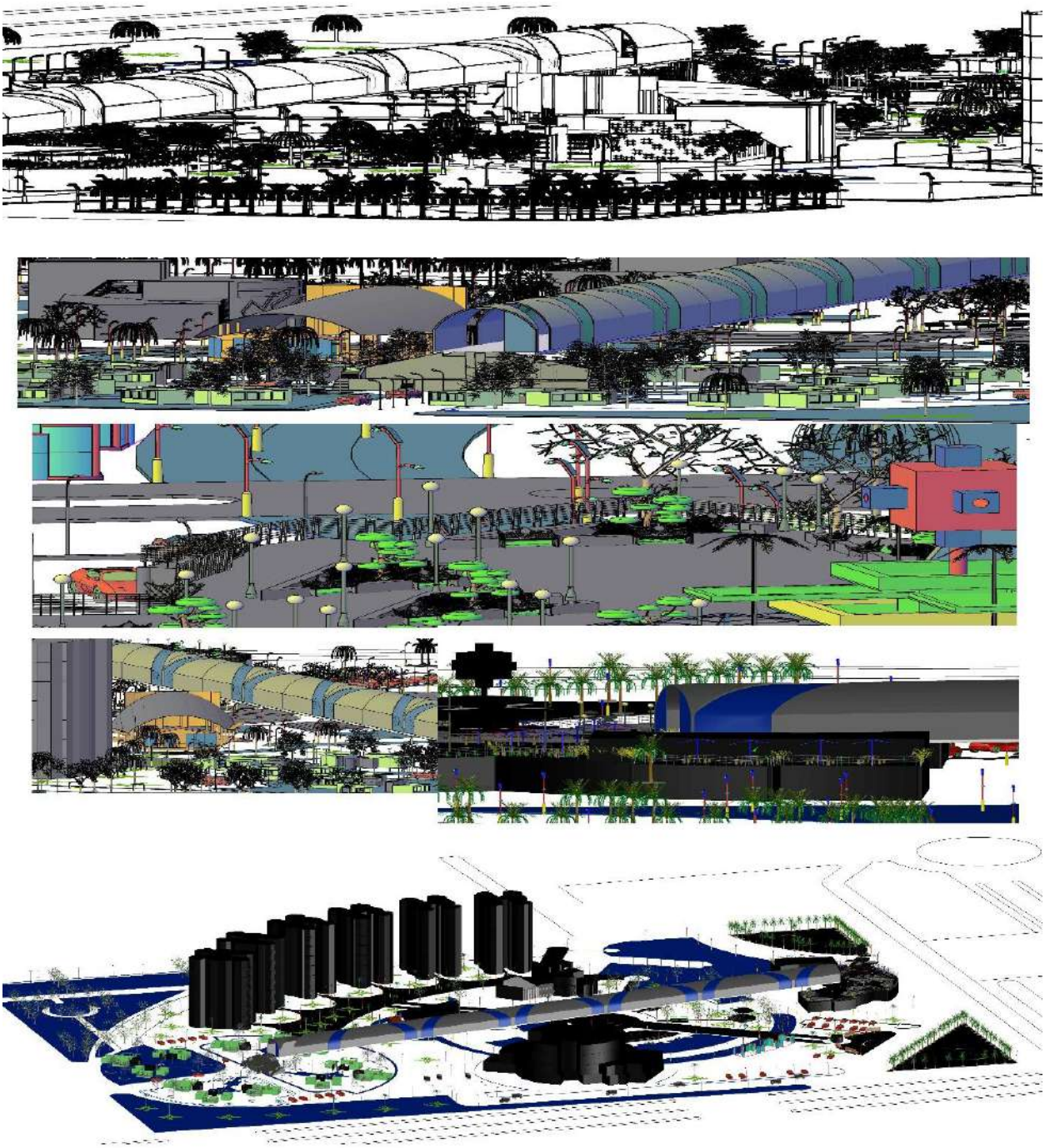


Figure 60 Master plan 3D views

CONDUCT PROGRAM OF THE PROJECT

	DESCRIPTION	FREQUENCY	AVALIABLILITY	AREA	MINIMUM CAPISITY	UTILITIES	NOT
	INSTITUTIONAL						
	COMMERCIAL						
	CULTURAL						
	PARKING						

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