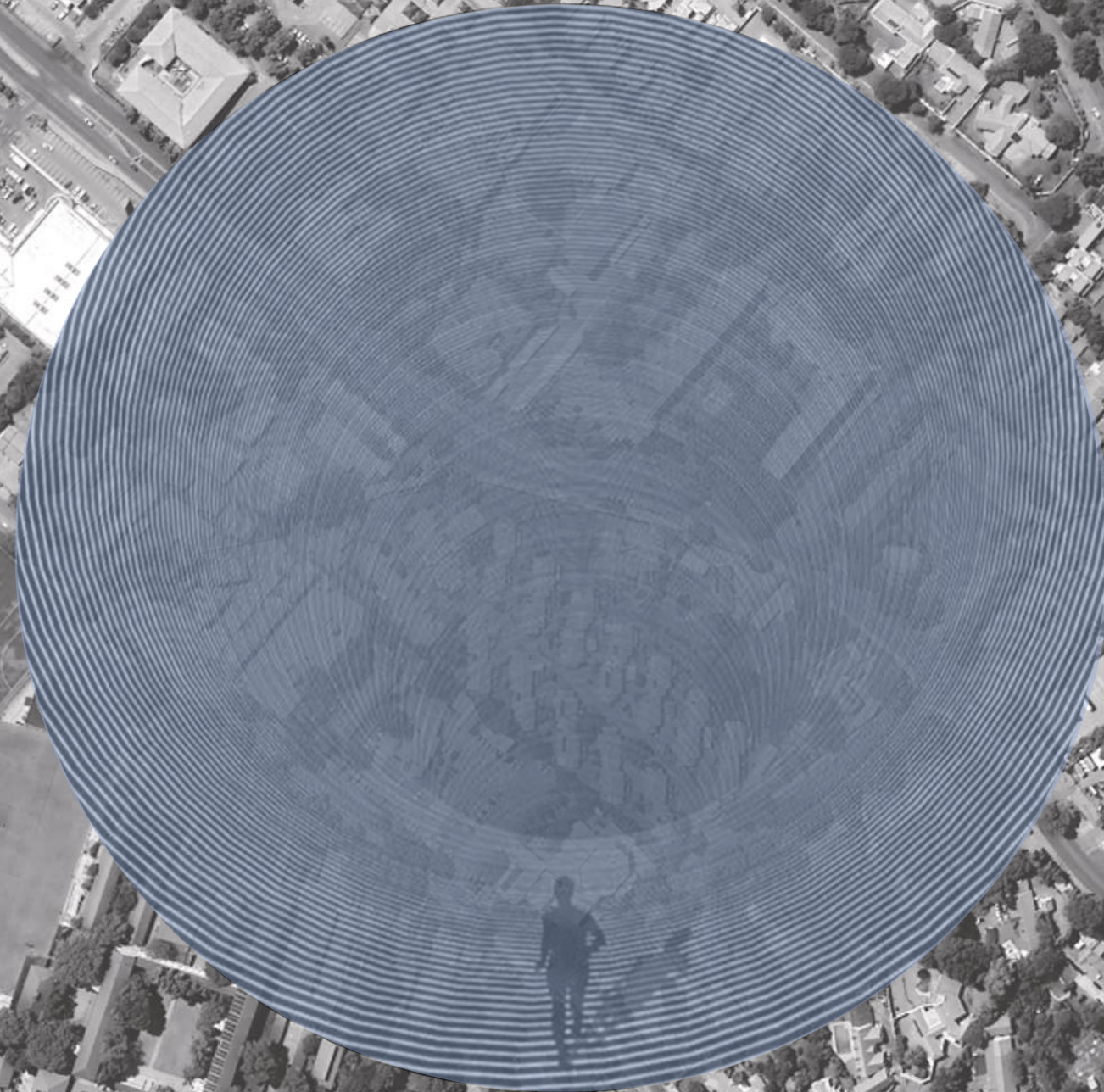


Re-imagining Northcliffs  
Cultural Landscape Through  
Architectural Intervention



# INTERCONNECTED VOIDSCAPES

By : Nabeel Mahomed



This document is submitted in partial fulfilment to the degree: Master of Architecture  
(Professional) at the *University of the Witwatersrand*, Johannesburg, South Africa, February 2024.

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Nabeel Mahomed  
1 February 2024





# Acknowledgements

The mercy and blessings of the Almighty are the only reasons I was able to produce this work, and everything I do on this earth is for the pleasure of Allah.

To my mother, Ayesha, who is the strongest person I know and the queen of my heart. Your love and care is everything to me just as much as you are. To my father, Farhaad, whose presence makes me feel safest, who has worked tirelessly to provide for us, and who always has the solution to your problem—I am who I am because of your Strength as a person and the morals youve embedded in me. To my brothers, Aadil and Rameez, who are my motivation to be the best leader I can be and my sense of comfort at home.

To my late grandfather, Essop, who always admired my work, shared architectural insights, protected me, and never missed an opportunity to be with me. To my late grandfather, Aziz, who made me laugh uncontrollably as a child and always spoiled me. To my grandmothers, Jubeda and Rehana, my favorite people—I cherish every moment with you and adore you, from your food to your words of wisdom. I am always in a state of happiness when you are around.

In Islam, the sister of the mother is considered just as important. To my aunt, Fatima, you have always been there for me, and I appreciate you more than you will ever know. To Saffiyya, the kindest and warmest aunt, who I can always count on and appreciate dearly. To Aunt Fatima Kaka, who guided me through my university years and was always there when I needed help.

To my uncles, Sameer and Ebrahim, who have been there for me all my life and whom I admire dearly. To my cousins, Uthman, Umar, and all the way down to the youngest of them—you are the greatest friends I never had to choose.

To Faaq, the greatest friend I did choose, and to all the members of the ABN, including the Moroccan and the Sunday bunch. To Matteo and Jessica, without whom I do not think I would have made it through architecture school, and who I have shared the best six years, filled with dry humour and the best laughs. To Saalihah, Salma, and Raeesa, whose support, motivation, and friendship made this document all the more possible to accomplish. I appreciate every single one of you mentioned.

Finally, to my Supervisor/Mentor, Liale Francis, whose guidance, ideas, efficiency, and careful consideration inspire you to strive to be better. Your Efforts are truly appreciated,

Thank You.  
-Nabeel

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**Cultural Voids**-void spaces that serve as religious and cultural hubs, hosting exhibitions, workshops, and events that celebrate the diversity of local users that enhance cultural experience

**Spatial Voids**-Integrate flexible and adaptable voids that can transform based on the needs of different events, ensuring the building remains dynamic and responsive.

**Multivalency/Multivalent Spaces** - creates spaces with multiple, adaptable uses, allowing them to serve various functions depending on the community's needs. It emphasizes flexibility

**Urban Coridors/Gateway to site**-refer to the key entry points and pathways that serve as contextual links between the broader cityscape and the specific precinct where the design intervention takes place. These corridors act as connective threads, guiding people into the site and setting the tone for their experience by framing the approach and movement into the space.

**Identity**-Identity refers to the unique character and sense of place that emerges from the blending of Northcliff's diverse social, cultural, and historical narratives within the design intervention. It embodies how the built environment reflects the community's evolving story

**Elitist** -It is used to describe white northern suburbs and is base don the idea that white is better than black, wealth is better than poverty.

**Placemaking**-Refers to the process of transforming the suburb's fragmented and enclosed urban environment into an inclusive, vibrant, and interconnected community space that reflects its diverse contemporary identity. It involves re-imagining and redesigning public spaces, streetscapes, and urban landscapes to foster interaction

**Sense of Belonging**-Refers to the creation of an inclusive and welcoming environment where residents of Northcliff, regardless of their diverse backgrounds, feel connected, valued, and integrated into the community.

**Diverse Population**-refers to the varied mix of people in Northcliff, encompassing a range of ethnicities, cultures, religions, and socio-economic backgrounds that reflect the suburb's evolutionMostly referring to people of colour or the "Black Community".

**Black Community**-Black people were those who did not identify as White and who benefited from the apartheid regime. It is a protest Ideology that opposes the classification of people based on their race.

**Salah**- A general term for the islamic 5 daily prayers

**Pillars of islam**-five fundamental acts of worship and practice that form the foundation of a Muslim's faith and actions. Faith,Prayer,Charity,Fasting,Pilgrimage

**Sunnah**-The practices of Prophet Muhammad (SAW) (PBUH) which all Muslims are encouraged to follow and practice.

**Madrassa**-Islamic Learning class/institute.

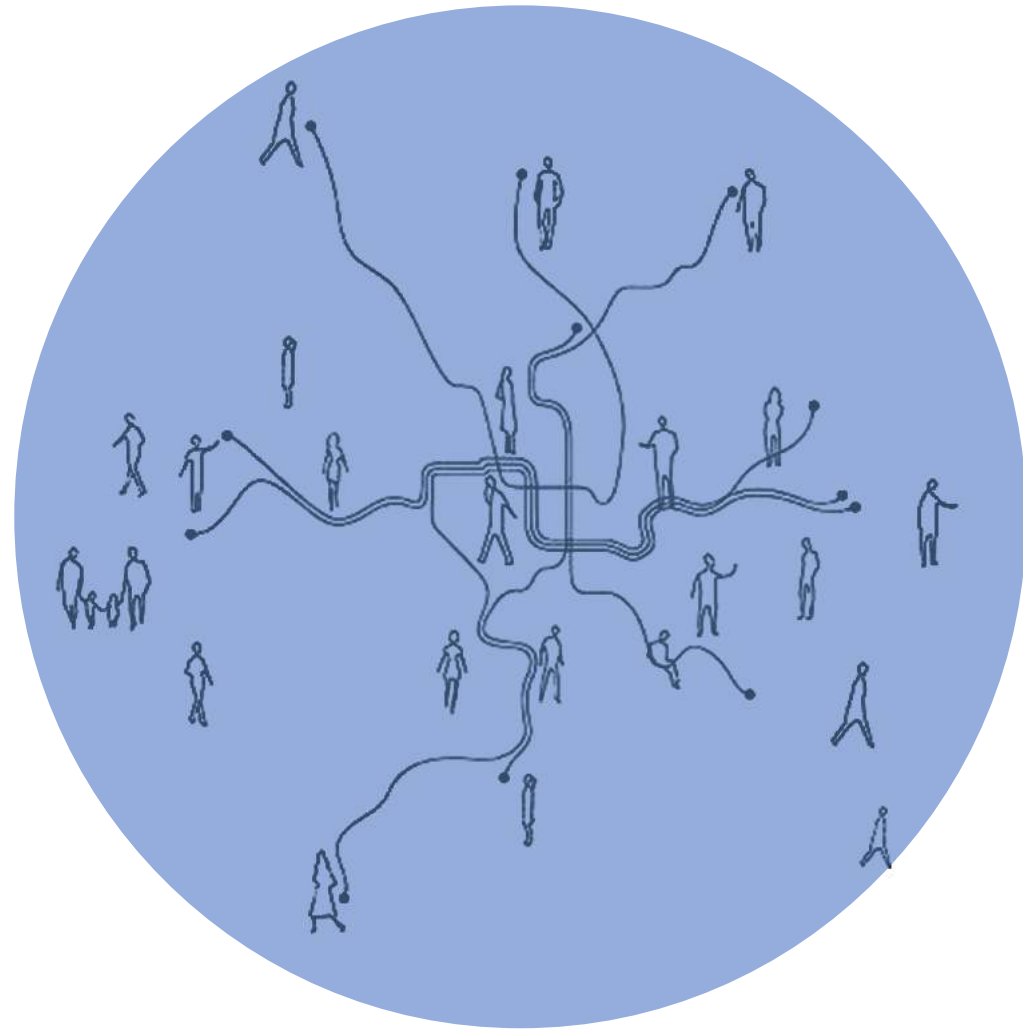
# Glossary

# VoidScape

[Void-Scape] - *noun*

1. Originating from the combination of “void” and “landscape,” voidscape refers to underutilized, empty, or disconnected spaces within an urban environment that disrupt the continuity of the urban fabric, often leading to missed opportunities for community engagement and urban vitality.
2. Space/gap left by apartheid and where modern black communities are found: a soulless place drowning in the ideology of apartheid, lacking identity and character.





# Abstract

**Voidscape** is a term that will be used in the research to describe the interconnected network of social, cultural, and spatial voids within Northcliff, serving as a conceptual framework to analyse the gaps and divisions present in the community's fabric. This research attempts to identify an urban program that finds significant opportunities for design intervention through a detailed analysis of the neighbourhood, eventually addressing the existing void spaces that potentially promote and ignite positive change in the community.

The study will identify strategic avenues for an architectural intervention that are in line with the goals and demands of the community. The urban program will act as a guide for the creation of lively, inclusive public areas that foster a sense of belonging and inclusivity for all residents, regardless of their backgrounds or origins. It encourages a feeling of community and connection among locals through this process



# Ch. 1

## Introduction

This chapter sets the stage by introducing the contextual scenario of suburbs in Johannesburg, framing the design problem within the broader urban landscape. It details the research methodology employed to tackle the issue, along with a thorough examination of academic arguments and ethical approaches relevant to the study. The chapter also offers a preliminary look at the site location, providing glimpses into its unique characteristics and challenges. This foundation establishes a comprehensive understanding of the issues and sets up the exploration that follows in subsequent chapters.





# Preface

Migration to Johannesburg’s northern suburbs often brings a profound shift, especially for those from vibrant communities like Lenasia. Suburban life, with its quiet streets and distant neighbours, contrasts starkly with the familiar, close-knit environment where religious buildings anchor daily life. Despite the conveniences of suburban living, many experience a sense of disconnection and lack of belonging.

The accompanying storyboard captures the complex emotions of adapting to suburban spaces that lack the communal vibrancy of more pedestrian-oriented areas. It reflects how places of worship and community hubs can bridge these voids, offering glimpses of connection and belonging. This Thesis is presented as a narrative and



Figure 1.1 - The Migration Effect (By Author, 2024)



Understanding Johannesburg Suburbs

Northcliff, a neighbourhood shaped by its post-apartheid legacy and car-centric, capitalist urbanism, exemplifies a voidscape where disconnected spaces and a lack of vibrant public realms contribute to a fragmented community fabric. This voidscape, characterized by its reliance on private transportation and sprawling, underutilized areas, underscores the pressing need for transformation.

Urban and suburban settings are intricate structures influenced by social dynamics, planning choices, and historical legacies. The legacy of apartheid surrounding suburbs in South Africa has had a significant influence on the country’s urban environment. Originally planned as a means of control and segregation, these suburbs are currently experiencing major changes as modern society looks to redefine and reuse these areas. It is important to comprehend the goals and beginnings of these suburbs in order to fully comprehend their present situation and possible futures. From an architectural perspective, unseen matter, such as different kinds of information, feelings, emotions, or meanings, can also be connected to the concept of empty space, which is the state of being vacant (Eugen and Nam, 2023). This sparked the thought that the idea of voids spaces could potentially be spaces are vacant, underused, or neglected has a significant impact on how cities work and look. These voids, which can be actual spaces between buildings, abandoned public areas, isolated and dead spaces or neighbourhoods, have qualities that either encourage urban deterioration or present chances for innovative reuse and restoration. Public life has suffered as a result of vehicular focused urban design in many places. This tendency is especially noticeable in suburban settings, where seclusion and solitude are frequently valued over social engagement.

Identity is another important factor to think about in suburban settings. The identity of a community is shaped by the shared experiences and common interests of

its members, which in turn influence different aspects of the social dynamics within it. User interaction is one crucial aspect of community dynamics that cannot be overlooked (Zhang et al., 2017). Therefore, I would consider elements such as the historical background, cultural traditions, and architecture, to have an impact on these places’ sense of identity and character. Common experiences and interests among its members give a group its identity. Based on this its Residents’ interactions with one another and their surroundings could potentially shape their identity. (Zhang et al., 2017) . Examining the country club’s cultural and historical relevance in South African culture, we consider the ways in which these organizations have come to represent exclusivity and social division. Individuals manage to comprehend these institutions’ changing nature as well as the larger social structures that occur due to this critical viewpoint. This is necessary due to the typology being present on the site of choice relevant to the study of this dissertation

These communities are greatly impacted by anxiety as a social, classist, and racial condition in Johannesburg society. Apartheid’s legacy combined with current socioeconomic issues generates a distinct environment of conflict and division. Making thoughtful and sympathetic design decisions that support inclusion and community cohesiveness requires an understanding of these relationships. The academic argument suggests that by adopting a pedestrian centred, public-realm-oriented approach, and integrating community facilities that foster interactions among residents, it is possible to address and counteract the voidscape.

The Design Problem And Objectives

The design problem, revolves around identifying effective strategies to implement such an approach in Northcliff. This involves developing programming and architectural solutions that not only enhance walkability and create engaging public spaces but also strengthen connections between individuals and their environment, ultimately revitalizing the neighbourhood into a more cohesive and dynamic urban community. Through a critical analysis of South Africa’s urban and suburban spaces, we may formulate approaches to construct more dynamic, inclusive, and useful places.

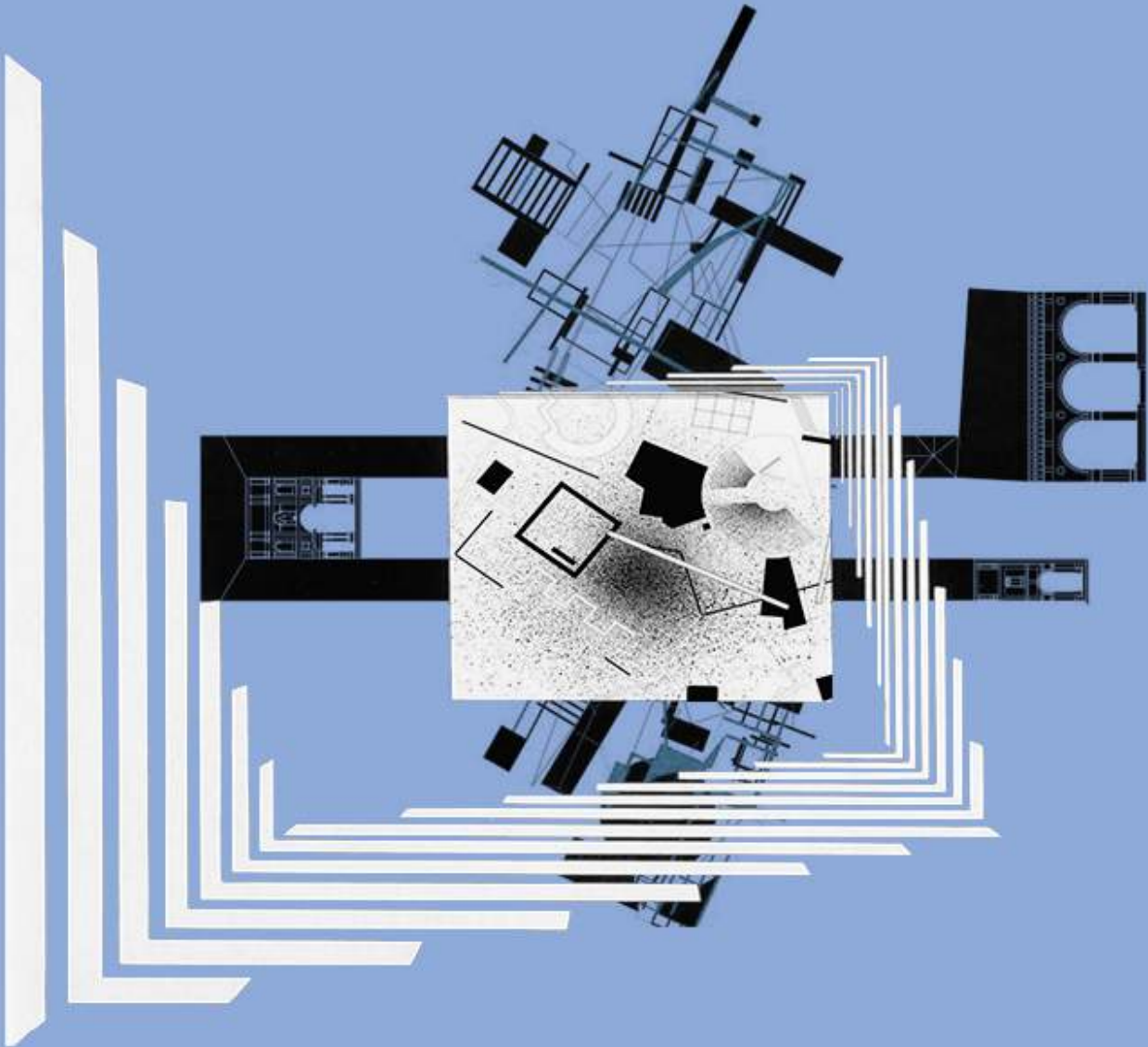


Figure 1.2 - The Interconnected Voidscape (By Author,2024)



Design Questions and Approach



Figure 1.3 Desgn Questions (By Author,2024)

What role do the voids play in promoting social interaction, community engagement, and cultural exchange among different users of different programmatic spaces?

The scales of buildings, sites, and neighbourhoods are more manageable for architects to work at than the scales of adjacent neighbourhoods, ecosystems, or geopolitical entities. In order to address the more general issue of building for urban resilience and architecture's place in it, we will employ two related entry points for this project:

The first is to plan and create a campus of buildings and spaces for the site at the architectural and building scale, considering the notion that it is in a void that requires a contemporary approach to community and is inside a void space. In order to do this, it will be necessary to evaluate the current building stock in order to determine whether it has the potential to be converted into new spaces or added to with programmatic demands, and to connect it to the neighbourhood's external environment and surrounding programmatic contexts.

The second could be conducting research into void theory in architecture, which examines the significance of empty spaces within the built environment. Consider how voids can serve as opportunities for connection, circulation, and interaction, both within the site and with its surrounding context. Develop a design concept that prioritizes the creation of void spaces that foster community engagement, social interaction, and cultural exchange. Experiment with different forms, scales, and configurations of voids to achieve the desired spatial qualities and programmatic integration.

The development of a pedestrian-centered, public-realm oriented community facilities that actively connect residents and users can effectively combat the fragmented urban landscape, or "voidscape," by fostering greater social interaction and community engagement.

Not only is a revitalized neighbourhood being proposed in the northern suburb of Northcliff by incorporating activities that support live public spaces, but a new perspective on urban communities is also being put forth, one that views them as ecologically stable and productive environments in addition to functioning neighbourhoods' research and design recommendations in this intervention will be based on the standards for how to appropriately plan and design for the appropriate sort of mix of productivities.

Academic Argument

Research Methodology



Figure 1.4 Research method (By Author,2024)

Creative research through design is a combination of inductive reasoning, interpretation and imagination linked to various themes, constraints (such as technological considerations, building site, client, and user groups) and precedents (urban and architectural). The creative research process in terms of discourse and design alike, take on an iterative (inductive-deductive), non-linear, cumulative, cyclical, and open-ended exploration to achieve its creative outcomes. The research combines qualitative and quantitative approaches to knowledge and argumentation, whilst the creative component translates the same into a defensible architectural proposition.

To inform the design decisions, published material pertaining to the thesis subject, including academic papers, journal publications, maps, and case studies, will be obtained and analysed using a computer-based search. This will be utilized to strengthen the research's conclusions. Analysis of architectural drawings and mapping-based site analysis to evaluate the physical relations of the urban grain and to map the many ways in which spaces are used, architectural (plans and sections) and site (plot, urban) drawings and maps will be analyzed.

Obtaning Physical Data

By visiting the site, I may obtain first-hand knowledge of its physical attributes and spatial dynamics, which can aid in comprehending the location's scale, context, and possibility for design intervention. It will be documented through Photographs, videos (if people are caught in the camera shots they will be blurred out), sketches and further applied to understand through the process of making, i.e. physical models. Access to sites will be requested through permission letters and consent forms Interviews will be conducted in 2 methods:

1. Individual Interviews with members of leading roles in the community, relevant to the project's endeavours. These may include, religious leaders, presidents and managers of local organisations and clubs, principals of schools etc.

2. Informal conversations with members of the community that may fall under the autoethnographic category. These participants will be informed that the conversation is for research purposes only and their identity will remain anonymous. Interviews will be requested through participant information sheets and consent forms



Ethical Approach

In the context of architectural research, ethics refers to the moral precepts and norms that control how research projects are carried out. It entails maintaining integrity, upholding participants’ rights, fostering openness, and considering how architectural research may affect society and the environment. We can summarize the ethical approach to this specific research:

- Protection of participants’ rights and privacy
- Obtaining informed consent from participants
- Maintaining confidentiality of participants’ information
- Conducting research in a transparent and accountable manner
- Addressing and resolving ethical dilemmas encountered during the research process
- Considering the social and environmental implications of the research findings
- Advocating for responsible and sustainable architectural practices
- Upholding integrity, respect, and ethical responsibility in architectural research
- 

COLLECTING

- In order to preserve the community members’ privacy and prevent any potential harm, ethical considerations were used maintaining anonymity during personal interviews with them.
- To learn more about the area without invading the community’s privacy or personal space, a broad site analysis was carried out.

REPRESENTING:

- Buildings and design developments were designed with consideration for the new cultural and social context of the community, both in terms of architectural language and form.
- Due care was taken to ensure that the architectural depictions and designs did not mislead or objectify the community.

PROPOSING:

- Material selections and design considerations considered the unique context of the community, including place, culture, climate, accessibility, and availability.
- The proposed Voidscape development was motivated by a genuine need identified through the research and engagement with the Participants focused on upskilling and uplifting suburbs in post apartheid Johannesburg communities

DISSIMENATING:

- To prevent plagiarism and provide due credit to the original authors, all internet articles and materials utilized in the study were correctly referenced.
- All drawings and other visual representations unless stated otherwise, were done by the author, guaranteeing their uniqueness and preventing any copyright difficulties.
- The study findings were presented in a way that was responsible and highlighted the ethical decisions made during the research process.

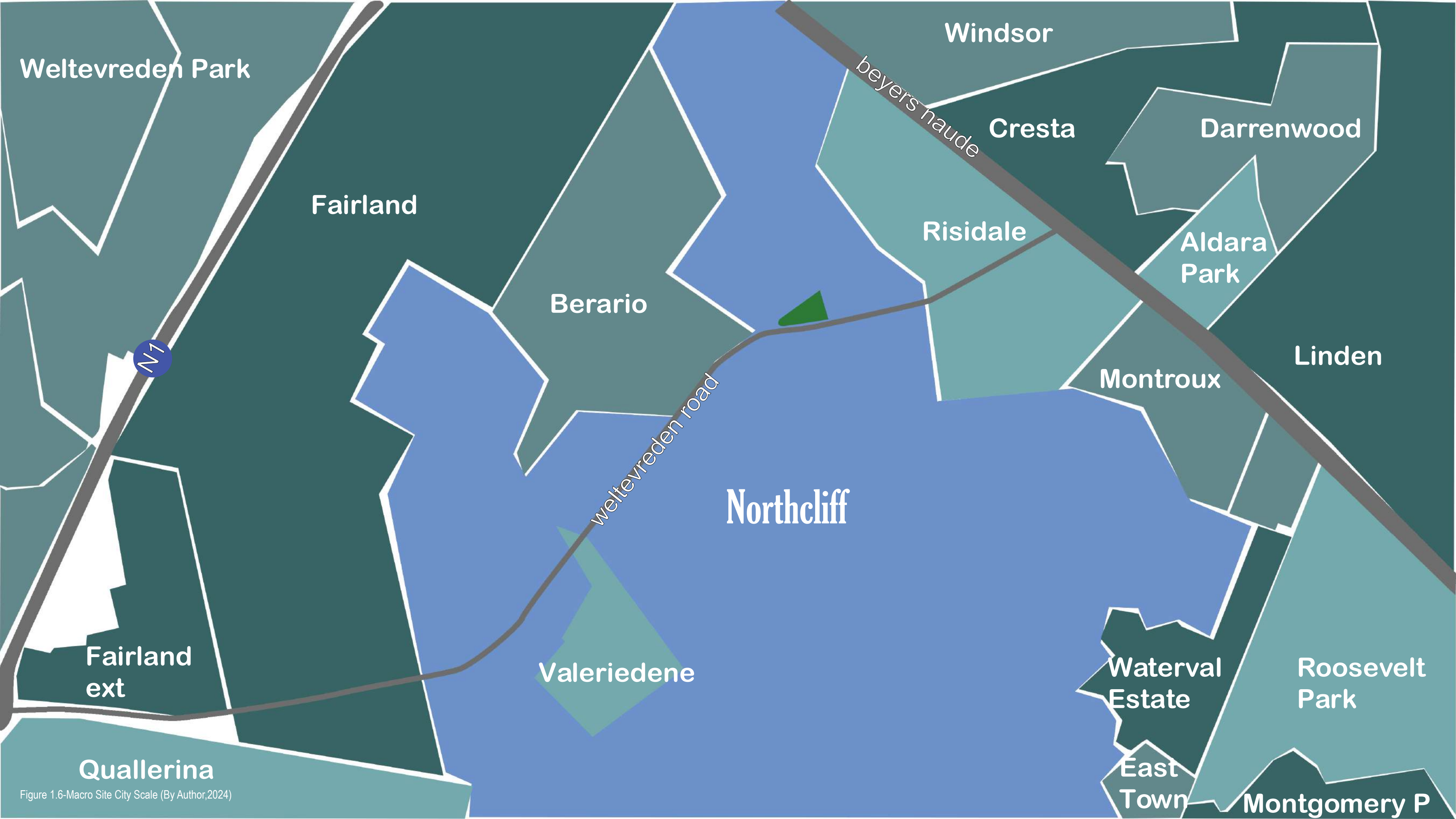


Figure 1.5 Ethical behaviour (By Author,2024)

The University of the Witwatersrand’s School of Architecture and Planning has developed standards for research ethics, and the study project will be done in strict accordance with those standards. Data from human participants in the study,will be used after consent is obtained. I shall assume full responsibility for providing clear explanations and adequate information as the researcher. The proposed point of view for the research entails analyzing current situations and structures to develop a systematic and appropriately programmed design, however it is merely a systematic reasoning and potentially calls for site visits and analysis To protect privacy, home addresses will be erased, and site locations won’t be indicated in the images. The raw data of any information found will be appropriately referenced. In summary, the site of study and its inhabitants will not be mischaracterized as the design response will appropriately address the issues and concerns through observed evidence.

# Ethical Statement





Weltevreden Park

Fairland

Berario

Northcliff

Valeriedene

Windsor

Cresta

Darrenwood

Risidale

Aldara  
Park

Linden

Montroux

Waterval  
Estate

Roosevelt  
Park

East  
Town

Montgomery P

Fairland  
ext

Quallerina

N7

beyers naude

weltevreden road

Figure 1.6-Macro Site City Scale (By Author,2024)

# Ch. 2

## Apartheid Legacy-

The Transformation Of Suburbs In Contemporary South Africa

Explores the impact of apartheid on Johannesburg's suburbs, examining how historical segregation has shaped the current urban landscape. It provides a detailed heritage profile of the site location, linking historical context to present-day conditions. The chapter also introduces the character of the place in relation to the site, highlighting the relevant issues, fears, and anxieties that persist. Through this examination, it offers a nuanced understanding of the site's legacy and the ongoing challenges faced by the community.





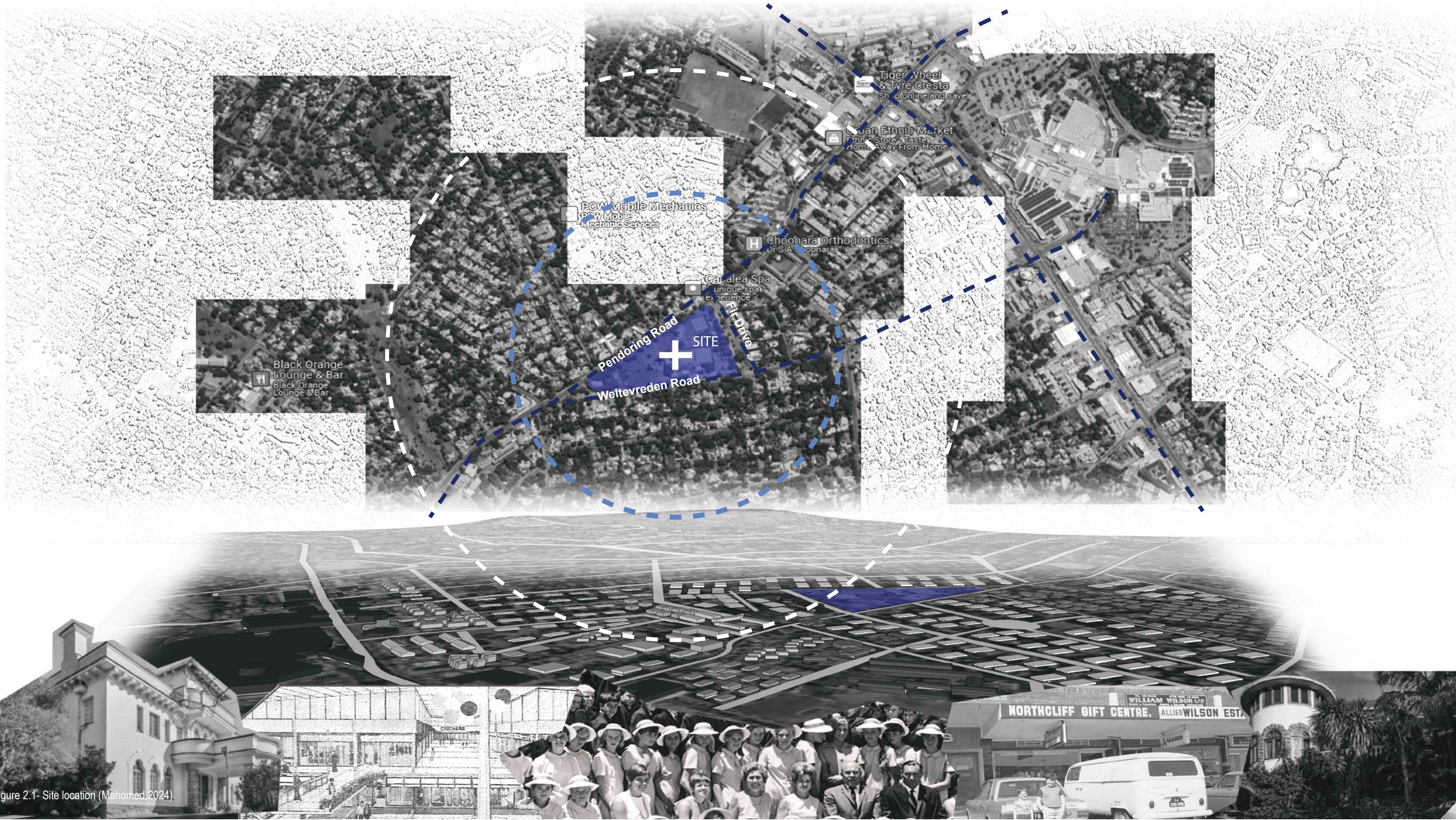
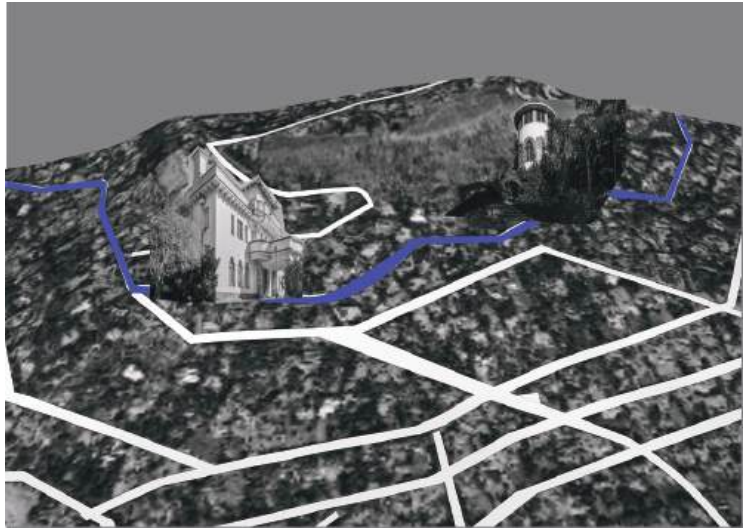


Figure 2.1- Site location (Mahomed, 2024)



1885

The year before Johannesburg was founded. Some areas of contemporary Johannesburg still have evidence of Stone Age Man. Their implements have been discovered directly adjacent to the Supreme Court structure in Johannesburg and the remnants of their settlements are located atop Northcliff Hill. Between 500 000 and 250 000 years ago..(STAR, 2015)



Northcliff ridge was established in 1934 by entrepreneur Fred cohen (heritage foundation, 2023).At about 1,807 meters, Northcliff Ridge is the second-highest koppie in Johannesburg. Constructed in 1939.The hill that is home to the Northcliff water tower was formerly known as “Aasvoelkop” or “Vulture Hill.” (anon, n.d.)

1935-1940

The Plastic Hall was the original name of Northcliff’s Plastic Theatre. It was constructed in the early to mid-1940s nearly completely out of plastic, which was novel at the time and prohibited by the building controller because of World War II-related material shortages (press, 2013)



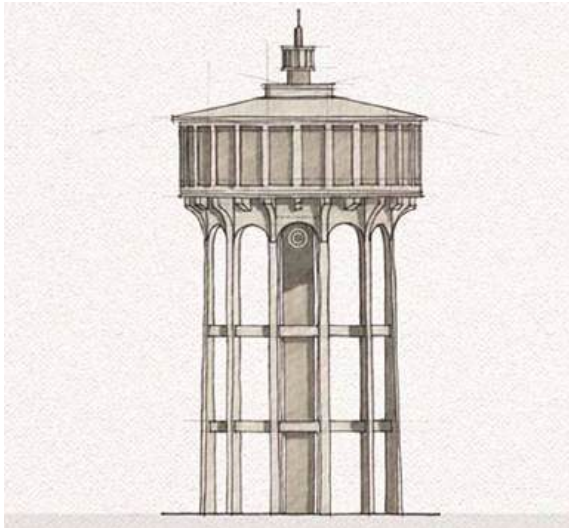
1957-1969



The Northcliff Primary School was a modest structure with three classrooms, a staff room, and an office. The third classroom used as a hallway as well. Every night, the Civic Guard who was in charge of maintaining order used the staffroom. The land and structure were donated by Mr. Fred Cohen. (primary school, 2019) Cresta,built in 1977, With over 260 stores and an enormous selection of high quality products, originally intended to serve customers in Randburg and Sandton, Cresta was the first retail center of its magnitude to serve the people in the northwest suburbs. It also drew customers from the West, South, and East Rands. (Sun, n.d.).Northcliff Country club funded in 1957

Present day

At about 1,807 meters, Northcliff Ridge is the second-highest koppie in Johannesburg. Constructed in 1939, the unique water tower stands as a landmark in Johannesburg (anon, n.d.)



# Northcliff Origins

Figure 2.2-Northcliff Heritage Timeline - In order of appearance ((KRUGER, 2015),(Mahomed,2024), (press, 2013), (High School,



Contextual Heritage and Site choice

As seen by Northcliff, which was intended to be exclusive and isolated from varied groups, the “white suburb” was the result of apartheid-era zoning that set aside well-serviced regions for White inhabitants.

South Africa’s suburbs, which were originally intended to impose racial segregation and economic inequality, have been significantly impacted by the legacy of apartheid. At present, these places are progressively changing in line with larger initiatives for equality and inclusion. Studies conducted on the broader Johannesburg area show that racial desegregation in the formerly White-only neighbourhoods is far more common than is often believed. And that Black citizens’ upward occupational mobility into higher-paying employment is a major contributing factor to this (Crankshaw, 2023).

As a result, the growing “people of colour population” which is now rich in multiple religious and demographic backgrounds in Northcliff as a model for a typical white suburb and is the site of choice may find themselves disconnected from the sense of belonging and community they once experienced in their former neighbourhoods. After being a “whites only” suburb under apartheid, Northcliff is currently undergoing a spectacular transformation into a thriving, multi-racial, and cosmopolitan town. The wealthiest neighbourhoods in the northern suburbs, where Black and White inhabitants’ occupational class compositions are nearly identical, are the greatest places to see the effects of the Black middle class’s expansion (Crankshaw, 2023). This change is representative of the larger social processes at work in South Africa’s post-apartheid landscape, where the integration and mobility of varied groups are redefining formerly segregated locations. As more and more individuals of many ethnic, cultural, and economic

backgrounds move to Northcliff, the suburb is changing from being a representation of apartheid’s segregation to a symbol of the nation’s continuous desire for equality and inclusiveness. As a place in transition, it is experiencing cultural, spatial and social voids, due to northern suburbs preserving aspects or functions that are possibly regarded as colonial heritage.

The current site chosen could be referred as the heart of Northcliff, situated at the epicentre of areas like Fairlands, Berario, Weltevreden Park, that is directly linked to Main Roads, Beyers Naude and 14th Avenue. At the micro scale it’s in walking distances of residential and commercial buildings as well as religious and educational in less than a 5km radius. Currently occupying the land is Northcliff country club at the base and Tshepo Community initiative- A Community-based organisation in partnership with the local church and U-TURN Clothing that specialises in Agriculture,upskilling and rehabilitation of the poor at the apex of the triangular site. Furthermore, there are small businesses at the apex of its triangular shape intersecting the adjacent streets of the site, Pendoring and Weltevreden Road.

The choice of the site and its significance is increased by the existence of the Tshepo Community Initiative and the Northcliff Country Club. Though it has always been affluent the Country Club is an important part of the region’s history, and the Tshepo Community Initiative provides important social services through its agricultural and rehabilitative initiatives. The mixture of current usage offers a special chance to reinvent the location as a multipurpose, inclusive precinct that meets Northcliff’s changing demands.



Figure 2.3- 3D Site Location (Google, 2024)



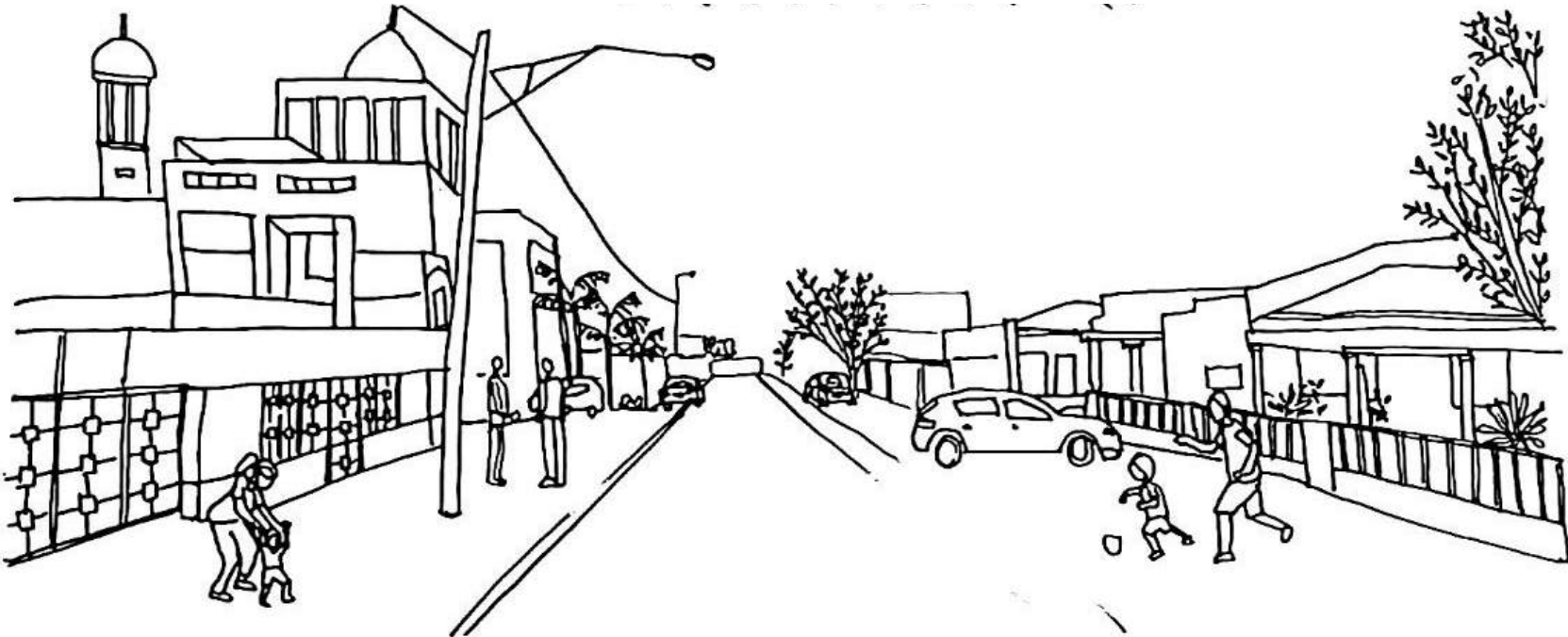


Figure 2.4 -Lenasia Streets (By Author,2024)

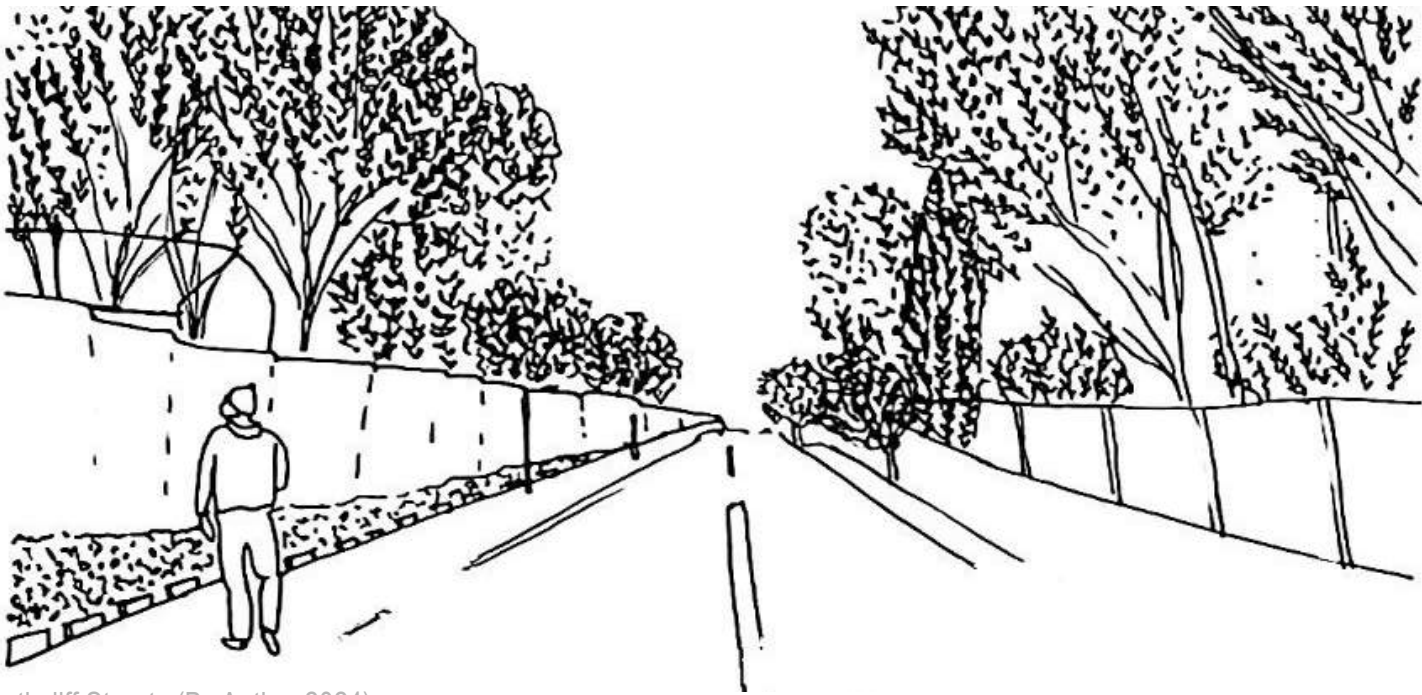


Figure 2.5 -Northcliff Streets (By Author,2024)

Each area in Johannesburg was set aside for a certain “race group” in accordance with the 1950 Group Areas Act, which served as the legal basis for urban apartheid (Campbell, 2019) The northern suburbs were predominantly a White Raced area in the Apartheid era. Although there are Black Africans in the city, most of them still reside in “townships.” (Campbell, 2019). In addition to addressing the existing voids within Northcliff, it is crucial to acknowledge the historical context that has shaped the community’s demographic composition. The majority of Indian residents reside in Lenasia, a unique “Asiatic” township created in the 1950s to house Indians who had been forcibly evacuated from the city center. White people occupy the remaining portion of the city (Campbell, 2019).

Black laborers were employed by and exploited by white-owned mining enterprises, who stood to gain financially from that finding (Blakemore, 2019). These corporations reaped enormous profits from the diamonds and gold they extracted, all the while effectively enslaving Black miners. In addition, they served as a means of controlling Black settlement, pressuring Black residents to live in areas where their work would be advantageous to white settlers (Blakemore, 2019). Many individuals from areas such as Lenasia , Mayfair which is majority of the Indian race population , Soweto and Eldorado park being the Black native and Coloured race as well as other formerly segregated neighbourhoods in Johannesburg ,of all religions and backgrounds were systematically excluded from residing in areas like Northcliff during apartheid. The segregated community can be referred to as the Black community as they fall under the protest ideology of not benefitting from the Apartheid Regime. Their desire for a higher standard of living is reflected in their relocation to communities like Northcliff, where they might experience better educational settings, improved amenities, and easy access to both the city and their place of employment. In recent years these areas have become

dilapidated experiencing increases in crime, Electrical and water issues as well as poor maintenance. These observed issues among many others are the reasons the want for a better life resides in migrating elsewhere for the middle-class population.

Lenasia, Soweto, Mayfair, and the surrounding suburbs are not merely residential districts; rather, they are dynamic, proud communities with a rich past. There is a strong sense of community and belonging in these neighbourhoods, which are reflected in the low-wall dwellings and busy streets filled with the sounds of neighbours conversing and children playing. Residents have embraced their heritage in spite of the difficulties faced by apartheid, transforming these formerly neglected areas into representations of resiliency and communal strength.

There is a strong sense of community here, along with a great sense of pride in the cultural customs and life experiences that have made these neighbourhoods what they are today, thriving communities. in stark contrast Northcliff was a private haven for the white upper class during the apartheid era. The suburb, with its expansive, well-kept lawns and guarded estates, epitomized the affluence and segregation that apartheid imposed. There was a sense of exclusivity and seclusion to Northcliff’s tree-lined avenues. Due to the apartheid government’s determination to preserve racial purity and economic inequality, a society of guarded solitude emerged here, dividing Northcliff from the thriving, linked townships of Johannesburg.



Housing During Apartheid



Figure 2.6 -Protest (By Author,2024)

Spatial Legacy Post Apartheid



Figure 2.7 -RDP Houses (Erasmus, 2023)

Hundreds of thousands of people were displaced by the Group Areas Act, shattering friendships, uprooting families, and fracturing communities (Shah, 2018). This was mostly caused by the law’s retroactive implementation, which gave the Group Areas Act the authority to destroy any home in an area that was classified as a group area and to evict everyone who did not belong to the approved group. Numerous other laws and rules were implemented in the wake of the Group Areas Act to guarantee that various racial groups did not mix, marry, or reproduce, all while guaranteeing that the White population amassed riches and kept the other racial groups in submissive roles (Shah, 2018).

The growth of South Africa’s urban population during this period led to the emergence of unsanitary communities and illegal tin shacks surrounding the major city centres (Shah, 2018). There being a great deal of sickness and mortality, HIV spread like wildfire, and as a result of Apartheid’s bitter legacy and inadequate healthcare for the Black people, South Africa now has one of the highest rates of HIV worldwide (Shah, 2018).

Together with the ANC, President Nelson Mandela worked to undo the injustices caused by Apartheid once he was democratically elected in 1994.Housing for all South Africans is a human right and should be the first item on the agenda. Building homes was therefore the first duty assigned to the Reconstruction and Development Program (RDP), which was ostensibly created to encourage social cohesion and economic prosperity (Anon,2013). Sadly, the demand for inexpensive property to build these houses led to the development of communities far from the city center, lacking the necessary commercial or transit facilities to support them, which served to worsen the already uneven sprawl that already existed (Anon, 2013). The 1994 election of a new government was centred on reconciliation and peace, guaranteeing rights, housing, healthcare, and education to individuals who had been denied them for an extended period of time. Housing therefore started to be determined by socioeconomic position (Shah, 2018). Living in communities with individuals who share your history, culture, and background has psychological benefits since it’s comfortable. Funding may be allocated to appropriate infrastructure and community services in areas with a high concentration of members of a specific culture. This has a domino effect, drawing further members of the same group and culture to the region (Shah, 2018). At the same time, because racial hierarchies and racism’s lingering effects are still evident, this helps maintain some of the issues connected to Apartheid (Shah, 2018).



Figure 2.8- Johannesburg Class Juxtaposition 01(Anon, n.d.)



Figure 2.9- Johannesburg Class Juxtaposition 02(Anon, n.d.)



Understanding the Impact of Apartheid on Low to Middle-Class Communities

Making the connection between this history and the middle-class realities that are currently driving change in places like Northcliff is crucial. Apartheid is no longer only a historical narrative; rather, it is a continuing force that has shaped Northcliff's and other similar suburbs, transformation from an elitist community to a diversified, middle-class neighbourhood. White people were able to perpetuate the myth that there were no "outsiders" in their houses or communities and that everything was secure and under control because of their familiarity and invisibility (Falkof and van Staden, 2020). Generally, white South African suburban dwellers seldom ever saw black people in their neighbourhoods, with the exception of domestic and garden staff in their secure uniforms (Falkof and van Staden, 2020). This highlights the deep racial divisions and denial that underpinned apartheid's social fabric.

Planners during the Apartheid era primarily drew on pre-existing Modernist suburban patterns. The black townships suffered from all the negative aspects of suburbia, whereas the white towns were planned as ideal Garden Cities and enjoyed its wide-open spaces and lush vegetation (Anon, 2013). Rather than being assigned large backyards and suburban homes, black people were given tiny, identical "matchstick houses." Additionally, black inhabitants were sometimes hours and kilometres distant from the city core due to their geographical position and a deficient public transit infrastructure (Anon, 2013).

It should not be shocking that as the anti-apartheid movement grew, Black people started to reclaim the territory that was denied to them (Anon, 2013). The ANC concentrated on undermining strong, constructed symbols of Afrikaans dominance, such government buildings and civic centers, during the early years of resistance in the 1960s. However, as black South Africans started to establish sizable informal communities on the vacant land around large cities, the

resistance eventually took the form of occupation (Anon, 2013). Thousands of Black people were living in "white only" neighbourhoods by the middle of the 1980s, making it impossible for the Apartheid regime to maintain its policy of segregation (Anon, 2013).

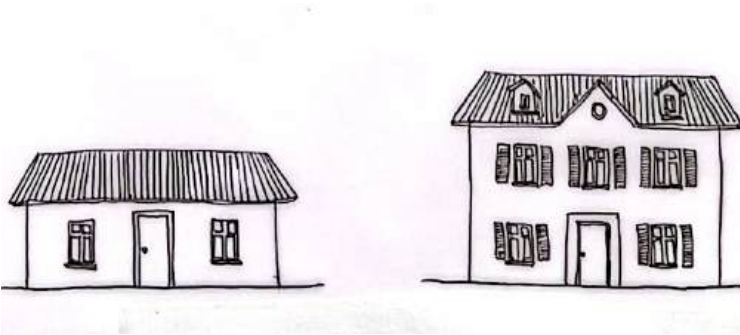


Figure 2.10-Matchstick vs Mansion (By Author,2024)

"Architecture of siege" In "Fortress Johannesburg," private residences are encircled by tall walls and mechanized gates. Thus, for its middle classes, Johannesburg has been able to become fully "global" with the disappearance of elements from some parts of the past (Falkof and van Staden, 2020).Many suburban whites used to harbour existential anxiety, but they have been masked by general urban fears about crime, immigration, environmental issues, political instability, and other issues (Falkof and van Staden, 2020). One of the distinguishing characteristics of modern Johannesburg life is the dread of crime, both real and imagined (Falkof and van Staden, 2020).Under apartheid rich communities served to reinforce racial and socioeconomic inequalities throughout society while shielding privileged inhabitants from perceived concerns of poverty, social unrest, and crime (Mazibuko, 2024). These neighbourhoods still persist today in different ways, acting as markers of privilege and marginalization in the post-apartheid era (Mazibuko, 2024).

The progressive symbolism of black people living in a once white-only neighbourhood is tragically overshadowed by feelings of vulnerability, alienation, and a strong desire to journey somewhere else (Falkof and van Staden, 2020). Belonging is about feeling safe, accepted, and connected, yet for many black residents in former white-only suburbs like Northcliff, lingering exclusion often leads to vulnerability rather than a true sense of home. Following this, it is evident how fears of crime narrow people's perspectives on possibilities and urban civic roles that they feel empowered to undertake. Therefore, it is important to treat feelings of endangerment seriously as both political elements and a way of expressing actual anxieties and concerns (Falkof and van Staden, 2020). Turning to anxieties about crime serves as a substitute for other constraints and disconnections and conveys the limited nature and experience of urban citizenship in the years following apartheid (Falkof and van Staden, 2020). Residents' narratives and the issues or subjects that concern them reflect the inequalities that define contemporary South African society, including the physical disparities between different residential areas and the limited housing options available to people, as well as the unequal distribution of financial or political

power and the resulting ability to influence urban environments (Falkof and van Staden, 2020).Although obvious ethnic divisions have made way for more diverse communities, the enduring architecture of security and dread highlights the ways in which past anxiety continue to influence contemporary life. The continuous process of transitioning from a gated community to a diverse neighbourhood has revealed the difficulties in making peace with a history that never truly goes away. It is ironic that, while black areas were designed to be segregated and isolated, they evolved into vibrant, thriving communities, whereas the "white northern suburbs, initially envisioned as idyllic garden cities, have turned into anxious, self-isolating, gated enclaves.

In suburban areas such as Northcliff, post-apartheid migration is a complex process influenced by socio-economic and cultural elements. Northcliff has been a popular destination for middle-class families looking for better prospects, excellent schools, and safer surroundings as South Africa tries to recover from its apartheid history. To reflect upon Why are people moving to Northcliff, why are people selling their properties, and where are they going? Having personally experienced this migration and being associated with the growing Islamic community, its observed that Diverse populations are pouring into Northcliff, However, some long-time residents may experience a sense of displacement as the suburb grows more diverse, leading them to give up their homes and relocate to calmer neighbourhoods or regions they believe better reflect their historical identity. This movement reflects changing demographics, but it also tells a deeper tale about aspirations, belonging, and the difficulties of navigating a country still traumatized by apartheid.



Figure 2.11 Reconciliation (By Author,2024)



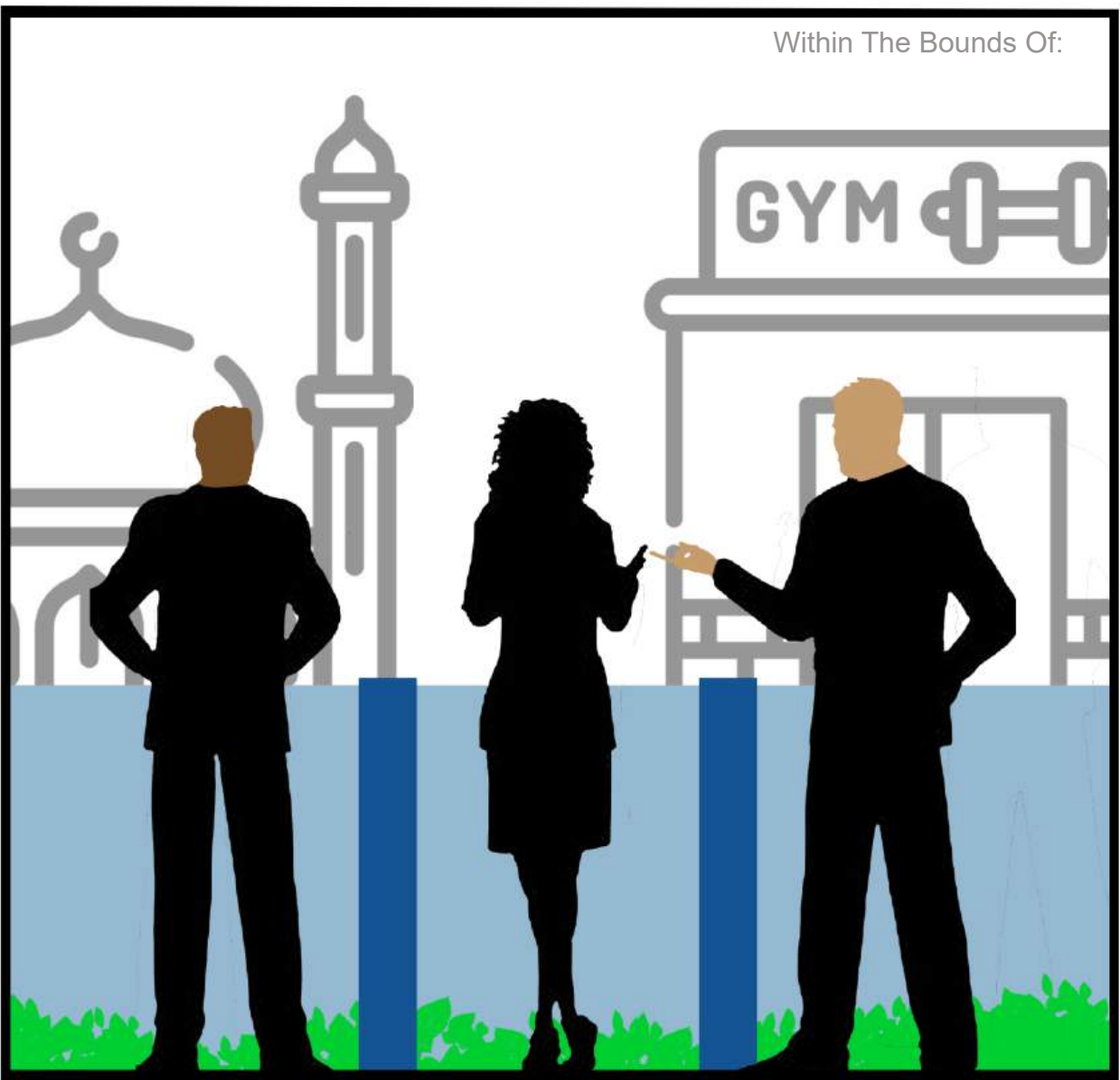
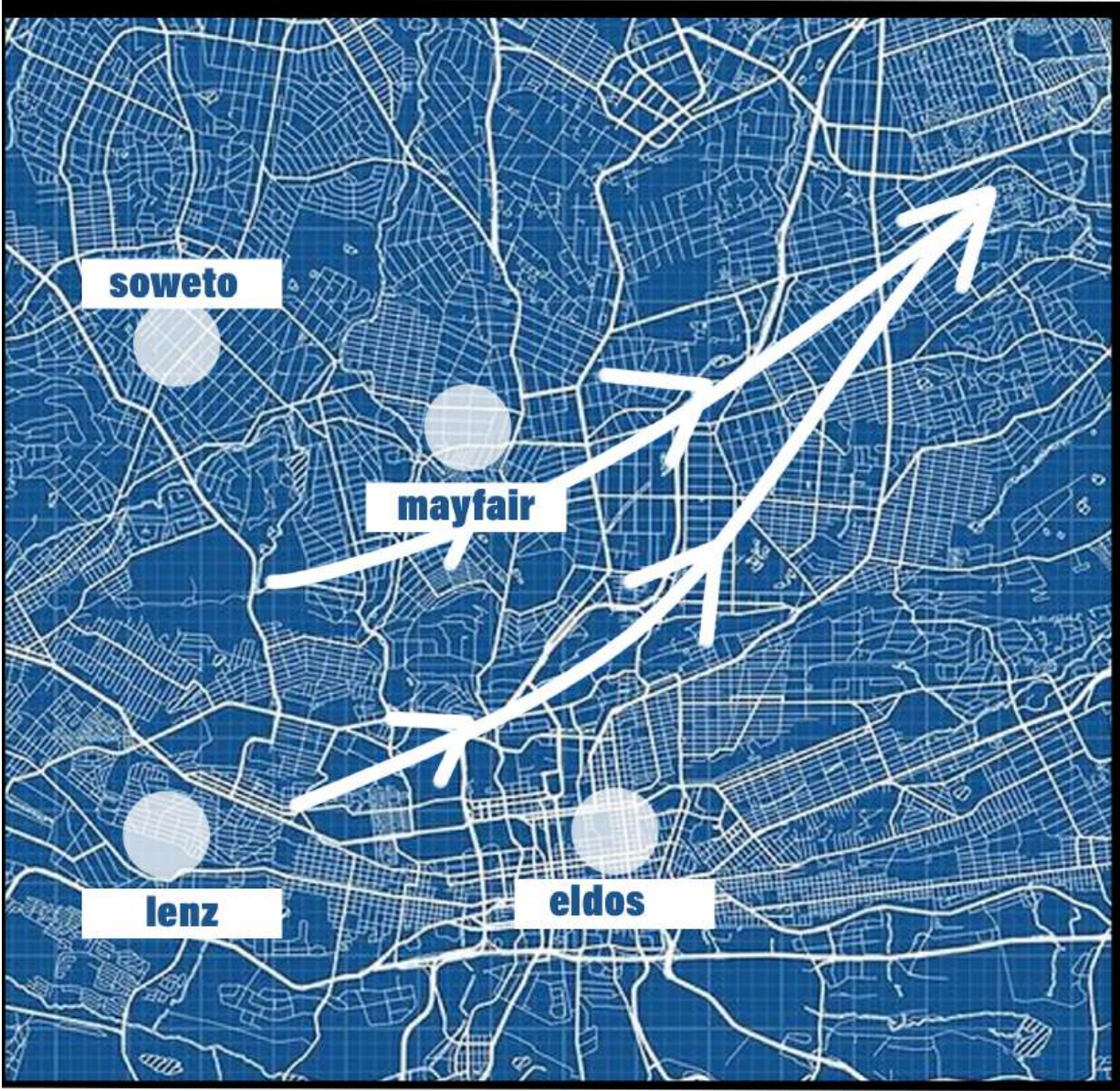


Figure 2.12-Disconnection (By Author,2024)





Figure 2.11-Main Road Voids (Google,2024)



Figure 2.13- Beyers Barrier (Google,2024)

**Major Main Road Connectors To Site**

The connection between commercial and residential areas in Northcliff is heavily disrupted by major roads like Beyers Naude Drive, which act as barriers rather than connectors. These wide, vehicular-focused roads prioritize car movement, creating a physical and psychological divide between the spaces on either side.

The prevalence of parking lots, driveways, and high-speed traffic further undermines the pedestrian realm, making it difficult and unsafe for residents to walk between residential areas and nearby shops, cafes, or community facilities. This car-centric design emphasizes separation over integration





Figure 2.14- Blank Space (By Author,2024)



**Building Relationships In Northcliff**

Strong boundary walls, consistent pavements, and mature trees that provide a sense of shade yet enclosure give the area a serene, almost isolated impression. The streets' apparent preference for automobile traffic above pedestrian-friendly design seems to reinforce the division between the public and private spheres. This setting exudes a suburban character more concerned with seclusion and privacy than with social connection with the community. It also lacks a lively street life.

**Residential to Sites Open space Relationships**

Open spaces, such as sidewalks and greenery, are often overshadowed by these barriers, limiting opportunities for social interaction and community engagement. The lack of active edges, such as cafés, shops, or communal areas, means that public spaces remain largely functional rather than lively or interactive, reinforcing a sense of isolation within the neighbourhood.

Figure 2.15-Blank Public Realm (By Author,2024)



# Ch. 3

## Identity & Belonging

Focuses into the concept of identity within a neighbourhood, focusing on how the site's analysis reflects the location's unique character. It examines the growing diversity within the neighborhood and how various building typologies contribute to and reflect the evolving identity of the area. By exploring these aspects, the chapter provides insight into how architectural and urban elements interact with the community's sense of self and collective identity





Neighbourhood Identity

A neighbourhood is taken care of by its members when they actively participate in developing its shared areas, encouraging relationships among them, and protecting the distinctive features that define it who it is. The collective perceptions of a community contribute to its overall “identity “.Neighbourhoods with a “strong identity” are defined by some policymakers and scholars as those where residents have a propensity to actively engage in civic life and have a shared vision for the community’s future (anon, 2024). A neighbourhood’s identity is shaped by its social customs, architectural characteristics, cultural sites, and population variety. These factors all work together to create a sense of belonging, which is essential for providing residents with a sense of safety, acceptance, and collective spirit. This sense of belonging is changing in Northcliff as the area becomes a more varied and inclusive community instead of an elite enclave. This transformation also begs the concerns of how establishments such as the neighbourhood country club, long a symbol of exclusion, fit into the new story of Northcliff’s identity and if they support or undermine the development of newly unified community.

Topographical Identity

The topography of Northcliff, characterized by a steep incline from the lower areas at the base of the hill to the elevated heights, reveals a distinct socio-spatial gradient. As you move up the hill, the landscape shifts dramatically, with the lower areas generally more accessible and integrated into the surrounding urban fabric, featuring a mix of commercial, residential, and public amenities. In contrast, the upper side of the hill, dominated by large, private residences and gated properties, offers panoramic views, signaling wealth and exclusivity.

This elevation difference not only symbolizes a socio-economic hierarchy but also affects how residents interact with their surroundings. The lower slopes are more connected and accessible, while the higher areas are more secluded, reinforcing feelings of isolation and privilege. The topography thus reflects a broader narrative of separation within the suburb, where elevation is not just a physical trait but a marker of status, privacy, and disconnect from the broader community below.

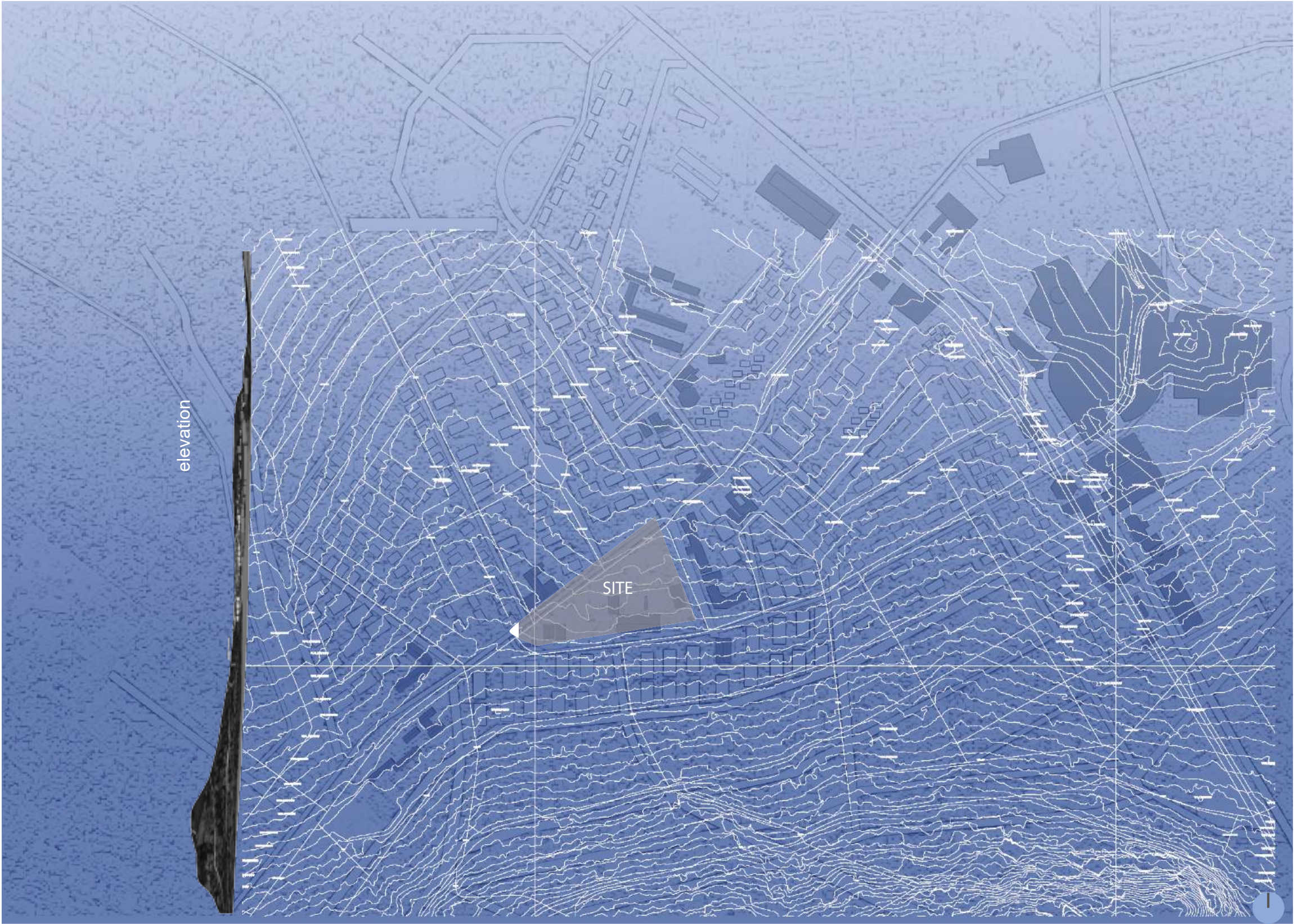


Figure 3.1 Topography (By Author,2024)





Figure 3.2 Property Ownership 01 (By Author,2024)

# Property Ownership

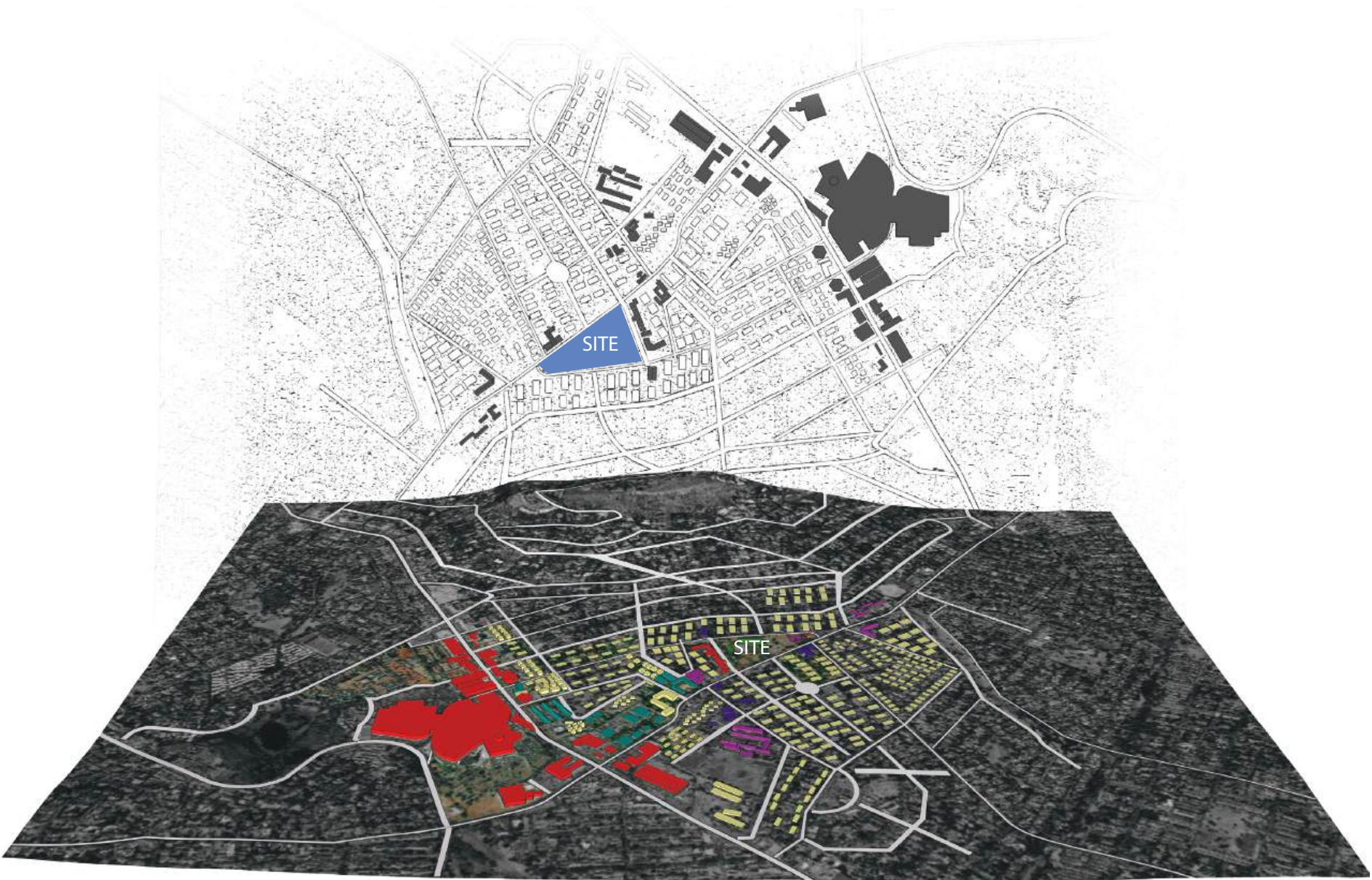


Figure 3.3 Property Ownership 02 (By Author,2024)

## Property Ownership Identity

Northcliff and the general northern suburbs does well in implementing various amenities amongst each other but lacks the social interaction factors its capable of by its disconnect to the public realm. The site provides a central location to spark an proposal and change the dynamic of relationships amongst the people of northcliff. People are drawn to public space to relax,interact and enjoy open space

However more sound is generated in places of commerce and interactive street edges.The public space is seen as an escape. property ownership shapes identity and belonging, with the lower and middle parts of the hill featuring a mix of residential, commercial, and public spaces. interaction is confined within the bounds of each building type, resulting in a lack of visual or dynamic connection across the suburb.



Identity and Anxiety

Neighbourhood identity promotes a sense of community and shared responsibility among inhabitants, which can help reduce crime. Reflecting upon the aforementioned points on crime; when a community’s identity is shifting, as it is in Northcliff, concerns about the change in social fabric may cause worries of crime to increase. Residents tend to withdraw and avoid forms of affiliation with one other and their living places due to fragile and stressful living circumstances and the responsibilities of daily life (Falkof and van Staden, 2020).Residents articulate their desires through discourses about crime and physical security, rather than through bonds to the neighbourhood and their neighbours (Falkof and van Staden, 2020).Thus, it becomes clear that crime limits or restricts people’s experiences of contemporary Johannesburg in very real ways. However, worries about crime also mask more serious problems with belonging and ownership of urban space, and are a symptom of larger societal inequalities and forms of stratification (Falkof and van Staden, 2020).

Northcliff is an accurate representation of this research as it shows how, in post-apartheid Johannesburg, concerns about crime may obscure more fundamental questions of ownership and belonging. Although towering walls and gated houses are common security measures, these reactions to crime also reveal a wider fear about the shifting socioeconomic structure of the suburbs. Since the real challenge is to create spaces where all residents feel a genuine sense of belonging and ownership, beyond the physical barriers of security, it is evident that newer, ethnically diverse residents frequently feel disconnected due to the ongoing socioeconomic divides and historical legacies of exclusion.



Figure 3.4- Historical Legacies Of Exclusion (Sithole, 2023)



Figure 3.5- Split Identity Figure 3.2 (By Author,2024)



Significance of a Country Club

Country clubs, which combine heritage, sports, and social networking possibilities, have developed from private retreats for leisure into essential community centres. They are essential in helping members feel like they belong, offering a wide range of recreational opportunities, and making a substantial economic and community impact (admin, 2024). Country clubs are lively communities that promote social integration, uphold traditions, and make significant cultural and economic contributions to society. They are more than just places for fun and relaxation. Knowing a country club’s objective demonstrates the scope and depth of their influence and emphasizes its continued importance in the modern world (admin, 2024).As a component of this changing area, the Northcliff Country Club represents both history and future change. It is vital to evaluate if the club’s goals and ideals are consistent with this new identity as Northcliff transitions into a more open and varied community. The country club’s continued relevance on this location depends on its capacity to change with the times and make a significant contribution to the evolving social landscape of Northcliff, promoting a feeling of community among all citizens instead of merely upholding the exclusiveness of the past.

What Does The Club Represent In Terms Of The Site And Country

Given the complicated history of racial segregation and discrimination in South Africa, the history and perception of country clubs are in fact entwined with colonialism and apartheid In South Africa, many country clubs were once private establishments serving the white minority, a legacy of apartheid’s segregationist practices. Due to the colonial system’s racial and economic division of society, the White group was the only focus of its early forms (Vasilios Ioakimidis and Wyllie, 2023). Its known that these clubs frequently prohibited non-white South Africans from entering or using the club’s amenities

due to racial membership restrictions. Furthermore, the advantages and social structures of the elites throughout the colonial and apartheid eras were frequently linked to the founding and upkeep of country clubs. These clubs reinforced social inequalities and exclusivity along racial lines by acting as gathering places for the white elite to socialize, network, and have fun. Northcliff once regarded as a place exclusively for White people, with Black people being creatively ostracized outside of it. Its reported that Black women were “careful not to draw attention to themselves through their dress or their bearing, since their positions as family servants made them appear innocuous and their ubiquity made them invisible to White people.” (Falkof and van Staden, 2020). Therefore, to shape perceptions of country clubs in South Africa, and discussions about their role in society often involve considerations of historical privilege, exclusion, and efforts towards reconciliation and transformation.



Figure 3.6- Dont Draw Attention (Anon, 2024)

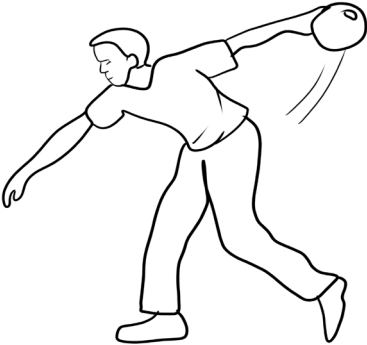
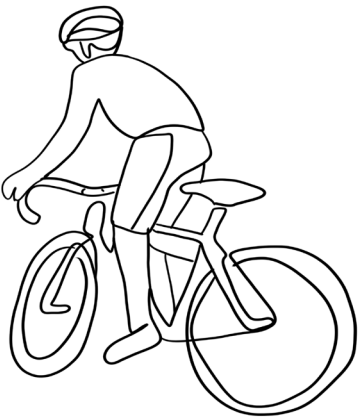
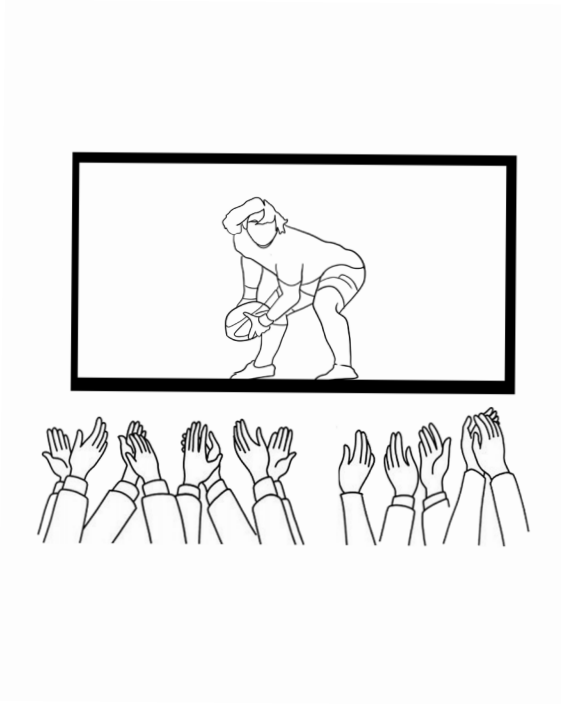


Figure 3.7 Relevant Programme of The Northcliff Country Club (By Author,2024)



The ideologies attached to a country club can be associated with racial sport exclusions during and even before apartheid. In sports, there was a clear class divide in the Cape Colony. In 1897, the Western Province Rugby Football Union participated in their inaugural rugby Junior Challenge Cup match. It was made clear that only males of “European descent” were eligible to participate (Cleophas, 2017).

White students in Stellenbosch, Western Cape, voiced concerns over rugby matches with the “chams,” or coloured people, on a property known as ‘Die Braak’. When segregation measures were accepted by the government, they were happy (Cleophas, 2017). This was a mirror of cultures in the 19th and 20th centuries where involvement in sports was intentionally restricted or allowed. The colonized had little leeway from these limitations, prejudiced viewpoints, and exclusive provisions in the bylaws of their sports organizations (Cleophas, 2017) therefore, distinct athletic organizations for the African, mixed-race (Coloured), Muslim, and Jewish populations existed at the provincial and national levels prior to World War II. These clubs occasionally competed against one another. However, in general, the officials and fans continued to be rigid about who was allowed to participate in their games (Cleophas, 2017).

In South Africa, economic factors influenced who could participate in sports, and most black people, particularly women, found it challenging to get access to quality sports facilities, the bulk of which were located in predominantly white communities (U.S. Sports Academy, 2005). Townships were left without a sports infrastructure due to the legacy of apartheid, and their access to sports facilities was inadequate. A female teacher from a coloured township in Cape Town attested to the lack of amenities, describing her school’s sports facilities as practically non-existent (U.S. Sports Academy, 2005).

It is impossible to isolate the post-apartheid era’s changes in sport from the larger social, political, and economic context. White people and their involvement in sports are still given priority under this framework. (U.S. Sports Academy, 2005). In places populated by Indians and Coloured people, there were fewer sports resources, and most of them were utilized by males. The township facilities for Africans were substandard and mostly limited to soccer and occasionally netball (U.S. Sports Academy, 2005). Sport was irrelevant to a lot of people. Resources for African, Coloured people, and Indians in schools were scarce. Women’s participation in sports was restricted by patriarchal rules, transportation issues, and poverty (U.S. Sports Academy, 2005).

Programming of the country club may change to appeal to a wider audience, its symbolic associations with elitism and discrimination endure. This begs the important question of whether South Africa’s post-apartheid democratic community still needs these kinds of institutions. It could be possible to make the country club more representative of Northcliff’s changing demographics by incorporating it into multivalent, inclusive community areas. In particular, sport has the power to bring people together across ethnic and cultural barriers by promoting a feeling of shared identity and belonging. Northcliff can more fully accept its diverse community by converting the country club into a place that fosters inclusion through sports and social events, making sure that the region’s long history of segregation does not impede its progress toward unification.

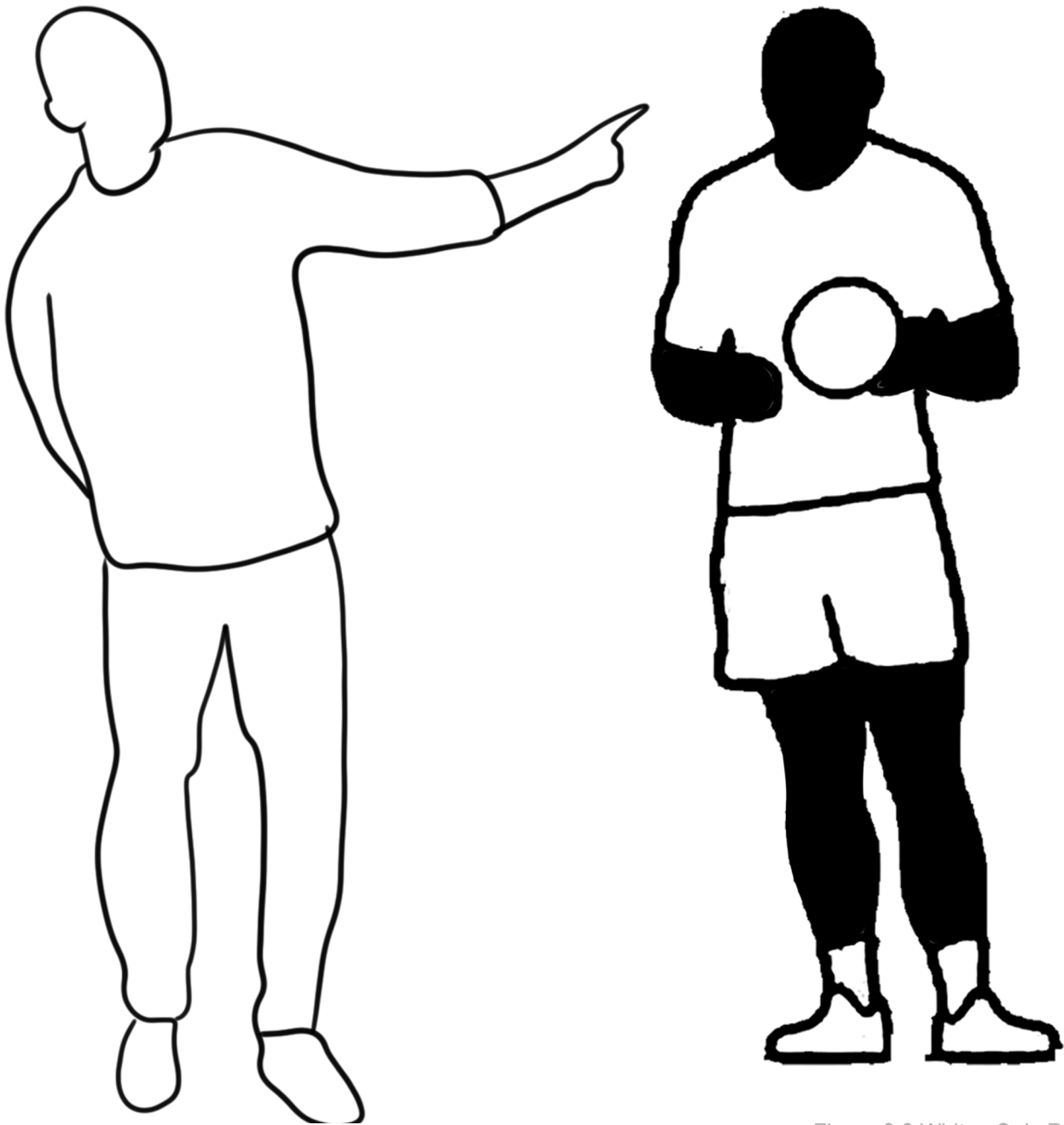


Figure 3.8 Whites Only Rugby (By Author,2024)



Typology Of The Guarded Suburbs /Enclosed Communities

In South Africa, gated communities are often categorized as contained neighbourhoods and security villages. Many believe that the only secure place to live in a city is an enclosed neighbourhood or a security village, especially given the high prevalence of crime in the area (Landman, 2004). The majority of the undeveloped township lands in the City of Johannesburg were located south of the mining belt. Significant urbanization and severe housing shortages were brought on by the city's explosive expansion in the 1950s and 1960s in the so-called "locations" or "townships," which were designated as non-white zones. These "townships" are underprivileged communities with a weak local economy (Landman, 2004). Apartheid design therefore produced an urban structure that was disempowering, had no drive for social and economic advancement, and was heavily dependent on the northern half of the city for jobs, necessities, and services. The wealthier suburbs north of the city, on the other hand, continued to expand and change (Landman, 2004). Over time, a large number of companies and city dwellers moved to the northern suburbs. As a result, several decentralized nodes that provide retail, leisure, and job options in the northern suburbs were developed (Landman, 2004).

The lowest rates of property crime are frequently seen in townships and impoverished communities, which also have the highest rates of violent crime per capita in urban areas. Richer suburbs, oppositely typically encounter the exact reverse (Landman, 2004). In response, locals have stepped up security measures. These can range from installing electrical devices like alarm systems, intercom systems, electronic gates, panic buttons, and closed-circuit surveillance cameras to making structural changes like adding security gates, fences, and walls surrounding houses, as well as installing burglar bars. Still, a lot of South Africans who live in cities feel that these steps are insufficient (Landman, 2004). Their desire is to reside in a neighbourhood that is safer. As a result, Tshwane and

Johannesburg have seen a rise in the number of contained neighbourhoods and security villages. Larger business parks, opulent mansions, and modest townhouse complexes are just a few of the various development types seen in security villages (Landman, 2004). Any architectural style that complies with the estate's architectural norms and restrictions may be used by residents or office park developers inside the security estates (Landman, 2004).

The enclosed neighbourhoods comprise quiet residential streets lined with typical suburban houses. The streets are narrow and designed for local residential traffic (Landman, 2004). The sidewalks are generally wide and mostly well maintained, and often lined with luxuriant trees. The areas are well signposted (Landman, 2004). Many people walk or jog through both these neighbourhoods. Others walk their dogs and in some cases children walk alone or with dogs .

Northcliff is a reflection of a larger trend in the northern suburbs of Johannesburg, where growing security village and contained neighborhood construction is a response to growing crime concerns. This dynamic has caused the urban fabric to become fractured, characterized by physical barriers and an emphasis on personal protection. With walking walkways connecting its business, residential, and recreational spaces, Northcliff may create a more cohesive, interconnected atmosphere that promotes social interaction and a feeling of community among all of its numerous residents.

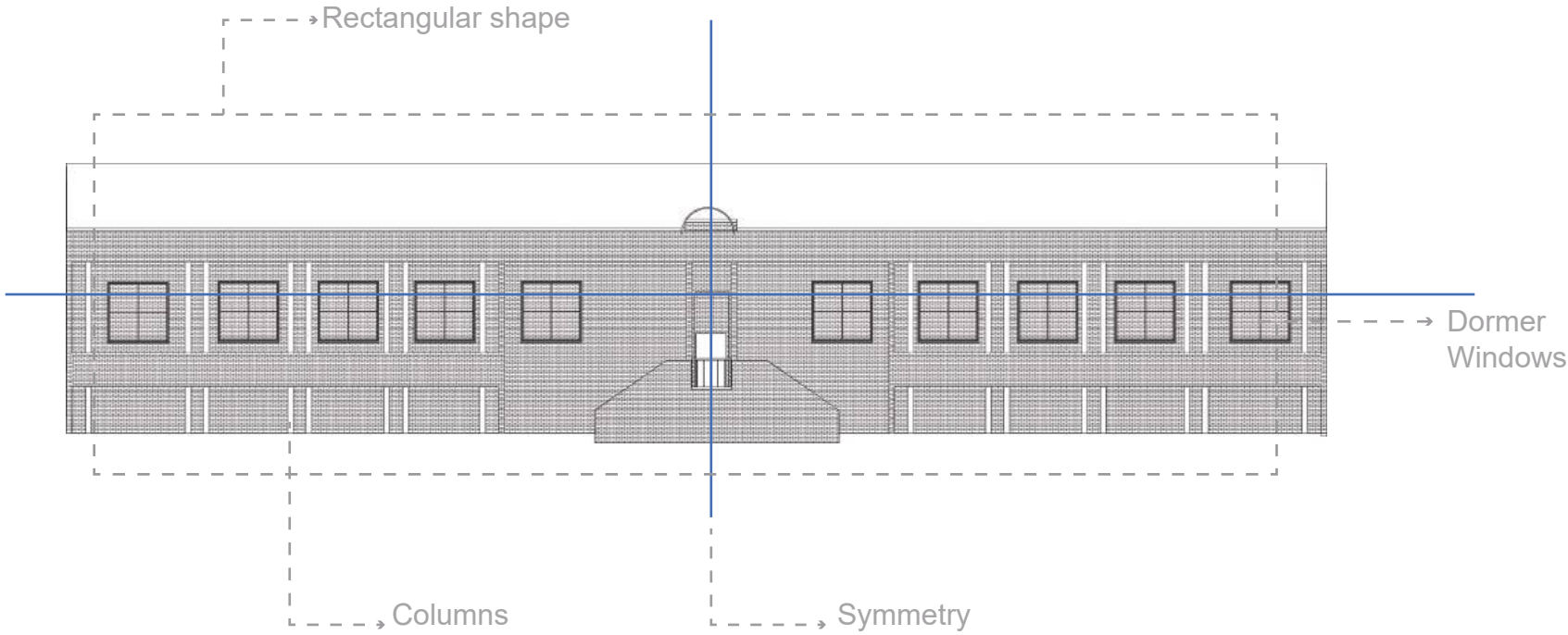


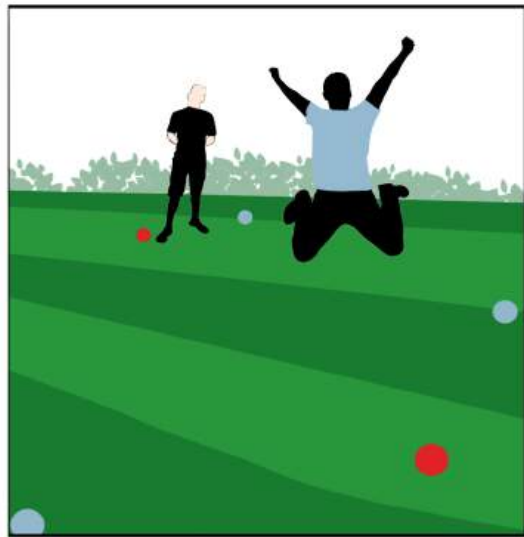
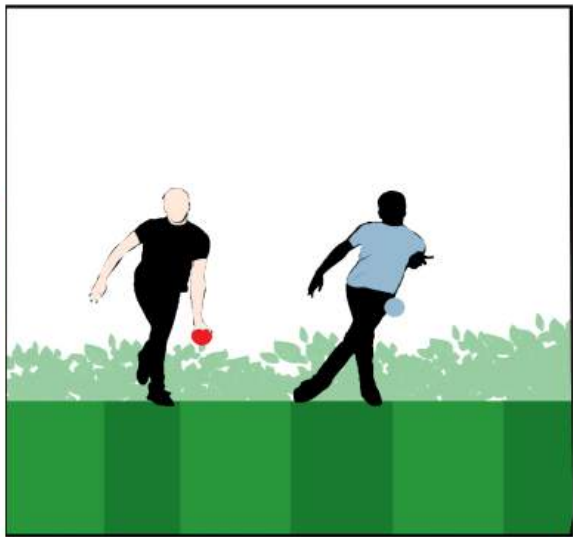
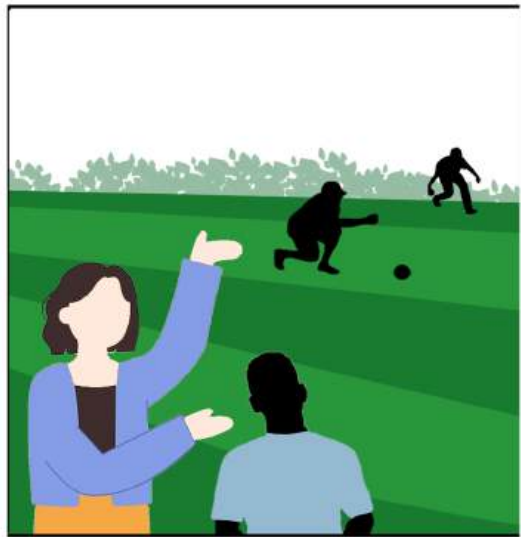
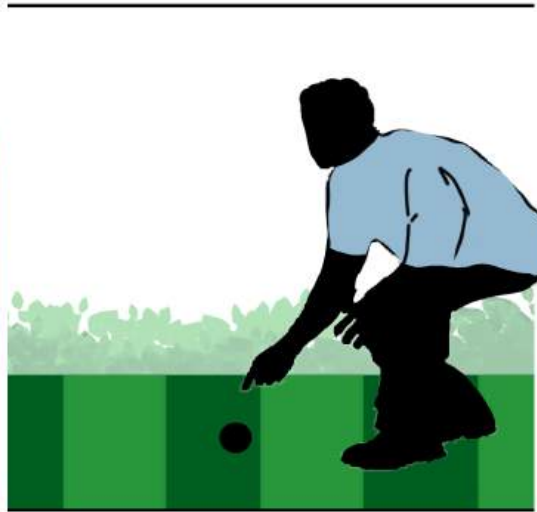
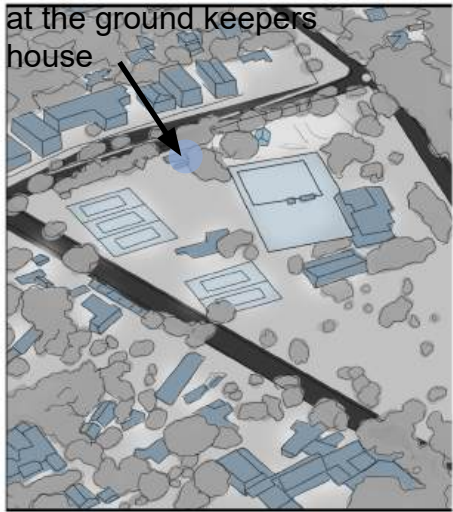
Figure 3.9-Northcliff Country Club Typology (By Author,2024)

The colonial architecture of a country club, with its imposing facades, rigid symmetry, and Conspicuous columns, often perpetuates outdated and elitist aesthetic values that reflect historical inequities and an exclusionary sense of refined leisure.



Figure 3.10-Gated Communities (By Author,2024)





Misconceptions About Sport Relevance

Bowls, often seen as a sport for elderly white members of apartheid-era country clubs, seemed irrelevant in the evolving suburb of Northcliff—a community now diverse and youthful. Initially, I thought the sport had no place in a new vision for Northcliff and planned to exclude it from my design.

However, a meeting with a representative from Bowls South Africa, under SASCOC, changed my perspective. The country club now hosts children from various local schools, who learn and compete in bowls, making it a vibrant, inclusive sport. These young players, diverse in ethnicity, have embraced bowls, turning the country club into a lively space for inter-school tournaments and community engagement.

This surprising relevance of bowls is one of the reasons the country club stands as an exciting prospect for future urban evolution. It embodies the spirit of Northcliff's transformation. A space where tradition meets new beginnings, and outdated perceptions give way to a progressive, inclusive reality. Bowls, once an emblem of division, now unites a new generation of Northcliff residents, proving that even the most unexpected elements of the past can find a meaningful place in the suburb's ongoing story.

The storyboard reflects an unexpected true story about a boy in relation to the country club and sport

Figure 3.11 -Bowls Prodigy (By Author,2024)



Religion And Sport

Programming can be influenced through the idea of religion and sport working in harmony. The imposition that multivalent spaces can be incorporated surrounding multiple building functions majority being residential is worth exploring. Creating a public realm that can host the wider range of surrounding areas but serves the area its placed in by creating a safe, modern, reformed and pedestrianised neighbourhood is the nucleus of the design and thesis objective.

Symbolically there is a powerful connection between body and place. The following is from my personal perspective and experience: Being an Indian Muslim originally from Lenasia, Johannesburg, used to the busy pedestrian occupied streets, low residential walls and having a religious building on almost every corner it's a radical shift to living in the northern suburbs not knowing your neighbours or ever forming a relationship regularly. There is a convenience of being almost 10 minutes away from all amenities or not having to worry about driving home before it gets dark due to safety concerns but it still doesn't escape the feeling that you don't belong in the elitist suburban lifestyle.

The mosque however provides a glimpse of hope to improving the enjoyment feeling of living here. It's a beacon of matter in an otherwise void space. Its where you meet people of all races and backgrounds who have either been in place for years or have recently just settled. Its where community and relationships are grown. Following that notion its observed religious and recreational sport facilities possess similar characteristics.

The Islamic population within these northern areas is

rapidly growing. Our mosques are at capacity and Islamic organisations are constantly seeking funding for more prayer and educational spaces. The Islamic identity within me is drawn to create spaces that provide these amenities but is also in urge to produce a hub that will be beneficial to the greater community backgrounds through multivalence and addressing the voids present in Northcliff. Islam holds that humans are made up of a spirit and a body. God has given us the ability to have a body. We should refrain from unhealthy behaviours and make sure it is appropriately safeguarded. One of the finest methods to safeguard the human body is through sport (Manaz, 2005).

اللّٰهُ الَّذِي جَعَلَ لَكُمْ الْاَرْضَ قَرَارًا وَالسَّمَاءَ بِنَاءً وَصَوَّرَكُمْ فَأَحْسَنَ صُوَرَكُمْ وَرَزَقَكُمْ مِنَ الطَّيِّبَاتِ ذٰلِكُمْ اِلٰهُكُمْ رَبُّكُمْ فَتَبَارَكَ اِلٰهُ رَبِّ الْعٰلَمِيْنَ

“It is Allah Who has made for you the earth as a resting place, and the sky as a canopy, and has given you shape- and made your shapes beautiful, - and has provided for you Sustenance, of things pure and good; - such is Allah your Lord. So, Glory to Allah, the Lord of the Worlds!” (Surah Ghafir ayah 64, The holy Quran).

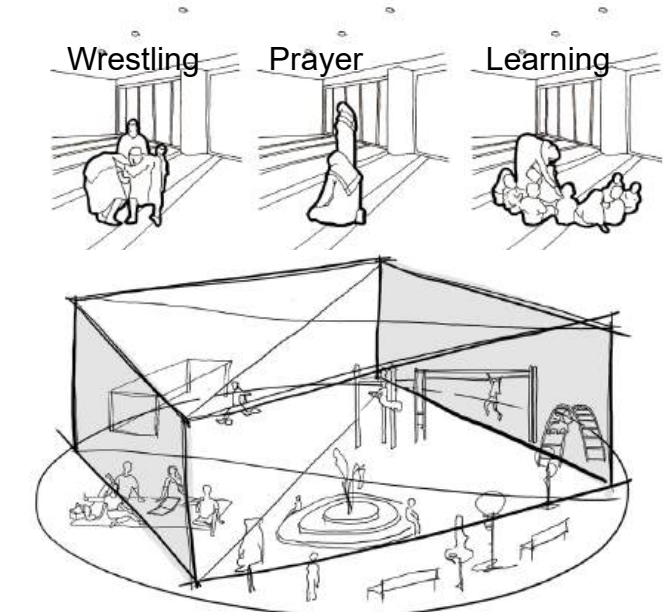


Figure 3.12- Multivalency (By Author,2024)

Since the dawn of civilization, there has been a link between sport and religion that has grown and changed to become the contemporary world we live in today (Games, 2023). It's common to draw comparisons between how religion imparts moral principles and ideals and how athletics shapes beliefs, attitudes, and actions (Games, 2023). The Prophet Muhammad (PBUH) had engaged in camel or horse racing, wrestling, running, archery, and other sports, and he had counselled other Muslims worldwide to do the same and it is advised for us to follow his sunnah. The social function of religion is to maintain religious harmony and tranquillity (Manaz, 2005). No religion in the community aspires to prejudice, conflict, or evil deeds. Athletic clubs resemble communities. The people who are receiving training or who are supporters of the sports team have a same belief. According to the perspective of religious psychology, each religion serves the unique aim of imparting life discipline to its followers (Manaz, 2005). Athletics is a discipline that is specific to a person. It is evident that there are parallels between religion and sports (Manaz, 2005).

Prayer is also a connotation of physical health. As a religious duty to obey The Eternal Lord, Allah S.W.T., Muslims view prayer as the second pillar of Islam. Our daily prayers are a gift; they serve as a tiny window, opening five times a day, that helps us see the big picture and remember why we are here on earth (Global Ehsan Relief, 2024). Besides the spiritual benefits, prayer five times a day also has several health advantages. When we pray, we must adopt a variety of positions that compel our bodies to go through a certain exercise during the Salah (Global Ehsan Relief, 2024). The discipline as well as belief in the unseen is a constant test of faith, though surely it brings peace to those who want to lead a good life during their time on earth.

These are just the surface of ideals and values I've practiced my entire life but is a major aspect of my identity. These are the ideals I want my design to reflect. A space where you get to be yourself at any time. A space for all religions to engage through sport and education. A space where if you had missed one of the 5 daily prayers at the mosque it can be read or made up here. A space for all religions to feel safe to come and practice. A space to wait, relax, think or play. A space for the new Northcliff. The challenge lies in the method one develops, nurtures and enhances identity and belonging through architecture.

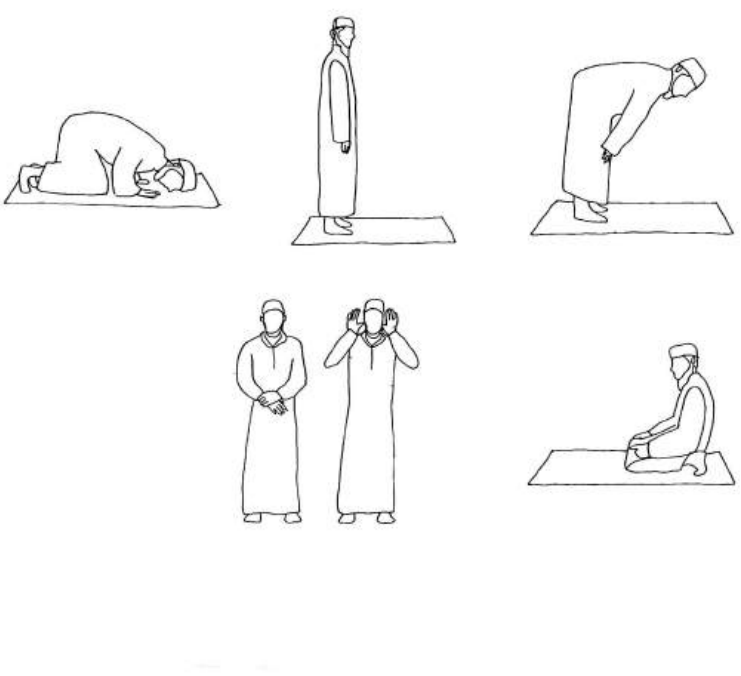


Figure 3.13-Positions Of Salah (By Author,2024)



# Ch. 4

## Urbanism

This chapter compares a central public space precedent with research focused on the issues, successes, and strategies of various neighborhoods. It critically analyzes how colonialism and apartheid has influenced Johannesburg on multiple levels, affecting its urban development and public spaces. By juxtaposing the case study with historical and contemporary research, the chapter highlights key lessons and strategies for addressing the complexities of urban environments shaped by colonial legacies.





Urbanism

Urbanism in Northcliff is intricately connected to its evolving spatial system, reflecting the area’s transition into a more integrated and diverse urban environment. While Johannesburg’s public space provision has changed dramatically from the apartheid era’s regulated and constrained settings to the post-apartheid era’s more inclusive and accessible areas, it still falls short of other global cities’ dynamic, fully functioning public spaces. Great public areas are those where festivities take place, people interact socially and commercially, acquaintances cross paths, and cultures blend (Project for Public Spaces, 2020). Our public institutions, such as libraries, field houses, and schools, serve as the “front porches” through which we communicate with the public and the government (Project for Public Spaces, 2020).

Urban areas have always been experimental grounds; their success has come from moving away from monolithic designs and toward interactive spaces (KG, 2021). This also entails examining rival uses and, if required, reassigning usage rights. Everyone has access to public space, and stagnation results from a lack of change (KG, 2021). In reality, there’s always a wider context inside a neighbourhood. It’s up for debate how big it needs to be. However, there should already be a gathering place where public space is involved, where parks, squares, and streets serve as the structural foundation around which the buildings are developed (KG, 2021). where several purposes coexist and are not only packed inside one structure but rather stand next to one another (KG, 2021).

The relationship between these buildings unpacks the conversation of platonic solids and voids. As objects are positioned within the environment, the structures have distinct forms, much like small boxes. These solids are platonic (philipabenton, 2015). The areas between the structures start to take on a personality and shape of their own. These voids are the leftovers, which is why they take on arbitrary forms. While the spaces are not platonic, the solids are (philipabenton, 2015). The contrary strategy is more common in urban areas. The designer plans the spaces first, the structures second, rather than thinking of the buildings as having a shape of their own (philipabenton, 2015). The forms are identified as squares, plazas, or streets; each is a rectangular or cylinder of space, and this time, the building fills in the spaces left by the other structures (philipabenton, 2015).

Platonic voids in Northcliff symbolize the possibility for flexible, adaptive spaces like new communal areas, while Platonic solids depict the suburb’s structured, traditionally elite regions like the country club. Keeping these ideas in check might contribute to the development of a more vibrant and welcoming urban environment as Northcliff develops. I conducted a Precedent study to supplement my understanding of Urbanism and reflect upon the principles that could potentially be applied to my design.

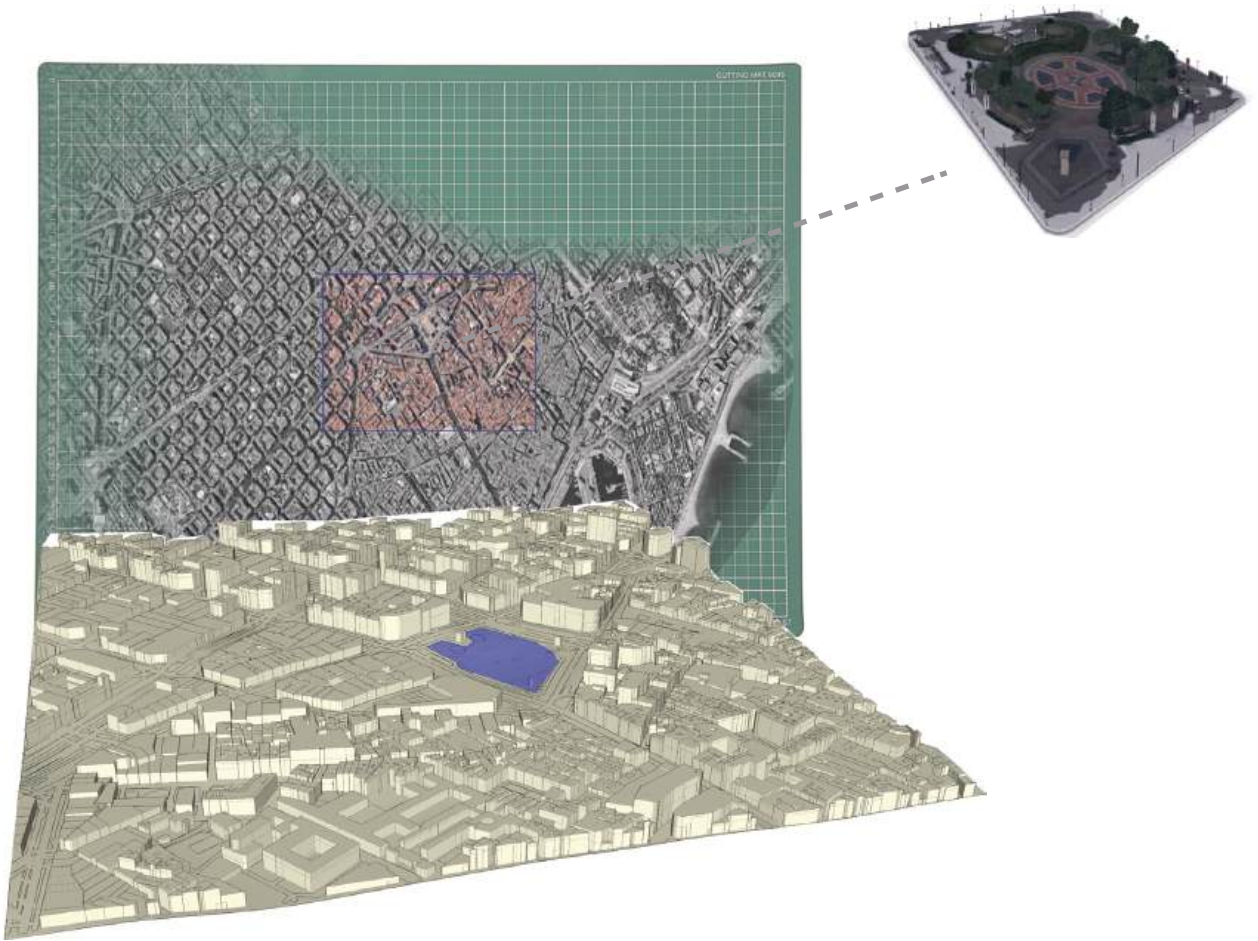


Figure 4.1-Placa De Catalunya (By Author,2024)

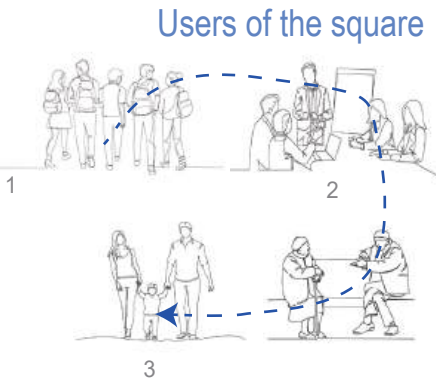
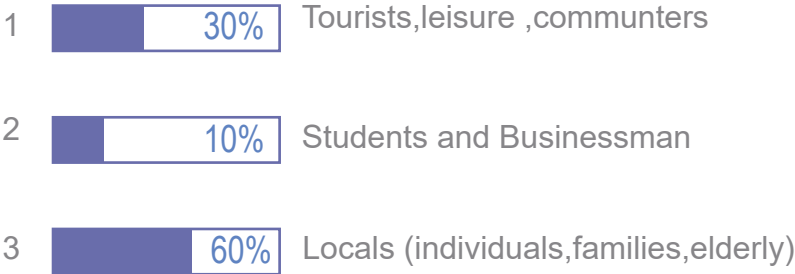


Figure 4.2-Users of the Square (By Author,2024)

# Placa De Catalunya

Catalonia Square -Barcelona,Spain

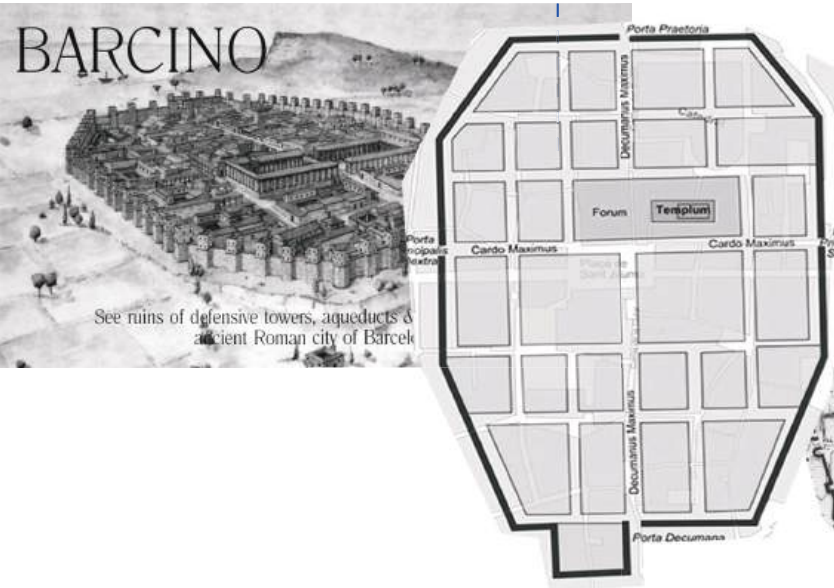
A major plaza in the heart of Barcelona that is often regarded as the city’s center as well as the meeting point of the old city and the Example, which was constructed in the 19th century (Wikipedia Contributors, 2024).

The square’s oval-shaped center has seats that are perfect for people watching. This location is sheltered from the busy streets by a solitary row of trees. There are two sizable circular fountains to the north that are lit up at night (a view on cities, 2015) The plaza’s architectural features include park seats, striking fountains, reflecting ponds, and a variety of neo-classical sculptures and monuments (Barcelona-Home, 2013).



1260

The wall was extended, and in the fifteenth century, it was enlarged once again to include the newly established Raval area. To supply the city, agriculture was practiced on the portion of the plain beyond the wall (Cm |, 2019)

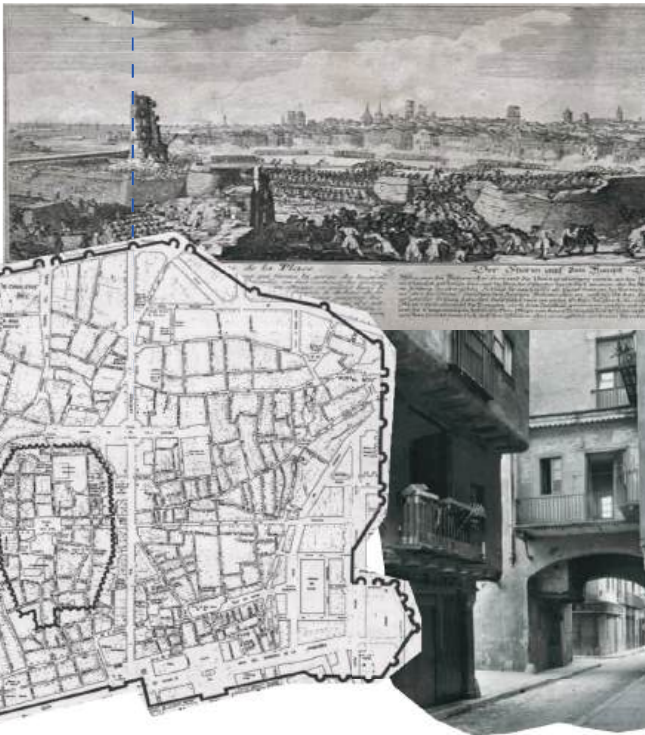


15-10 BC

Barcino, a Roman settlement, was the site of Barcelona's founding. Emperor Augustus established the Roman town of Barcelona in the years 15–10 BC (YELLOW, 2024)

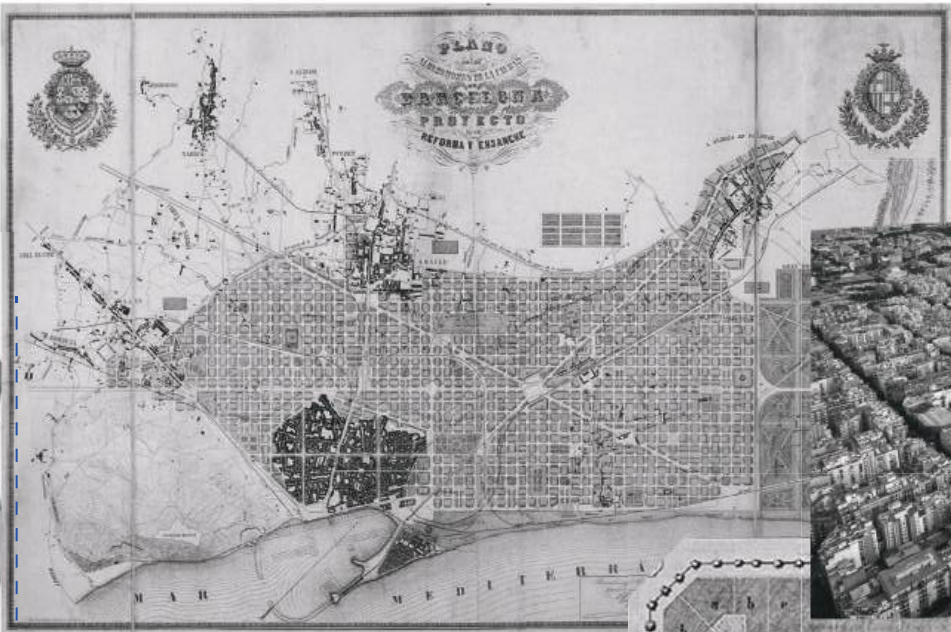
1859

The development of the manzana, a carefully considered and planned city block layout, was the central idea of Cerdà's master plan. Each manzana was originally intended to be constructed with only two or three sides, a depth of 20 meters, and a height of 16 meters. (DOERR, 2015)



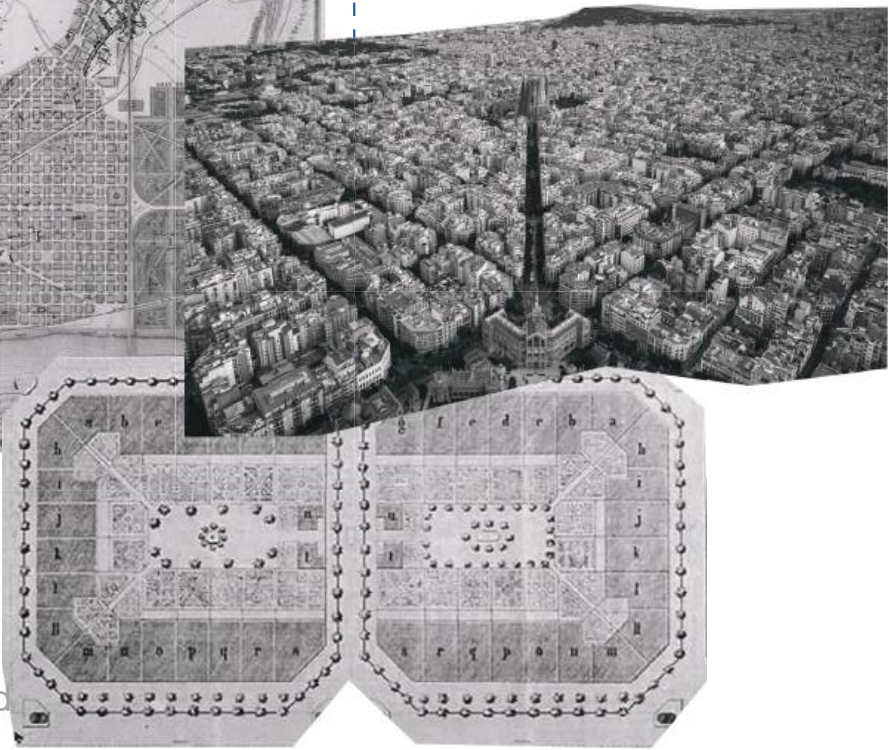
1800s

By the mid-1800s, the city had the greatest population density in all of Spain, terrible working conditions, uncontrolled sewage, contaminated water, and a history of cholera outbreaks and riots. (Roberts, 2019)



CERDAS DESIGN

The 45 degree chamfer was created to allow for the steam tram's turning radius since Cerdà thought that this mode of transportation will eventually take over in Barcelona (DOERR, 2015).



21ST CENTURY

Barcelona still a model of successful city planning. Cerdà an architect/engineer is known as the one who created urbanisation.

Timeline

Figure 4.3-Placa Origins ((YELLOW, 2024), (Cm |, 2019), (Bausells, 2016), (DOERR, 2015).



People Centred Urbanism

Research into diversity of use, active edges and thresholds, access to public resources, and walkability is essential for addressing the current challenges in Northcliff. Gathering data on these factors will provide valuable insights into how best to develop and enhance the area, ensuring it evolves into a more inclusive, functional, and pedestrian-friendly community.

I will use Jane Jacobs’ “The Death and Life of Great American Cities” and Carlos Moreno’s’ Concept of a “15-minute city” to deepen my understanding of urban dynamics and inform my approach to addressing the issues in Northcliff.

Diversity Of Use

A sidewalk in a city is nothing on its own. It is an abstraction. It only has significance in relation to the structures and other uses that border it, or in relation to other sidewalks that are close by. A city appears intriguing if its streets are interesting; if not, the city appears uninteresting. Firstly, regardless of how important the police are, they do not maintain public peace alone. It is mostly maintained through a complex, nearly unconscious web of voluntary norms and controls that are upheld by the public as a whole. Therefore, a city’s vibrancy and safety system from the community’s organic interactions and collective responsibility, rather than just formal structures or policing.

People who have no motive to utilize the streets aren’t compelled to do so. If a significant amount of businesses and other public spaces sprinkled over a neighbourhood’s sidewalks; these spaces are utilized both during the day and at night (Jacobs, 1961). They entice people to wander down the sidewalks past locations that are not very interesting to the public but are used as pathways to go elsewhere. As opposed to being disliked for their mixing and destroyed by attempts to separate their constituent parts from one another, streets or districts

that do have strong main mixes and are successful at creating city variety should be valued (Jacobs, 1961). Streets and neighbourhoods thrive when their diverse elements are celebrated and integrated, drawing people into vibrant public spaces that enhance the overall city experience.

Buildings Surrounding The Plaza as thresholds

A mix of retail, residential and commercial buildings that have modern and historical value surrounding the plazas success

Ownership

A district is a self-sufficient 20-block area that has easy access to stores, services, marketplaces, and educational facilities. (DOERR, 2015). Larger facilities, such parks, plazas, hospitals, cemeteries, and industrial buildings, would be positioned inside each zone at precise, measured distances, giving residents of Example access to a general utilitarian radius. (DOERR, 2015).

Morphology

A recreational green area would provide a green belt for the entire city in all cardinal directions and enable the greatest amount of sunshine and ventilation to reach every unit in the manzana in between the two or three built-up sides (DOERR, 2015).

Conclusions

The mixed use reflects a holistic approach to urban planning forstering a vibrant urban environment, where people can live/work/shop/socialise in close proximity. The buildings have evolved since its erection to adapt to the modern world and programmatic needs.

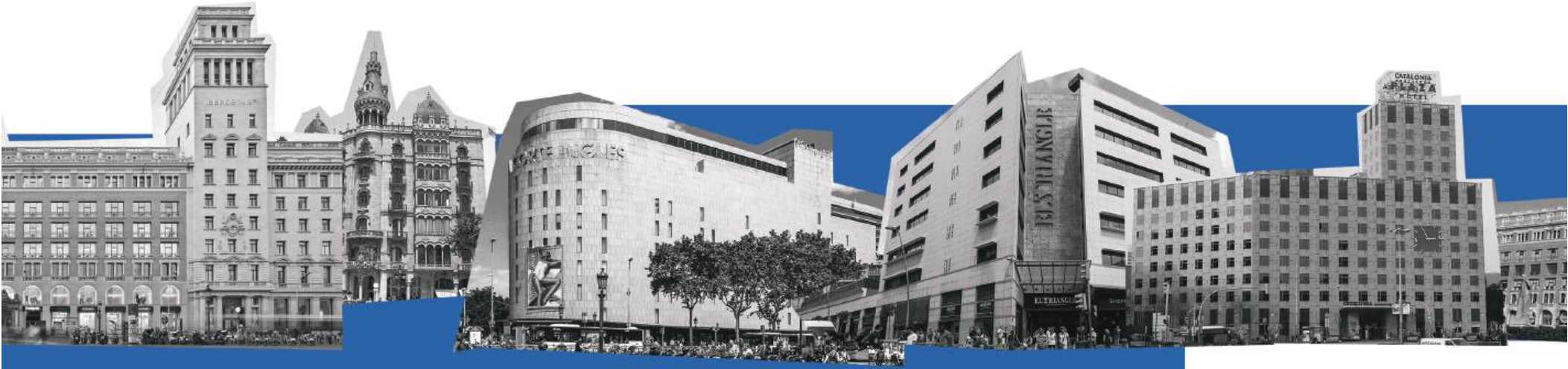


Figure 4.4 Buiding Character-((YELLOW, 2024), (Cm |, 2019), (Bausells, 2016), (DOERR, 2015) Collage by (Author,2024)

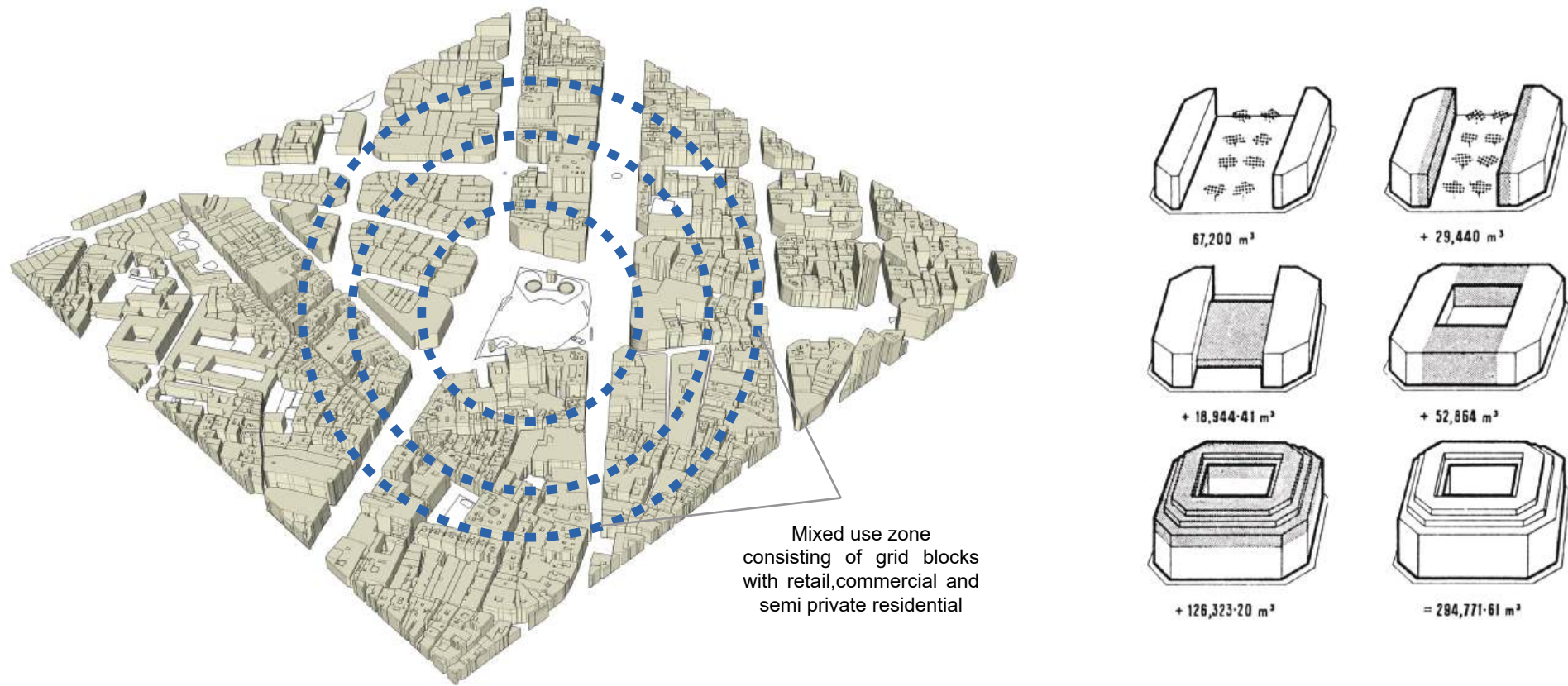


Figure 4.5- Zoning (Author,2024)

Figure 4.6-Manzanas (Roberts, 2019)



Active Edges And Thresholds Between Public And Private Spaces

In urban areas where housing is the primary use, the link between concentration and diversity is rarely considered. When there are enough homes for everyone, diversity and all of its charms are paired with decent living circumstances, which encourages more individuals to make their own decisions and remain put (Jacobs, 1961). It is tedious to live in long blocks with high ground covering. Because there are voids between buildings, frequent roadways make up for the extensive covering of land outside of them (Jacobs, 1961). If there are many streets, open space in the shape of streets have been added in place of constrained space. By creating public parks in busy areas, we're creating more open space overall (Jacobs, 1961). A comparable result is attained when non-residential structures are successfully integrated into residential districts, thinning out both the overall number of homes and district residents (Jacobs, 1961). A positive may be defined as a population concentrated in a city that is both large and dense, with the belief that this is because the population is the source of immense vitality (Jacobs, 1961).

In urban settings, particularly those where housing is the predominant use, active edges and clearly defined boundaries between public and private spaces are essential features. These components support the delicate balance that exists between diversity and concentration, allowing for the coexistence of lively public areas and pleasant residential areas. Cities may create a dynamic environment where public spaces complement private life and create a more engaging and liveable urban fabric by integrating non-residential constructions into residential areas and planning streetscapes that stimulate interaction.

Public Space And Greenery

Cerda's original plans, with the goal of giving every manzana in the neighbourhood a public courtyard and ensuring that every inhabitant had access to a public green

area within 200 meters of their house (DOERR, 2015). Greenery is placed at the thresholds of sidewalks and the perimeter of the square with seating for shade. The city also utilises interior courtyards in most of its manzana buildngs. Greenery in the city provides the feeling of comfort and healthy environments. it creates an inviting atmosphere in which people are drawn to.The thresholds are important creating a difference between shaded areas and open aired space.Leads people to a multitude of spaces and feelings.

Street Threshold And Pedestrian-Vehicular Relationships

Sidewalksareextremelywideandaccomodatesseatingand large pedestrian movements while still providing parking space for Motorcycles and Bicycles. Mouments play roles in the squares identity and heritage.The space between buildingsandroadsinadditiontothegridplanningmakes the relationship seamless. Bus lanes and pedestrian crossovers are demarcated and are easily identifiable

Heirachy Of Public Space

The square guides users from bustling streets into the tranquil central plaza,forstoring movement and social interaction. Heirachical feature of commerce at street level to leisure and relaxation

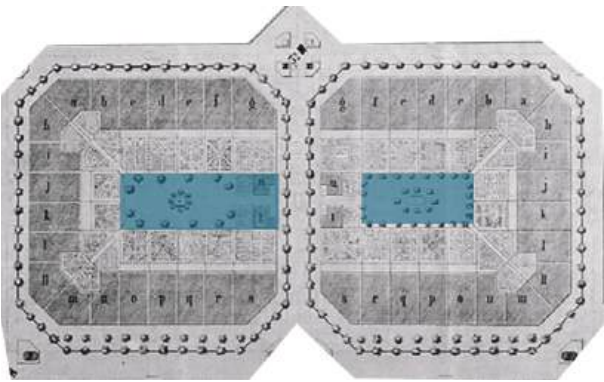


Figure 4.7-Courtyard Space (DOERR, 2015).

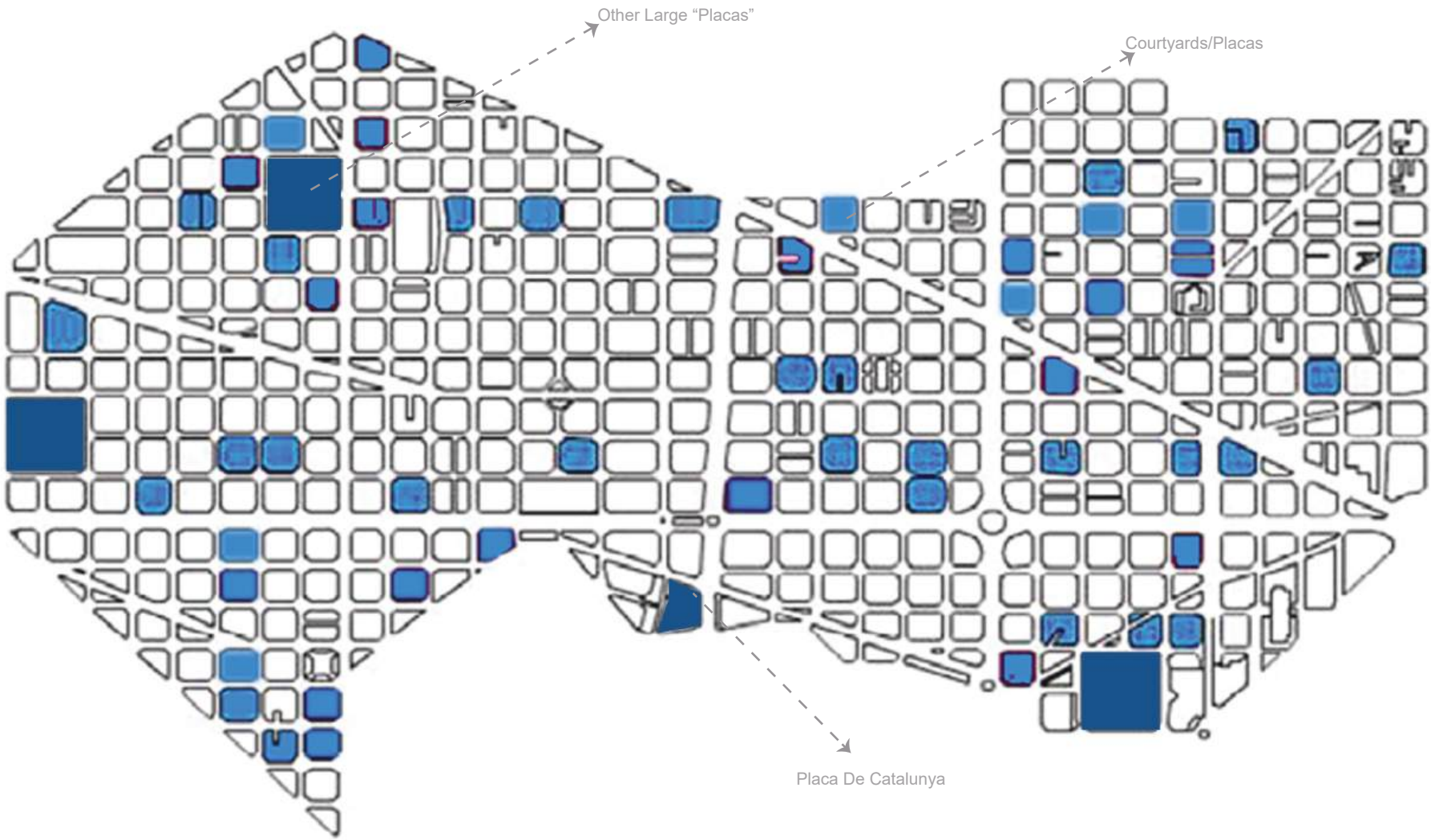


Figure 4.8 Heirachy of Public Space (DOERR, 2015).



Figure 4.9 Nightlife (Google,2024)





Figure 4.10-Streetlife (Google,2024)

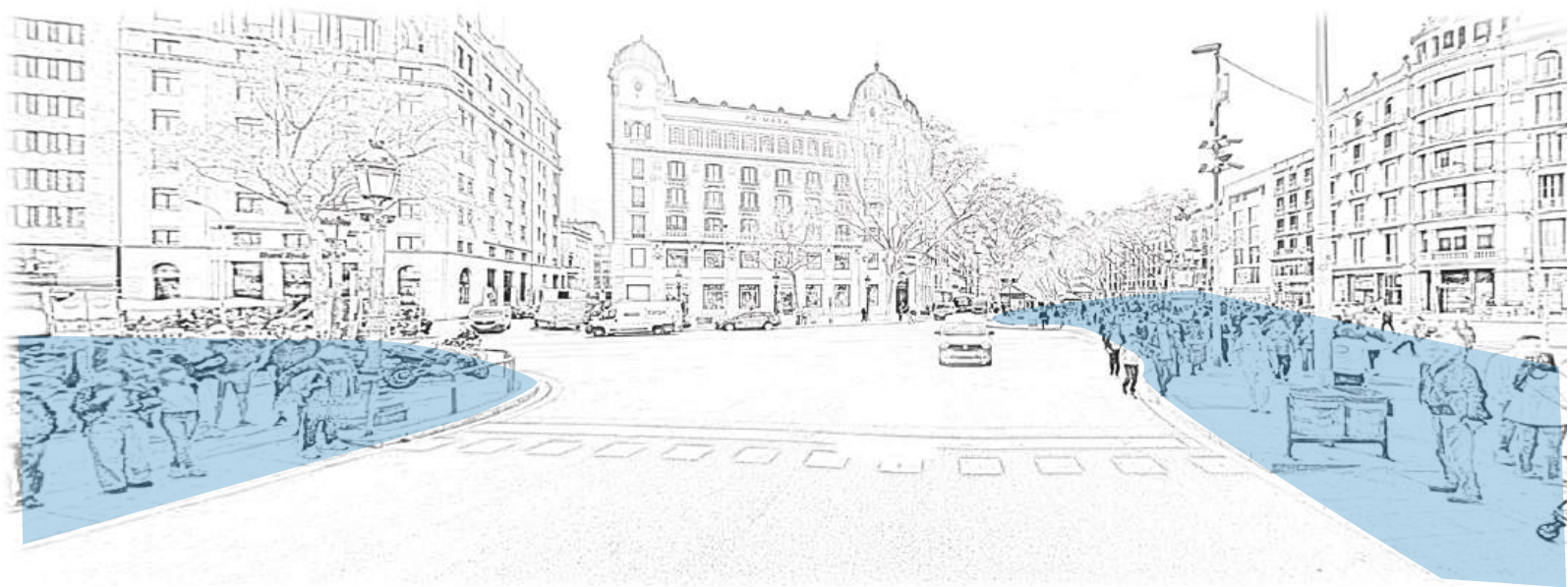


Figure 4.11-Vehicle-Pedestrian Relationship by (Author,2024)

Access to public resources/ facilities

Traditionally, parks or park-like areas are seen as gifts given to the underprivileged residents of urban areas. Every city park is unique in some aspects of its behaviour and resists generalizations. Among our city parks, neighbourhood parks are the most widely distributed type (Jacobs, 1961). If there is a comprehensive blend of residential and commercial areas in the area, or if the working district is the majority (Jacobs, 1961). The myth that parks serve as community hubs or stabilize real estate is also essential to rejecting in order to comprehend park behaviour numerous negative repercussions of unpopular parks are concerning, in addition to the waste and missed opportunity they suggest (Jacobs, 1961). roadways beside parks with eyes become regarded as dangerous zones and are avoided because they have the same issues as blind roadways and pose a threat to the surrounding neighbourhoods (Jacobs, 1961). The primary challenge in designing community parks is fostering diverse areas that can utilize and sustain parks (Jacobs, 1961).

Neighbour parks or public spaces are not at all like the diverse and abundant city life. Just as sidewalks are not abstractions, neither are city parks, nor do they serve as automatic sources of virtue or inspiration (Jacobs, 1961). For a wide range of additional purposes, generalized parks may and do greatly enhance the appeal of communities that people find appealing. They magnify the emptiness, the danger, and the boredom of communities that people find unappealing for a wide range of other reasons, which further depresses those neighbourhoods (Jacobs, 1961). The more effectively an urban area integrates a wide range of daily activities and users into its streets, the more successfully, and economically its citizens enliven and support planned parks that may restore elegance and joy to their neighbourhoods

rather than causing empty space (Jacobs, 1961). Access to public resources like parks is often idealized, but their success depends on being integrated into diverse, active areas. Without thoughtful design and community engagement, these spaces risk becoming neglected and unsafe.

Placa Square Transit

Plaza Catalunya is where a number of the city's most significant roads and streets converge. The plaza is around 50,000 square meters in size (Barcelona-Home, 2013). The public transit system in the city is centered in the Plaça de Catalunya. There's the major subway junction beneath the square (VISITBCN, n.d.).

Transit Points And Routes

On an urban level, Cerdà's plan separated the Eixample into many sectors, zones, and districts, with regularly spaced, North-South and East-West running streets. The roadways would be constructed to be 20 meters wide, with 5 meters set aside for pedestrians on either side (DOERR, 2015).

Climate And Ecology

Public spaces in Barcelona and central courtyards in Barcelona take advantage of natural sunlight and ventilation through its planning predominantly in the southern direction being in the northern hemisphere. The greenery is paramount on every street and public space providing shade and a comfortable walking space-seating area and healthy environment within a dense and busy city.



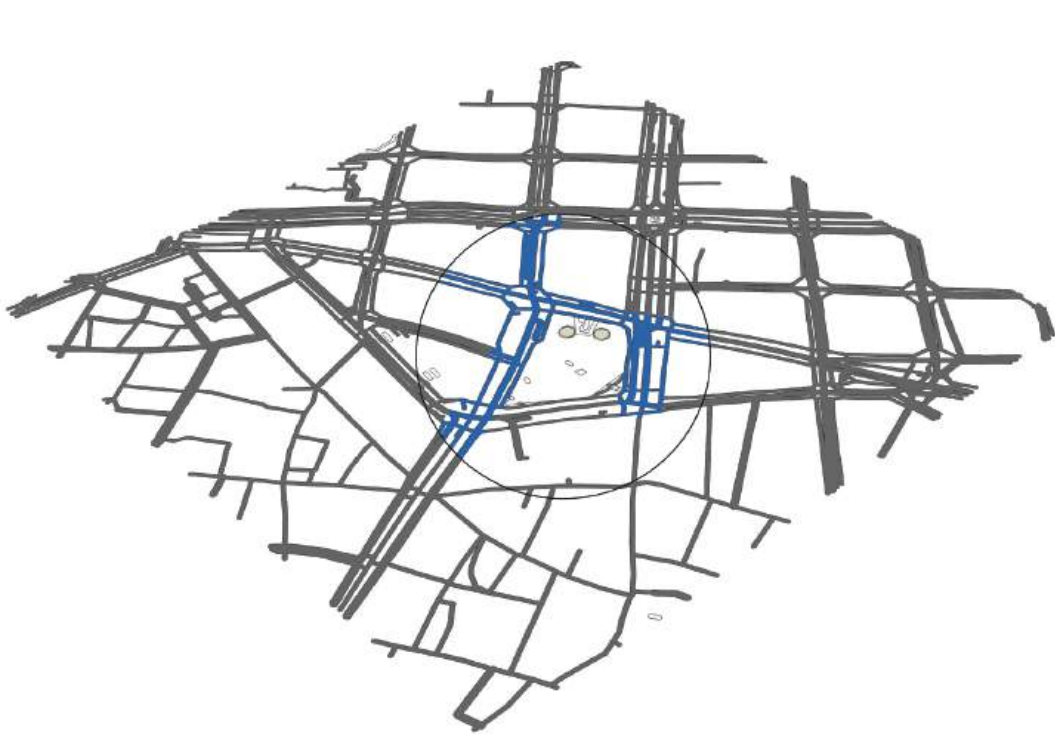


Figure 4.12-Square Transit (By author,2024)

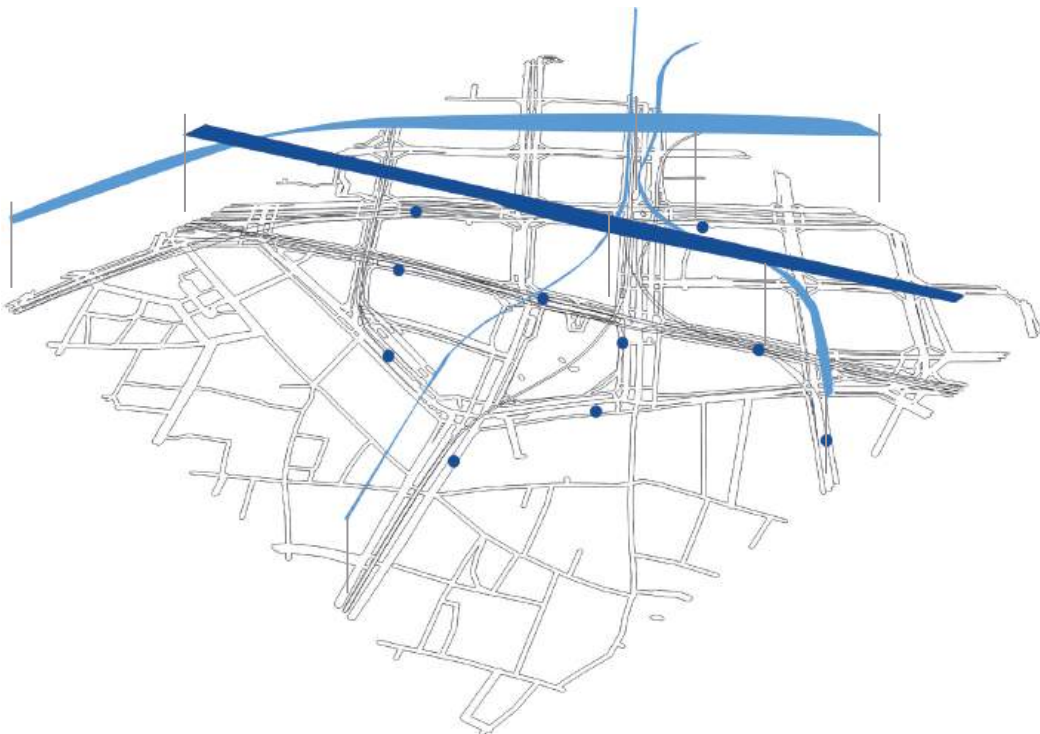


Figure 4.13 Transport Node (By author,2024)

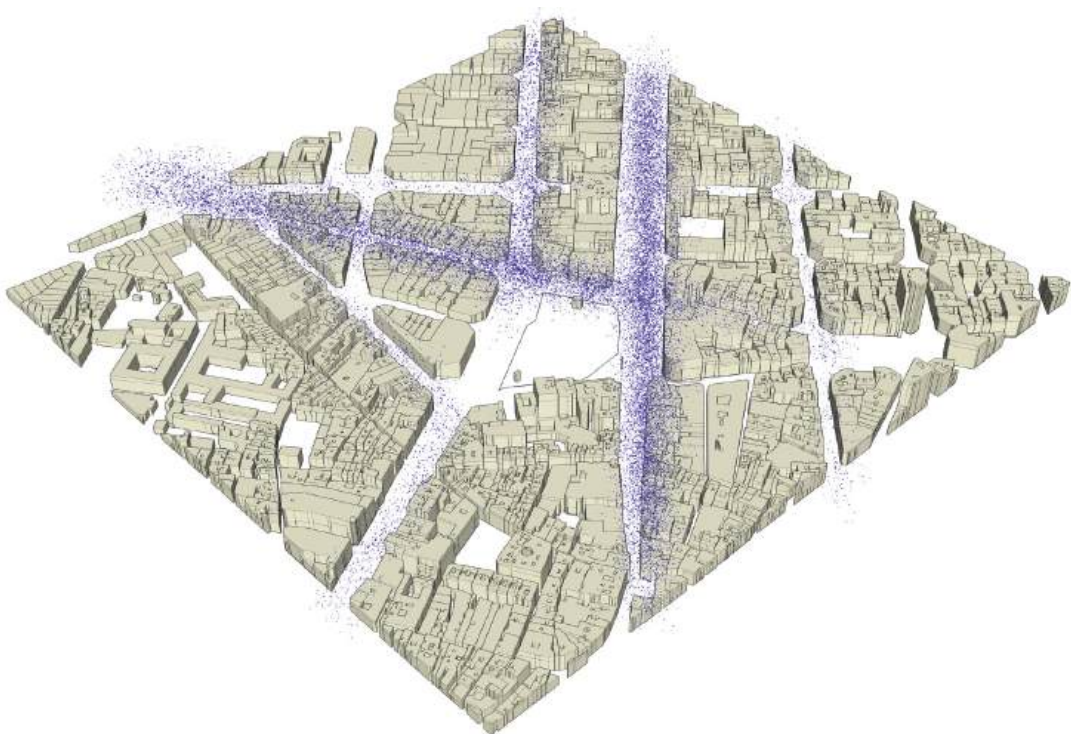


Figure 4.14- Density (By author,2024)

Transportation usages

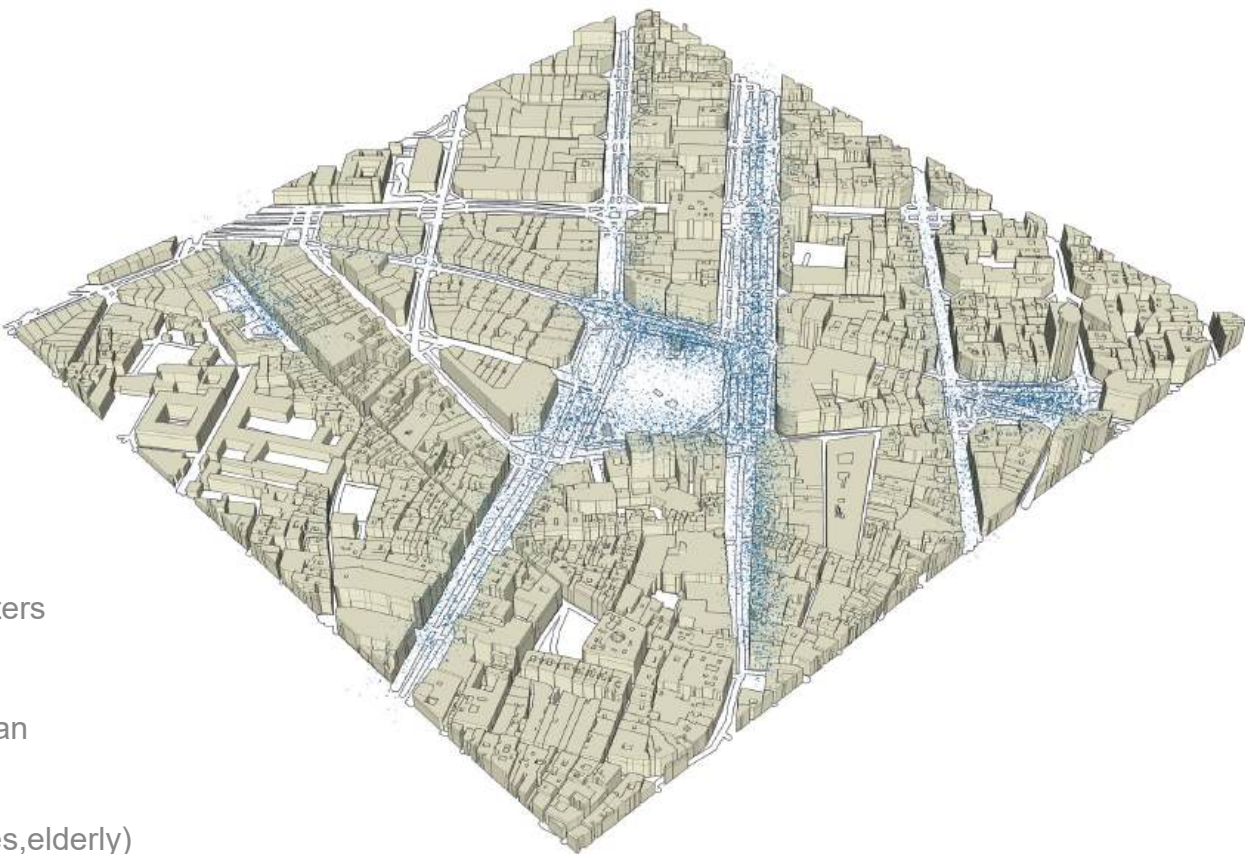
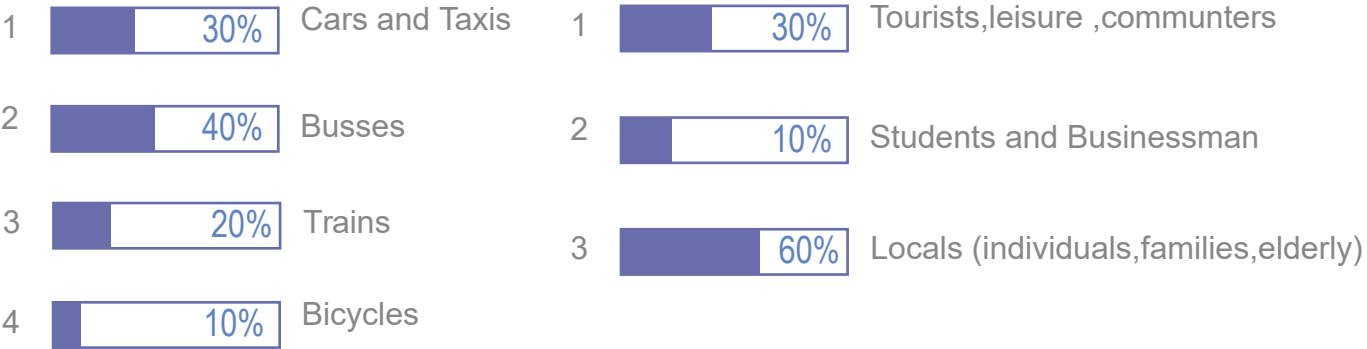


Figure 4.15 Pedestrian Density (By author,2024)

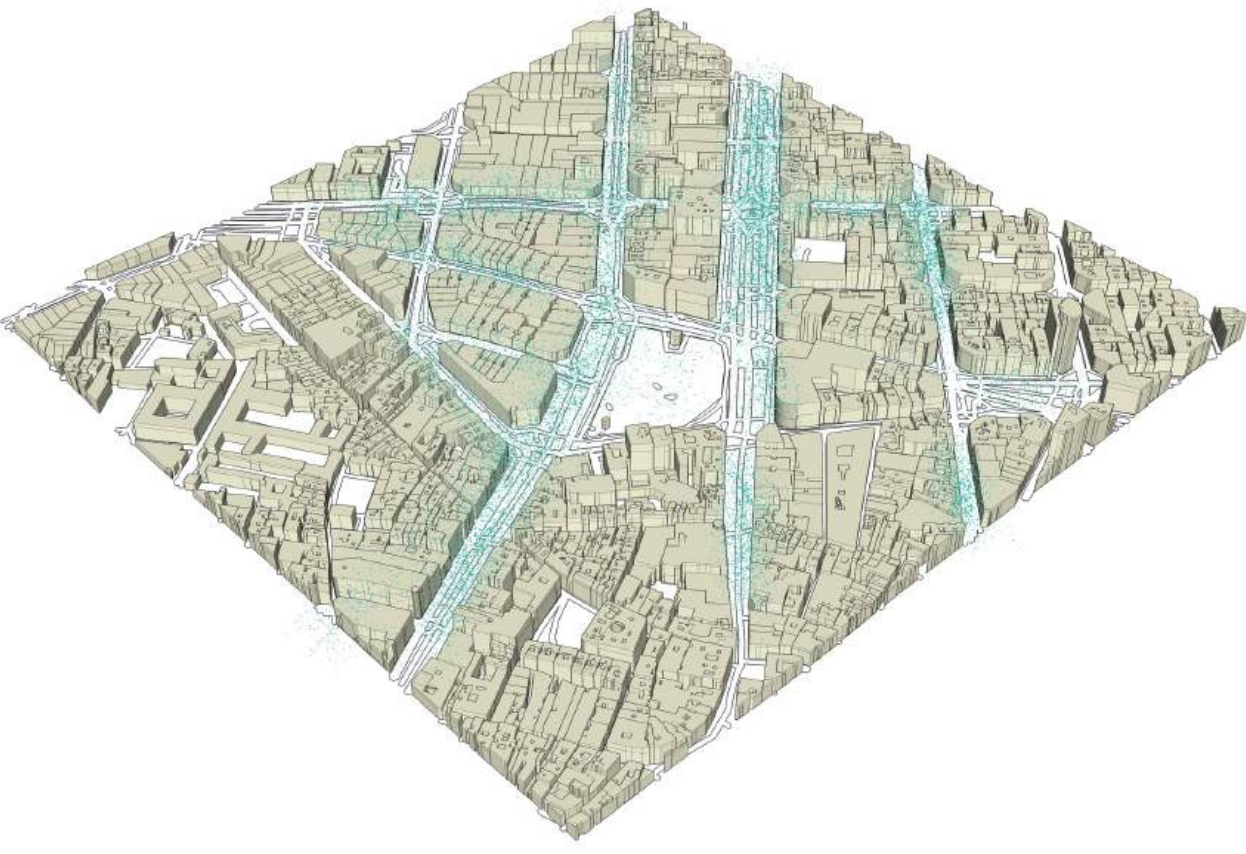


Figure 4.16-Sound Density (By author,2024)



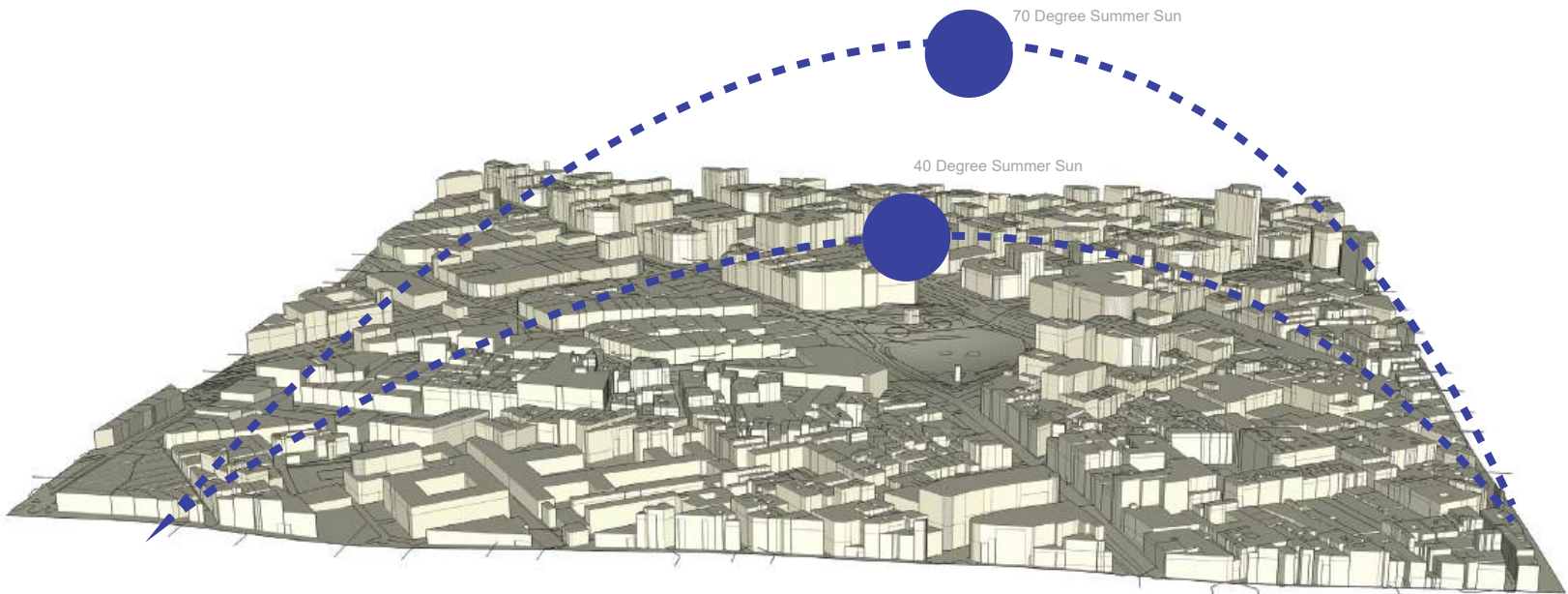


Figure 4.17 Barcelona Climate (By author,2024)



Figure 4.18 Greenery Edge Condition (By author,2024)

Walkable City

Beginning in early 2020, COVID-19 presented previously unknown challenges that are largely insurmountable with the help of widespread technology (Allam et al., 2021). Technology cannot completely alleviate problems like the need for social contacts, which have been hindered by the requirement for social separation. Rearranging the urban layout can make it easy to walk to all of the main services and amenities in the area in under fifteen minutes (Allam et al., 2021). According to Moreno, this would result in more liveable cities as city dwellers would have more time for social interaction and self-care (Allam et al., 2021). Since most people are “trapped” in traffic and vital infrastructures like road networks have traditionally been positioned to favour automotive flow over human traffic, this has not been feasible in today’s metropolitan environments (Allam et al., 2021).

The idea is centred on the necessity of removing people’s fixation with cars. It allows for the implementation of other innovative planning strategies, such as mixed-use projects that put essential services and facilities within everyone’s reach (Allam et al., 2021). In addition to the living and working aspects, the 15-minute city idea is perceived to focus on the social side of urban dwellers, where important activities like care, entertainment, and education are found (Allam et al., 2021). It does not advocate for a complete reorganization of cities that would eliminate their distinctive character and vitality. A feature of the 15-minute city planning concept is the ability for many areas within a city to be included in the planned 15-minute radius (Allam et al., 2021). It encourages the use of proximity-based urban design, which may improve both the quality of life and sustainability of urban environments (Allam et al., 2021).

Placa de Catalunya, a lively, mixed-use public area that promotes neighborhood interaction and urban vibrancy, is a prime example of Jane Jacobs’ ideas from “The Death and Life of Great American Cities” in Barcelona. The area, surrounded by stores, cafés, and transportation hubs, guarantees a steady stream of people throughout the day, fostering the type of vibrant, diversified atmosphere that Jacobs advocates. With its high foot traffic and visibility, Placa de Catalunya is a lively urban area that enables the dynamic interaction of many uses and groups.

In Northcliff, integrating Jane Jacobs’ insights on urban vibrancy and Carlos Moreno’s “15-minute city” concept will be pivotal in addressing the area’s current challenges. Presently, Northcliff’s community is fragmented, with residents primarily engaging at specific locations like schools, bakeries, stores, and religious buildings, while the wider urban fabric remains disconnected and filled with void spaces. The proposed interventions will focus on enhancing the diversity of uses along streets, establishing active edges between public and private spaces, and ensuring accessible public resources. By creating pedestrian-friendly streets and multi-use spaces.



Urban Greening Issues

There are multiple layers towards the apartheid oppressiveness and the differentiation between neighbourhoods that provide a sense of needs and wants when previously oppressed people lean towards moving to predominantly white neighbourhood’s post-apartheid.

Colonialism has left a profound influence on most facets of urban form and life in numerous Global South nations (Shackleton and Gwedla, 2021). Colonial governments had an impact on language, education, knowledge systems, social conventions, architecture, urban planning, and food, to mention a few areas of life (Shackleton and Gwedla, 2021). Numerous aspects of indigenous knowledge, traditions, and beliefs were prohibited, denigrated, or suppressed. They also had an impact on the size and variety of tree species planted in public and private places, as well as the placement and design of formal public green spaces and residential neighbourhoods (Shackleton and Gwedla, 2021).

The highveld is a typical savannah/grassland system, meaning that trees are not found natively there, just grassland and sporadic scrubs. As the need for trees increased, KwaZulu-Natal as well as other countries imported trees (Davie, 2021). In 1874, Fred and Harry Struben discovered gold there, which they named Confidence Reef. While the gold was only in place for a short while, a variety of trees, including wild acacia, teak, olive, tambotie, beech, ebony, seringa, mimosa, and quince, were planted in the region (Davie, 2021). Unusual trees include the Kentucky coffee bean tree in Greenside, the tea plant, the ban oak, the copper beeches, the maidenhair tree in Killarney, the Chinese maple in Oxford Road that was originally brought from Paris, the poplars along Houghton Drive, and more (Davie, 2021). Even the agricultural identity of Northcliff is shaped by colonial influences, with non-native trees dominatingthelandscape,underscoringtheneedforchange and a more thoughtful, indigenous approach to design.

Even with the construction of new low-cost housing residential zones under the RDP, the existing distribution patterns of public and private urban green spaces

and trees in South Africa bear a strong resemblance to colonial design (Shackleton and Gwedla, 2021). The distribution of urban green space and trees demonstrates disparities that disproportionately benefit wealthy and formerly “white” residential neighbourhoods, with the impoverished and predominately “black” neighbourhoods having far less public green space and trees (Shackleton and Gwedla, 2021).

A few studies conducted in South Africa have reported on the species composition of street trees in various municipalities, with regard to the types of trees found in public areas. Studies showed that there are notable differences in the number of street trees in the various areas, with many streets in RDP and townships having none at all (Shackleton and Gwedla, 2021). The fact that there are typically more non-native species in the CBD and older, wealthier neighbourhoods than in the townships serves as more proof of this colonial heritage (Shackleton and Gwedla, 2021).

Green Structure And Analysis

Northcliff has significant green spaces that are often underutilized due to the area’s fragmented architectural layout, which limits accessibility and connectivity to these public spaces. The disjointed urban design results in a lack of cohesive pathways and communal areas, preventing the green spaces from being fully integrated and engaged as vibrant community parks. This choice of vegetation further emphasizes the disconnect between the community and its natural environment, as the lack of indigenous trees fails to support local biodiversity and ecological identity.

The distribution of green areas and non-native tree species in South Africa’s urban form, which are remnants of colonialism, closely reflects the exclusivity of places like country clubs, which have traditionally served to maintain racial and socioeconomic division. Similar to how colonial planting methods ignored disadvantaged townships in favor of rich, predominately white suburbia, the country club’s well-kept landscapes continue this exclusive use of public space by acting as a walled preserve of privilege and prestige.



Figure 4.19 Green Structure (By author,2024)

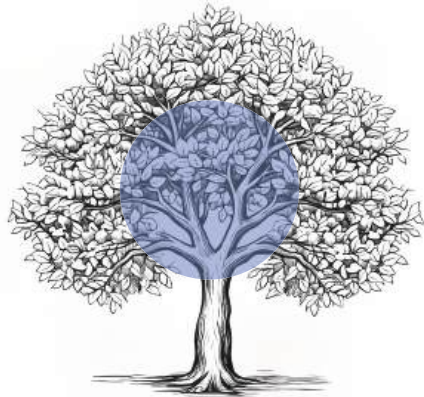


Figure 4.20 Oak Tree (By author,2024)



Figure 4.21-Wild Acacia Tree (By author,2024)

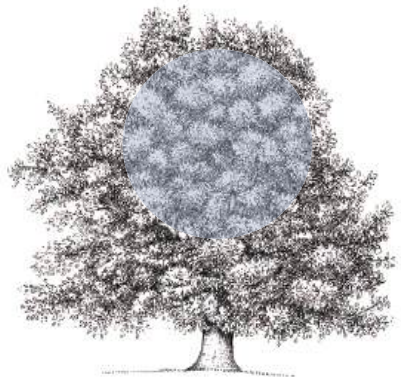


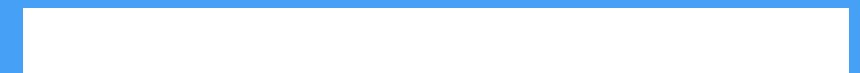
Figure 4.22-Beech Tree (By author,2024)



# Ch. 5

## *The VoidScape*

As the heart of this thesis, Chapter 5 introduces the concept of the “voidscape,” defining and exploring its significance through in-depth site analysis and various analytical mediums. This chapter examines the identity and impact of the voidscape, illustrating how it influences design decisions and serves as the central framework for the design project. By focusing on the voidscape, the chapter lays the essential groundwork for the design, shaping its development and providing a cohesive backbone for the project.





Defining The Void

In Turkish, the term “void” has the lexical sense of “cavity or unclosed space.” In contrast, it is typically defined in English as “nullity or space with no bodies in, along with identifying it opposite to the meaning of fullness (Chitnis, 2021). Public places are becoming increasingly limited in packed cities and neighbourhoods since land is so expensive there. In cities, there are many underutilized, lifeless, or poorly built places that ultimately become such (Chitnis, 2021). These urban voids are the result of inadequate land management, ill-advised decision-making, and a lack of communication between planners and designers. However, by strengthening the urban fabric of the city, these urban voids really have a great potential to improve the area (Chitnis, 2021).

The definition encourages a feeling of interconnectedness between people and place. As such, it will lessen the likelihood of a space becoming void. It can support the development of a creative pattern of usage that considers the distinct social, cultural, and physical characteristics that are specific to the location and its history (Saraswat, 2021). Plans and designs created with users in mind will ensure that the public views things similarly to the designers and allow dead, underutilized, and vacant spaces to be converted into useful spaces for the public (Saraswat, 2021).

The voidscape within Northcliff can be characterised as lifeless and disconnected. The neighbourhood is fragmented, with limited interaction between its different parts. A lot of these voids are empty and fail to generate engagement. The absence of lively, multipurpose public areas increases the estrangement between locals and reduces chances for social contact.

After monitoring individuals for a time, you start to see that their surroundings are subtly influencing their paths (FAGAN, 2014). There are other pathways that people choose than the constructed ones; some are dictated by culture and society.

The greatest way to illustrate this behavioural architecture is perhaps through our interactions with the constructed world (FAGAN, 2014). Since most of our lives are spent in or close to buildings, it's natural. In our lives, architecture occupies a transitional area that we inhabit, it occupies us, and it reflects our attitudes toward the public and private spheres as well as societal norms (FAGAN, 2014).

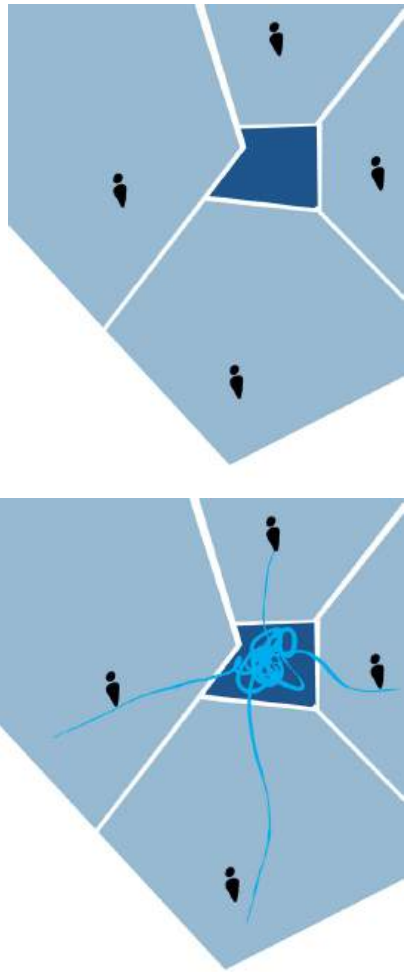


Figure 5.1 Interconnected (By author,2024)

Significance Of The Void And Perception

When formerly nomadic people started to settle down, claim territory as their own, draw improvised borders to mark their limits, and build communities centred around shared resources, the earliest civilizations flourished (Saraswat, 2021). The public realm was one of the resources that was used the most. Open spaces are areas of a settlement where a variety of groups, personalities, events, and activities converge to reproduce all the nuances of human life. This description applies to current urban architecture. These are areas where people's actions reflect their unique identity (Saraswat, 2021).

Open spaces can be broadly described as discrete areas within the constructed environment that are neither inhabited or constructed upon (Saraswat, 2021). These areas are often found in the public domain and may be planned or accidental in nature. Although all unbuilt spaces are open spaces, not all unbuilt spaces will necessarily be considered open spaces because of ownership and size considerations (Saraswat, 2021).

The main issue is that the designers used a two-dimensional layout without considering the experiences of the people living there as well as the standard of living. Occasionally, they are unable to identify the users' needs. Because of this, people's perceptions of these spaces vary greatly from the designer's, which results in the formation of voids (Chitnis, 2021).

The spatial significance of A location that incorporates activity is void in space. Consequently, a location is in fact generated by this emptiness that has been defined in form based on space (Kuloğlu and Şamlıoğlu, 2012).

Perceptual importance plays a crucial role in how voids are experienced One of the fundamental ideas of this study is perception. All of the senses are involved in the process of perception; however, vision is recognized as being more important than the other senses in this specific case (Kuloğlu and Şamlıoğlu, 2012). simplified into two types Perception is connected to

cognitive voids. The categorization of cognitive voids is determined by the architect's intended effect or the impact the void has on the user (Kuloğlu and Şamlıoğlu, 2012). These voids fall into three categories: sculptural/monumental, conceptual, and perceptual/visual. Functional voids are to accomplish with how the space is used. These spaces are intended for practical uses. Entry, corner, balcony/terrace, gallery/atrium/courtyard, surface, and transition/circulation are the different categories of functional voids.

Incorporating people as part of the design process can aid in creating a socially sustainable neighbourhood, it will be something that encourages a feeling of interconnectedness between people and place (Chitnis, 2021). As such, it will lessen the likelihood of a space becoming void. It can support the development of a creative pattern of usage that considers the distinct social, cultural, and physical characteristics that are specific to the location and its history. Plans and designs created with users in mind will ensure that the public views things similarly to the designers and allow dead, underutilized, and vacant spaces to be converted into useful spaces for the public (Chitnis, 2021).

Many of these spaces in Northcliff are underutilized and lifeless due to a design approach that has not fully accounted for residents' needs and experiences. To transform these voids into vibrant areas, it's crucial to reflect on buildings both cognitively and functionally to try an enhance its perceptual qualities and practical uses. The country club being an integral part of influencing design decisions and analyses can be considered both a functional and cognitive void. its design and purpose are centred around specific, practical uses and activities, such as sports, social events, and leisure to its members however it symbolizes exclusivity or reflects certain cultural or social ideologies, it might influence people's perceptions and interactions with the space, contributing to its cognitive significance. Schools utilise the spaces to teach sport to students but aside from that its an outdated form of community belonging that residents are disconnected from.



The Origins Of Isfahan,Iran

The provincial capital and largest city in western Iran. The city is not only a significant regional and provincial center, but it is also one of the most significant architectural hubs in the Islamic world (Zeidan, 2024).

Isfahan has a reputation as one of Iran's most significant trading hubs due to its location in the middle of the Iranian plateau. Occasionally, this location serves as the link between the East, West, South, and North. Like other Iranian desert towns, Isfahan City was built on the conversion of agricultural land into urban residential areas (Estaji et al., 2014). The irrigation system continued to exist as a system of roadways and lanes connecting public areas. The irrigation systems' main purpose was to provide water for agriculture, but they also shaped the structure of cities and their urban development (Estaji et al., 2014).

As the city grew and took shape, the mosque served as the focal point, inspiring Isfahan to become one of the first Islamic metropolises. In addition to being a place of worship in the early Islamic towns, the mosque also functioned as a court, a school, a forum for discussion and debate, and a venue for the announcement of Islamic laws (Estaji et al., 2014). Being the center of politics, society, and religion, it also served as the city's center. Large plazas were often close to the main mosque in Islamic cities, and major thoroughfares connected them to the city gates. Usually, businesses were situated along the sides of such roads close to the city center and the central plaza (Estaji et al., 2014).

Symmetry was a strong trend in Iranian architecture. While organic growth and Euclidean geometry differ, they are comparable to fractal geometry. In contrast, static buildings exhibit an independent, unique, and geometrical order (Estaji et al., 2014). Even in the bazaar, architectural modules and nodal intersections provide a feeling of geometry and continuity, despite the walkway creating an organic spiral form without the classic geometry found in entire arcade. Furthermore, restrooms, hotels, schools, and caravanserais are all extensions of the marketplace and

adhere to strict geometry and order (Estaji et al., 2014). Similar to leaves on stems, they exhibit a static, autonomous, and well-defined geometrical arrangement (Estaji et al., 2014).

The intentional integration of public spaces, religious sites, and marketplaces in Isfahan transforms potential urban voids into vibrant, coherent community hubs, therefore embodying the idea of the voidscape. The layout strategically fills in any gaps with multipurpose spaces that promote social cohesiveness, cross-cultural dialogue, and community engagement. Isfahan's mosque and its network of plazas serve as an excellent example of how thoughtful architecture may keep areas from becoming empty, unused places by incorporating them into people's everyday life.

Reflecting on Isfahan's urban design and its relationship with community spaces offers valuable insights for Northcliff. Isfahan's development centered around the mosque, which was not just a place of worship but a hub for social, political, and educational activities. Although a mosque or other religious facility might not be the focal point in Northcliff, the idea of a hub that serves as the community's core is still important. Drawing on the notion that public spaces may promote social cohesiveness and identity, the central location in Northcliff might operate as a hub for community interactions. Like the mosque in Isfahan, a prayer area or other such religious structure might be built to supplement the Friday mosque nearby and act as a hub for social and spiritual meetings. Furthermore, the area's various places of worship could help establish a network of locations that strengthen links within the community.

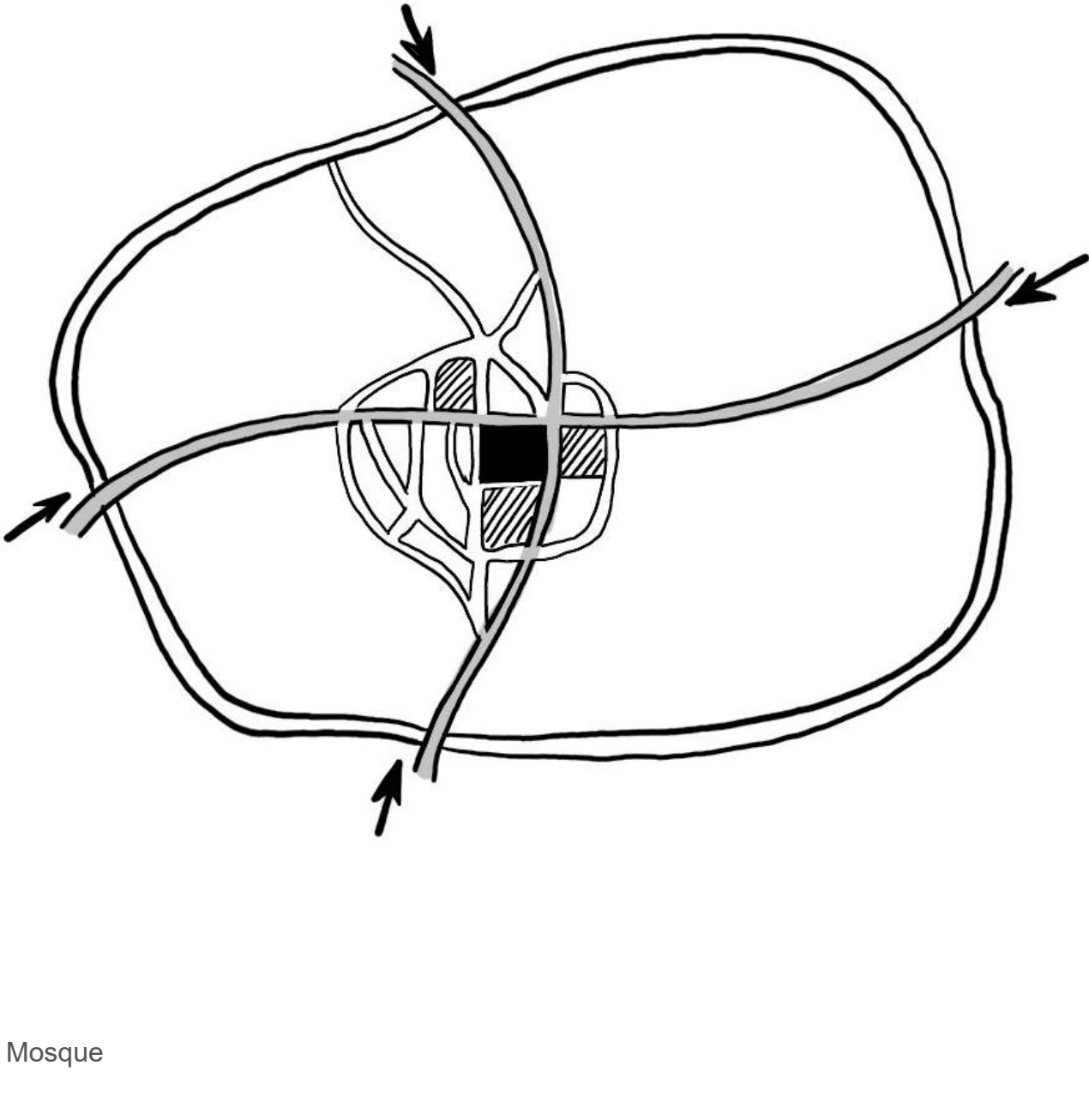


Figure 5.2 Isfahan Origins (Estaji et al., 2014) (By author, 2024)





Figure 5.3- No Streetscape (By Author,2024)



Figure 5.4 Taken over By Parking Details (By Author,2024)



Figure 5.5 Barrier upon Barrier (By Author,2024)



Figure 5.6 -Broken Relationship



Typology Of The Void

Void space has the potential to emerge as a city driver structure in the future. There are four major kinds of voids according to scale and ownership after processing, integrating, and evaluating the development of cities and their political, social, and economic transformation: the boundaries and buffer voids, infrastructure voids, transportation voids, and large-scale plots (Hashem, Wahba and Nasr-Eldin, 2022).

Urban voids, such as areas underneath bridges, deserted residential streets, ill-planned municipal parks, etc., have become abandoned areas, the majority of which have been transformed into locations for criminal activity and illicit activities (Hashem, Wahba and Nasr-Eldin, 2022). The typology of voids can be categorised into a number of factors that can influence the way we design for the future and the issues related with them:

Geographical and functional voids: Urban void growth is influenced by geographic factors; they might be physical barriers such as the terrain, which create irregular, unoccupied open green places. One of the most frequent causes of urban voids is the function of the space or the region around it; if a particular place is not used effectively, it eventually becomes obsolete (Hashem, Wahba and Nasr-Eldin, 2022).

**Political and economic Voids:** Wars have a detrimental impact on the built environment of the area, which affects created vacant spaces (Hashem, Wahba and Nasr-Eldin, 2022). In the case of South Africa this is related to the aftermath of Apartheid and the effects of the group areas act. Ineffective land management and poor decision-making are other political factors. Urban vacant spaces are a perfect area to arise because of the W

Similarly, there are values attached to the typology of voids that contrast the negative connotations associated with it, that can benefit the urban architectural fabric:  
**Environmental and economic values:** Urban voids may improve community quality of life by offering several environmental benefits. These unused spaces can be used to produce ecological advantages and

transportation technology that will benefit the environment (Hashem, Wahba and Nasr-Eldin, 2022). Additionally, urban voids may benefit a city strategically and economically in a number of ways. It has a substantial impact on the economy to support city economic structures, which encourages more spending and job prospects (Hashem, Wahba and Nasr-Eldin, 2022).

**Historical and cultural values:** From a cultural standpoint, urban voids offer a great opportunity to support and expand cultural activities in the city. Therefore, repurposing urban voids into cultural venues may foster an innovative environment and give a community a sense of identity and character (Hashem, Wahba and Nasr-Eldin, 2022). Repurposing these areas while taking the city’s past into consideration helps maintain the city’s historical memory, identity, and character. These places are an integral part of the city and depict its evolution throughout time, making them significant historical sites (Hashem, Wahba and Nasr-Eldin, 2022). However, in the case of South Africa particularly in an oppressive suburb the intention focus should shift to creating a new and modern identity relevant to the post-apartheid era.

The aforementioned analysis emphasizes the enormous potential of urban voids, which are areas of cities that are neglected and underutilized as a result of poor design and land management. voids which frequently exist between residential and commercial districts, can be filled in to greatly enhance the urban setting. To combat the void, Cities can reinvigorate empty spaces and make them lively, active components of the urban fabric by recognizing the spatial and perceptual significance of these voids.

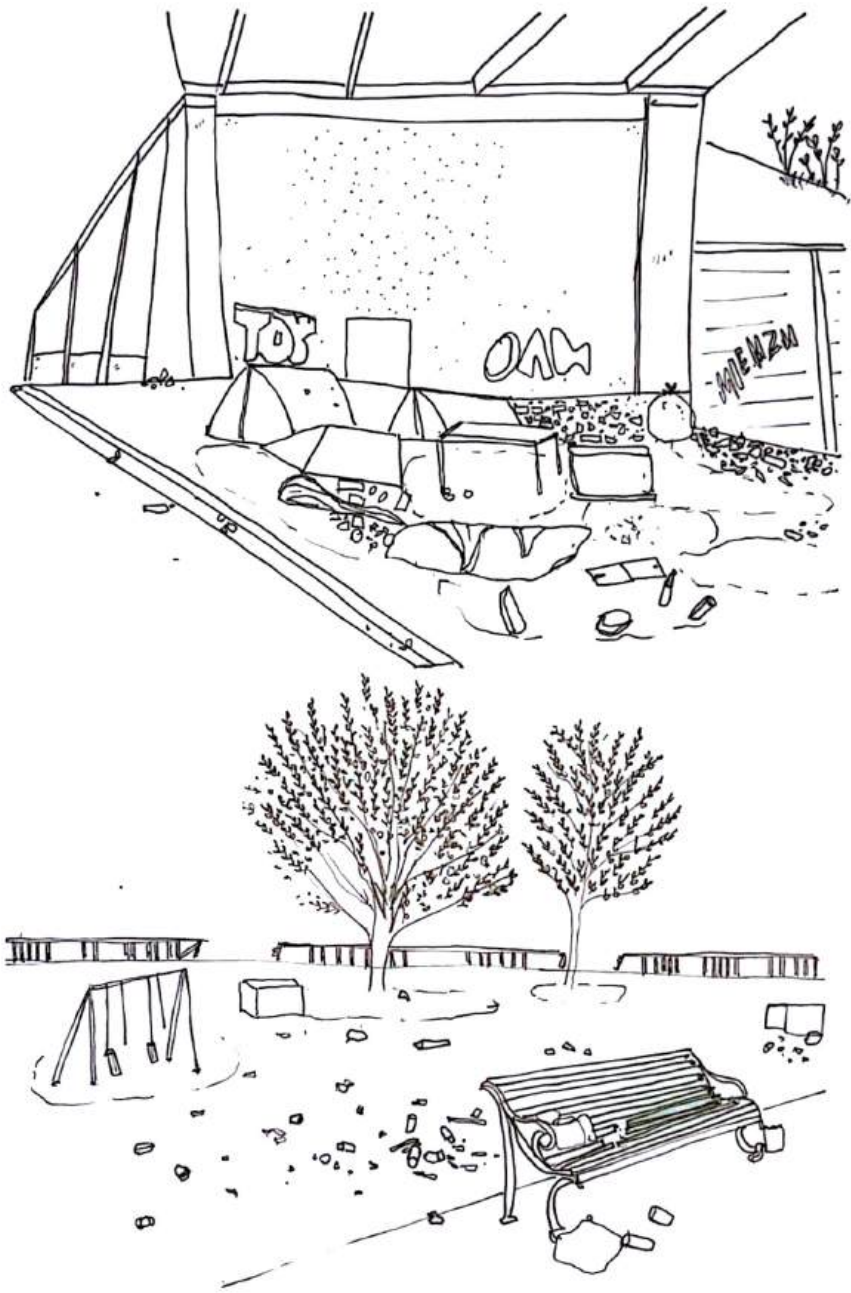
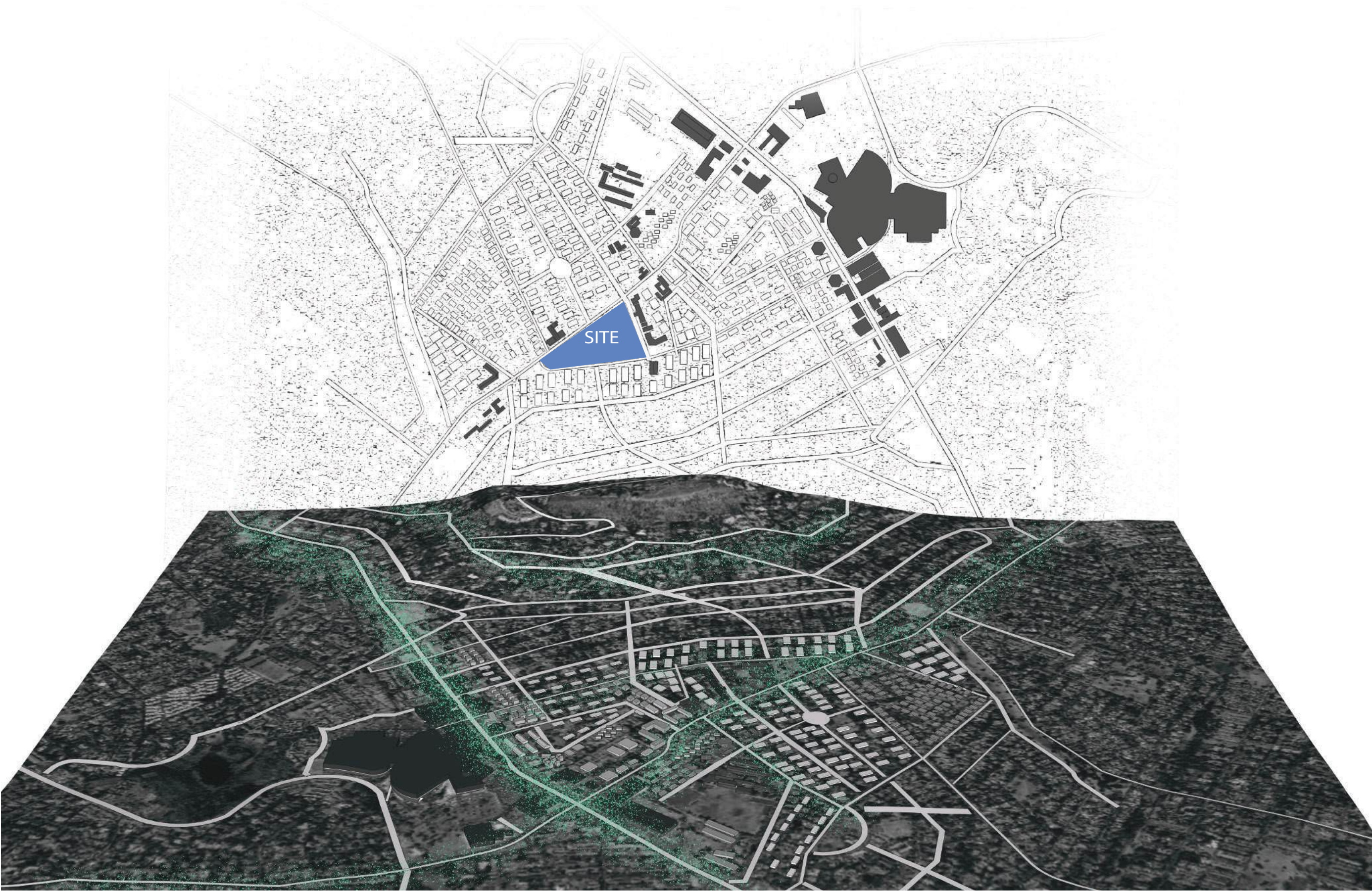


Figure 5.7 Dilapidation (By Author,2024)



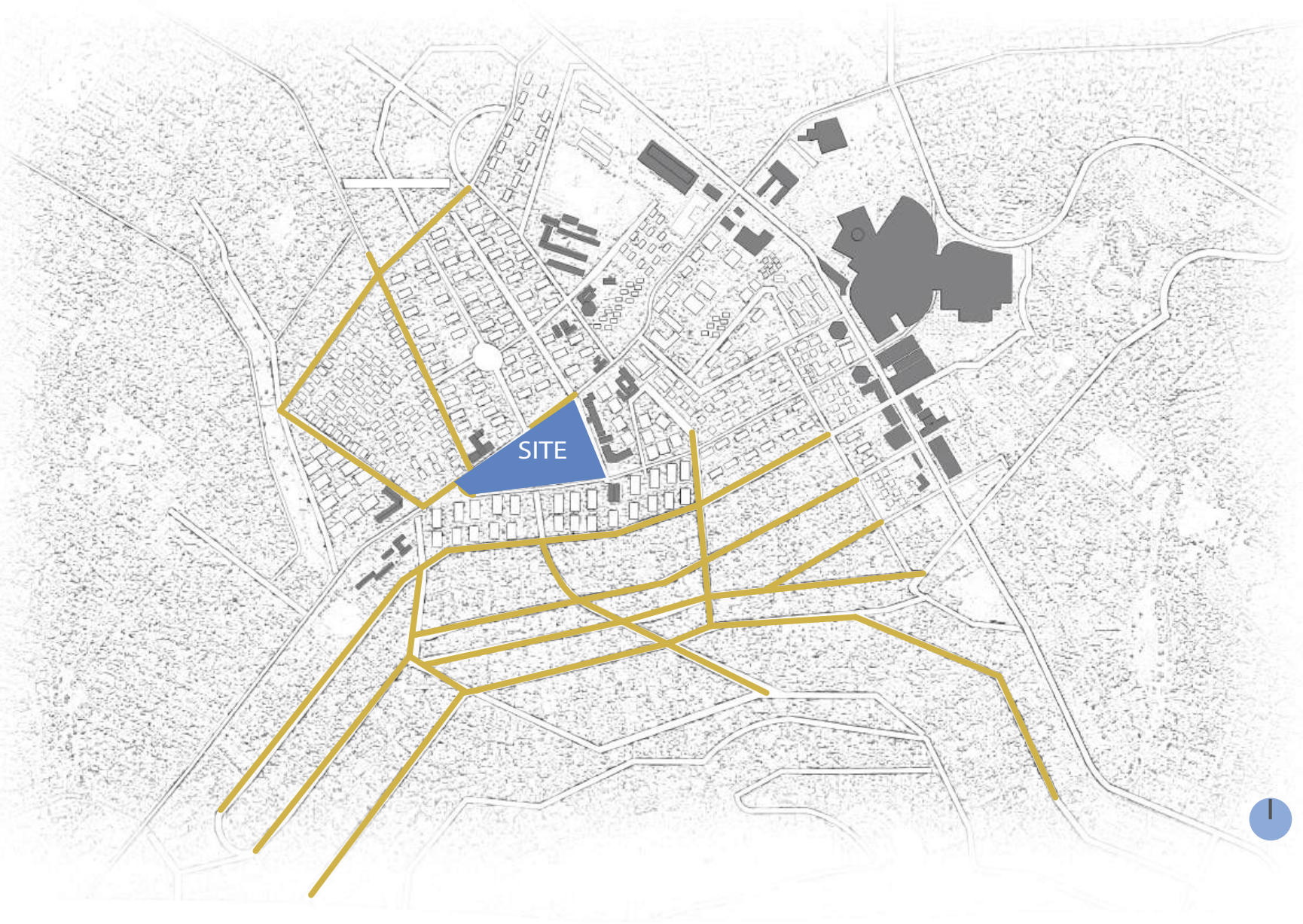


Density

The urban design prioritizes automobile traffic, resulting in a lack of pedestrian-friendly spaces and infrastructure. This car-centric focus diminishes walkability and community interaction, as sidewalks, pedestrian crossings, and public transit options are often inadequate or absent..

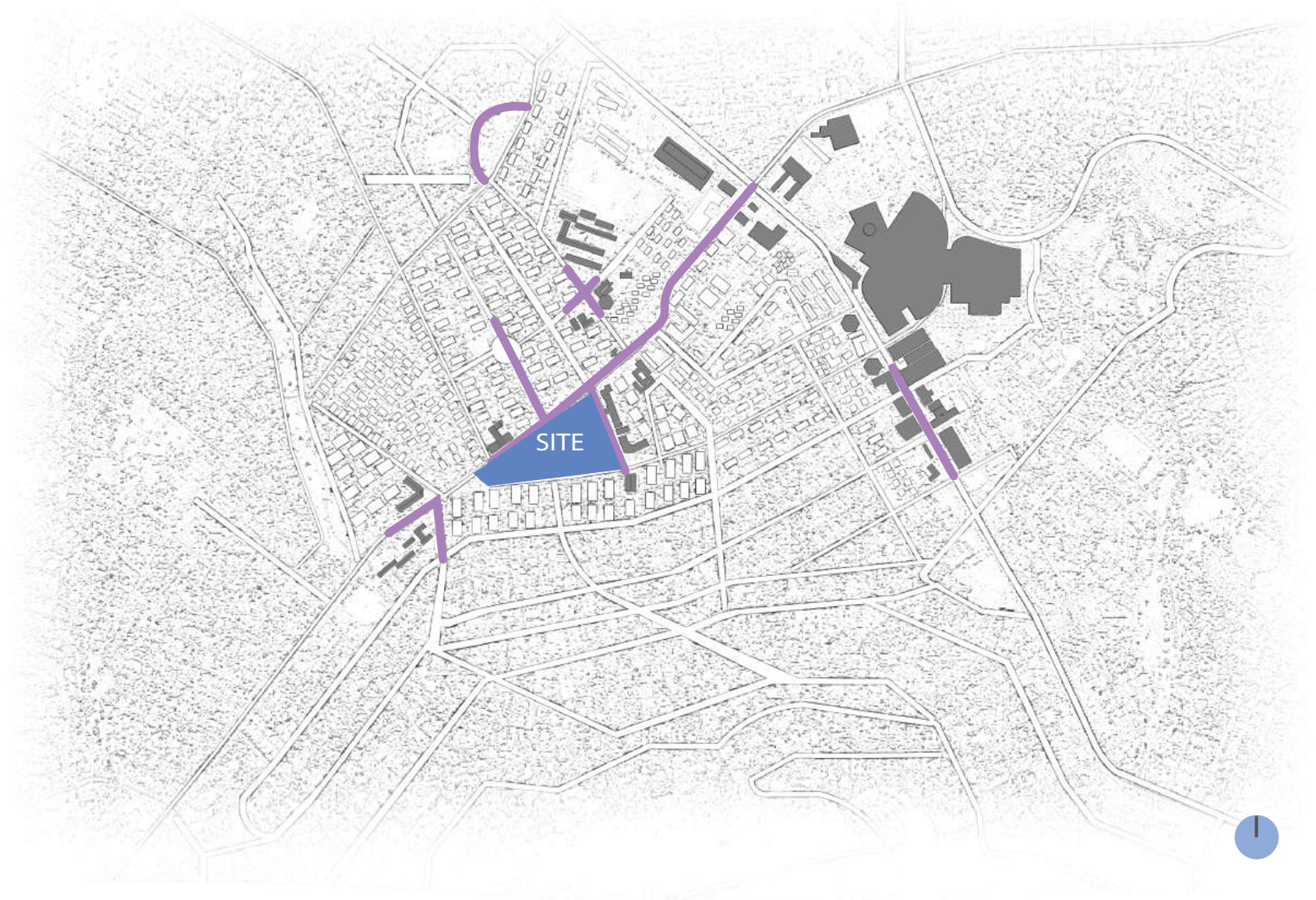
Figure 5.8 Density (By Author,2024)





**Barriers/Inactive Street Edges**  
High boundary walls, erected for safety reasons in Northcliff, contribute to a significant disconnect between buildings and the public fabric. These barriers limit visibility and interaction, creating isolated structures that hinder community engagement and the seamless flow of public spaces.

Figure 5.9-Barrier Edges (By Author,2024)  
Interconnected Voidscape



**Active Street Edges**  
Small businesses, schools, religious buildings, and some open spaces contribute to active street edges during peak hours, bringing vibrancy and community interaction to the area. These lively zones present opportunities for urban design to enhance connectivity and accessibility, fostering a more integrated and engaging public environment that leverages these dynamic periods.

Figure 5.10-Active Edges (By Author,2024)  
Interconnected Voidscape





Figure 5.11-(By Author,2024)



Figure 5.13 (By Author,2024)



Figure 5.12-(By Author,2024)



Figure 5.14-(By Author,2024)



Experiential Feeling Of The Void

An object’s space, or the space inside a constructed form, is determined by both the unbound space around it and the physical arrangement of the external envelope. Therefore, space is always divided between the tangible and the intangible, the built and the unbuilt (Saraswat, 2021). When one decreases, the other increases in a confined space with limited dimensions, and vice versa. As a result, there is continual interaction between the two, with one influencing how the other is viewed and utilized. Therefore, all constructed forms and unbuilt areas combine to produce the built environment of the specific location (Saraswat, 2021).

Urban voids are unoccupied, neglected areas that are mostly found between residential and commercial areas and lack a clear purpose or justification. In terms of the urban notion, “urban voids” are the absence of people, functions, and aesthetic values (Hashem, Wahba and Nasr-Eldin, 2022). The areas that split the urban tissue and leave it unfinished. Spaces that are either public or private at the border—are referred to as the voids of the city. Urban voids were described as unfavourable, devoid of people, and vacant. This is frequently the case around railroads, the boundaries of residential areas, undeveloped highways, abandoned military courts, and abandoned industrial zones. In this context, void spaces refer to waste zones, neglected places, and a waste zone (Hashem, Wahba and Nasr-Eldin, 2022).

There is a desire to exist holistically in Northcliff. Among the many layers of overlaying and intersecting voids. Amidst the high walls and sidewalks filled with parking requirements is the innate need to co-exist in the neighbourhood. Through running, cycling, engaging in sport in open areas or even just meeting up at the local store, market or coffee shop. These activities and amenities are pockets of engagement that live separately in void space. It should work as one. The voidscape is the soul of this dissertation and defines the need for reimagined streetscapes, connected public facilities, religious and sport activities and modern community in a reformed diverse post-apartheid era.

A key strategy in addressing these voidscapes is to focus on creating active edges and thresholds that blur the lines between public and private spaces, encouraging interaction and community engagement. This approach aligns with the principles of people-centered urbanism, which prioritizes the needs and experiences of the community in the design process. By reimagining voids as opportunities for connection rather than mere absences, we can begin to transform the post-apartheid city into a more inclusive and integrated space.

The transformation of urban and suburban spaces in post-apartheid neighbourhoods is deeply intertwined with the concepts of identity, belonging, and community. As these spaces evolve, they reflect the ongoing struggle to reconcile the fragmented legacies of apartheid with the need for inclusive, people-centered urbanism. In this context, the idea of the “void” emerges not just as a physical absence but as a conceptual tool that can help us understand and address the gaps both literal and metaphorical in the urban fabric. The locations where community involvement is low, the public realm is divided, and the opportunity for connection is strangled by the lingering effects of apartheid design are known as voidscapes, or the landscapes of absence. These divisions might show up as unproductive land, uninhabited areas, or even social and cultural divides within a community. Based on the aforementioned research themes it is my goal as a designer to create a programme that, re-stitch the urban fabric by locating these voids and carefully filling them in to create areas that promote a feeling of identification and belonging.

This approach not only addresses the immediate needs of the community but also contributes to the long-term project of creating a more just and equitable city.



Circulation Activation

- Main Transit Route-Beyers Naude
- Site Main Feeder Roads
- Areas that create more Vehicle/Foot traffic on a daily/weekly basis.

Small businesses, schools, religious buildings, and some open spaces generate circulation within those areas within those spaces exclusively, often leading to the streets still left in “Void”

Figure 5.15-Circulation Activation (By Author,2024)



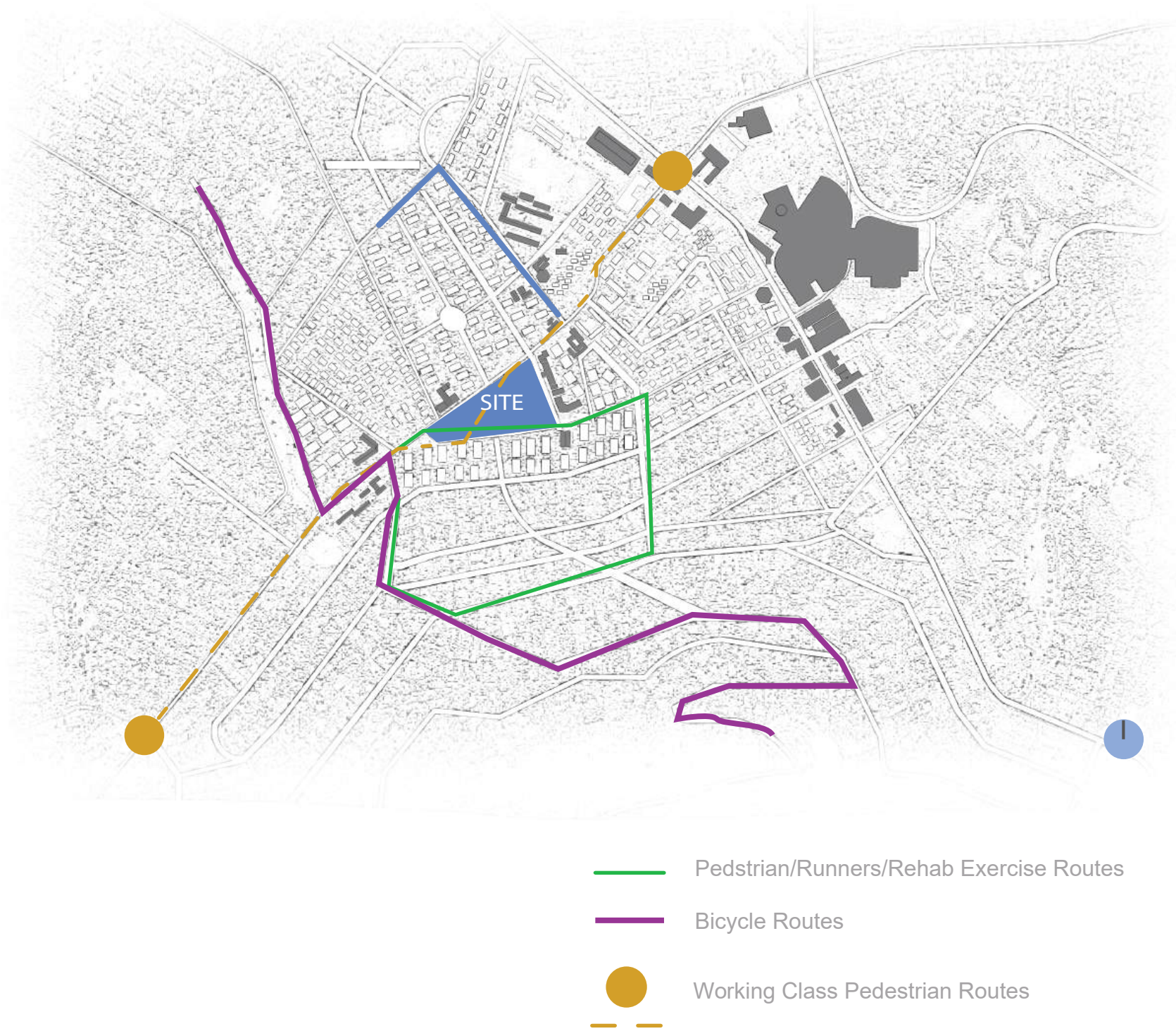
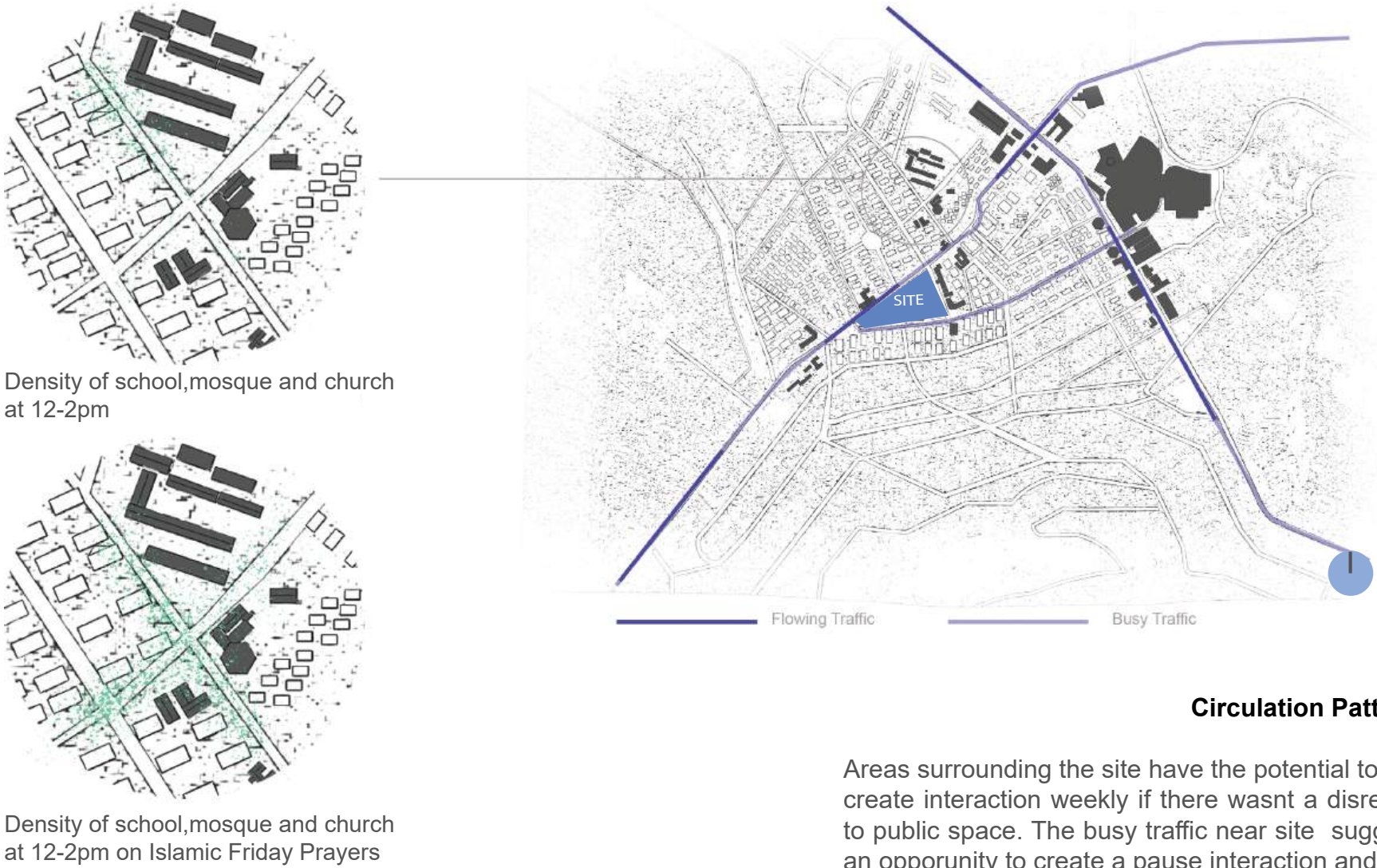


Figure 5.16-Observed Activity (By Author,2024)

Interconnected Voidscapes



Circulation Patterns

Areas surrounding the site have the potential to create interaction weekly if there wasnt a disregard to public space. The busy traffic near site suggests an opportunity to create a pause interaction and moment of stoppage.

Pedestrian Circulation observation indicates the desire for a walkable neighbourhood and patterns of movement that potentially lead to various amenities and locations surrounding the neighbourhood

Figure 5.17 Circulation patterns (By Author,2024)

Interconnected Voidscapes



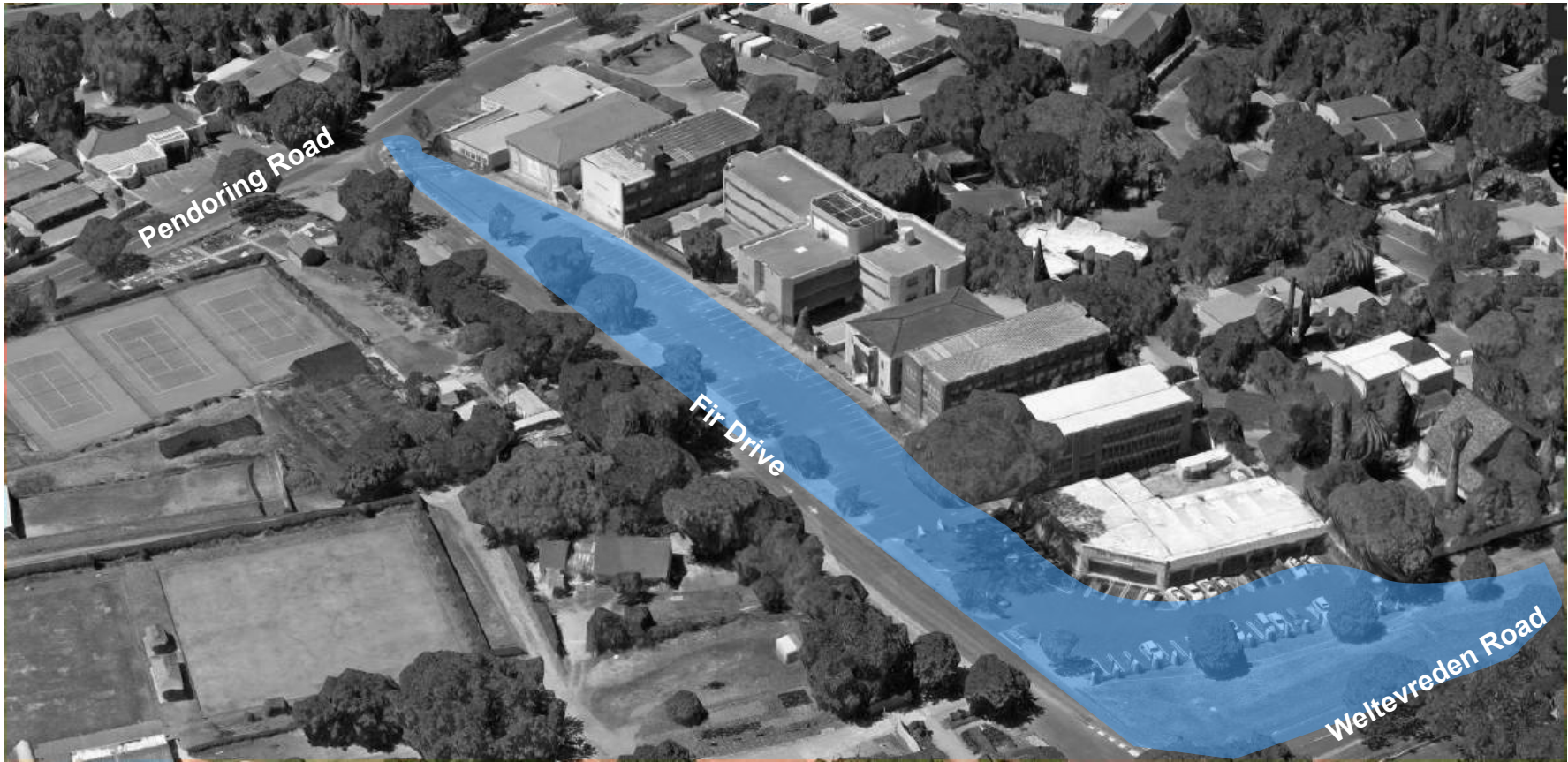


Figure 5.18 Bombarded By Parking (Google,2024)



Figure 5.19-(By Author,2024)



Figure 5.20-Religious Relationships (Google,2024)



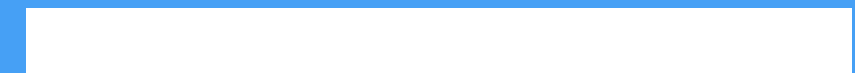
Figure 5.21-(By Author,2024)



# Ch. 6

## Conceptual Framework

Design is explored through various methods including charrettes, storyboard narratives, literature reviews, Precedent Studies, Model making and character studies. By integrating these approaches, it influences the design program and architectural typology, providing a structured and creative basis for developing the project's vision. This framework serves as a guide for translating conceptual ideas into practical design solutions, ensuring that the architectural response aligns with the identified needs and aspirations of the new community.





Site Choices and Decision Process

Initially when analysing the Northern Suburbs,Northcliff and Houghton were in contest for consideration.Due to both growing in ethnically diverse or black communities.It also showed great increase in the Islamic Population with New mosques and Islamic organisations. Both are situated near Schools,residential ,commercial and religious buildings. A good mix for addressing the voidscape in the northern Johannesburg Communities. Northcliff prevailed due the richness in narrative stories and amenities present within the community as well as the cultural impact design can have in addressing apartheid legacies and building typologies.

3 Sites were in consideration ,even though this dissertation has already presented the chosen site:

**Site 1:**Central to Northcliff. Includes Country club and rehab centre.In close proximity to schools,religious buildings,commercial and residential zones. Culturally could be highly impactful in addressing voids and creating a multipurpose community walkable public realm.

50000sqm

**Site 2:** Intended to be a mini-community centre adjacent to existing mosque that draws upon islamic principles while catering for the growing islamic population and proving facilities thereof.Scale was relatively low and its impact would not have addressed voids present in the community as a whole but rather its close proximity context with mostly residential surrounding.

3500sqm

**Site 3:**Adaptive and transformation of public space that analyses movements and integrates it into the community to create lively spaces and experiences. Scale relatively large and while an interesting endevaour ,it lacked the narrative to be addressed to be impactful and its importance to the community wouldve been minimal.Thus programme would not be defined through contextual needs. It would rather fit better to supplement the chosen site.

90000sqm

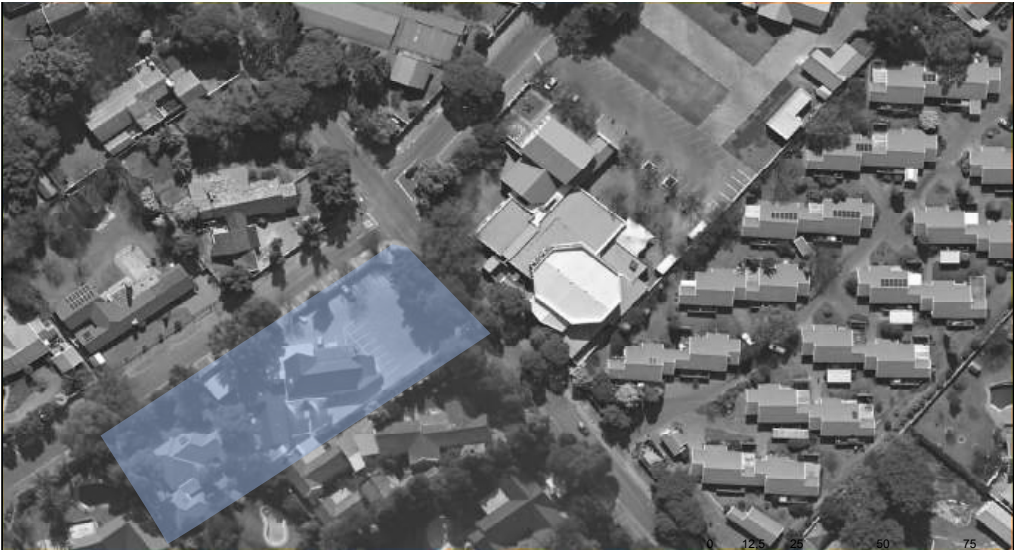


Figure 6.1-Site Choice 2 (Google,2024)



Figure 6.2-Site Choice 3 (Google,2024)

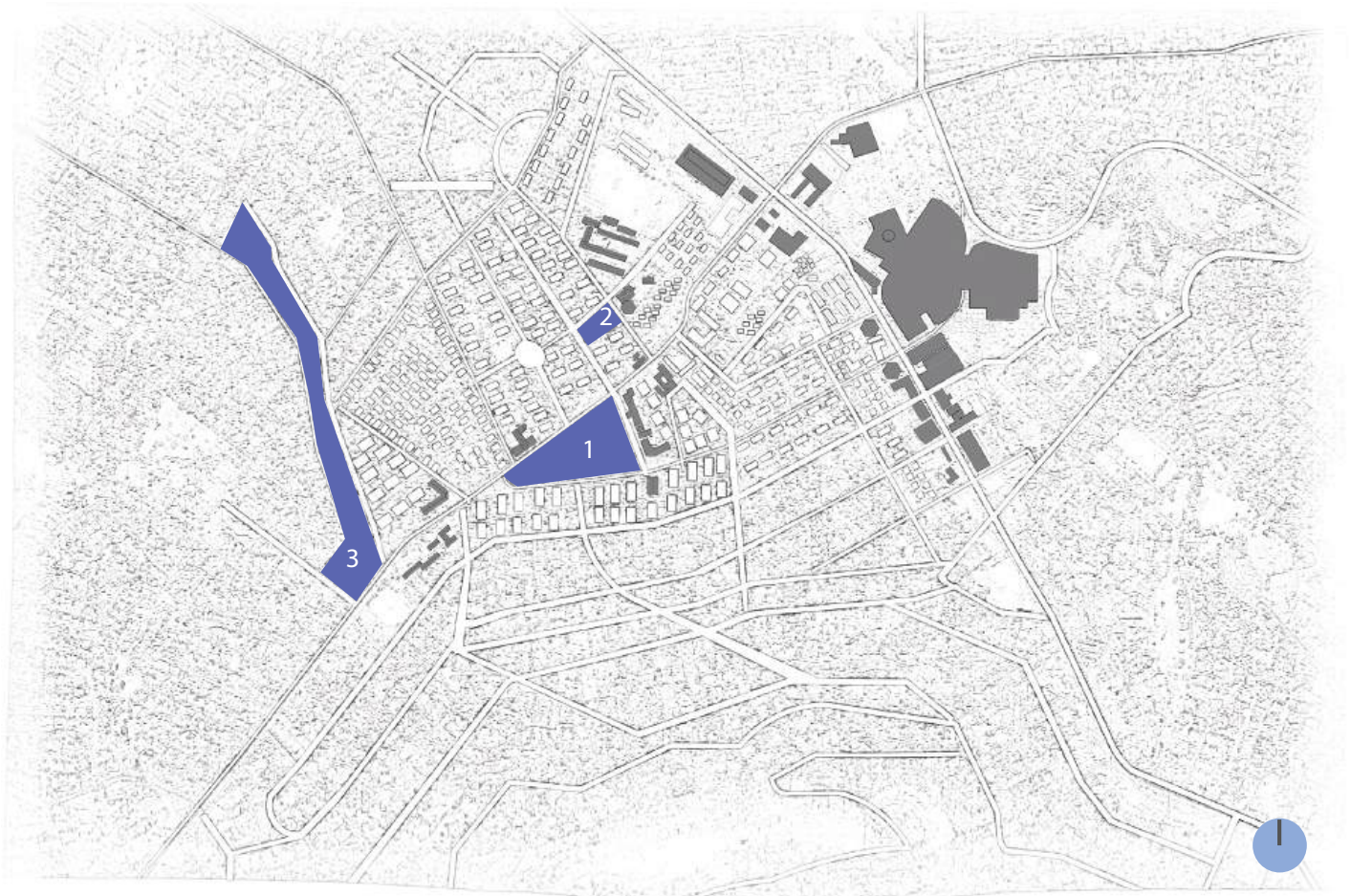


Figure 6.3-Site Choices (Google,2024)



Figure 6.4-Site Choice 1 (Google,2024)



The Design Brief

Following extensive research and site analysis, it has become evident that the voids present in Northcliff highlight the urgent need for it to evolve into a walkable Johannesburg suburb. These voids underscore a community longing for daily engagement in sport, prayer, and activities that foster spiritual upliftment and human connection. Current programs on the site, such as the Tshepo Community Initiative, already emphasize giving back to the community and contributing to economic stability, pointing towards a foundation that can be built upon to create a more integrated and supportive environment.

However, the current landscape also reveals a critical need for safer, more interactive spaces. Northcliff's disconnected urban fabric calls for safer streets, increased human interaction, and the concept of "eyes on the street" to cultivate a sense of community vigilance and shared responsibility. This need extends to creating environments where students and children feel safe and where parents are comfortable engaging in the community, knowing their families are secure. The country club will be reimagined as modern community center that promotes interaction through sport and its relevant club communities.

This type of building can be labelled as a Integrative Community Design and the main idea will be to foster cross programming relationships within the identified voids

Addressing these cultural, spatial, and social voids is essential to transforming Northcliff into a true identity for all its ethnically diverse communities, reflecting the area's post-apartheid evolution. The goal is to develop a design that connects people through sport, learning, worship, and community service, creating a vibrant, inclusive urban fabric that celebrates the suburb's rich diversity and fosters a sense of belonging for every resident.

This design strives to be a model intervention where similar concepts ideas and analysis can be applied to similar area types and be an expansion of the original to connect all areas in the **Interconnected Voidscape**

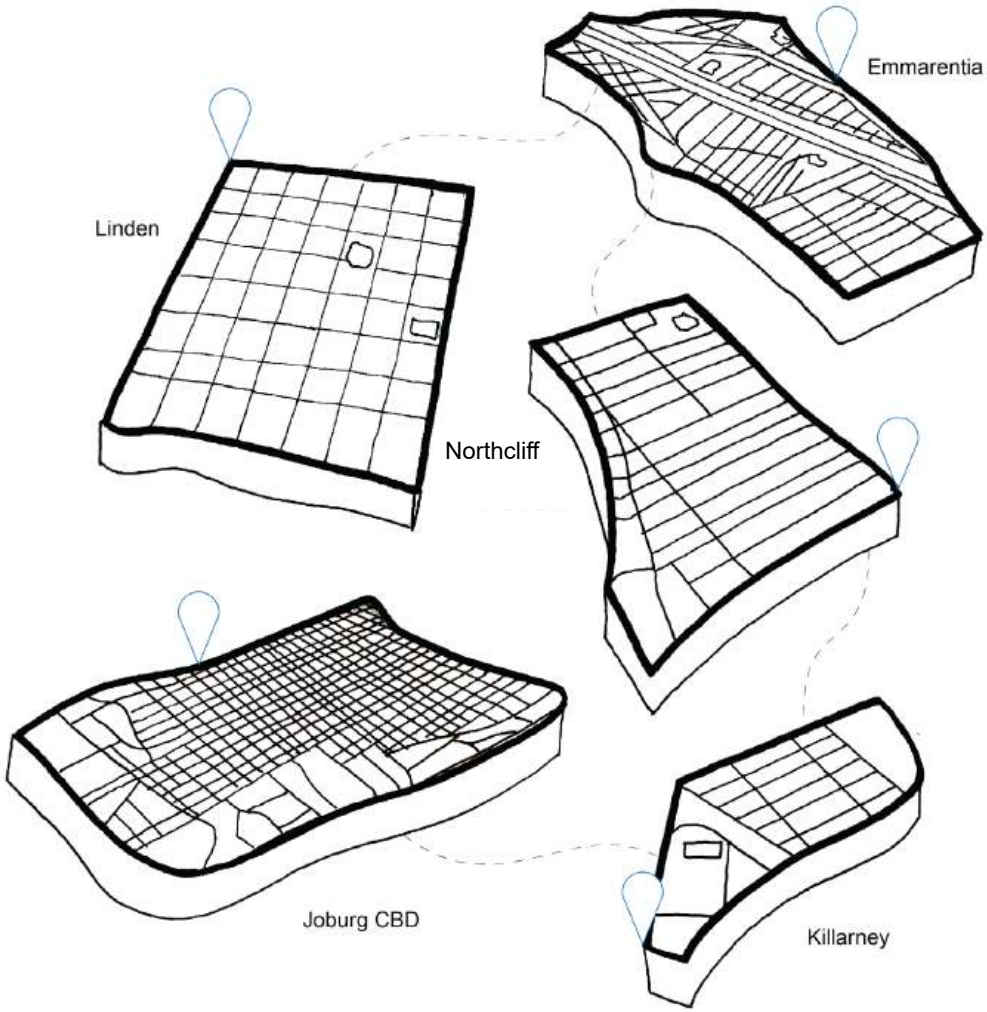


Figure 6.5-Multivalent MultiDimension (By Author,2024)

Design Considerations

Structure

The architectural design prioritizes flexible and adaptable structures that can accommodate different activities and events throughout the day. Additionally, the structural design of the intervention emphasizes flexibility and adaptability, allowing for future modifications and expansions to accommodate evolving community needs

Circulation And Approach

Its paramount to create a sense of social and interactive sustainability which is lacking in the area. The circulation design of the intervention prioritizes safety, efficiency, and community interaction. Secure pathways lead to the madrassa, ensuring a safe environment for children, while the feeding kitchens serve as spaces for both volunteers and the broader community to engage in charitable activities. The public space serves as a central node, fostering connections between different programs while maintaining a degree of separation for privacy and functionality. The sporting facility acts as a dynamic hub, linking with the country club and offering versatile spaces for activities like boxing while accommodating private women's facilities. This seamless circulation system enhances the overall functionality and inclusivity of the intervention, facilitating diverse community interactions and activities.

Services

Design considerations should focus on minimizing service costs through efficient utilization of resources and sustainable practices, such as incorporating energy-efficient systems and utilizing locally sourced materials. Additionally, integration of universal design principles should be prioritized to ensure accessibility for all members of the community, regardless of age or ability

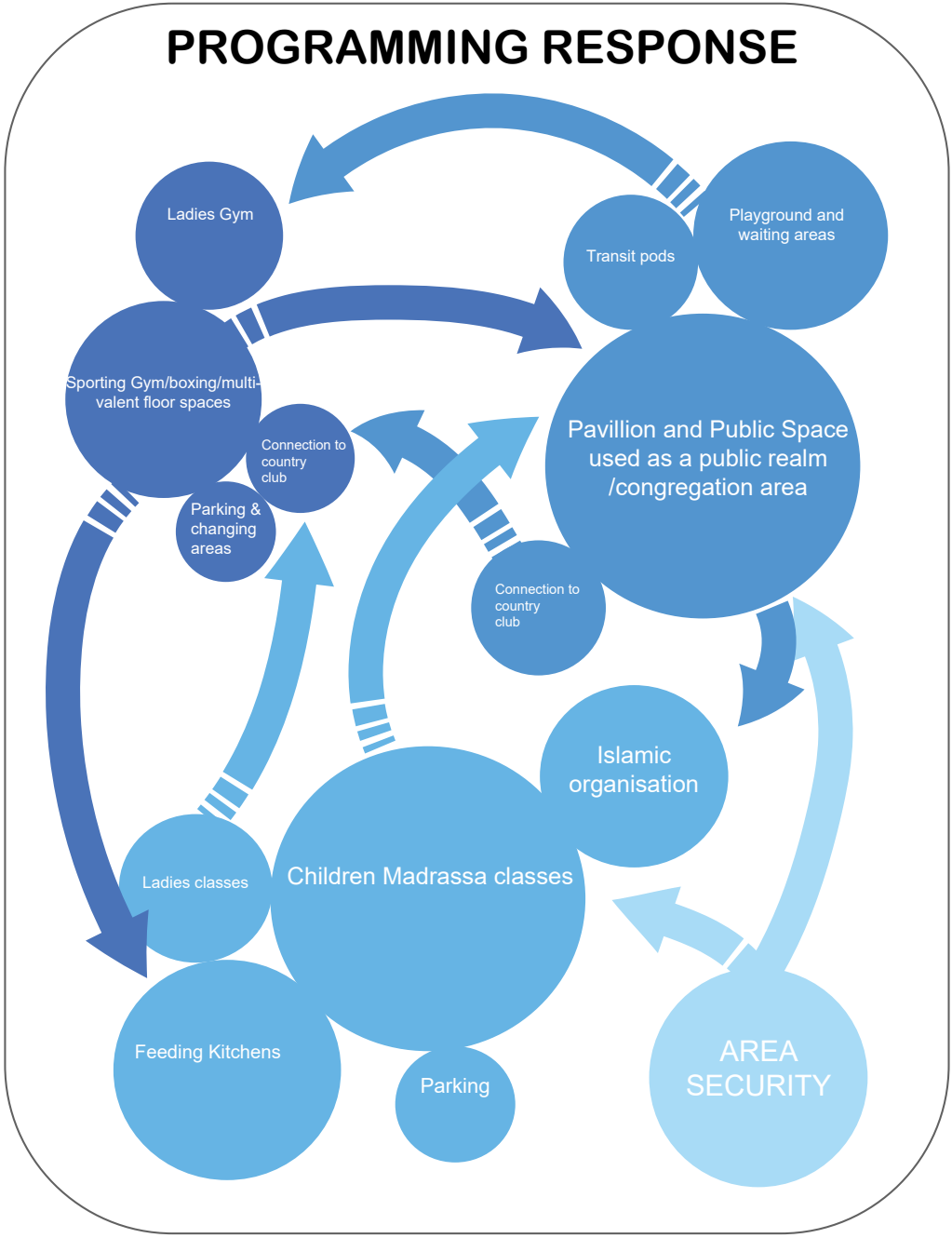


Figure 6.6-Programming Response (By Author,2024)



Charrette: Exploring the Narrative And Finding The Programme

The exploration delves into the exploratory design processes undertaken to uncover the programme and spatial requirements of the Northcliff project. Through abstract model making, storyboard narratives, literature reviews, and materiality studies, these explorations serve as tools to interpret and visualize the complex layers of Northcliff's social, cultural, and spatial context. These methods allow us to delve deeply into the narratives of the people, the existing voids, and the historical and contemporary influences that shape the suburb.

Model Making

Model 1:  
*This abstract model explores the permeability of building typologies and how they can be interlinked within the Northcliff site. It identifies key building uses such as religious spaces, schools, and community hubs, highlighting their importance and hierarchy within the urban fabric. The model serves as a conceptual tool to understand how these elements can be integrated to enhance connectivity, foster community interaction, and redefine Northcliff's spatial dynamics*

Model 2:  
*This abstract model of a central box with suspended smaller boxes represents disconnected spaces within a community voidscape. It symbolizes how fragmented elements, when enclosed within a vibrant, cohesive framework, can collectively bring liveliness and identity to a space. This exploration serves as a constant reminder of the impact of voids on the urban fabric and the potential for transformation when these spaces are thoughtfully reconnected.*

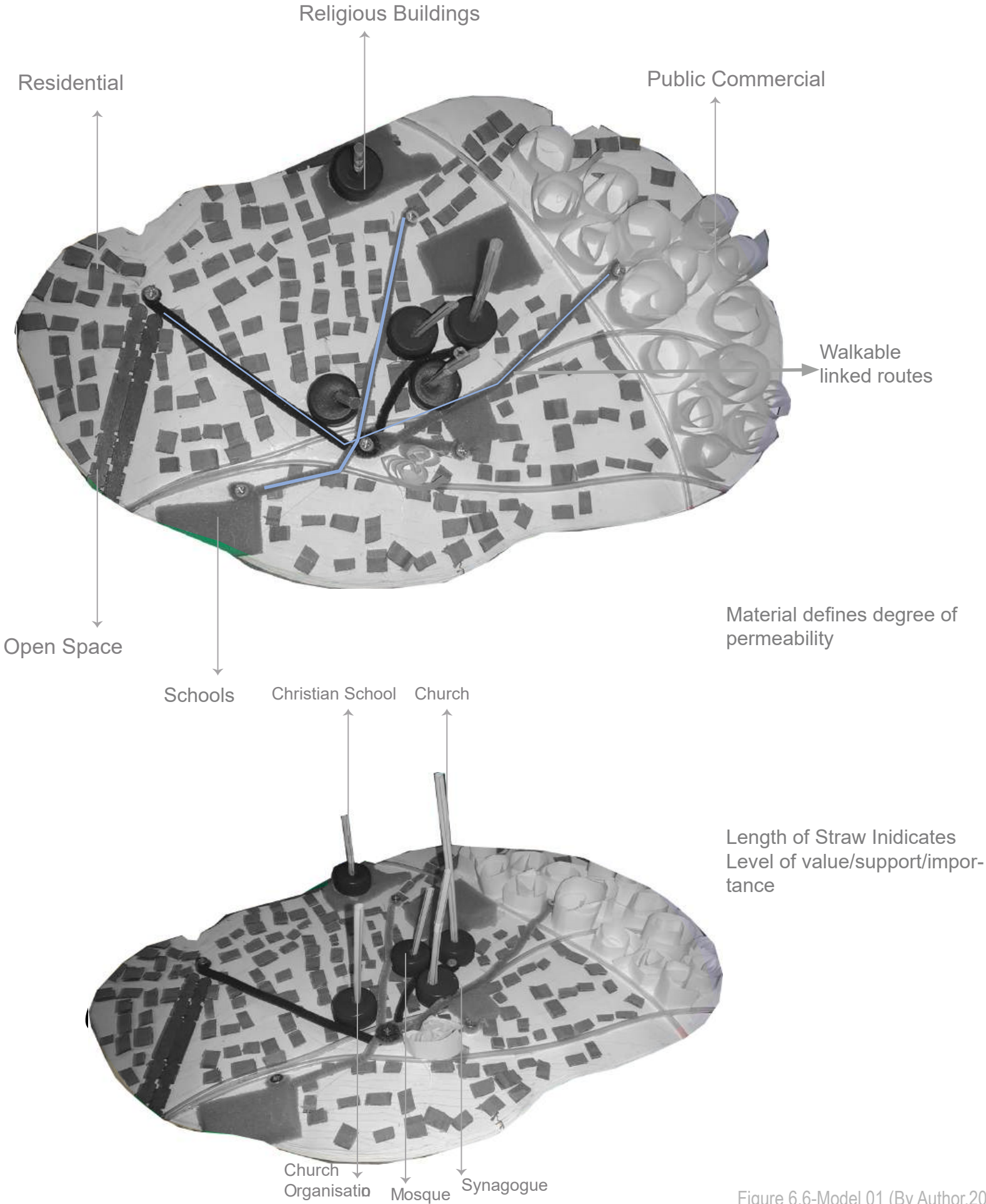


Figure 6.6-Model 01 (By Author,2024)



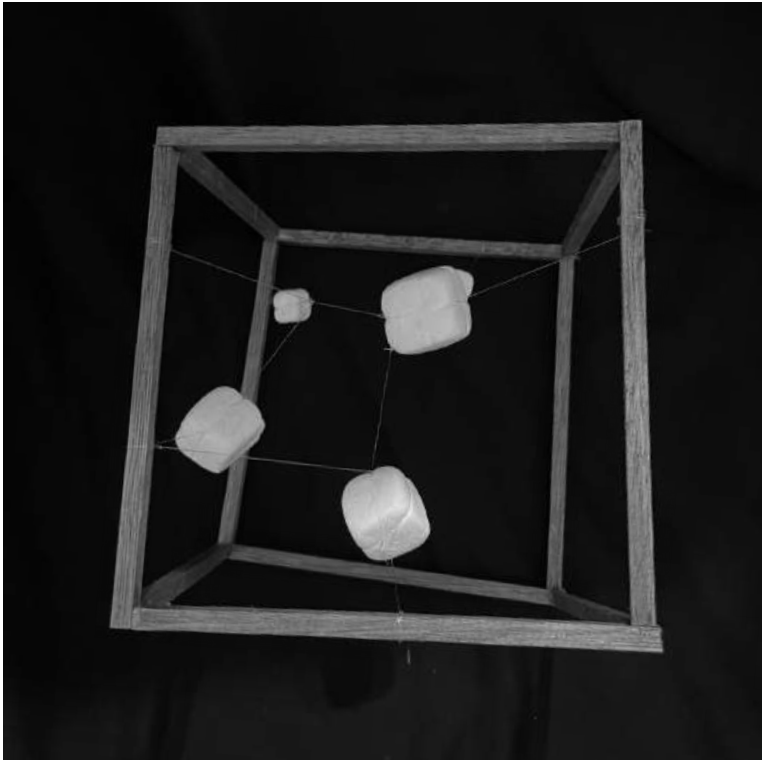
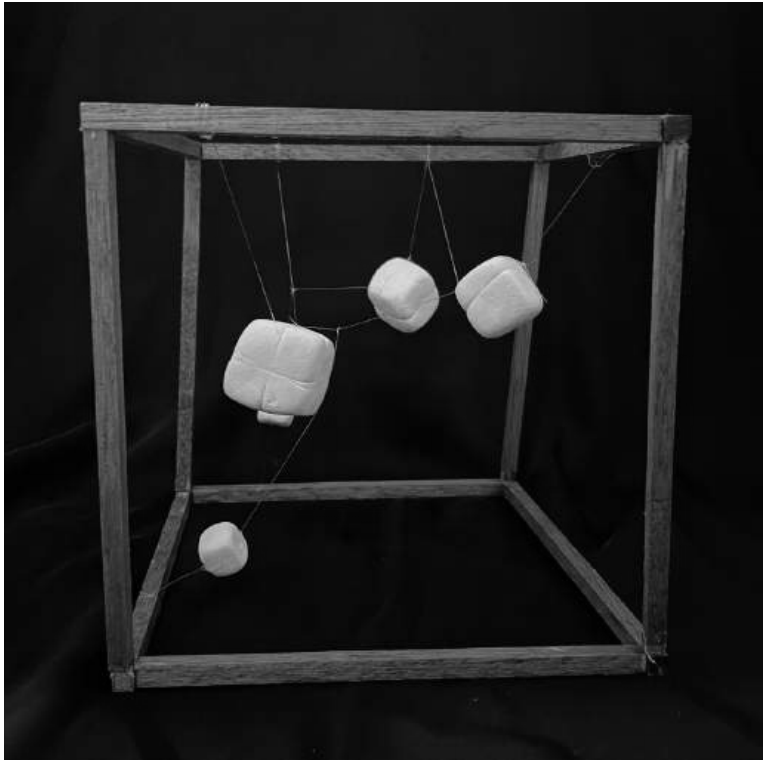
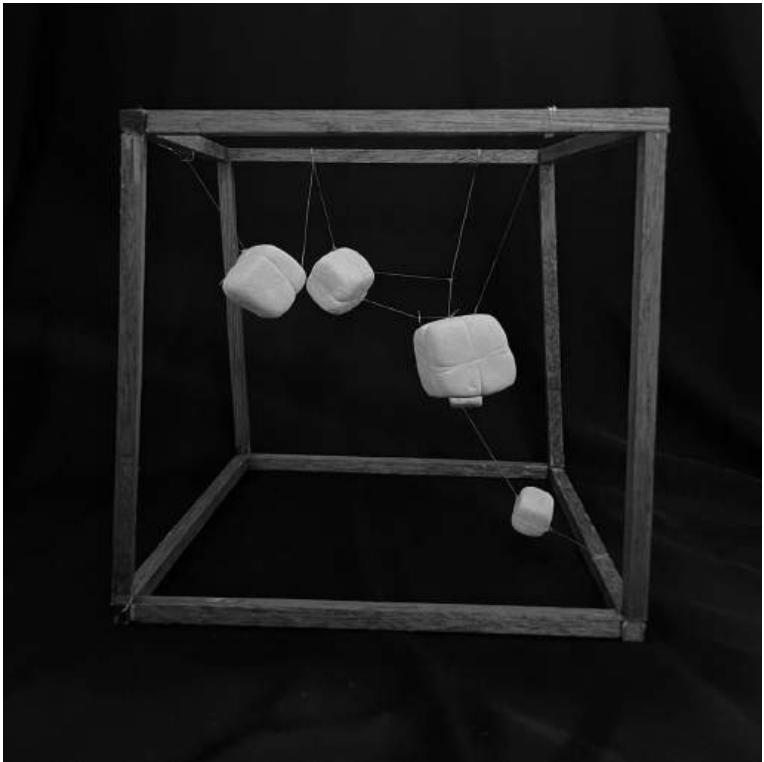
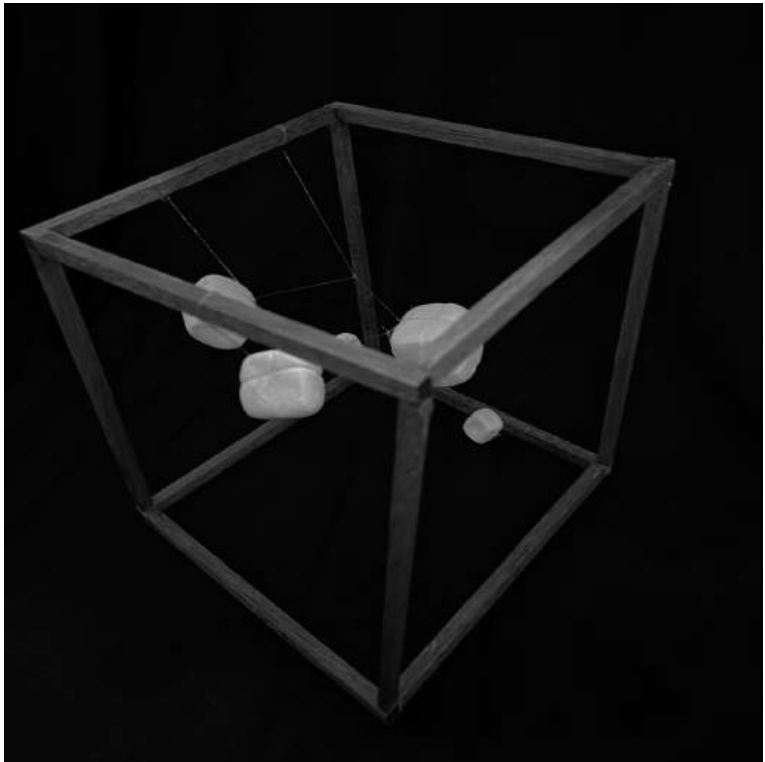


Figure 6.7-Model 02 (By Author,2024)



Figure 6.7-Model 02 (By Author,2024)



Charrette: Exploring the Narrative And Finding The Programme

The Journey

*In 2018, while applying for Architecture, I was tasked with depicting a daily journey, and I chose to reflect on my personal narrative of migration. The journey captures my high school experience, where each day I traveled from my hometown in the south of Johannesburg to my school in the north. A commute that felt like crossing into another world. Along the way, certain landmarks and locations became markers of time and significance, each symbolizing the distance between the disparate realities of my home and school environments.*

*This journey reflects a broader narrative experienced by many citizens who, under apartheid's Group Areas Act, were segregated and denied access to the quality of life enjoyed in the northern suburbs. The visual expression of my commute speaks to the enduring divide between these worlds and highlights the ongoing struggle for equity and belonging in the urban landscape of Johannesburg*

The Tshepo Initiative: A True Story Of Transformation

*The Tshepo Initiative, often seen as merely an agricultural training group, is much more. A beacon of second chances. Among its stories is that of a homeless man sleeping near the Initiative's site in Northcliff. Approached by the group, he embarked on a transformative journey through three phases: learning agriculture, working through addiction with support from U-TURN a community group that's partnered with Tshepo Initiative, and finally gaining skills to build a new career.*

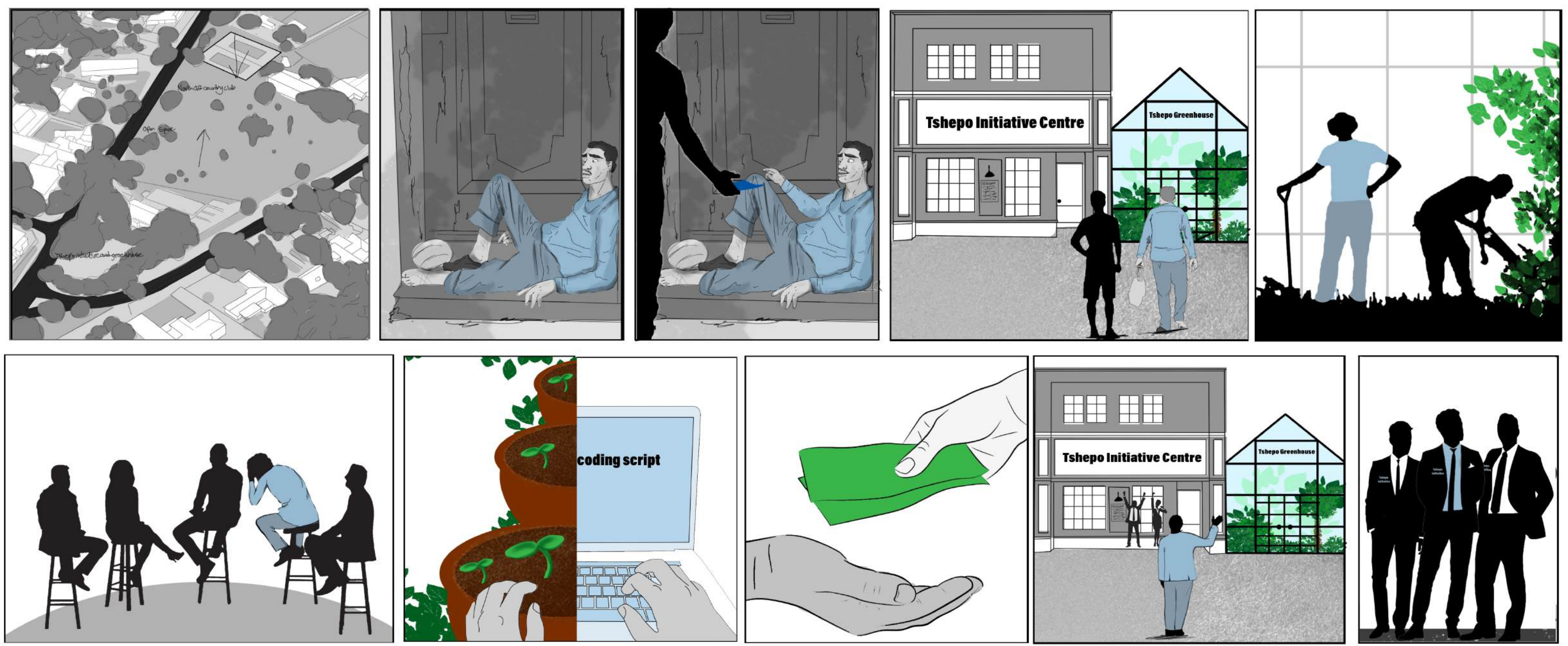
*While many wonder why this initiative operates in Northcliff instead of underdeveloped areas, the answer lies in the growing presence of homelessness here. Many homeless individuals are drawn to Northcliff, believing it's a place of opportunity among wealthier residents. The need is evident, and the Initiative addresses it by offering not just handouts but a path to empowerment, bridging the divide between prosperity and those seeking a fresh start. Tshepo Initiative hosts people of all races and colours which is reflective of the demographic change in Northcliff.*



The Journey

Figure 6.8 The Journey (By Author,2024)





This directly influences physical connections to programme and context by developing the initiative in spaces that are integral to Northcliffs developments.

The Tshepo Initiative: A True Story Of Transformation

Figure 6.9-Tshepo Initiative (By Author,2024)



Literature Review

Furthering the understanding the displacement one feels,the inability to express identity and sense of belonging in an area I drew upon the stories in the essay: *“A Faceless Compass Johannesburg’s haunted streets”* written by Ivan Vladislavic.

If you live in a place long enough, ghosts start to populate it. You see individuals you used to know, sometimes as long ago as many years ago, walking down the pavement, smoking a cigarette, getting out of a car, and going through doors when you drive down a street or turn a corner (Vladislavić, 2022). You may recognize yourself in familiar settings, where you used to be, standing by a window or waiting for the light to change, or engaging in any of the other forgotten activities you used to perform. While returning to a location may help maintain those unique connections that last in memory, extended absences might totally break them (Vladislavić, 2022). Memory is undone by losing territory that is, the sensation of access rather than ownership (Vladislavić, 2022). The new community of Northcliff, could possibly resonate with the architectural intervention in the way they interact with it in terms of nostalgic memory and feeling. It can also serve to be a vision for the new generations moving forward as a design that evolves and keeps its relevance through time.

Many find themselves transported back in time to their childhood homes, almost as though the scent of those days lingers in the air. Gospodinov, a Bulgarian poet claims he is unable to relive his boyhood in this way as the memories in his previous residences have been erased (Vladislavić, 2022). Yet if he finds himself in a new place, a certain flavor or fragrance frequently transports him back to that time in all its richness (Vladislavić, 2022).

It is important to consider how architectural spaces might arouse feelings of both memory and belonging in the design intervention at Northcliff. By using this approach, the community of Northcliff will be able to create a place that seems both familiar and progressive, while also remembering its past and shaping its future.

The Collages present placemaking and programmatic desire thats nostalgic and representative of the feelings of its users and their connection to familiar sites.

In the context of Northcliff, exploring the themes of memory, identity, and belonging can be achieved through thoughtful architectural interventions that resonate with both the past and present experiences of the community. The design can integrate elements that evoke nostalgia while fostering a sense of inclusion and ownership among diverse residents. This approach can be realized by incorporating recognizable materials, forms, and textures that reflect the area’s historical identity, blending them with modern, adaptable spaces that cater to contemporary needs.

For instance, public spaces can be designed to facilitate everyday interactions that echo familiar activities, like sitting by windows, walking along shaded pathways, or gathering in courtyards—spaces that feel lived-in and welcoming. The use of communal gardens, tree-lined walkways, and seating areas can create connections to the past while fostering new memories and a sense of place. Northcliff can become a living canvas where individual and collective memories are celebrated. Some of these charactersitics are also refelctive of Islamic Architecture principals which is what my identity and experience of migration yearns for and resonates with.

The aim is to craft an environment that not only remembers the memories of long-time residents but also evolves to embrace new identities, making Northcliff a dynamic and inclusive suburb that feels both familiar and forward-looking. This approach can help bridge the emotional and physical disconnection that residents feel, transforming Northcliff into a community that belongs to all who call it home, and ensuring that its spaces are lived in, not merely occupied.



Figure 6.10-Walkable Precinct (By Author,2024)



Figure 6.12-Learning (By Author,2024)



Figure 6.11-Religion,Sport,Leisure (By Author,2024)



Figure 6.13-Rehabilitation (By Author,2024)



Materiality Assessment

Writing about Johannesburg has frequently focused on the rectangular clay brick ever since a massive gold-bearing reef was found on the Langlaagte property in 1886 (Anon, 2018).

The majority of Johannesburg’s first brickmakers came from the city’s impoverished Afrikaner immigrant population. According to historical records of early Johannesburg, these poor immigrants relied heavily on brickmaking as a source of revenue (Anon, 2018). Afrikaners were able to obtain permission to produce bricks from the clay on state land that bordered the longest stream in the city, the Braamfontein Spruit, by appealing to the sympathies of the ZAR administration (Anon, 2018).

A true black theater’s mise en scène must include “mampara bricks,” a low-grade stock brick that is intended to be plastered over, corrugated zinc, and the filth and muck of township streets (Anon, 2018). Bricks are no longer only seen as a construction material; they are now recognized as violent instruments, physically expressive symbols of location, indicators of a genuine post-war Johannesburg vernacular architectural style, and, as of 1990, prepared cultural artifacts deserving of exhibition in a gallery (Anon, 2018). Brick was surrounded by peculiar instances of institutionalized racism. For example, in Johannesburg in the 1970s, black masons were only permitted to place plaster bricks on building facades rather than facing bricks (Anon, 2018).

During apartheid, the materiality of Northcliff and similar “white-only” suburbs contrasted sharply with that of segregated areas like Lenasia and Soweto, reflecting broader socio-economic divides. In Northcliff, high-quality bricks, concrete, and finishes were used to build durable, elegant homes and infrastructure, symbolizing wealth, permanence, and exclusivity. By contrast, materials in townships such as Lenasia and Soweto often included low-cost bricks, corrugated iron, and makeshift materials, reflecting the state’s minimal investment in these marginalized communities.

However, Religious structures are revered in most communities, no matter where they are located, since they provide a feeling of safety, spirituality, and community that goes beyond personal convictions. Their architectural features, particularly those derived from Islamic concepts, emphasize lightness, serenity, and an air of openness, making them naturally hospitable. Through the integration of delicately built brickwork and the deliberate, human-centered design characteristic of Islamic architecture, my Northcliff intervention may provide places that are both aesthetically pleasing and spiritually uplifting. These architectural elements will be subtly used to create a peaceful atmosphere that speaks to everyone, providing a place where individuals from different origins may feel at ease and a part of a common sense of community.



Figure 6.14- Fred Cohen House, Northcliff (Import, 2023)



Figure 6.15- House, 1850 (2summers, 2018)



Figure 6.16-Facade (By Author,2024).



Figure 6.17-Arches and Collonades(By Author,2024)



Figure 6.18-Street Facade (By Author,2024)



Figure 6.19-Public Entry (By Author,2024)



Curated Programme

The chcracters within this design narrative are as follows:

High Influential Characters:

- Students
- Recently migrated families,couples,singles
- Sporting and Community Organisations
- Existing Residents
- Homeless People

Medium Influential Characters:

- Religious Leaders
- Existing Elderly Residents

| Programme                                                                                                                                                                        | Void Class | Area (sqm) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|
| Teaching areas<br>Office space<br>Library<br>Rehab Centre<br>Community Initiatives<br>Upskilling Centres                                                                         | Cultural   | 1300       |
| Boxing Gym<br>Gymnasium<br>Prayer/Congregation<br>Spaces/Club Spaces<br>Borehole<br>Sport Facilities<br>Community hall and<br>centre<br>Public amenities<br>(store,pharmacy,etc) | Social     | 1200       |
| Walkable Precinct<br>Hardscape-Softscape<br>public space<br>Outdoor Sport areas<br>Greenhouse Agri                                                                               | Spatial    | 4200       |

Why have these spaces been chosen?

These reflect a deliberate approach to creating a dynamic, adaptable, and community-focused environment. These multivalent spaces are designed to be flexible, allowing them to adapt to the evolving needs of Northcliff's diverse residents. A teaching area can easily transform into a library, a prayer space, or even a community meeting room, while the community hall can host anything from sports clubs to private events, reinforcing the idea that these spaces are not fixed but rather responsive to the community's needs. This adaptability ensures that the precinct remains vibrant, inclusive, and multifunctional, catering to various cultural, social, and economic activities. By integrating public amenities, green spaces, and walkable connections, the design aims to create a cohesive urban fabric that addresses the area's past voids and fosters a sense of belonging, interaction, and upliftment in Northcliff.

Precedent Studies



Alexandra Heritage Centre-Johannesburg

Alex, one of the oldest townships in the nation, was originally named for the first farmer's wife, Alexandra, and was a white residential township. Since then, Alex has taken on several disguises, but it has never wavered from its foundations (Anon, 2012). The practice started a protracted process of interviewing locals to create an "oral history" of this richly culturally and historically significant region. After that, the location was designated as a conservation area (PeterrichArchitects, 2018).

The exhibition hall, the building's main volume, spans the street and embraces it. At ground level, two significant new civic areas are delineated and surrounded by new stores and public spaces. The building's language embraces the paradox between the well-planned spatial arrangement and seemingly ad hoc aesthetic of the densely inhabited Townships (PeterrichArchitects, 2018). The structure's main idea is to create a steel framework that is filled with an eclectic mix of materials that are inspired by the vibrant hues and textures of the surrounding area (PeterrichArchitects, 2018).

The proposal includes a library, training facilities, cafés, stores, and an exhibition area to describe the history of the location as well as a jazz archive to showcase the rich musical heritage that was born here (ArchDaily, 2010). On a bright day, you can come into someone getting their hair trimmed, attending a birthday celebration, or doing both in one location (ArchDaily, 2010)

The steel structure of the Alexandra Heritage Centre is adorned with a variety of materials and textures that reflect the township's dynamic style, therefore embracing the lively and unique nature of its community. Since the structure symbolizes the citizens of Alexandra's

culture, resiliency, and life experiences, this technique fosters a strong feeling of identification and belonging. Architecturally speaking, it shows how incorporating local stories and a variety of materials can turn open areas into significant community gathering places. In an upscale suburb such as Northcliff, this would mean developing multipurpose areas that combine old and new, encouraging diversity, and commemorating the neighborhood's changing character, all of which would make it seem more cohesive and representative of its heterogeneous population.



Figure 6.20-(ArchDaily, 2010)



Figure 6.21-(ArchDaily, 2010)

Architectural Language

Buildings that express identity and a sense of belonging to its community

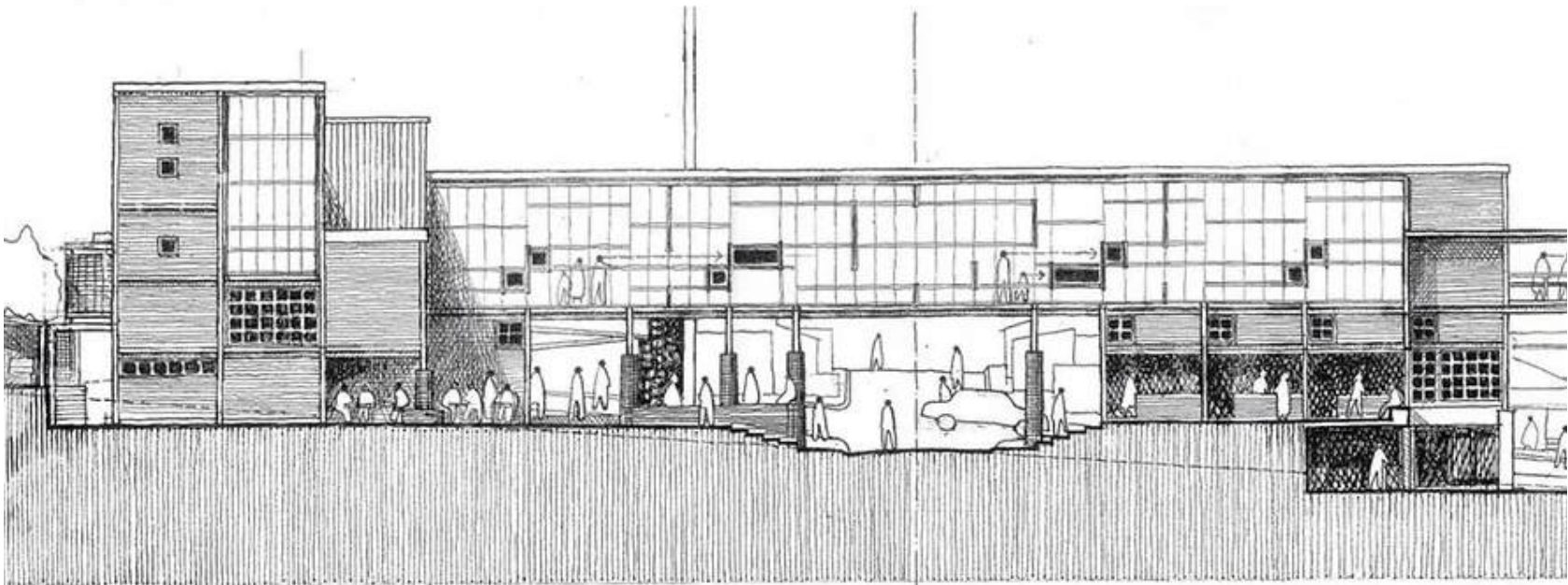


Figure 6.22 -Elevations (PeterrichArchitects, 2018)

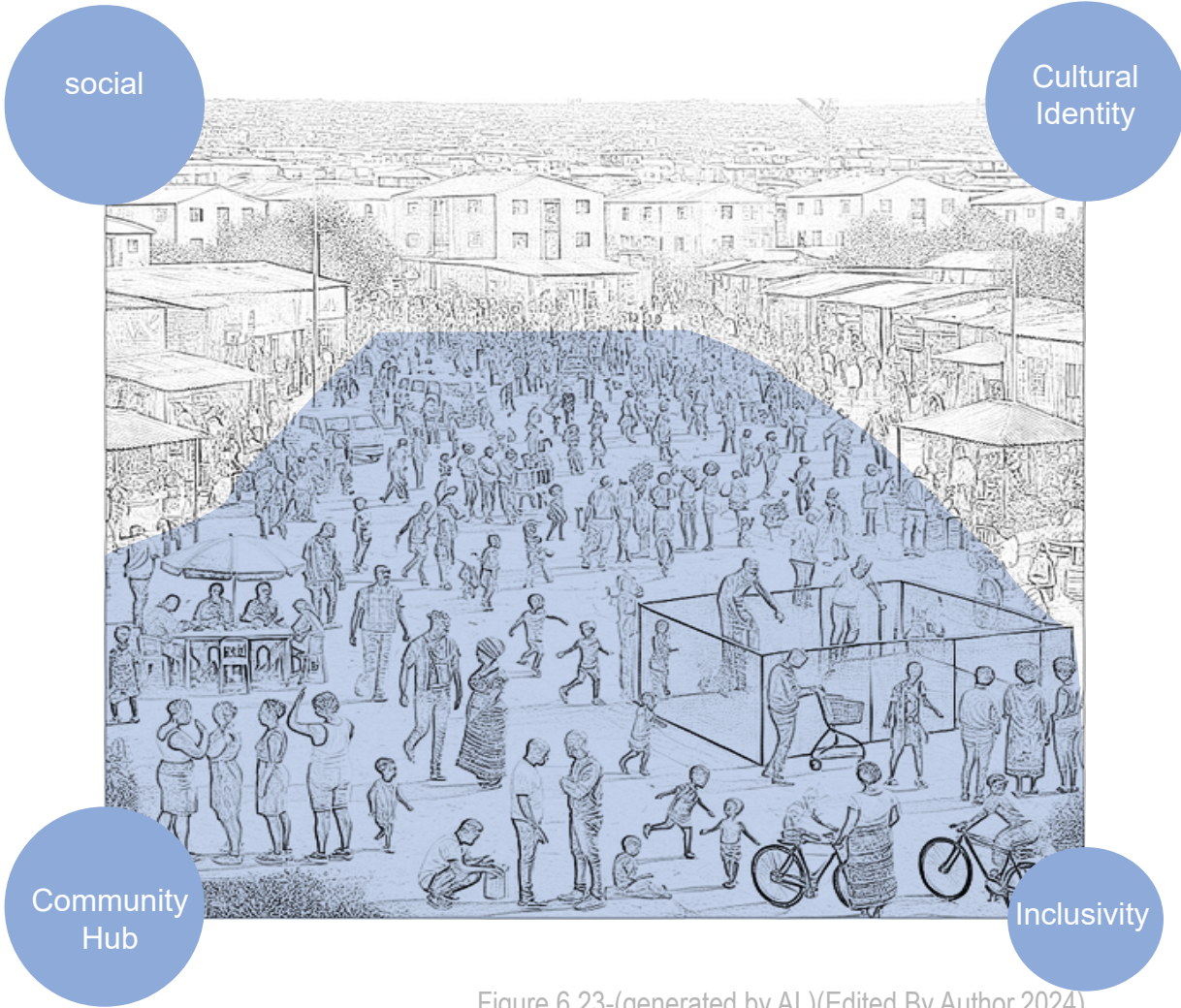


Figure 6.23-(generated by AI )(Edited By Author,2024)



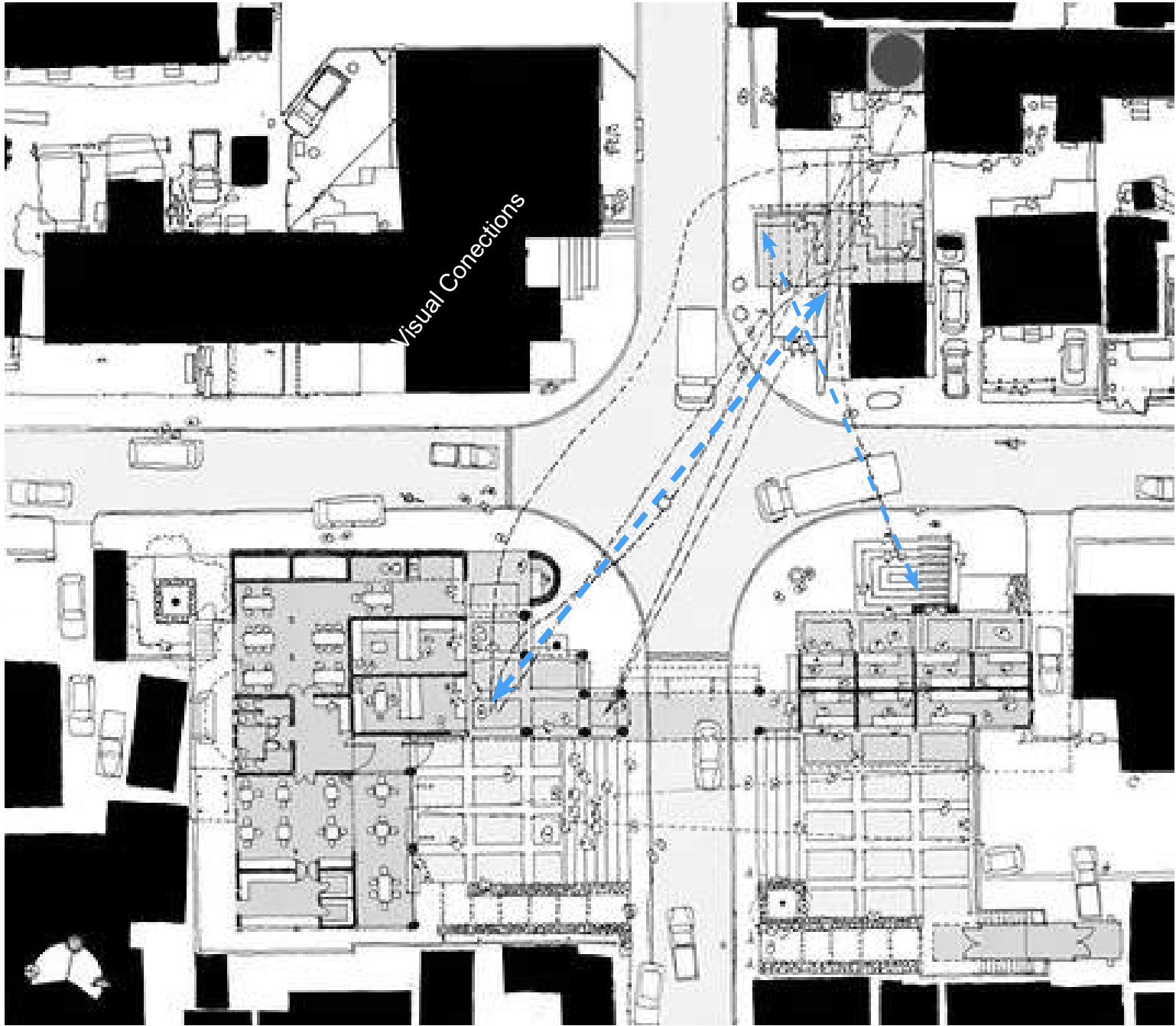


Figure 6.24-(PeterrichArchitects, 2018)

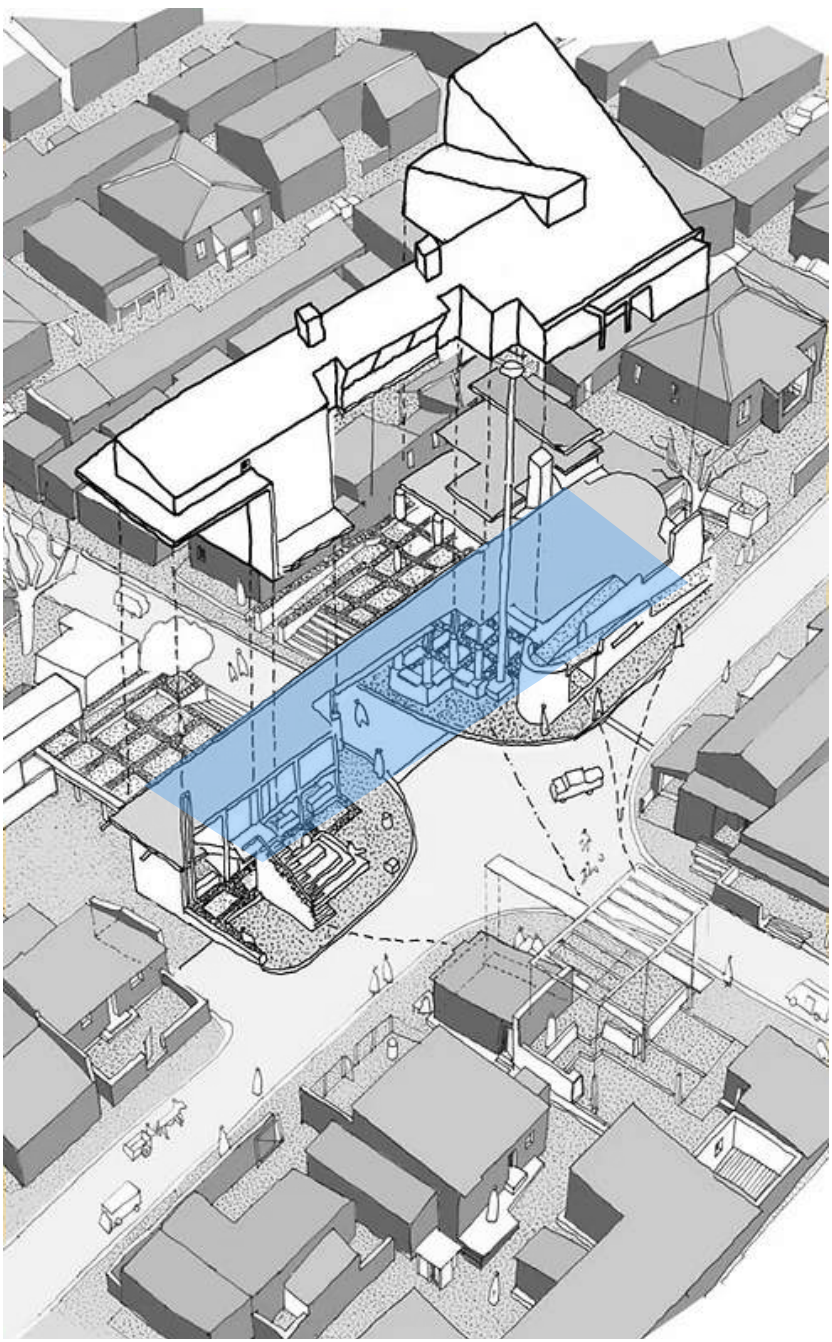


Figure 6.25-(PeterrichArchitects, 2018)



Figure 6.26-(PeterrichArchitects, 2018)



Bait-Ur -Rauf Masjid -Bangladesh

Raised on a plinth, the mosque provides flood protection and a common place for relaxation while separating the structure from the bustling city (Alyn Griffiths, 2017). Both exterior and interior, the terracotta bricks that made up the construction are left uncovered. They give the structure a distinct personality that alludes to both historical religious architecture and the architecture of neighbouring structures (Alyn Griffiths, 2017). “Built in brick, this mosque is an attempt at creating a language of architecture that takes its essence from the Sultanate period and gives it a contemporary expression,” Four voids are created in the corners of the structure as a result of the prayer hall’s rotation in the centre (Alyn Griffiths, 2017). The project was completed on a low budget and paid for by donations to charities. In addition to serving as a place of worship, it serves as a hub for social events (Alyn Griffiths, 2017).

Its function as a social center strengthens its ties to the neighborhood. Applying these ideas in a suburb like Northcliff may entail utilizing locally relevant materials and designs that combine historical references with contemporary requirements, producing areas that both mirror and improve the character and functionality of the neighborhood.

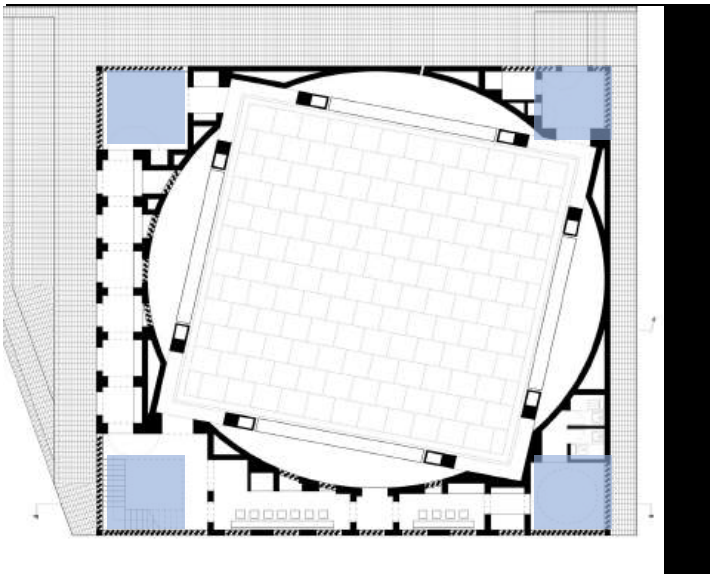


Figure 6.26-Plan (Alyn Griffiths, 2017)

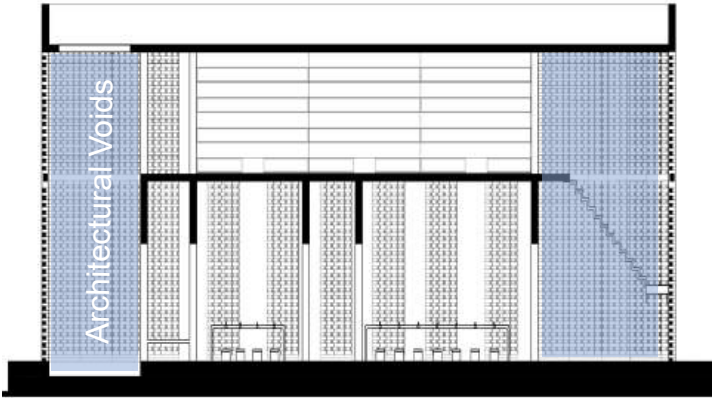


Figure 6.27-Section (Alyn Griffiths, 2017)



Figure 6.28-(Alyn Griffiths, 2017)



Figure 6.29-(Alyn Griffiths, 2017)



Figure 6.30-Materiality familiarity(Alyn Griffiths,



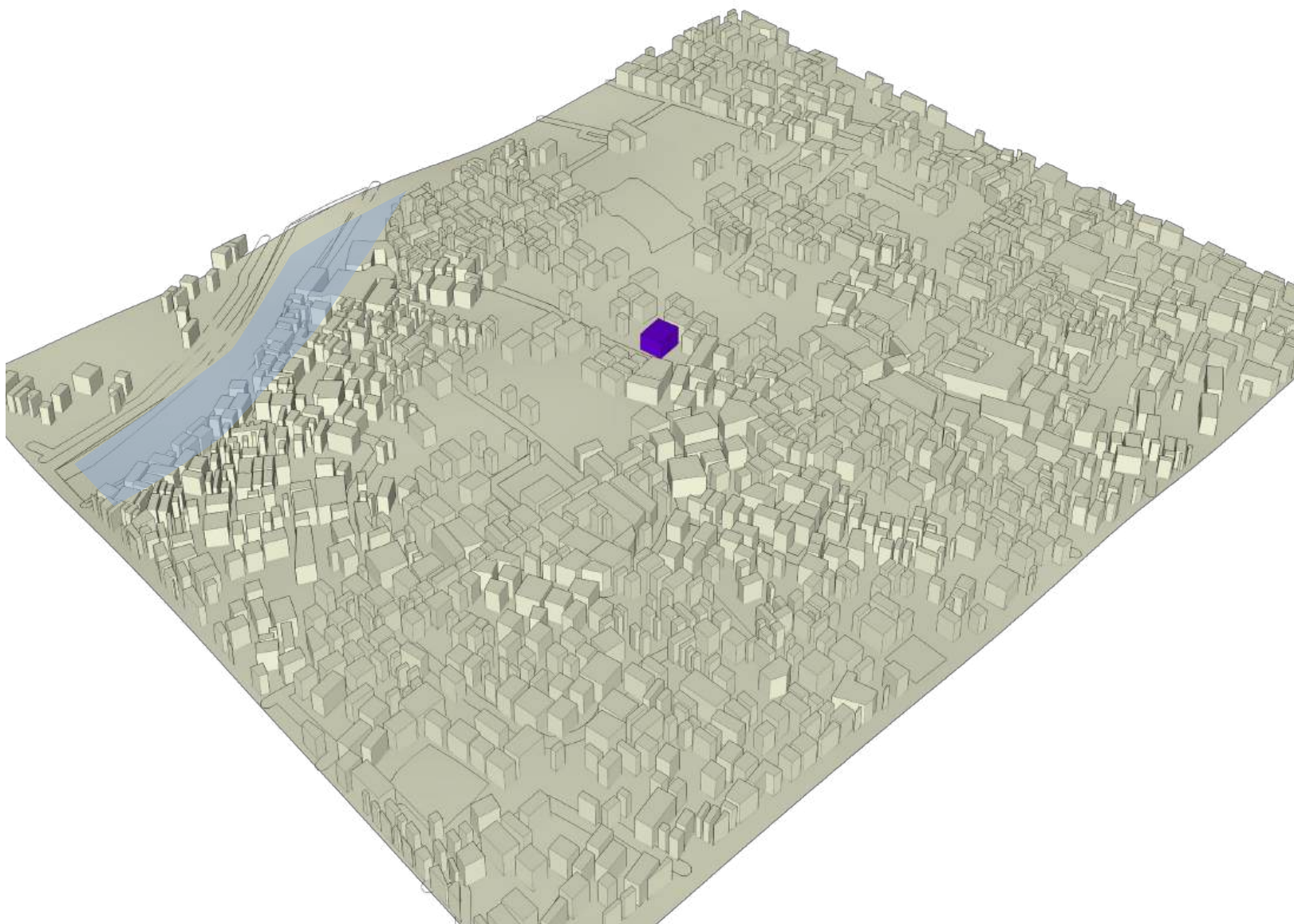


Figure 6.31-Location (By Author,2024)

**Placemaking**

Its locational decision strengthens its function as a gathering place, a hub for social interaction and the practice of common cultural and spiritual beliefs.This design is a significant symbol of community cohesion, cultural history, and shared identity in addition to acting as a physical anchor for the area.

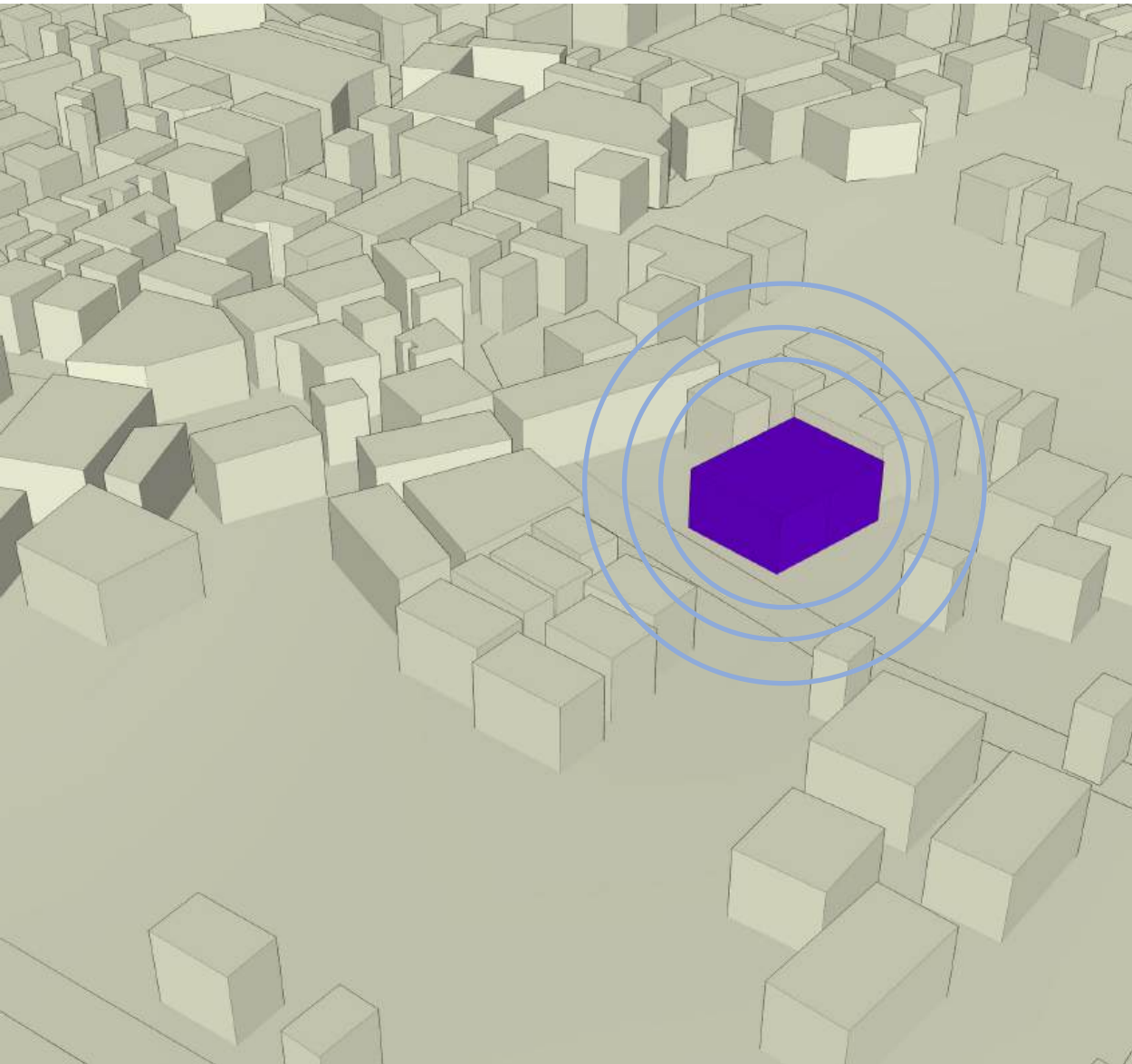


Figure 6.32- Cultural Heirachy - (By Author,2024)

**Contextual Importance**

For communities facing economic hardships, these places of worship become essential sanctuaries, embodying hope, resilience, and a deep connection to cultural and spiritual identity. The contrast highlights how, regardless of financial constraints, the significance of such spaces is amplified by their role in providing solace, unity, and a sense of belonging to communities that rely heavily on them for both spiritual and social support.



Red Location Museum-Port Elizabeth

The first black township to be founded in Port Elizabeth was called Red Location. A row of vivid red-rusting corrugated iron barrack structures is where the name comes from (Noero Architects, 2012). These were transferred to Red Location in 1900, where the first residential poor households lived from a Boer detention camp in Uitenhage. It turned into an armed struggle area during the Apartheid era. It is intended to contest preconceived notions about museum architecture (Noero Architects, 2012).

The idea of history and memory. Visitors are seen as engaged participants rather than as customers. The architecture of museum rooms challenges the norms of portraying history as a unified narrative. The past is shown as a collection of disjointed recollections united by common themes. Red Location provides a chance to connect the dots between the many struggles that characterize the attempts at liberation made by various people in South Africa (Noero Architects, 2012). Ironically, the Red Location activists are occupying the exact locations that their alleged opponent, the Boers, used to imprison their women and children in the Boer War concentration camps. The Museum's lesson is that no group of people's freedom should ever come at the price of another (Noero Architects, 2012).

The museum stands in stark contrast to the surrounding township. It is purposefully made to have a strong emotional connection with its surroundings. The museum is visually and symbolically connected to the township by its aggressive, industrial aesthetic, which is defined by aged steel and raw materials. This aesthetic also reflects the same harsh, utilitarian aspects of the township's homes. In order to match its environment and challenge typical museum design, this architectural interaction between the museum and the township grounds the tale of struggle, resiliency, and history into the everyday surroundings of those it represents.

Contextual Precedent

A Community Building Within A Suburb

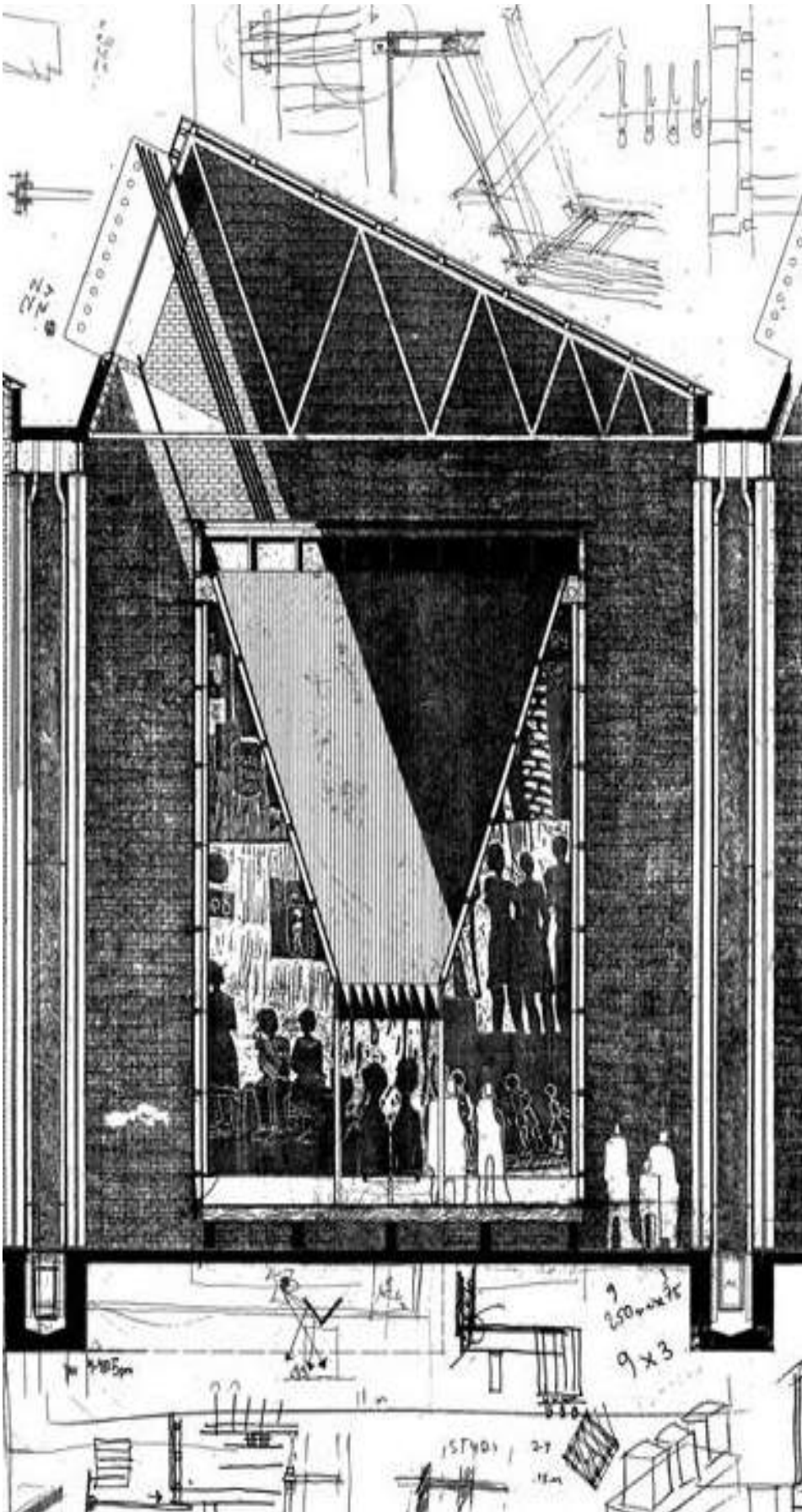


Figure 6.33- Cultural Hierarchy - (Anon, 2024)

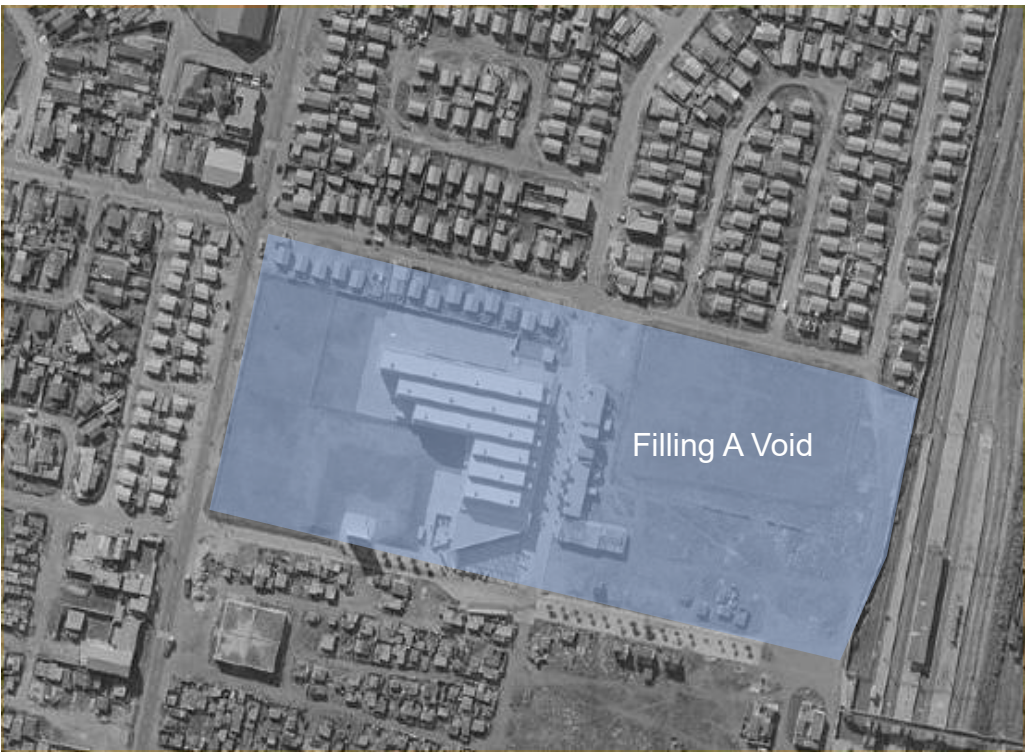


Figure 6.33-Filling A Void((Anon, 2024) Edited by: (By Author,2024)



Figure 6.34-Township Reflection (Anon, 2024) Edited by: (By Author,2024)



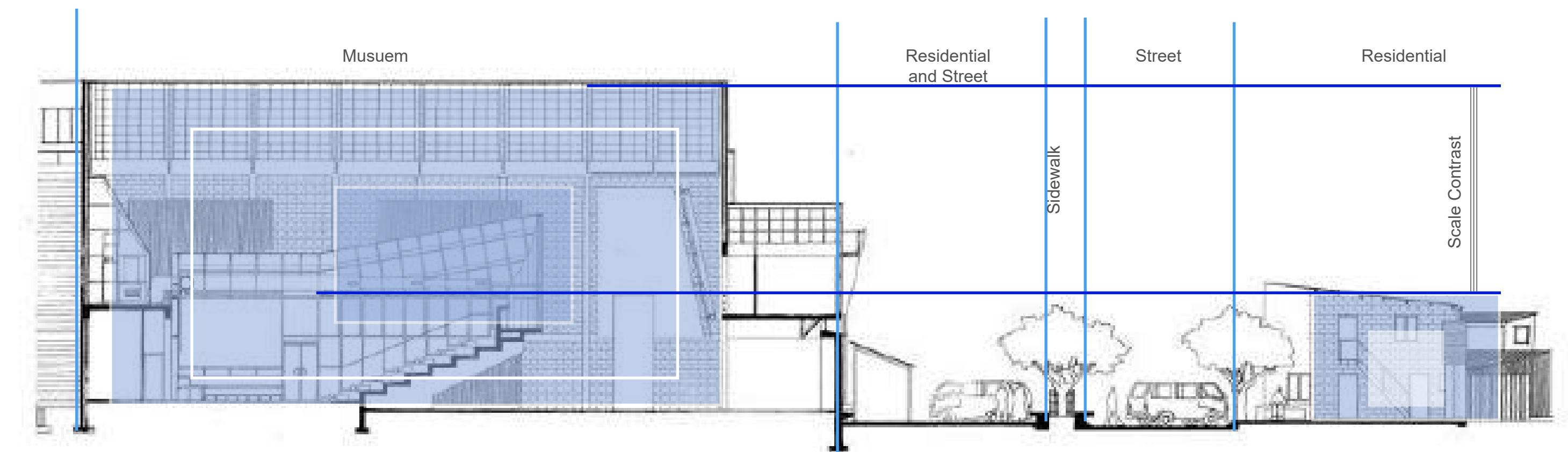


Figure 6.35-Section Analysis (Anon, 2024) Edited by: (By Author,2024)



Figure 6.36- Stark Contrast (Anon, 2024) Edited by: (By Author,2024)



Hikma A Religious and Secular Complex-Niger

In Bagdad’s Bayt al-Hikma, or House of Wisdom, a library and study center with the world’s biggest collection of books for experts to address in religious and scientific topics, Muslim scholars made tremendous contributions to the sciences and humanities in the ninth century AD (María Francisca González, 2019).

The Hikma project, which has the support of women, youth, and local leaders, reintroduces these ideals that are inherent in Islam by converting a deteriorating mosque into a library that also serves as a new mosque for the Niger community of Dandaji (María Francisca González, 2019). The initiative is a center for culture and education where religious and secular people live in harmony to develop their minds and build their community (María Francisca González, 2019). Its two blocks and outdoor prayer area are ideal for big Eid festivities, Friday assembly, or regular prayers. The initiative offers areas for education, reading, research, recreation, prayer, and workshops (María Francisca González, 2019).

The outdoor areas are designed to be adaptable enough to host neighborhood gatherings or to just be conducive to peaceful reflection. For the area, the cultural complex serves as a center of communal life (María Francisca González, 2019).

The use of Islamic architectural principles in the Hikma project provides excellent insights for the construction of community-oriented spaces in Northcliff. The project embodies the flexibility, inclusiveness, and communal emphasis inherent in Islamic design by repurposing a damaged mosque into a multipurpose cultural and educational hub. Essential features like the utilization of flexible, open-air areas, areas for reflection, and a combination of religious and secular purposes might motivate a comparable strategy in Northcliff.



Figure 6.37-Hikma Complex (González, 2019)



Figure 6.38- Prayer (González, 2019)



Figure 6.39-Learning (González, 2019)

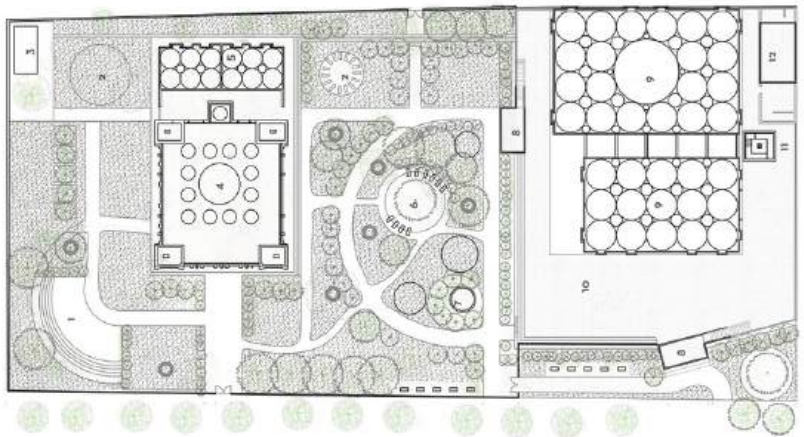


Figure 6.40-Plan (González, 2019)

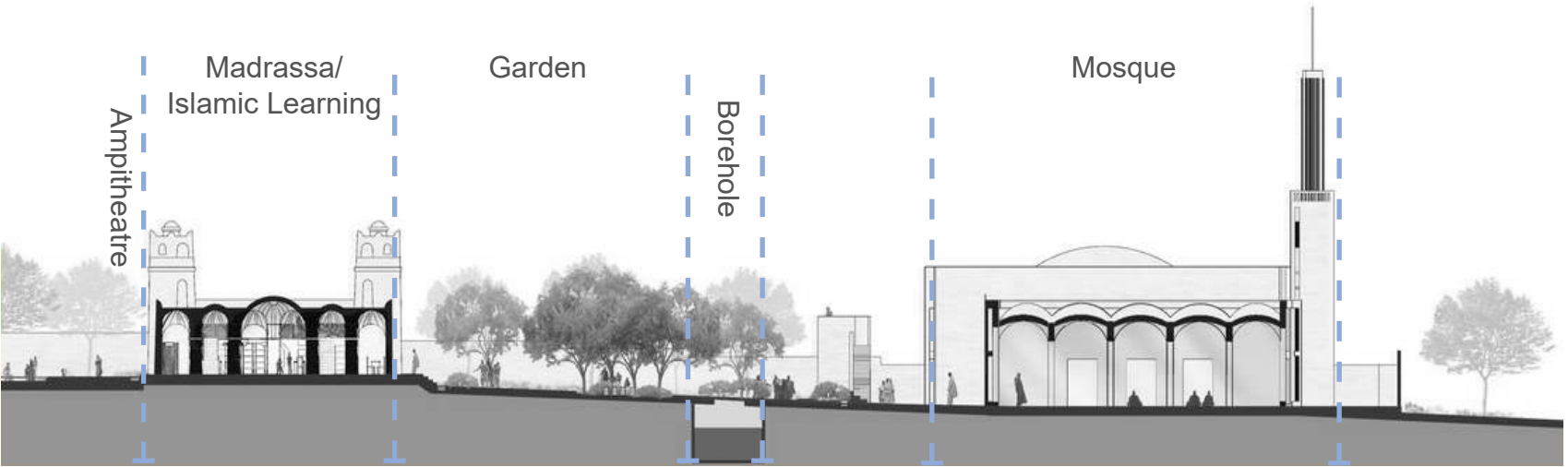


Figure 6.41 Section Analysis (González, 2019)

Programme Precedent

A mixed use building that is part of framing and activating a walkable mixed-use precinct. it’s the counter argument to an insular country club model that relies on status, money, exclusivity and car ownership.



Benjakitti Forest Park-Bangkok

Benjakitti Forest Park, located in the bustling heart of Bangkok, Thailand, was created on the site of a former tobacco factory within a short 18-month period on a low budget. It is a low-maintenance green lung that filters contaminated water, manages stormwater, creates habitats for wildlife, and is the largest public space for the densely populated area surrounding downtown (Holmes, 2024) .

For these objectives, three strategies were applied: Recycle: The current grid’s principal roadways are all still intact. Utilizing the existing manufacturing buildings, which will be completely merged into the environment, the sports center and museum were designed (Holmes, 2024) . The crushed concrete will be repurposed for the pavement and earthwork base.

Porosity and wetlands: Using a straightforward cut-and-fill method, three artificial wetlands with hundreds of mini-islands are produced, converting the concrete pavement into a porous and spongy environment that should retain runoff (Holmes, 2024) .

The development of a beneficial ecological link between plants and animals is anticipated. In contrast to the ordinary urban landscape, the built wetland’s roughness therefore generates a new aesthetic of dynamism and diversity. Along the small swamp near the edge, a number of boardwalks have been created to provide visitors an immersive sense of urban nature (Holmes, 2024) .

The wetland that uses water remediation functions effectively and generates enough water to sustain itself throughout the dry season. This park is home to a wide diversity of birds and other species. draws tens of thousands of people every day who utilize it for a variety of leisure activities, including cycling and running, family gatherings, picnics, dating, and wedding photos (Holmes, 2024) .

Public Space Precedents



Figure 6.42-Aerial (Holmes, 2024)

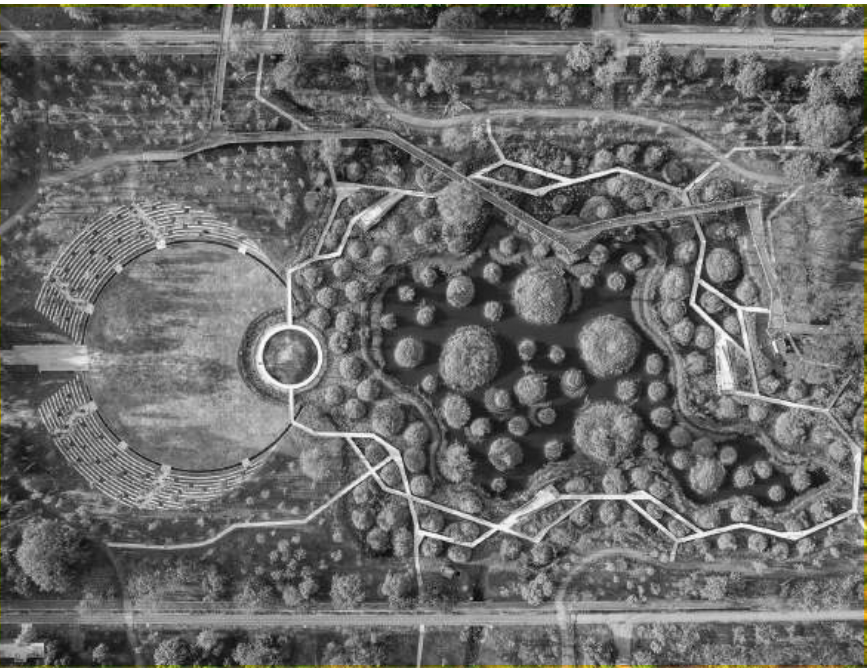


Figure 6.43 Landscaping (Holmes, 2024)



Figure 6.44-Skywalk (Holmes, 2024)



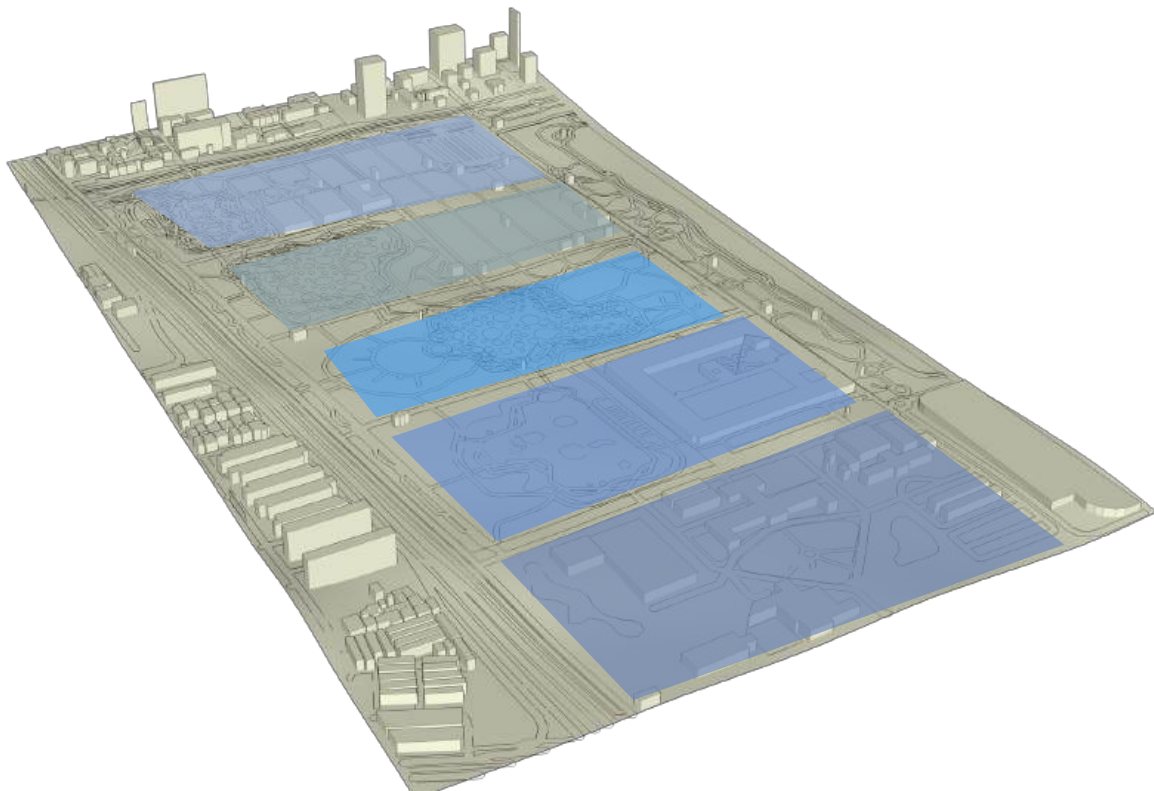


Figure 6.45 Layers of Experience (By Author,2024)

- Pre-Existing Tobacco Factory
- Earthworks: cut and fill the debris to create wetlands
- Water : retains wetland during monsoon season
- Vegetation: Semi natural plant communities take place
- Access: skywalk above retains public space

Figure 6.46-Functionality (Holmes, 2024)

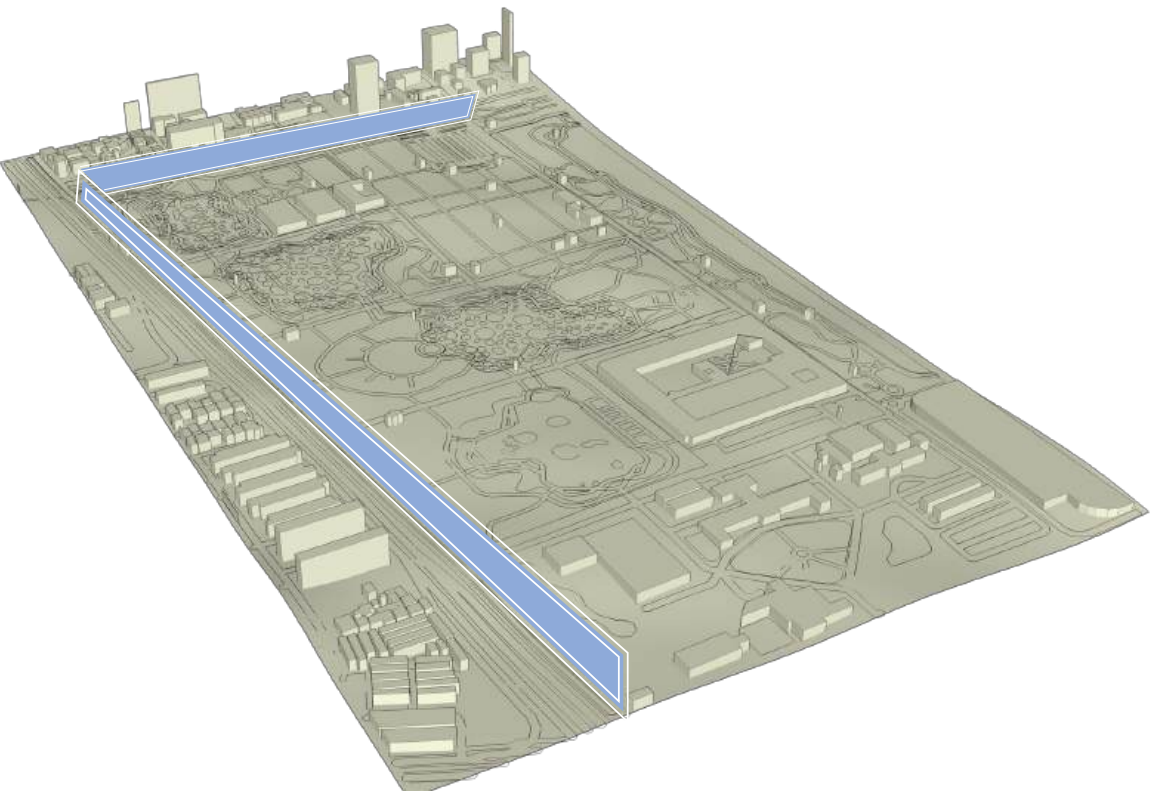


Figure 6.47- Barrier to the City (By Author,2024)

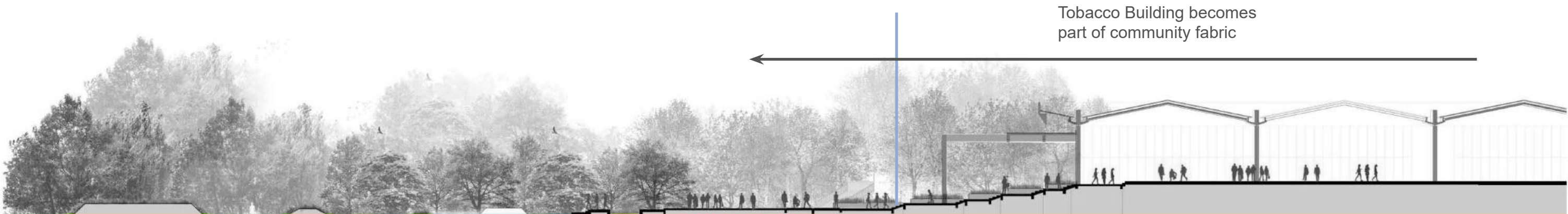
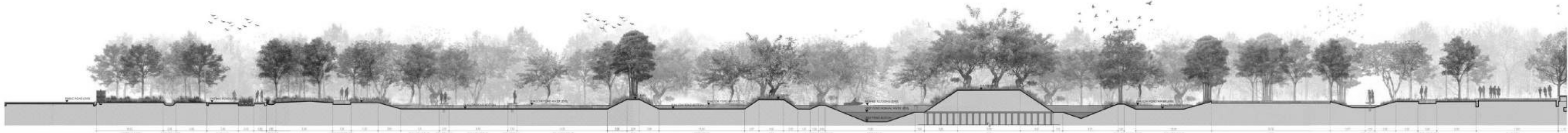


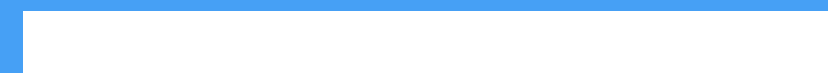
Figure 6.48-Section Analysis (Holmes, 2024)



# Ch. 7

## Design Development

Focuses on exploring design form and massing, delving into the technical development necessary for refining the project. It examines how the design evolves and addresses the practical considerations essential for the final design. By analyzing form, massing, and technical aspects, It outlines the path forward, ensuring that the final design integrates both conceptual and practical elements effectively.





Design Massing and Zone Classification

Figure 7.1  
Identifying current site usages and interpreting space designation in terms of where programme should go

Figure 7.2  
In terms of the open public space the edge conditions have a certain degree of permeability in terms of access

Figure 7.3  
Upon analysis of existing amenities on site the programme can be distributed in terms of the voids its addressing.

Figure 7.4  
A basic illustrative massing of programmatic distribution on site in 3D in dealing with shape of site and street thresholds.

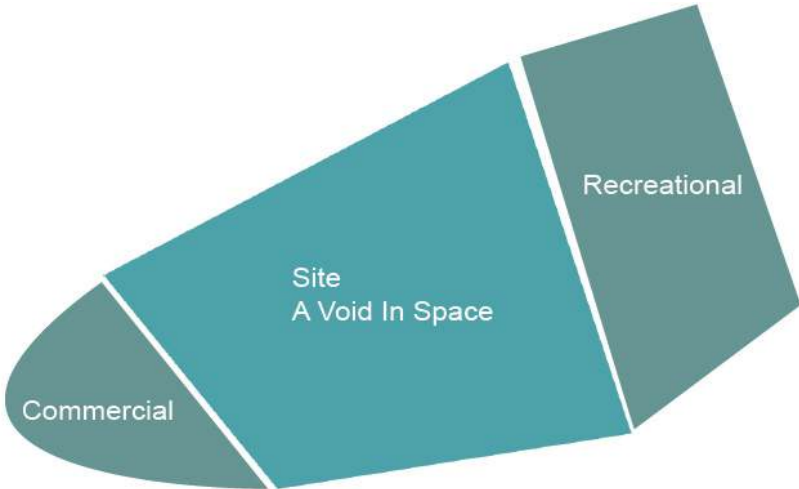


Figure 7.1- Usage Zones (By author,2024)

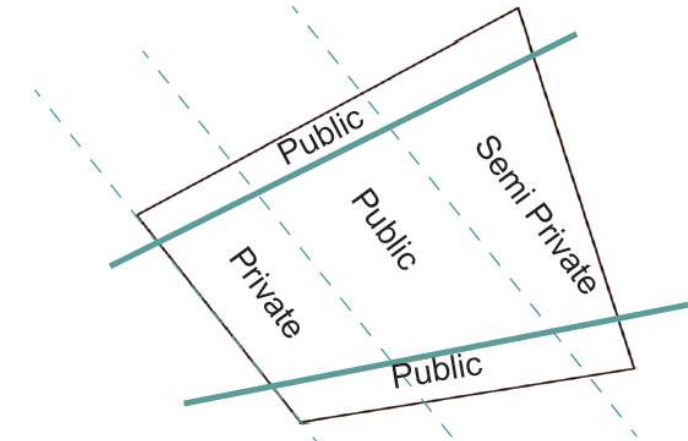


Figure 7.2- Degree Of Space (By author,2024)

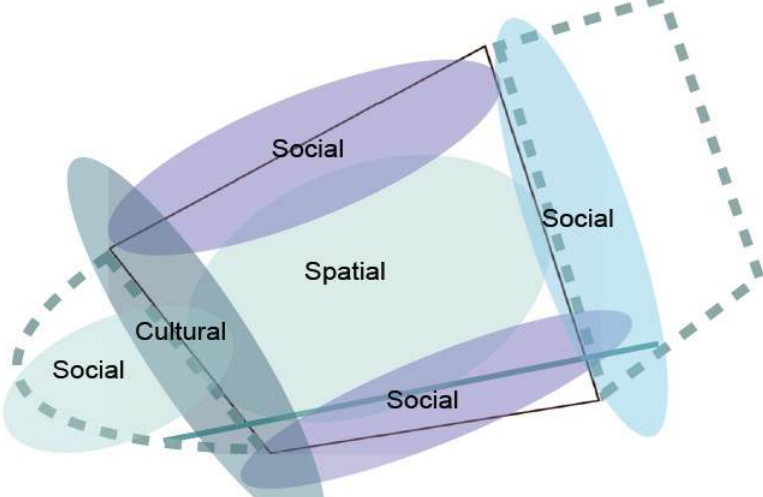


Figure 7.3- Void Class (By author,2024)

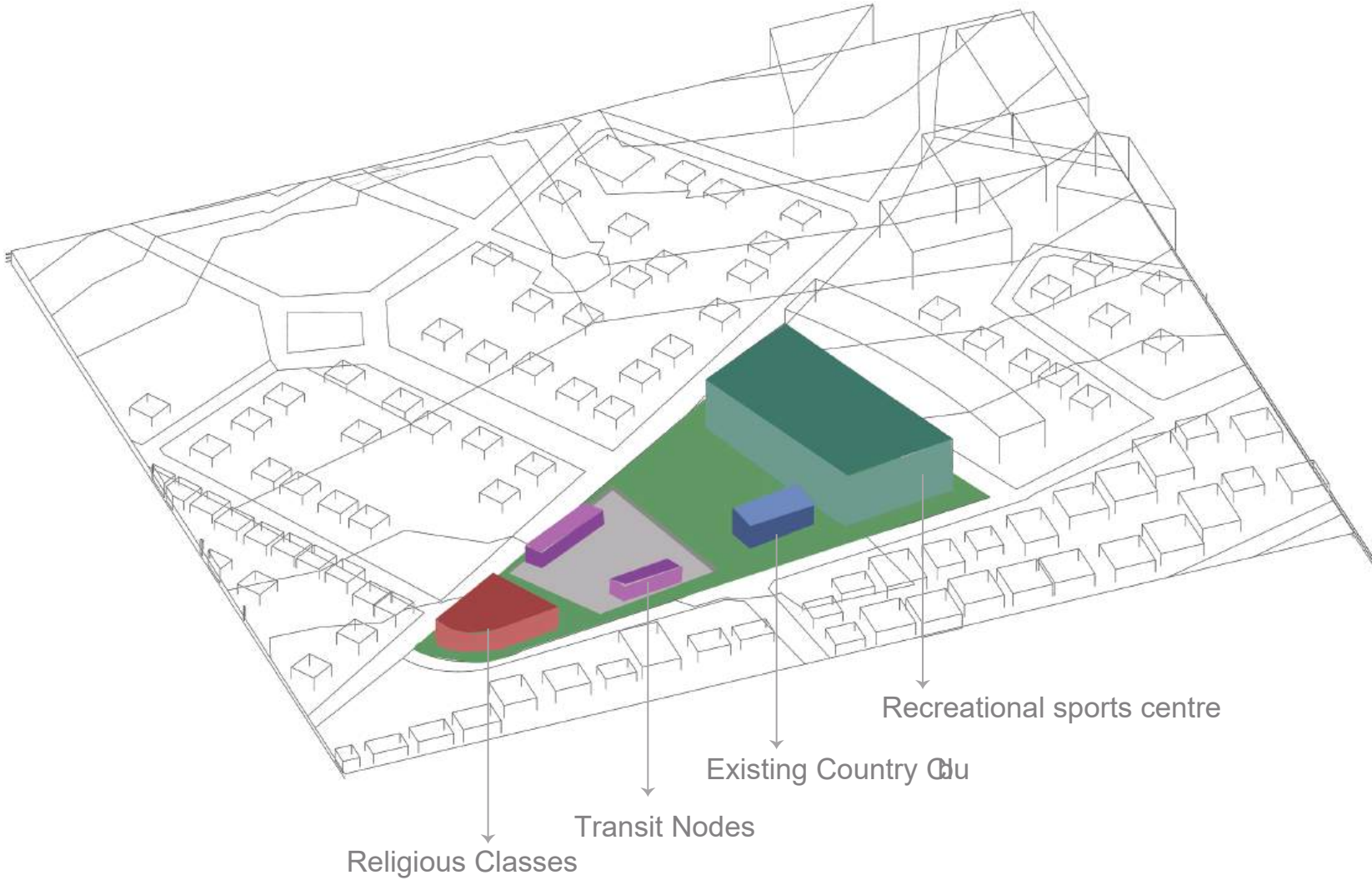


Figure 7.4- Simple Massing (By author,2024)



Climate And Sensory Components

Figure 7.5 (by Author (2024))

Multiple weather components indirectly and directly influence sense on site which directly dictate design decision making. It dicates which programmes require the most light and ventilation and how courtyards are formed as well as public space formation.

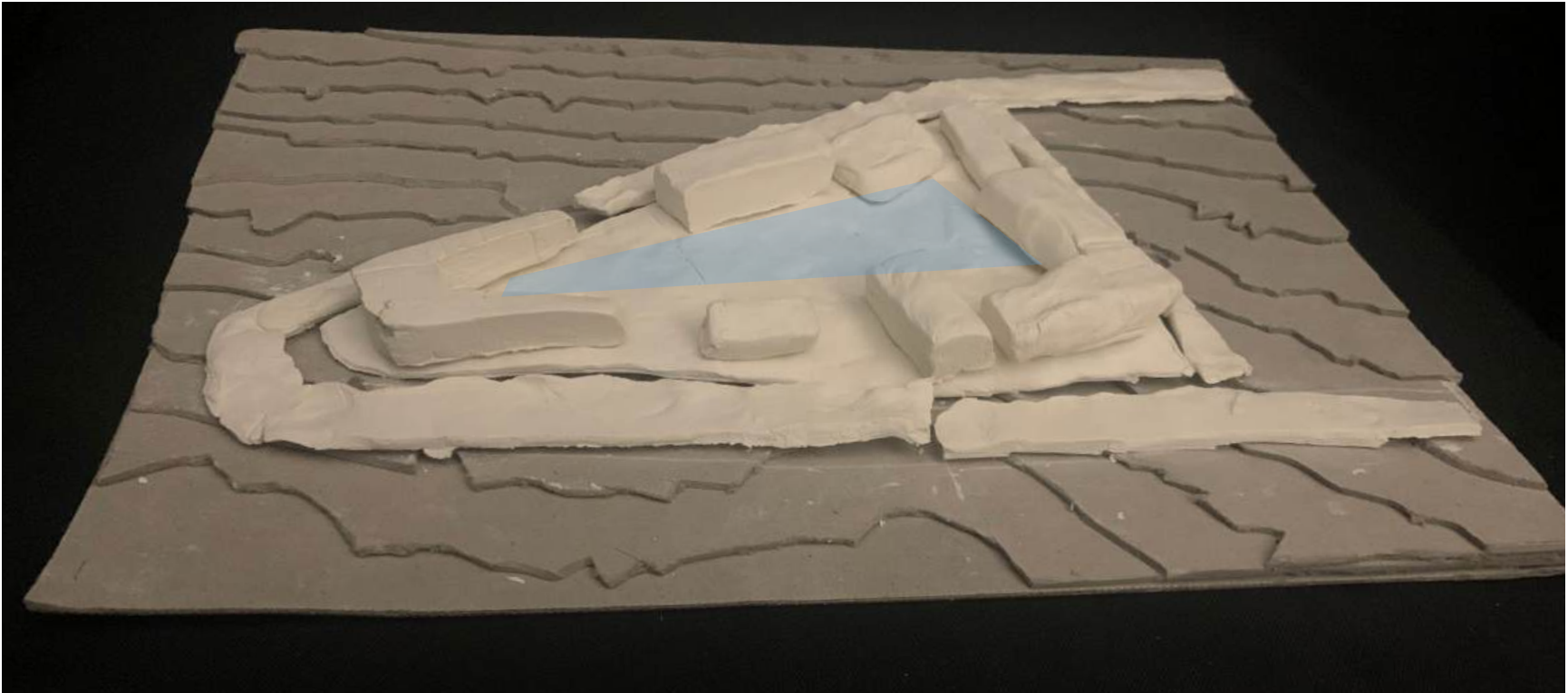
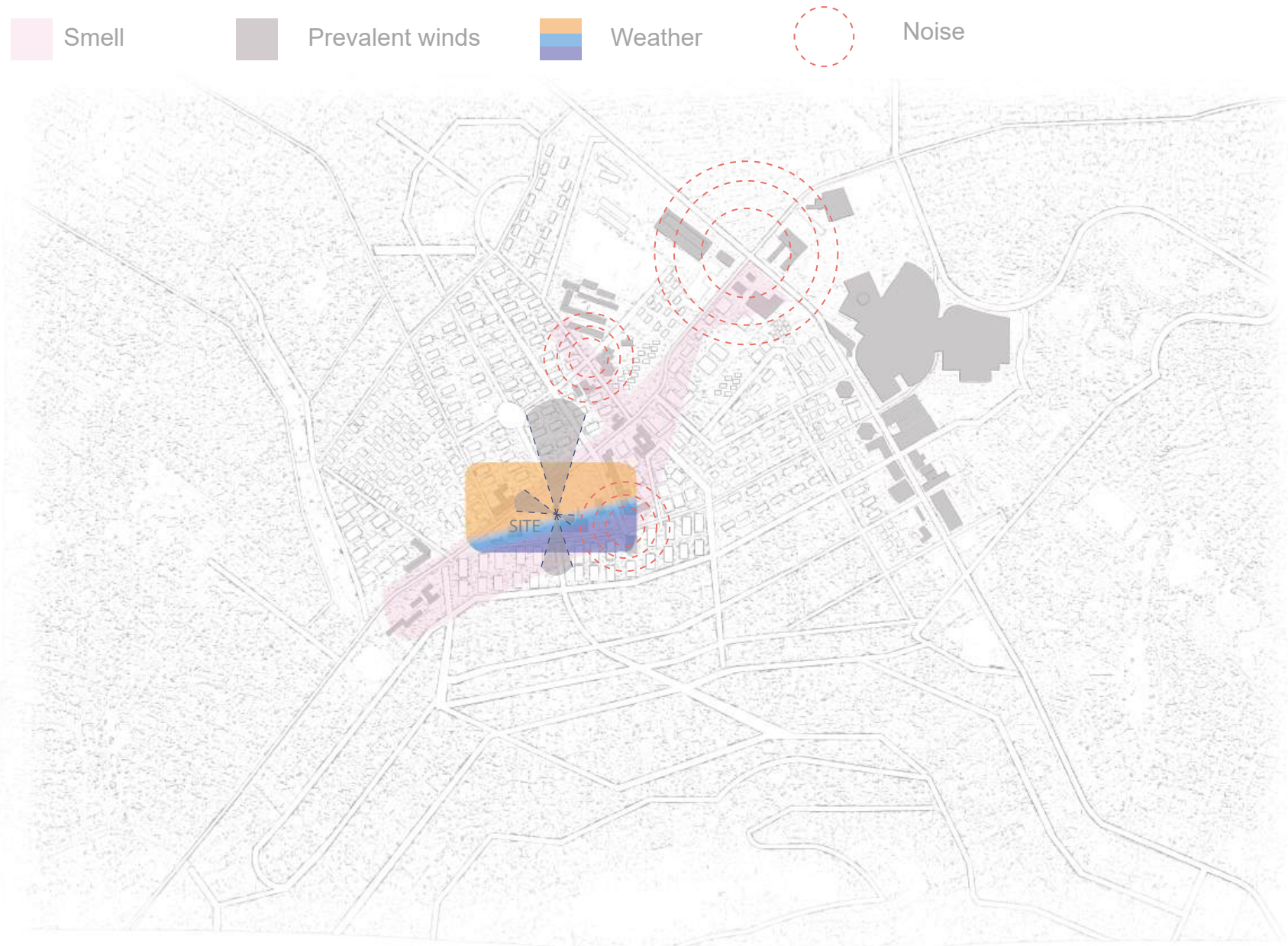


Figure 7.6- Massing Exploration 1 (By author,2024)

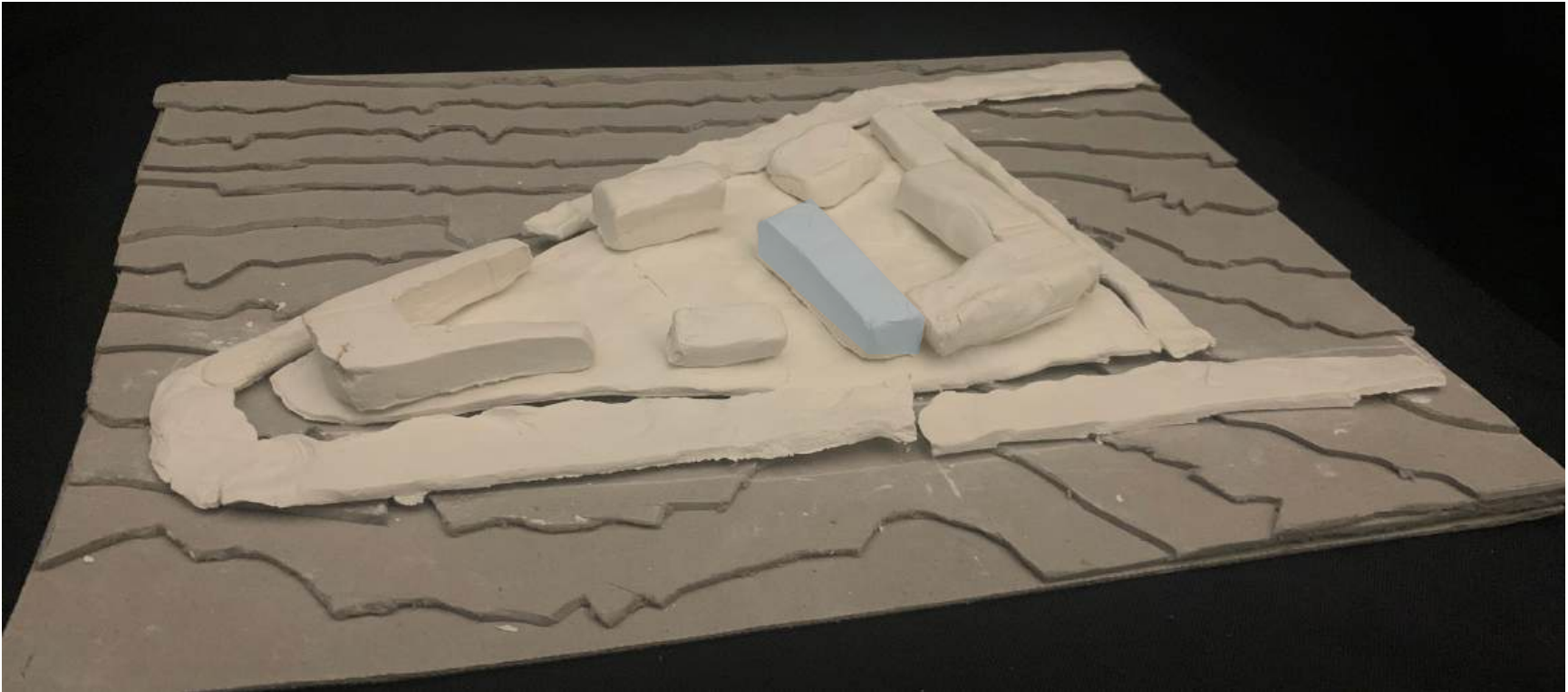


Figure 7.7- Massing Exploration 2 (By author,2024)



Design Consideration

Should the Country club be kept private and share facilities,or re-imagined entirely and intergrated?



Figure 7.8- Pedestrian Movement (By author,2024)

Iteration 01

full street frontage ,connecting to existing country club shared facilities.

Iteration 02

multiple access points,sticking with original boundaries  
privacy of country club ,public facilities intergrated  
seperately

Iteration 03

multiple access points  
broken up amenties  
shared facilities  
country club intergrated with shared facilities but privacy  
maintained for club members

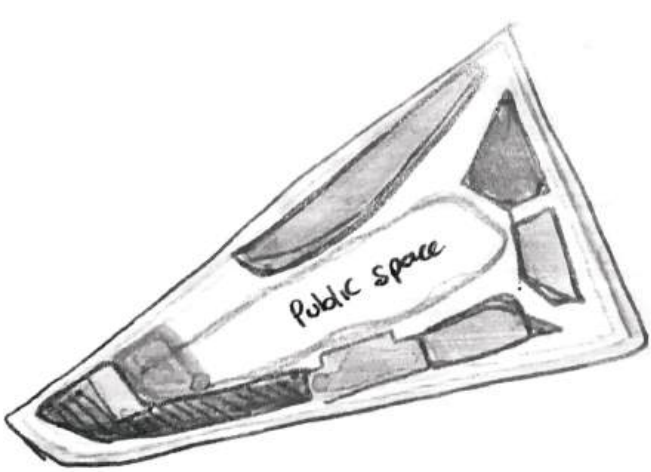


Figure 7.9- Iteration 01 (By author,2024)

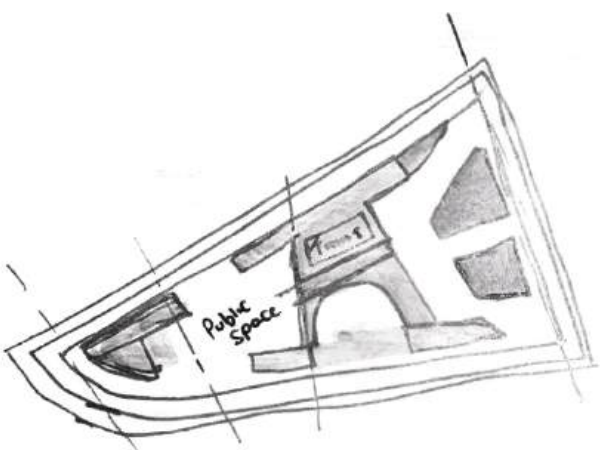


Figure 7.10- Iteration 02 (By author,2024)

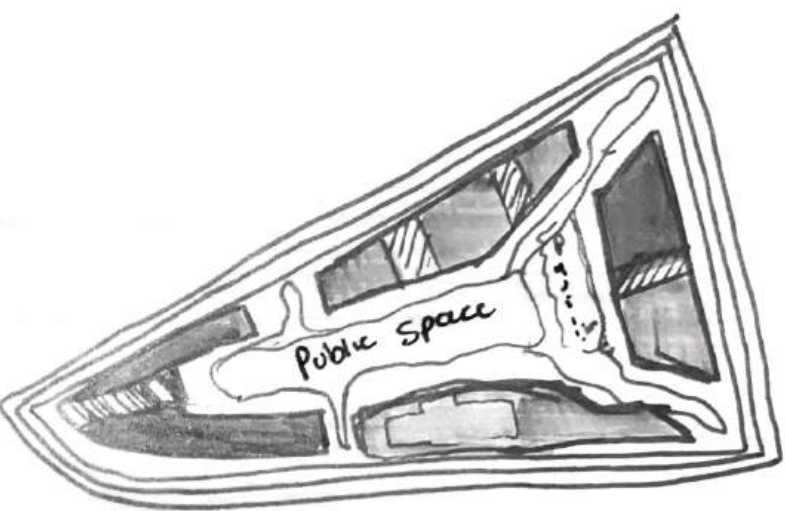


Figure 7.11- Iteration 03 (By author,2024)

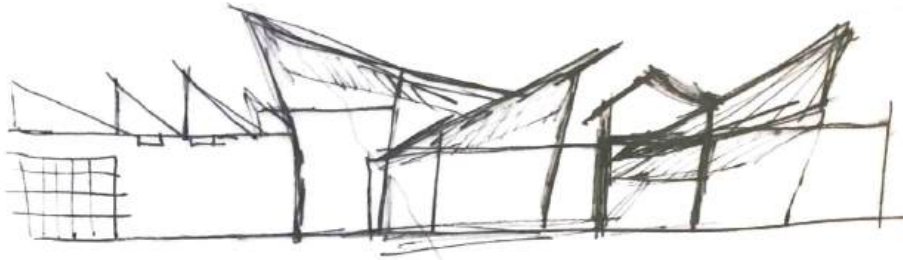


Figure 7.12- Facade Exploration (By author,2024)

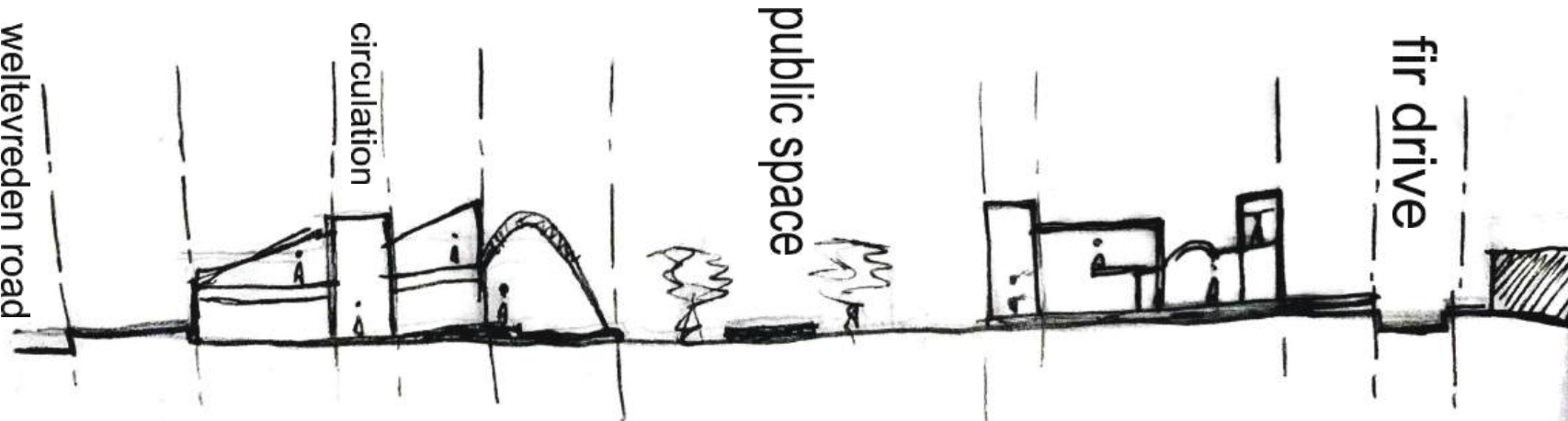


Figure 7.13- Section (By author,2024)



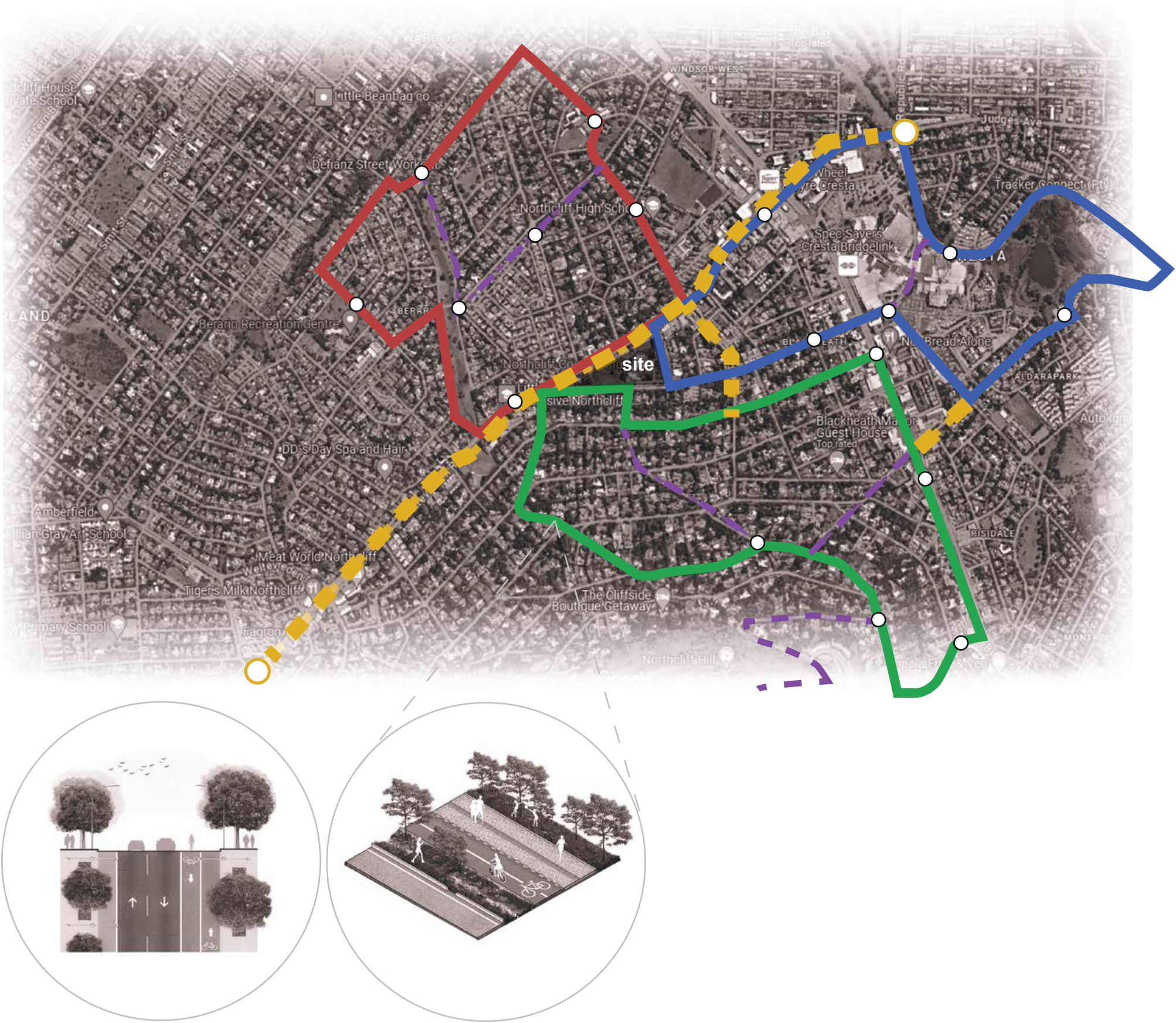


Figure 7.14- The Walkable Realm (By author,2024) Base Image by -(Google, 2024)

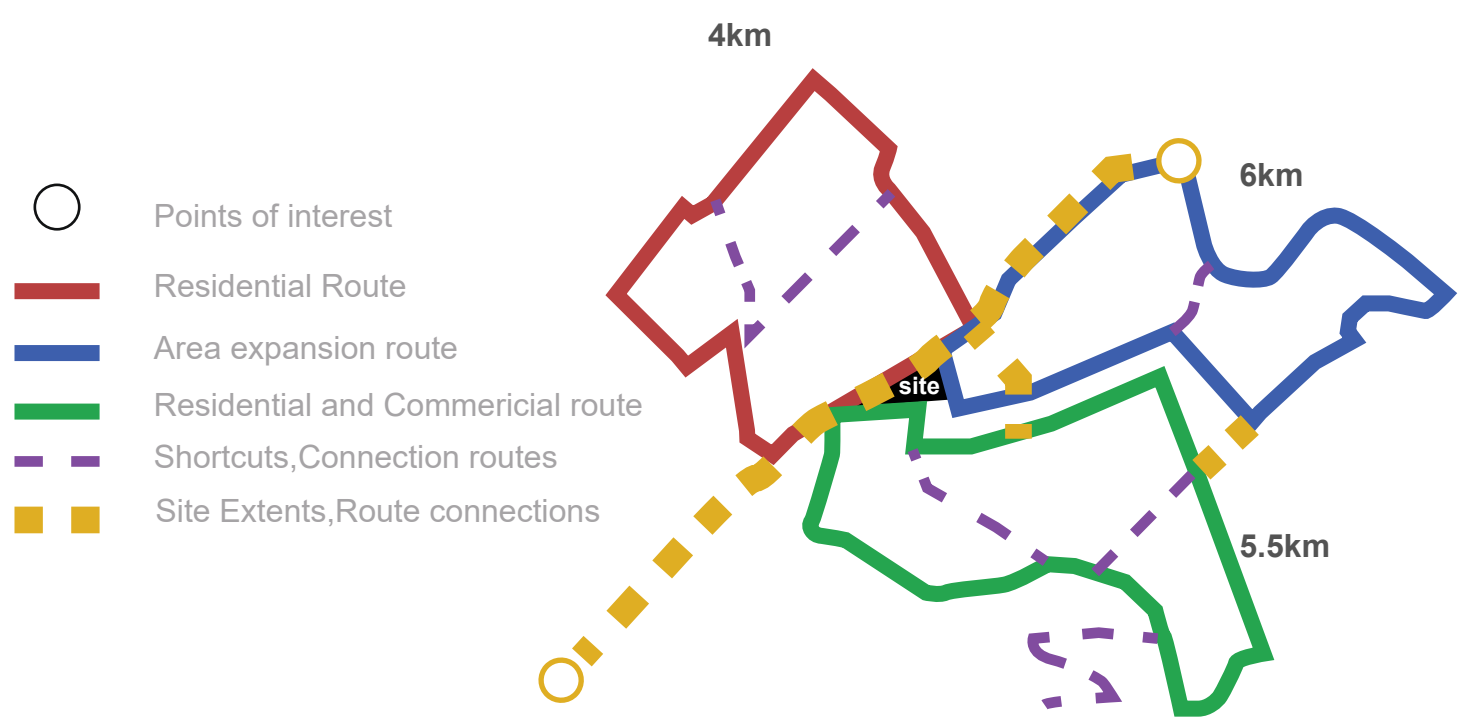


Figure 7.15- Routes (By author,2024)

**The Walkable Realm**

The sidewalks in Northcliff will be redesigned to create a safe, enjoyable, and connected realm that encourages constant pedestrian movement, linking key destinations throughout the suburb. Multiple route options with strategically placed shortcuts will cater to Northcliff's unique urban fabric, with the site serving as the central hub of these pathways, fostering a more walkable and cohesive community.

The Dimensions of various sidewalks will need to be evaluated to implement different experiences and design strategies.

Future expansion of my design involves creating multiple pedestrian access routes and a walkable realm seamlessly connected to my site, forming a continuous loop that leads to various destinations and enhances overall connectivity amongst all Northern areas.





Figure 7.16- Urban Plan (By author,2024)

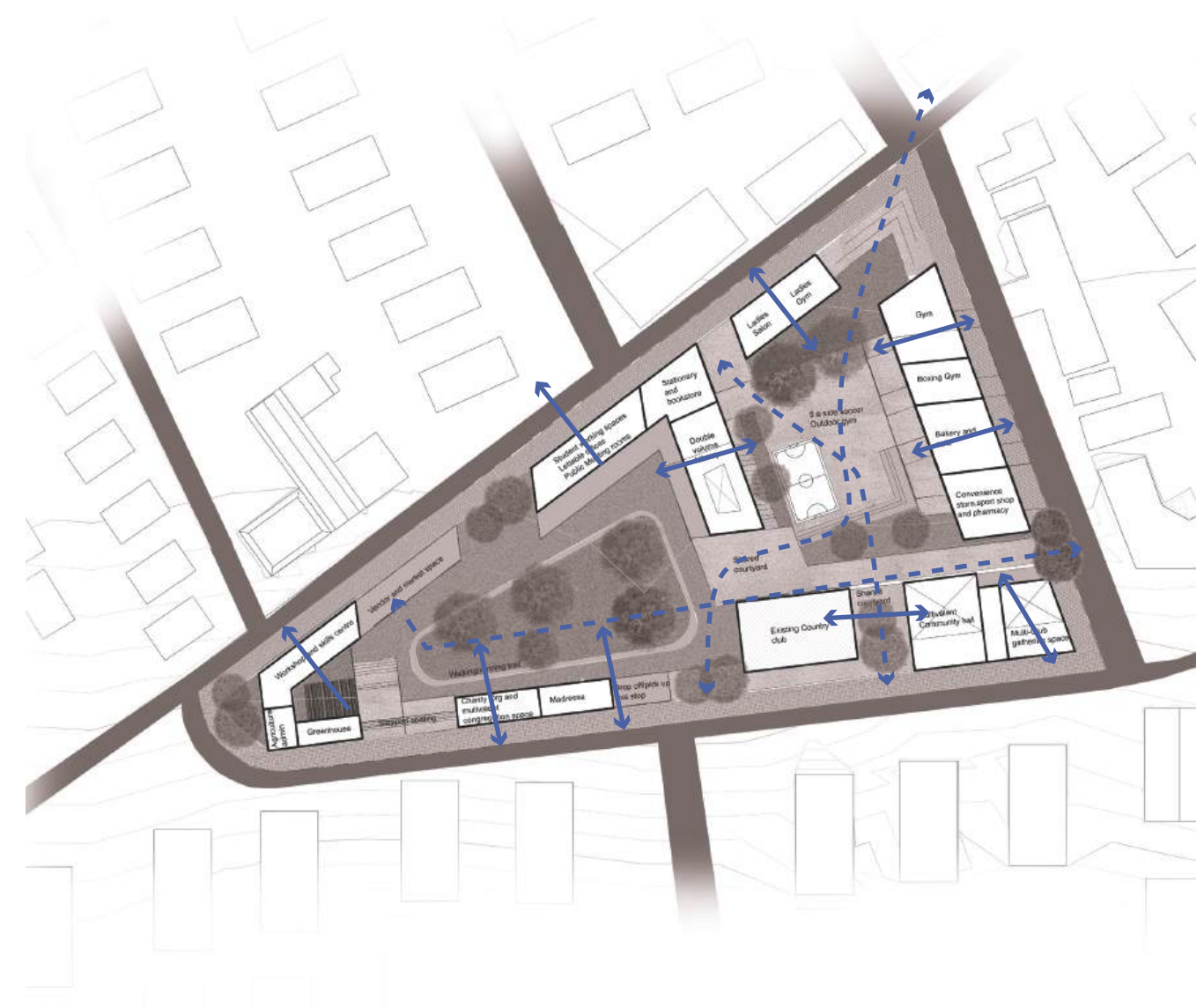


Figure 7.17- Urban Circulation Plan and Edge Conditions (By author,2024)

## The Benefit Of A Walkable Realm

Incorporating greenery, bike lanes, bus stops, and walkable interactive pavements in a suburban neighborhood brings unique benefits, such as reducing car dependency and enhancing the quality of life in areas typically dominated by sprawl. These features create a more sustainable and connected community, encouraging active lifestyles and social interactions in settings where these amenities are often lacking. Additionally, they improve accessibility and mobility for residents, making suburban living more convenient and environmentally friendly.

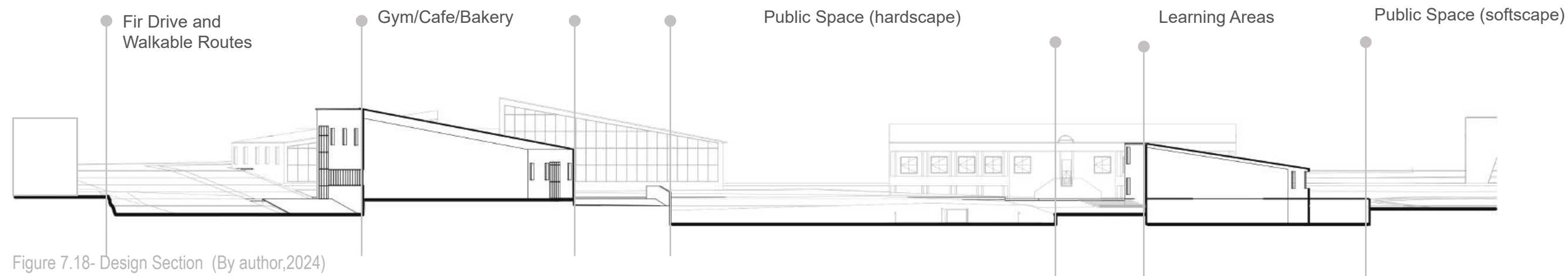


Figure 7.18- Design Section (By author,2024)





Figure 7.19- Streetscape (By author,2024)

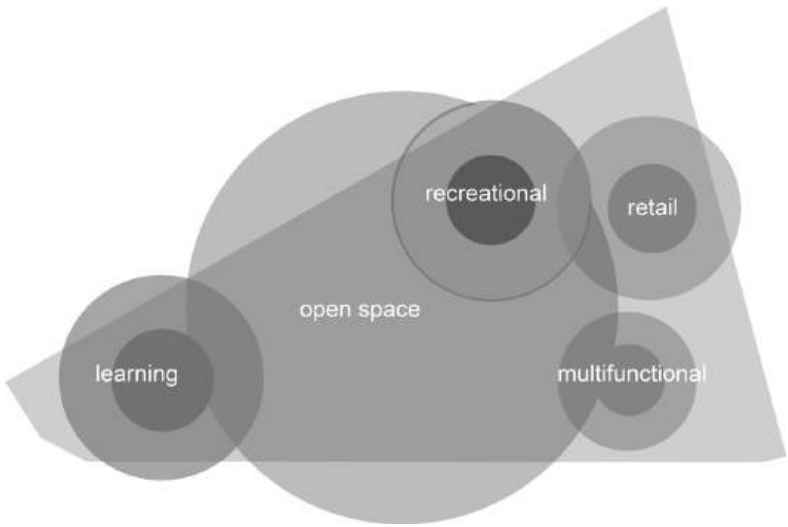


Figure 7.20- Programme Distribution (By author,2024)

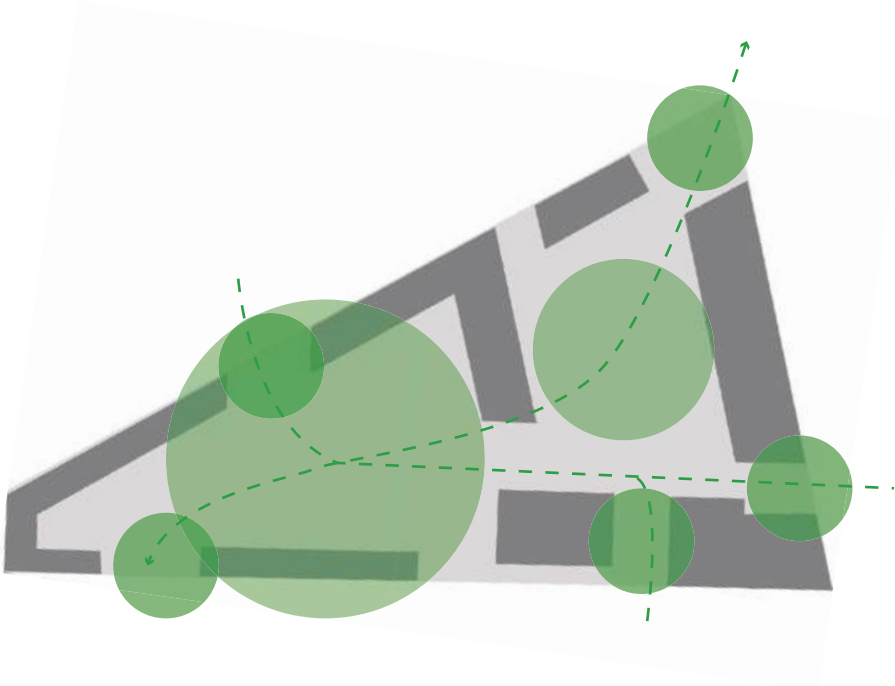


Figure 7.21- Heirachy Of Green Space (By author,2024)

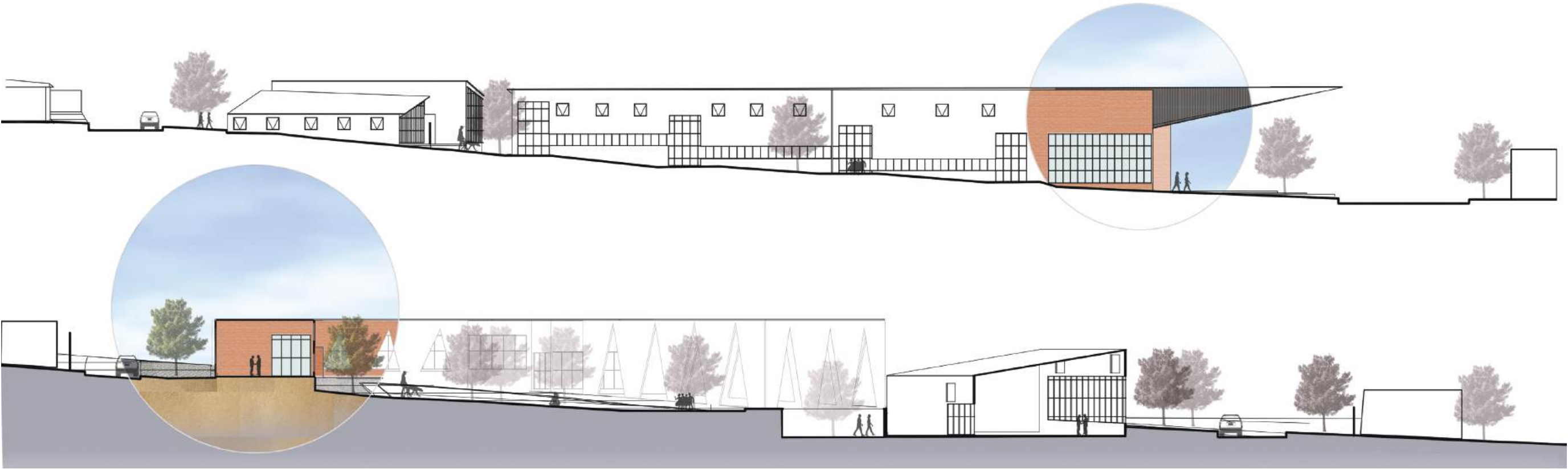
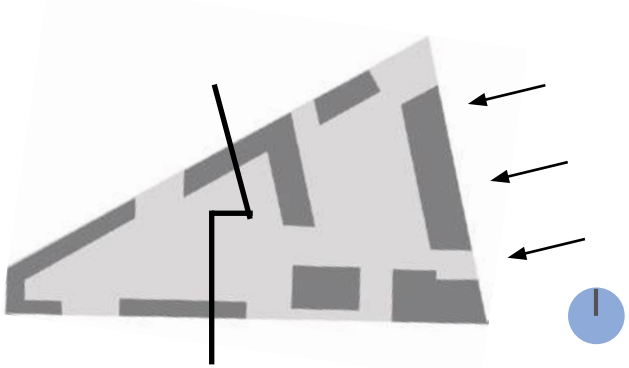


Figure 7.22- Elevation and Section (By author,2024)

**The Benefit Of A Walkable Realm**

Incorporating greenery, bike lanes, bus stops, and walkable interactive pavements in a suburban neighborhood brings unique benefits, such as reducing car dependency and enhancing the quality of life in areas typically dominated by sprawl. These features create a more sustainable and connected community, encouraging active lifestyles and social interactions in settings where these amenities are often lacking. Additionally, they improve accessibility and mobility for residents, making suburban living more convenient and environmentally friendly





Materiality

Facebrick maintains this sense of continuity with historical architecture, creating a visual and material link to the past. However, the application of facebrick in innovative ways can signify a shift towards inclusivity and modernity

Modern zinc roofing comes in various finishes and can be formed into sleek, contemporary profiles, offering flexibility in design to create dynamic and innovative roof structures.

The use of facebrick, modern zinc roofing, and colonnades reflects diverse identities through materiality, blending historical continuity, modern inclusivity, and timeless architectural elements that adapt to various cultural, climatic, and spiritual contexts, symbolizing the interconnectedness of different traditions within a shared urban landscape.

Frequently used in all three types of religious buildings, representing stability and connection between heaven and earth.colonnades and platforms around a main open space is a timeless architectural feature that enhances the functionality, beauty, and spiritual ambiance.It reflects the adaptation of architectural designs to cultural, climatic, and religious needs across different traditions and regions.

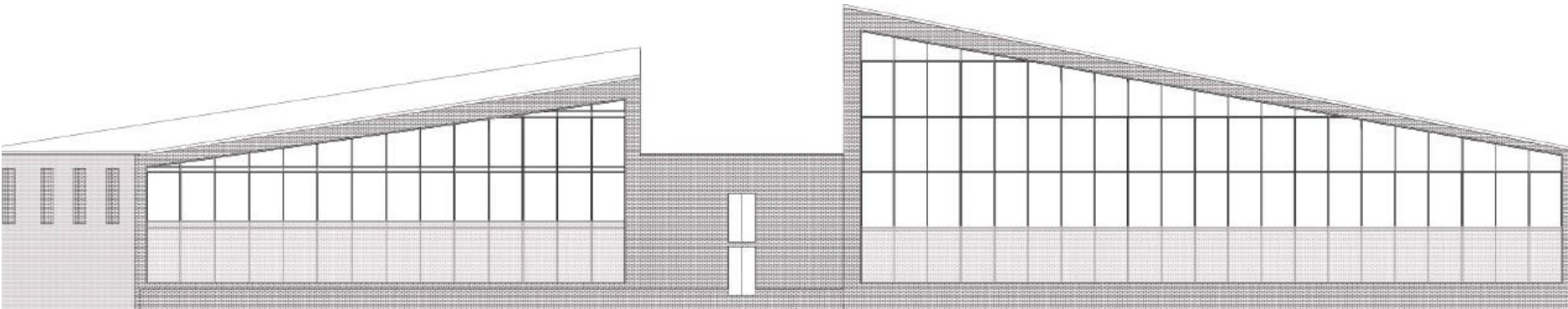


Figure 7.23- Design Form (By author,2024)

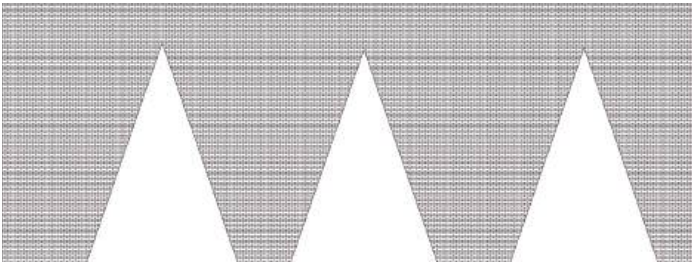


Figure 7.24- Arches Concept (By author,2024)

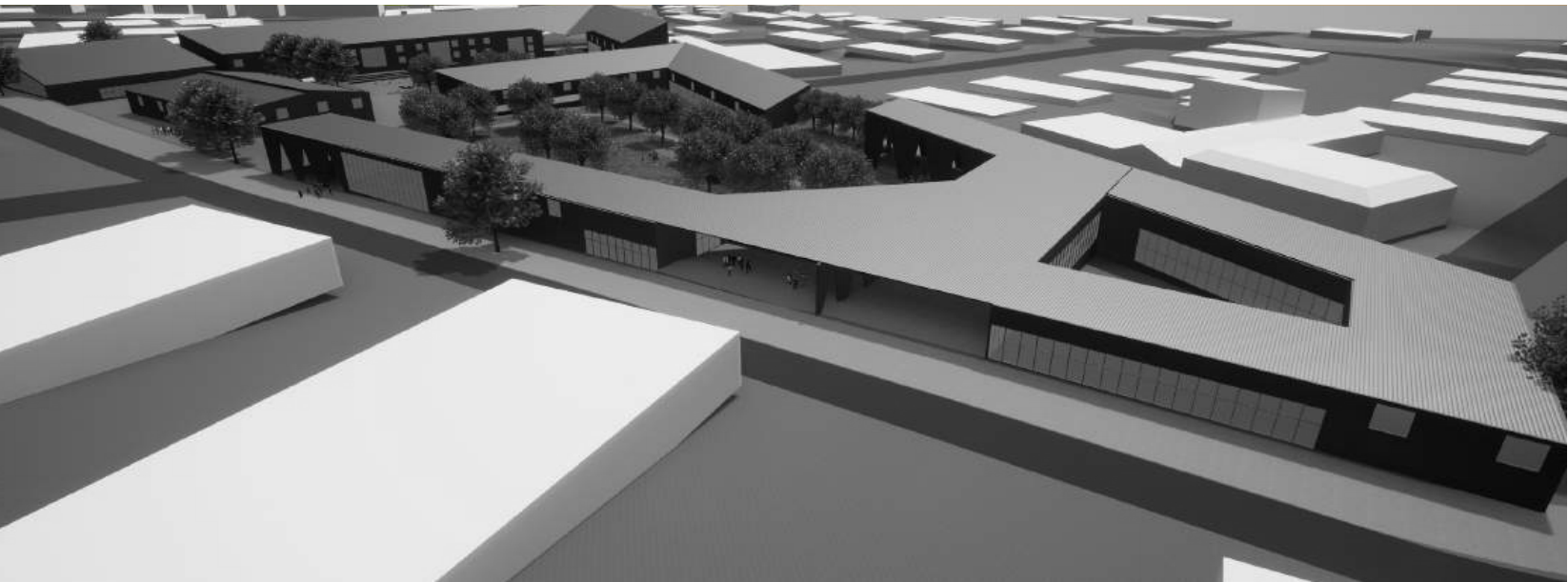


Figure 7.25- Birds Eye View (By author,2024)



Figure 7.26- Street Level (By author,2024)



Analysing A Portion

For the purpose of Design Development the centre of the site and the building thereof were reimagined in terms of circulation,functionality and efficiency. Cutting through and joining perpendicular streets. It utilises the topography levels to make ascension almost seamless

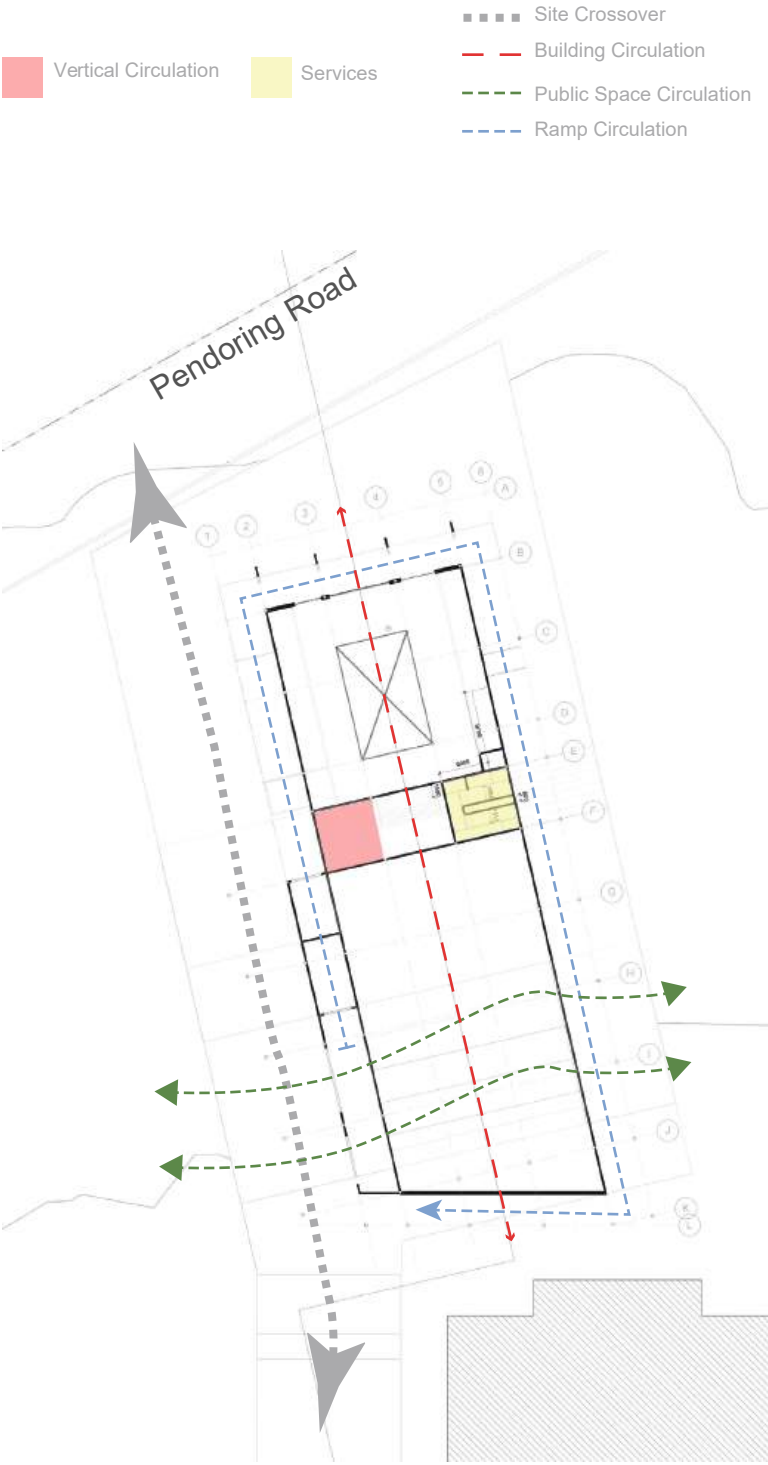


Figure 7.27- Lifting off the ground (By author,2024)

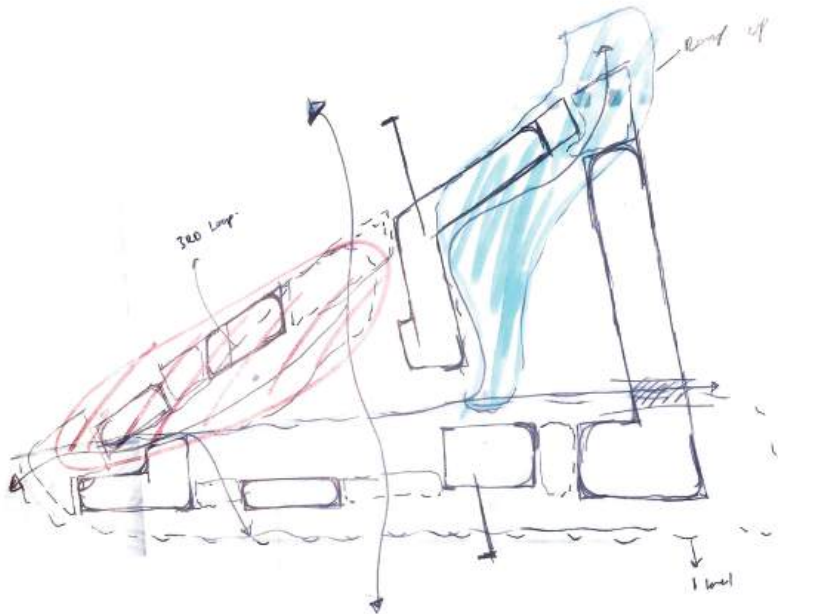


Figure 7.28- Lifting off the ground (By author,2024)

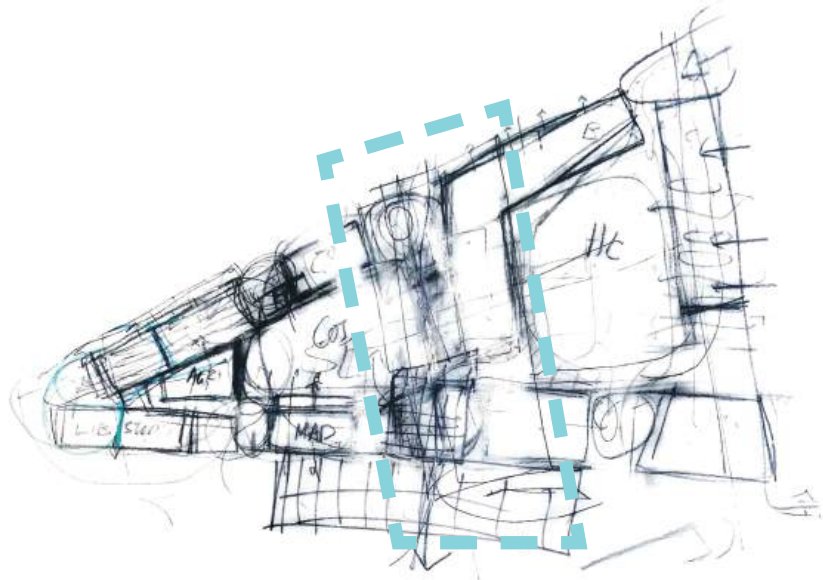


Figure 7.29- Cutting through the middle (By author,2024)

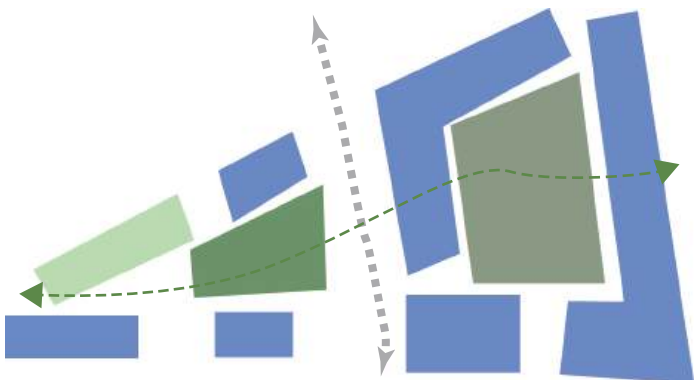


Figure 7.30- Mass And Void (By author,2024)

Box Gutter

RC Upstands

RC Slab

Pile Foundation

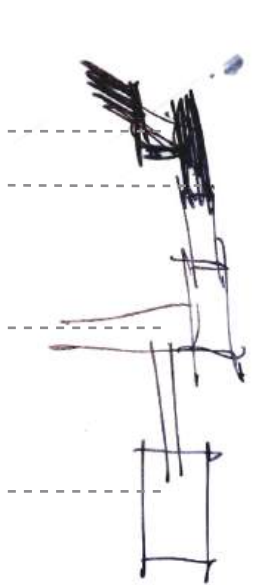


Figure 7.31- Structure (By author,2024)

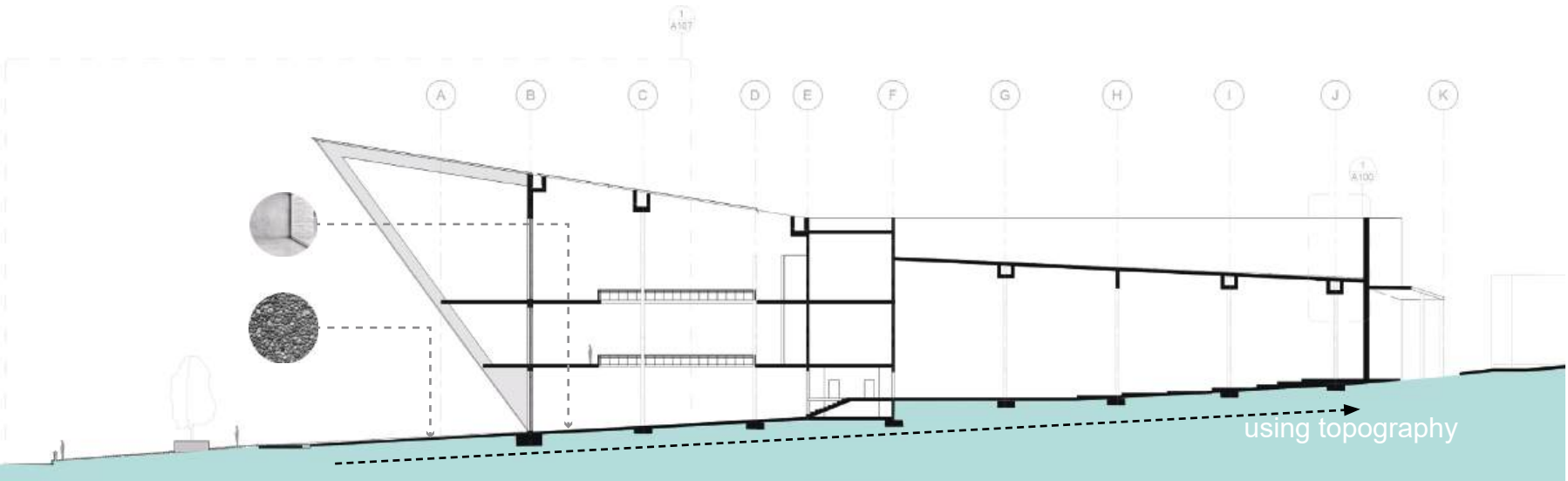
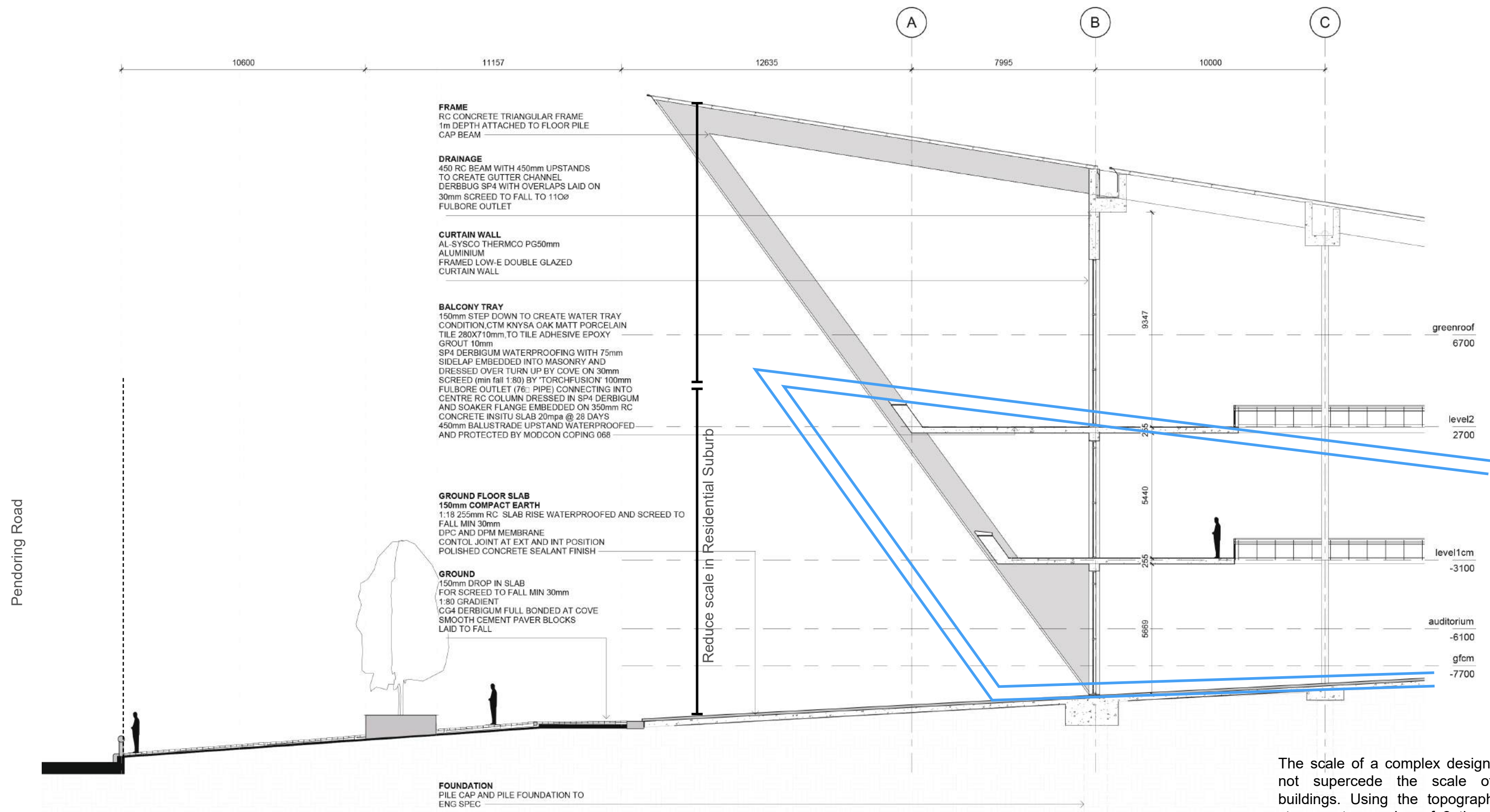


Figure 7.33- Raising Levels (By author,2024)





The scale of a complex design in this case must not supercede the scale of the surrounding buildings. Using the topography and limiting the storey s to a value of 2 the design will be sensitive to surrounding context ,moving forward.

Figure 7.34- Reducing Scale-Perimeter Section (By author,2024)



Moving Forward

The design intention is to interconnect all buildings on the site through seamless circulation pathways, leading visitors through various levels and offering a dynamic journey filled with diverse experiences and emotions as they navigate the space.

Does away with vehicular Usage entirely.Subtle hints of islamic architecture by encouraging walking movement.A Reference to the act of pilgrimage,one of the 5 pillars of Islam.

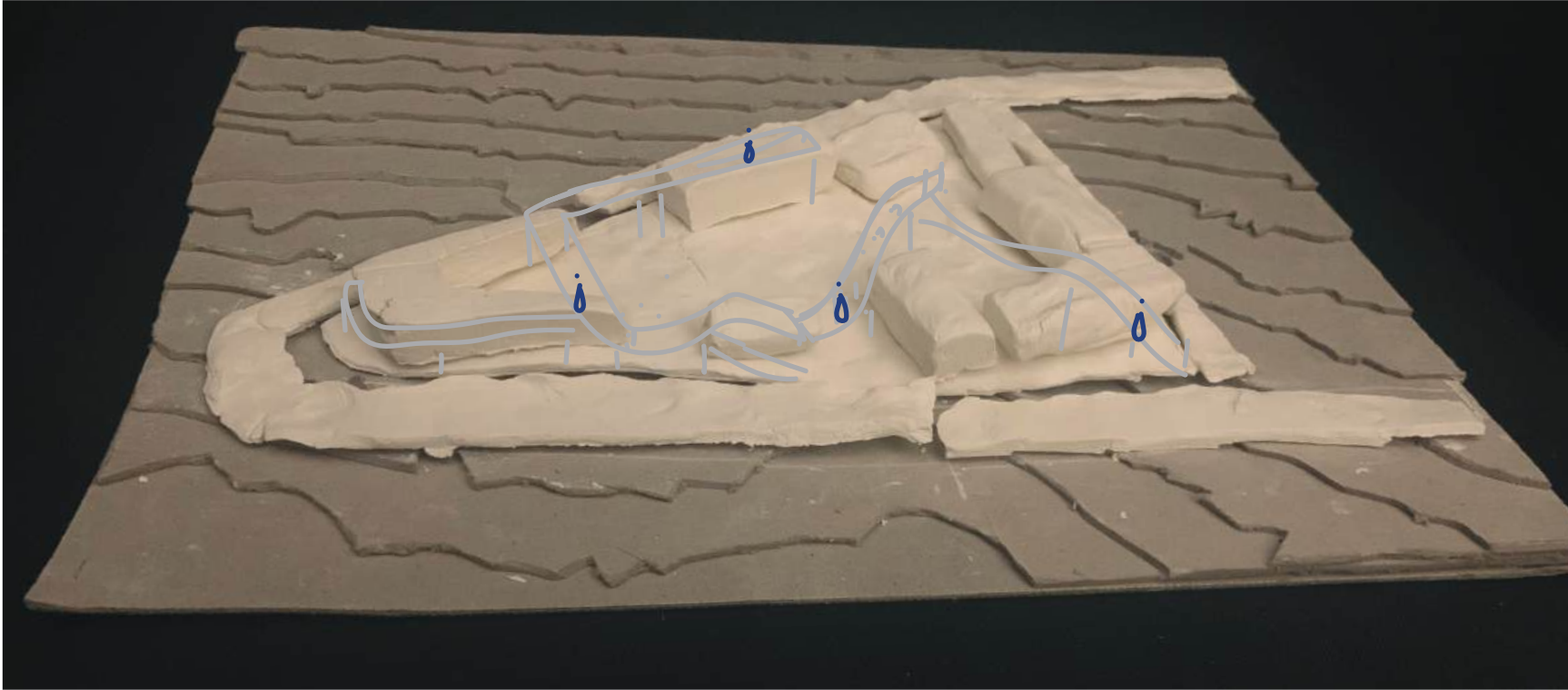


Figure 7.35- Experience the Realm (By author,2024)

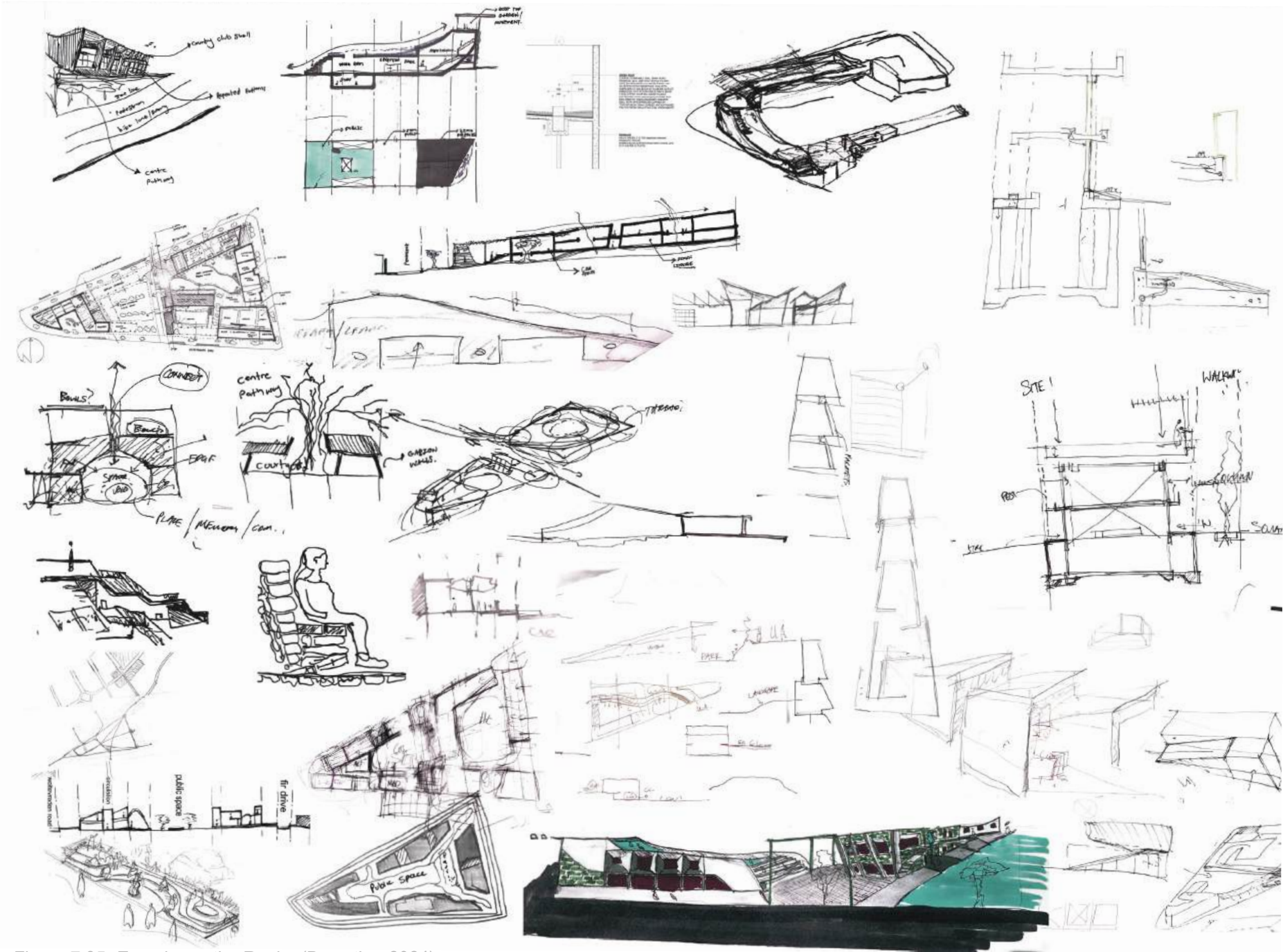


Figure 7.35- Experience the Realm (By author,2024)

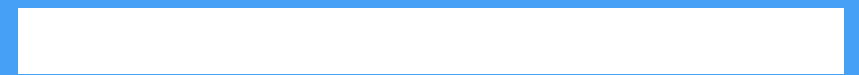
The Benefit Of A Walkable Realm

Incorporating greenery, bike lanes, bus stops, and walkable interactive pavements in a suburban neighborhood brings unique benefits, such as reducing car dependency and enhancing the quality of life in areas typically dominated by sprawl. These features create a more sustainable and connected community,



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Final Design





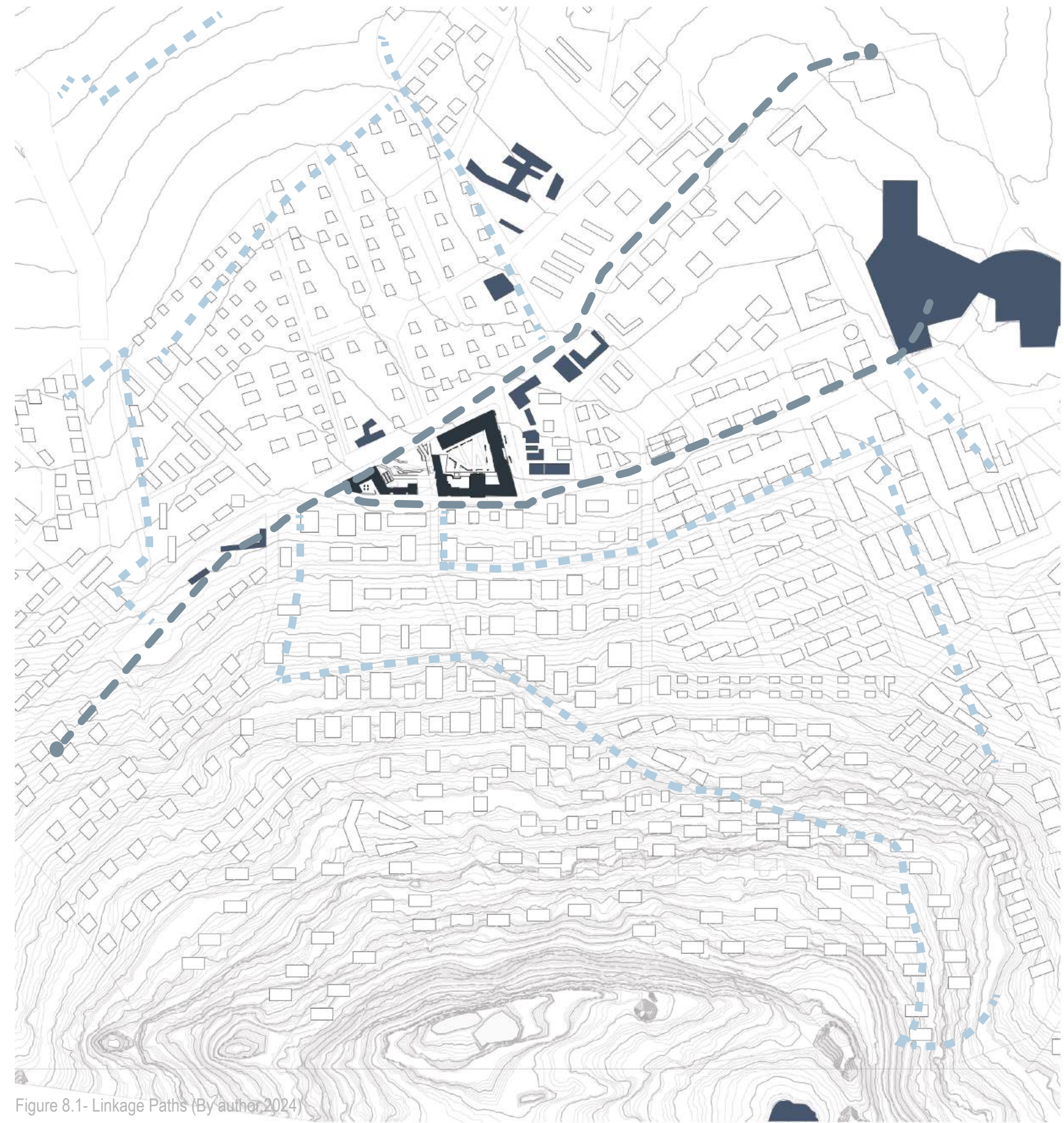


Figure 8.1- Linkage Paths (By author,2024)

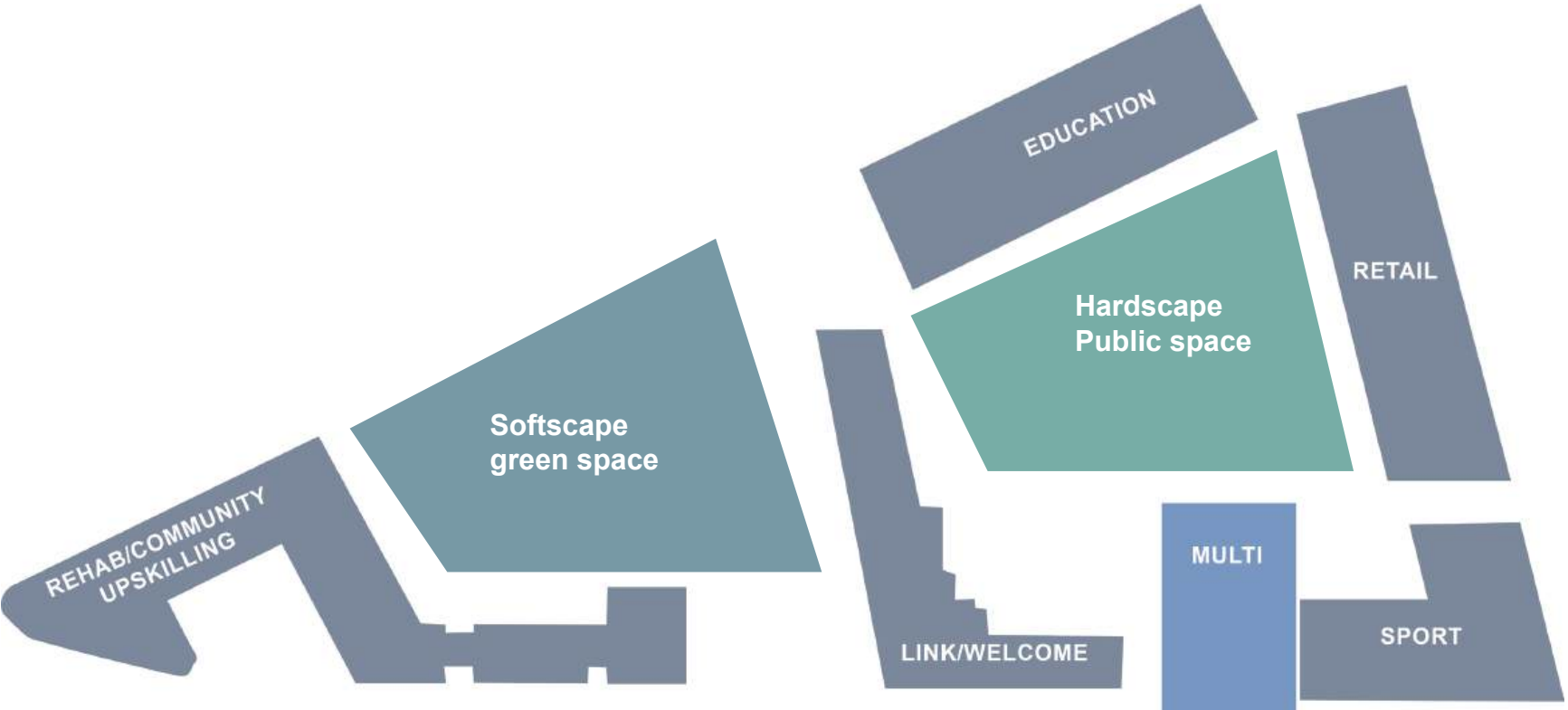


Figure 8.2 Programme Layout (By author,2024)

**Clarification of Spaces**

The design intent is not to diminish open space but rather to enhance it by allowing the buildings to complement and define it. The proposed hardscape is carefully integrated along building thresholds, creating a seamless transition between built and open areas. This network of pathways and plazas guides movement through the hard square, directing users toward key points within the complex while also leading them to the soft green space. The green space remains open to the public, fostering social interaction and providing a flexible setting for residential gatherings, reinforcing a balance between structured and open environments.



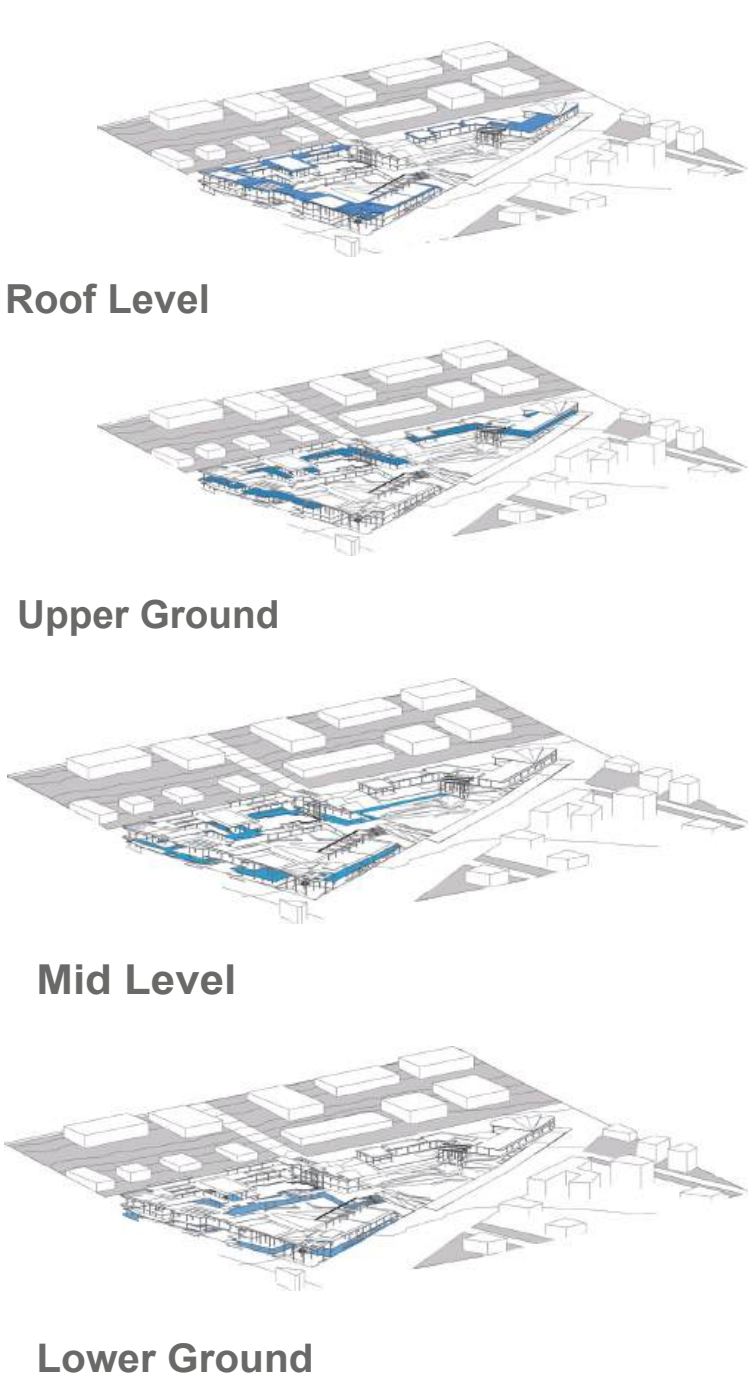
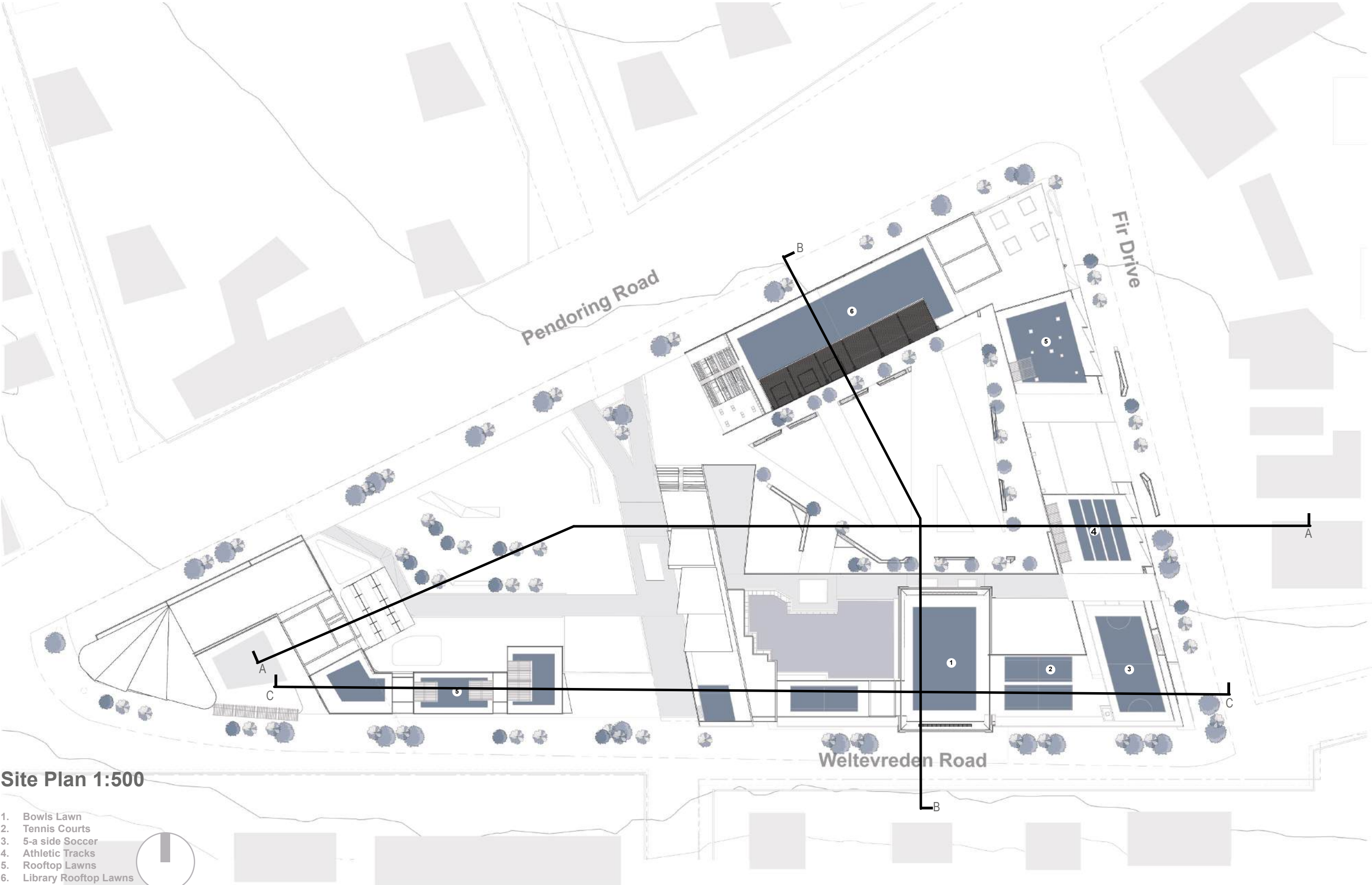


Figure 8.4 Axonometric Levels (By author,2024)

**Thresholds**

There is layering amongst the many thresholds. The Street facade acts to engage users on pedestrian friendly sidewalks. The interior facade activates the edges of the public squares and spaces. Layering even further pathways,treelines and landscaped seating allow for the public spaces to be engaged with deeper than the designed thresholds





South Elevation 1:500

Figure 8.5 South Elevation (By author,2024)



Homely,Warmth      Bold Empowering      Retiring,Relaxing

Figure 8.6 Material Textures (By author,2024)

Psychology of Materials

The use of brick, stone, steel, and concrete in this design resonates deeply with the diverse residents of Northcliff, Johannesburg, reflecting the city’s post-apartheid journey. Brick and stone evoke a sense of familiarity and permanence, grounding the design in local tradition and history, while steel and concrete introduce modernity, strength, and progress. This material combination creates a welcoming environment that feels both rooted in the past and forward-looking, fostering a sense of belonging and inclusivity. The familiar textures and forms invite residents from all backgrounds to connect with the space, creating an atmosphere of unity and shared identity

Section A-A 1:500

Figure 8.7 Section A-A (By author,2024)

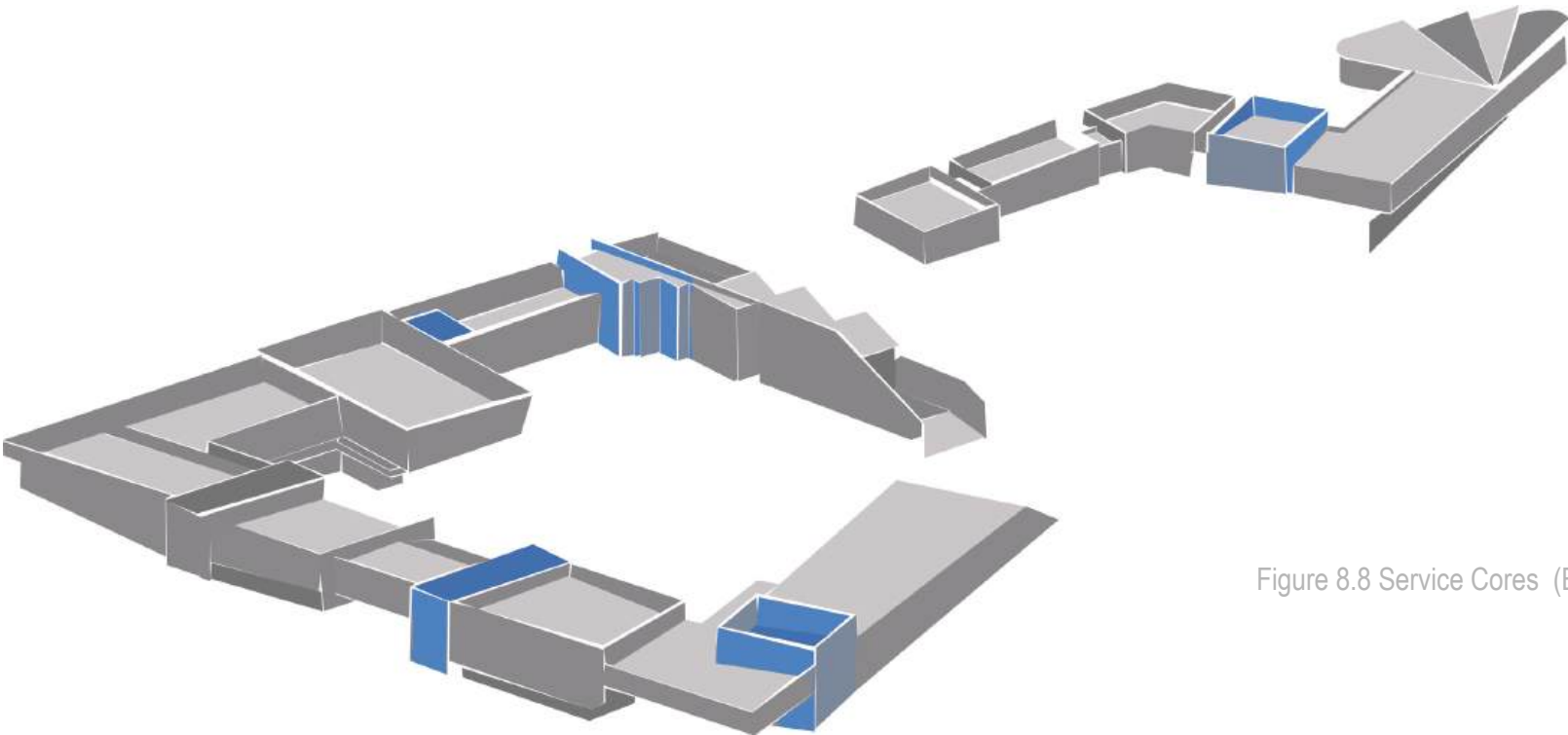
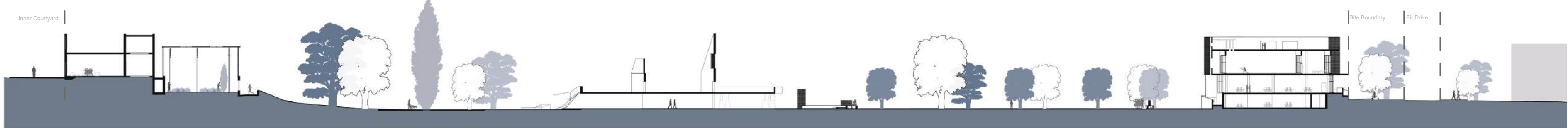


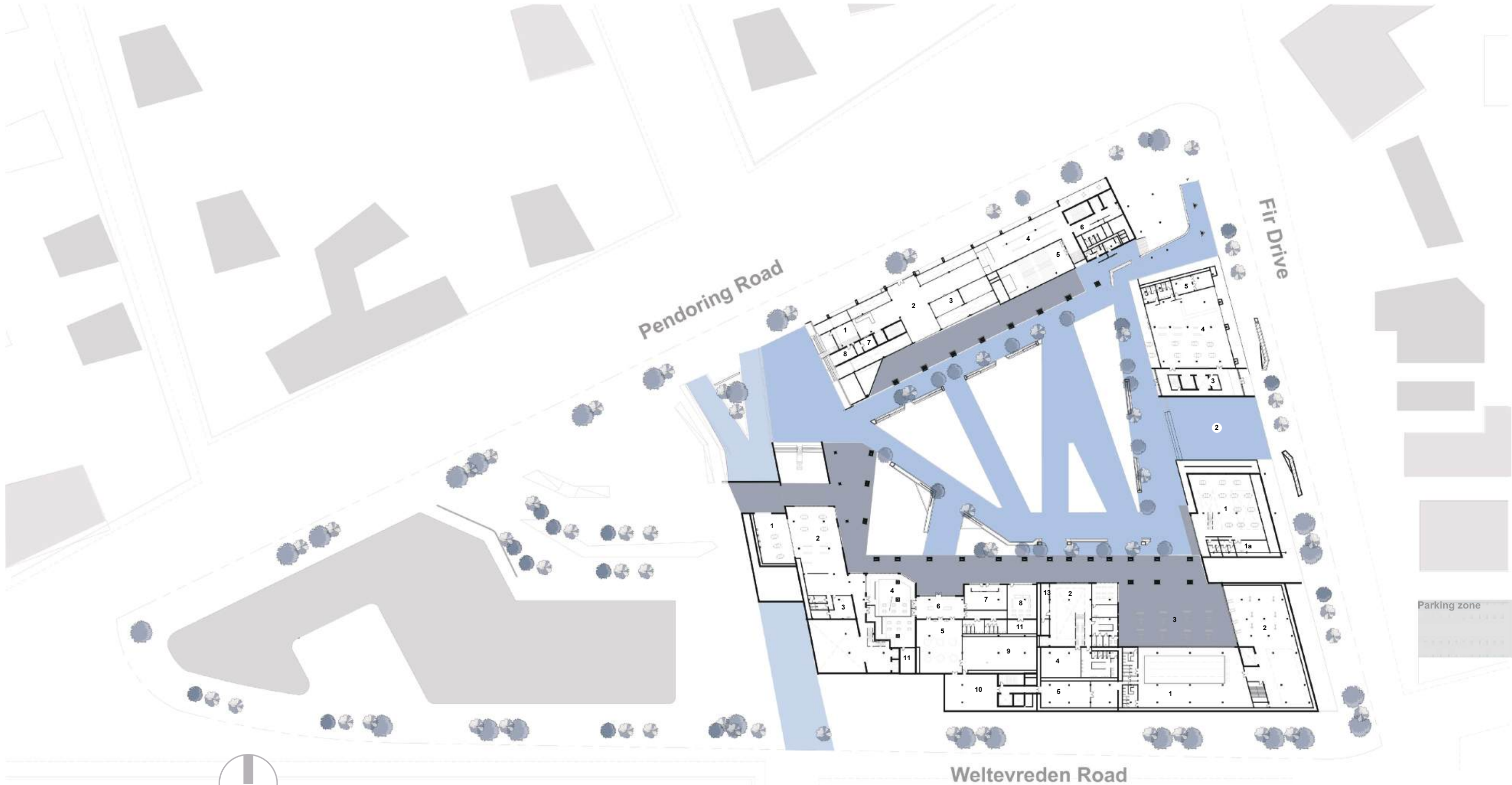
Figure 8.8 Service Cores (By author,2024)

Services

Servicing and Circulation cores are strategically placed within 45m distances according to SANS regulations.

Designed to flow effortlessly, the interplay of hardscape and softscape invites a natural rhythm in the urban fabric of Northcliff. Walkability and connectivity form the foundation of this vibrant space, where the built environment and nature coexist in perfect balance.Flowing naturally between hard and soft elements, this dual-space design celebrates Northcliff’s topography. The blend of sturdy, urban hardscape with soft, inviting green spaces encourages interaction.On Fir drive it creates the opportunity to evoke a relationship with the neighbouring office and commercial block





Education Building

- 1. Staff Offices and Lounge
- 2. Reception and Entry Hall
- 3. Sound Insulated Meeting Rooms
- 4. Exhibition Gallery
- 5. Auditorium
- 6. Entry and Circulation Core
- 7. Security
- 8. Storage

Link/Welcome Building

- 1. Halfway Courtyard
- 2. Sports and Coffee Shop
- 3. Kitchen
- 4. Islamic Prayer Room and Madressa
- 5. Water Storage Tanks
- 6. Reception
- 7. Water Distribution Area
- 8. Existing sneaker cleaner relocated
- 9. Generator Room
- 10. Service Foyer

Multivalent Arena Building

- 1. Ticket Manager and Office
- 2. Hall Space
- 3. Food and Snack Bar
- 4. Arena Storage
- 5. Pool Pump Room

Sport Building

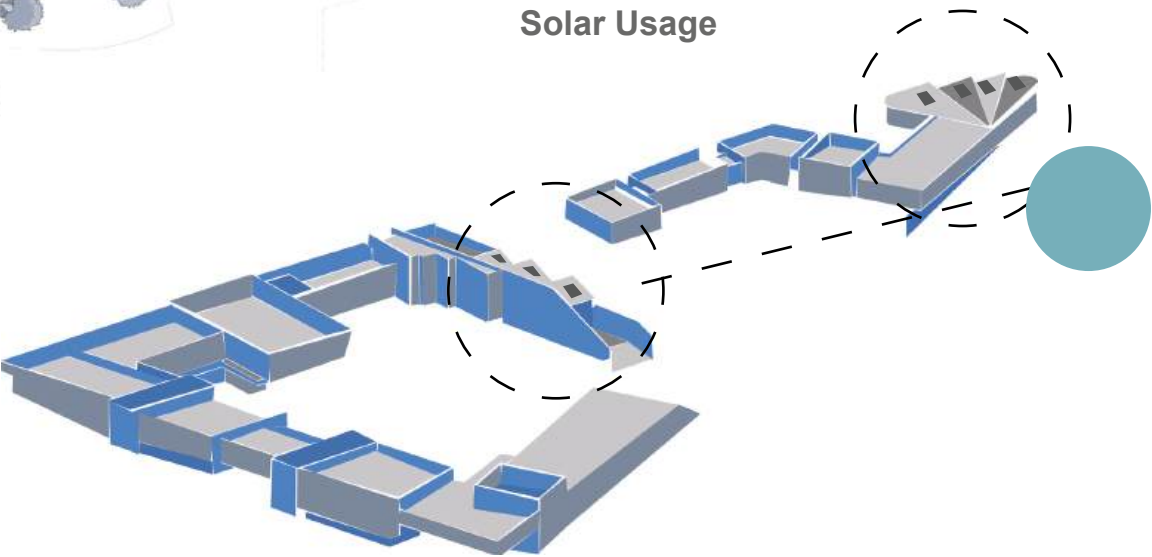
- 1. Swimming Area
- 2. Cardio and Calisthenics section
- 3. Open Public Space

Retail Building

- 1. Kitchen And Restaurant
- 2. Open Market Area
- 3. Circulation Core Entry
- 4. Bakery Cafe and Clothing Model

Figure 8.10 Solar Usage (By author,2024)

Solar Usage



Lower Ground 1:500

Figure 8.9 Lower Ground (By author,2024)



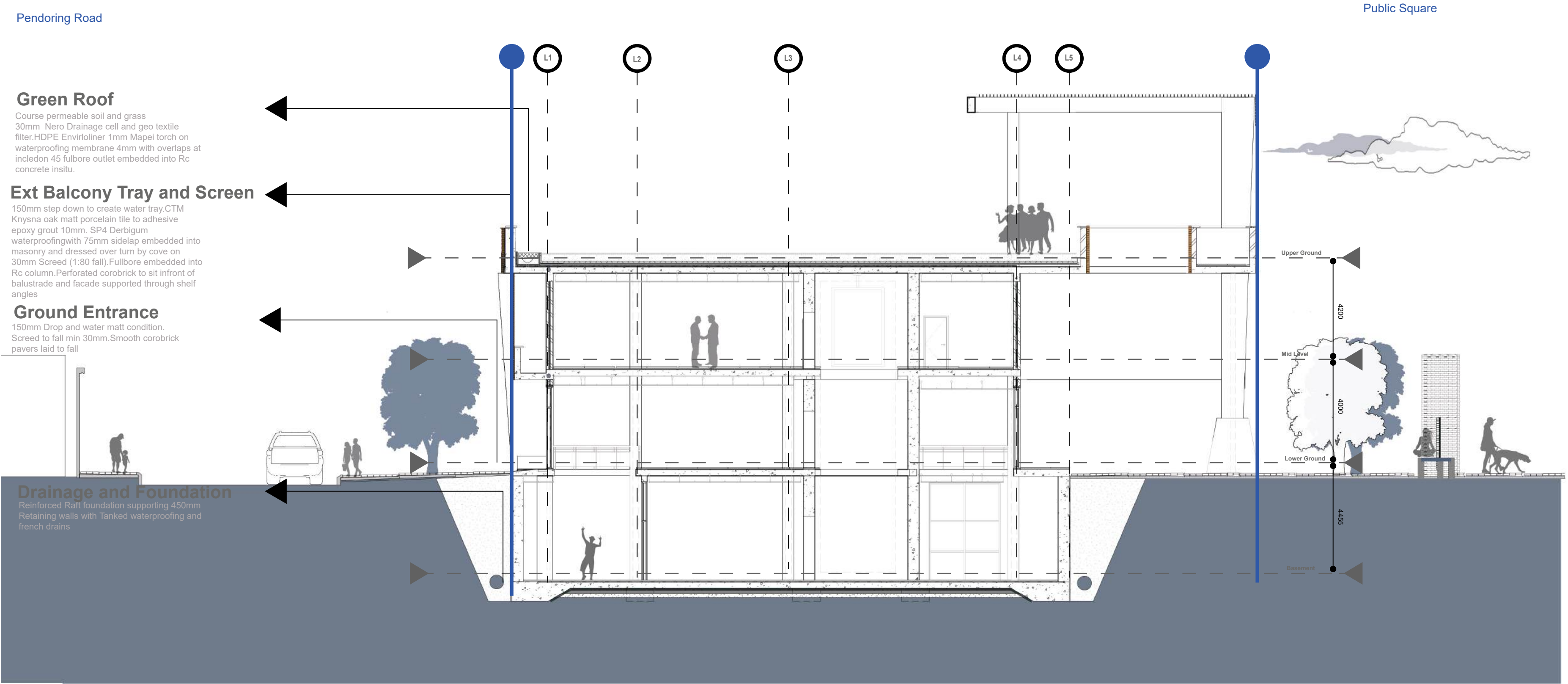
Education Elevation From Square 1:200

Figure 8.11 Inner Elevation (By author,2024)



Technical Section 1:200

Figure 8.12 Technical Section (By author,2024)





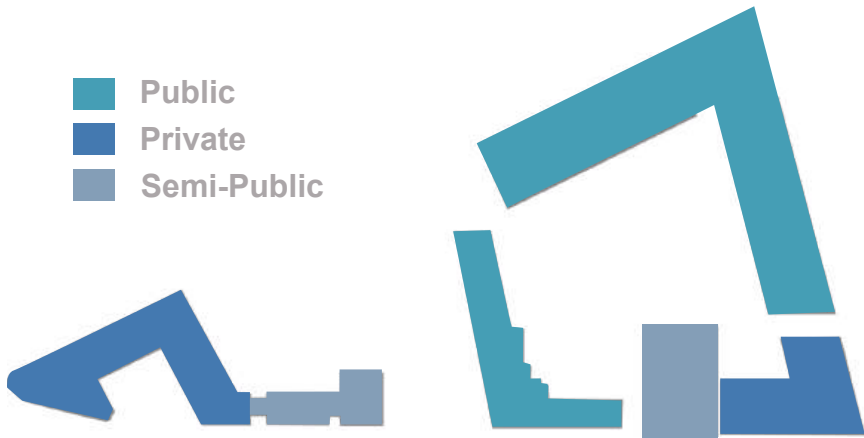


Figure 8.13 Space Interaction (By author,2024)

Basement

- 1. Individual Study Spaces
- 2. Archive Books
- 3. Meeting or Group Desks

Upper Ground  
Link/Welcome

- 1. Office
- 2. Meeting Room
- 3. Meeting Room
- 4. Storage
- 5. Kitchenette
- 6. Tennis and Squash Club
- 7. Runners Club
- 8. Pause Space
- 9. Reception and Foyer
- 10. Exhibition Gallery

Education

- 1. Library space
- 2. Lettable Offices
- 3. Security
- 4. Balcony
- 5. Classrooms
- 6. Informal Meeting spaces

Retail

- 1. Squash Courts
- 2. Open Market Space
- 3. Bakery Cafe and clothing model

Multivalent Arena Building

- 1. Arena

Sport

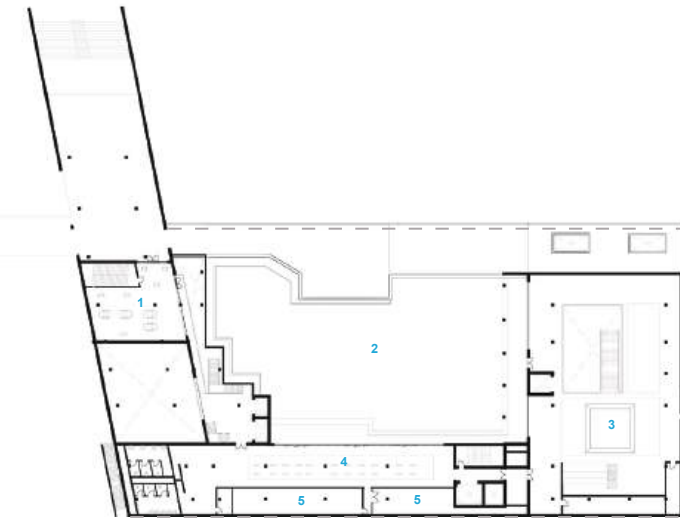
- 1. Boxing Gym
- 2. Meditation Room

Rehab/Community Upskilling

- 1. Lounge
- 2. Cafeteria
- 3. Meeting/Games Room
- 4. Janitors Closet
- 5. Bedroom
- 6. Shared Hostel
- 7. Multipurpose Floor Space
- 8. Managers Office
- 9. Staff Office
- 10. Workshop
- 11. CAD Labs
- 12. Reception and Entry Hall
- 13. Nursery
- 14. Thrift Store/Donations
- 15. Relocated Existing Restaurant
- 16. Kitchen
- 17. View deck/Overflow space
- 18. Crops
- 19. Greenhouse

Mid Level 1:500

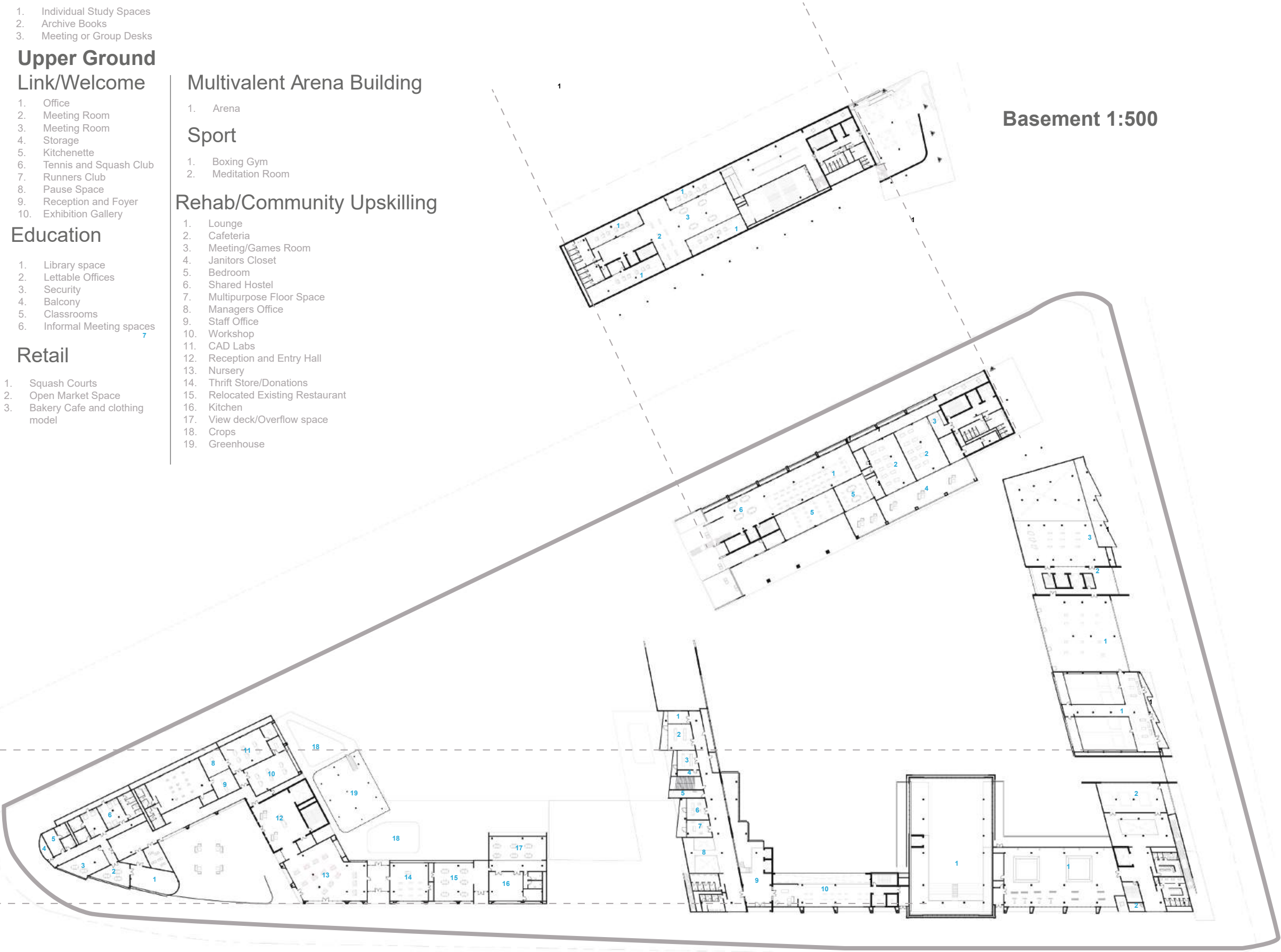
- 1. Sharks Supporters Club Lounge
- 2. Club Shared Courtyard
- 3. Arena
- 4. Extended Exhibition Gallery
- 5. Storage



Mid Level 1:500



Figure 8.14 Mid and upper Level Floors (By author,2024)



Upper Ground 1:500

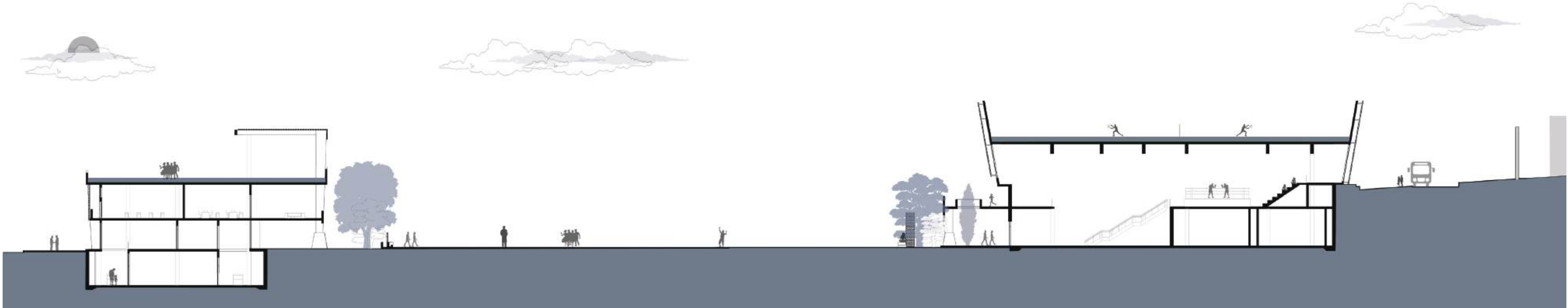




East Elevation 1:500

Figure 8.15 East Elevation (By author,2024)

Facade design responds to the context of Northcliff, breaking through the high walls to create permeability within the neighborhood. While large, solid masses dominate the upper levels, they remain visually light and transparent, contrasted by the dynamic, open connections at ground level, facilitated through the use of transparent materials that invite flow and interaction. Seamless transition from the street threshold to the building interior and adjacent public space, creating a fluid connection between urban life and architectural enclosure. The design integrates spatial layers that invite movement, with the entry sequence guiding visitors from the public realm into a welcoming, continuous flow between the exterior and interior environments



This design operates across multiple urban scales, connecting seamlessly to the surrounding city through pedestrian routes while creating new pathways that integrate the site into its context. The design layers building, street, public square, and landscaping, guiding movement through spaces of varying hierarchy and intimacy. While some areas offer restricted access, the overall experience remains cohesive for all visitors. Sustainability is prioritized with passive ventilation and pitched roofs for solar panels, enhancing the building's environmental performance. The design fosters both connectivity and intimacy, making the site an integral part of its urban and social fabric

Section B-B 1:500

Figure 8.16 Section B-B (By author,2024)



Section C-C 1:500

Figure 8.17 Section C-C (By author,2024)





Figure 8.18 Aerial View 1 (By author,2024)

Circulation

Users are able circulate the site on many levels and many planes. Travel to your original starting point occurs seamlessly and gracefully.Sporting activities are places on roof levels to ensure undisturbed public spaces.



Figure 8.19 Aerial View 2 (By author,2024)

The Architectural Language

Brick is versatile and resonates with many communities to ensure a universal feeling of inclusion within New Northcliff. Though not directly intergrated the design has subtle influences of islamic architecture and practices.The influences around walking in a circle similar to pilgrimage in Makkah or layers of building around a centre space in relation to ancient mosque buildings.





Figure 8.20 Street View 1 (By author,2024)



Figure 8.21 Street View 2 (By author,2024)



Figure 8.22 Square View (By author,2024)



Figure 8.23 Softscape street view (By author,2024)





Figure 8.24 Garden Patch (By author,2024)



Figure 8.25 Library View (By author,2024)



Figure 8.26 Central Pathway (By author,2024)



Figure 8.27 Square Thresholds (By author,2024)



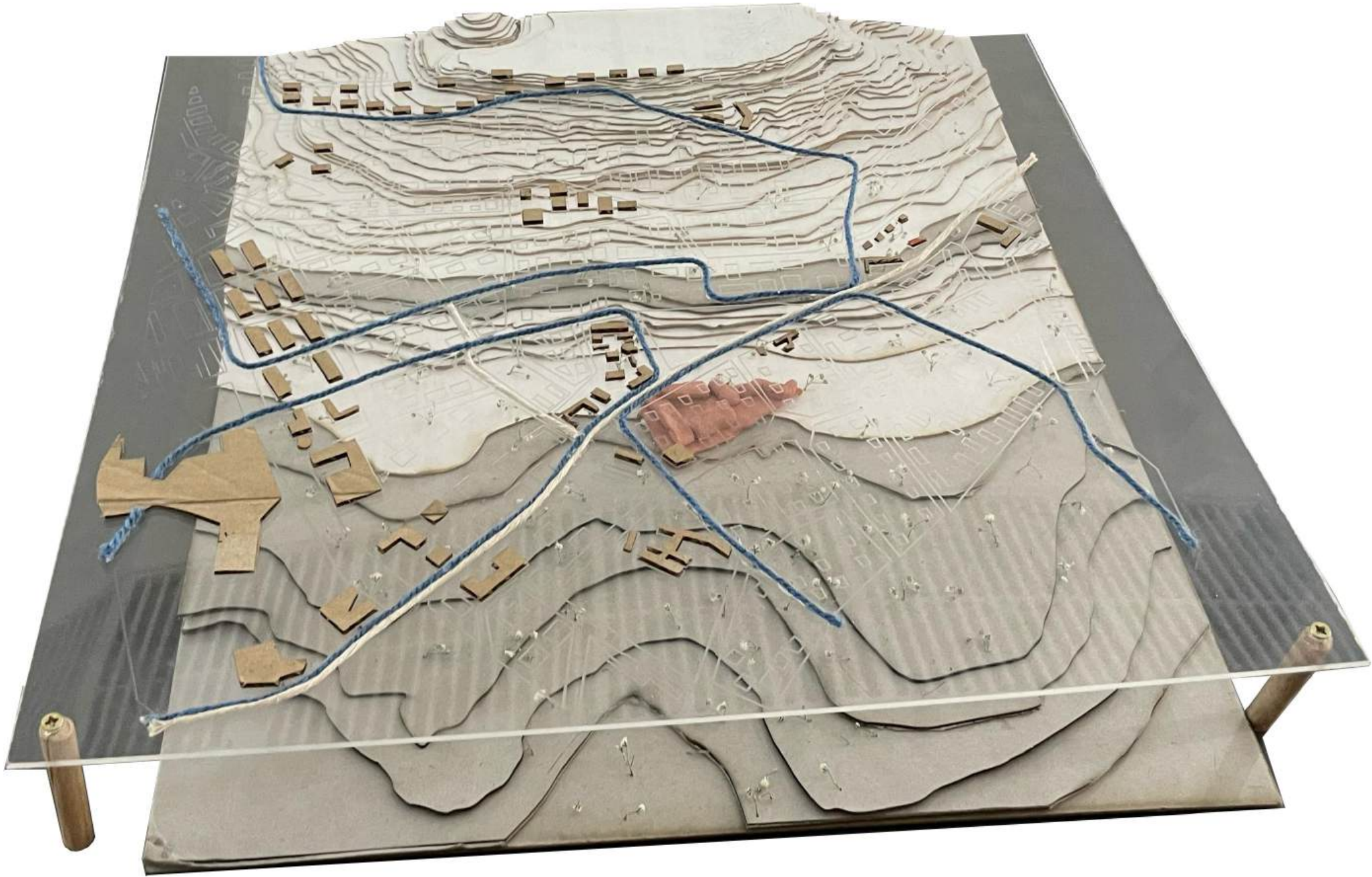


Figure 8.28 Urban Model (By author,2024)



Figure 8.29 Birds Eye View (By author,2024)

**City-Campus Scale**

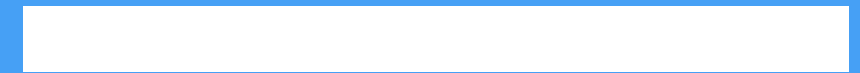
The following images provide a sense of depth and connection to the neighbourhood . It is visibly noticed how an individual can travel through the site as well as through the city linking to other areas on a campus and city scale seamlessly.



# Ch. 9

## Appendices and Referencing

- Appendix A -Viability Report
- List of figures
- Bibliography Referencing





Viability Report

STATUS

There is currently a Country club, an upskilling centre and other small business commercial stands on the site. The benefit of this site is that its surroundings consist of Residential and Commercial usages for residents and travellers to occupy. The total area of the site is 43471sqm. The country club takes up 26000sqm, the upskilling centre approximately 3000sqm, parking and small commercial businesses 2600sqm.the previous two amenities take up the apex of the site .The country club is separated from this by a large open green space that occupies approximately 11000sqm.The entire land including the country club is owned by the City of Johannesburg.

LAND ACQUISITION RIGHTS AND RESTRICTIONS

The process of land acquisition for the community project in Northcliff involves navigating various rights and restrictions held by different stakeholders, including the Northcliff Resident Association, the country club, religious groups, and the City of Johannesburg as the governmental body. As the site is owned by the City of Johannesburg, it holds authority over zoning regulations, building lines, and other restrictions that may impact the project. Collaboration and negotiation with these stakeholders are essential to address any concerns and ensure alignment with regulatory requirements for the successful realization of the community project.

SITE DATA

- Site area-43471sqm
- Height restrictions -3 stories
- Coverage -TBD from zoning certificate
- FAR- TBD from zoning certificate
- Erf number 426
- Township -Northcliff



Figure 9.1 Locality (Geolis,2024)

Clients and Funding

City of Johannesburg- Johannesburg City The metropolitan municipality that oversees Johannesburg's local government is called Metropolitan Municipality (anon, 2022). Obtaining rights and redevelopment of this site as a community project. Majority of the permission is obtained from them as a client. They are committed to provide and support community/ public infrastructure. They currently own the entire site including the country club that resides on it, therefore support from them is paramount as majority of funds will come through here. Their goals of a community project include, improved communities and potentially income.

Department of sports, Arts and culture-. Facilities for sports, recreation, and the arts and culture are provided under the supervision and management of Infrastructure Support. Additionally, this sub-program offers technical assistance for the creation, refurbishment, and maintenance of structures owned by the government and other organizations involved in sports, the arts, and culture (anon, 2024). In conjunction with COJ this department could further invest to the potential of this project as a major stakeholder.

Northcliff Rotary Club- Under Bill Kemptner's direction, the Northcliff Rotary Club started initiatives such as supplying sewing machines for the blind. Since its founding in 1989, the Rotary Ann's have supported a range of charities, including orphanages and elderly homes, through fundraising, contributions, and community service. Through its involvement in youth initiatives including group exchanges, ambassadorial students, and foreign exchanges, the club promotes leadership development and cross-cultural understanding. Northcliff High School's Interact Club organizes social events and fund-raisers for neighborhood initiatives. The overall goals of the Northcliff Rotary Club are youth development, foreign exchange, and community service for a good worldwide effect. Some of their notable projects are the redevelopment of the Northcliff ridge and the berario recreation hall and clinic. Their ideals align with the goals of the project and could support the funding

Northcliff resident's association (NRA)- strives to improve the area's living, working, and investment circumstances by promoting better infrastructure development, upkeep, and services. They aim to influence the City of Johannesburg's financial choices, particularly those that pertain to infrastructure, fees, and service delivery. The NRA also intends to take care of billing concerns, improve membership representation, and launch PR campaigns. In addition to taking part in integrated development planning, they seek to address capital spending, infrastructure development, and service delivery. Funding could be supported by resident donations, investors and private stakeholders within the area, after approval of the project from this association.

Tshepo community initiative- A Christian organization rooted in the community that works in conjunction with the local church is called the Tshepo Community Development Initiative (community initiative, 2015). Our goal is to create and execute programs and projects that will enable individuals to live self-sufficient, fulfilling lives on their own terms. In response to the rising number of jobless and homeless individuals in Johannesburg's northwest suburbs,

Tshepo was established in 2007 (community initiative, 2015). To better assist the vulnerable community of Windsor and the surrounding regions, a number of churches from the Linden Fraternal of Churches began combining their resources (community initiative, 2015). Tshepo currently manages a fully functional afterschool education center in Northcliff in addition to a successful job creation and rehabilitation center. This initiative is situated on the site and although funding may not be retrieved from here, members of the union church may receive substantial donations towards the project cause to benefit the initiative.



Clients And Funding

- Religious Associations – Al Qadr Masjid, Northcliff Masjid, Northcliff Union Church and others can attain funding for their specific needs based on the programmatic intentions of the project. The church affiliated with the Tshepo community initiative creates the opportunity for upskilling and food growth within the community that enables jobs, skills and educates the youth. The Islamic community would potentially fund the need for a new madrassa (Islamic learning) as there is a lack of these institutions in the northern suburbs.
- Central Islamic Trust (CIT)- The acclaimed non-profit Central Islamic Trust was founded in 1956 to meet the urgent needs of the Muslim population in the Gauteng and larger Johannesburg areas. CIT is committed to offering the Muslim Ummah full services, such as Islamic education, welfare, bursaries, and funeral services (anon, 2017). They highlight that accomplishing our objectives takes precedence above gaining recognition for our company. They are able to accomplish the objectives and make a significant contribution to the well-being of the Muslim community in Gauteng and the surrounding Johannesburg area thanks to the specialized vehicle provided by Central Islamic Trust. Funding from here is likely in support of the scarcity of madrassa classes that exist in northern suburbs. Its further reinforced by the intention of feeding schemes and feeding kitchens within the desired facility.

Financial Considerations

**Construction costs**  
The figure below shows the total cost of construction which amounts to R151615000. This is in accordance to AECOM property and construction Africa cost guide.

Land Cost

Based on a number of variables, the project site’s anticipated land cost which measures 47,000sqm was determined. The country club takes up about 26,000sqm, the public area is about 11,000sqm, and the remaining space is about 5,000sqm. In order to estimate the cost of the land, it was necessary to look at nearby property values, possible zoning laws, and any amenities or infrastructure that may already be there. To determine a fair estimate for the cost of the land, assessments of recent land transactions in the area and conversations with local real estate professional, a general estimation based on typical land prices in Johannesburg. Keep in mind that actual land costs may vary significantly depending on various factors. For the country club area, prime location and potential commercial value suggest a range of R2,000 to R5,000 per square meter. The public space area, typically designated for recreational or public amenity use, could range from R500 to R1,500 per square meter, Finally, the remaining 5,000 square meters, suitable for mixed-use or educational zoning, might range from R1,000 to R3,000 per square meter.

| Classification                                      | Building rates (ZAR/sq m) | Programme               | Area (m²) | Total (m²) | Proposed unit (ZAR) |
|-----------------------------------------------------|---------------------------|-------------------------|-----------|------------|---------------------|
| Offices and teaching                                | R11500                    | Offices                 | 500sqm    | 800sqm     | R9200000            |
|                                                     | R9800                     | Boardrooms              | 300sqm    |            |                     |
|                                                     |                           | Madressa classrooms     | 1000sqm   | 1700sqm    | R16660000           |
|                                                     |                           | Ladies classrooms       | 500sqm    |            |                     |
|                                                     |                           | Security                | 200sqm    |            |                     |
| Studios                                             | R23000                    | Boxing Gym              | 2000sqm   | 4500sqm    | R103500000          |
|                                                     |                           | Ladies Gym              | 1000sqm   |            |                     |
|                                                     |                           | Pavillion               | 1000sqm   |            |                     |
|                                                     |                           | Prayer room             | 500sqm    |            |                     |
| Site works                                          | R800                      | Hardscape               | 15000sqm  | 21000sqm   | R12000000           |
|                                                     | R600                      | Softscape               | 6000sqm   |            | R3600000            |
| Parking and services (allocated to specific spaces) | R850                      | Parking on grade        | 4000sqm   | 6000sqm    | R3400000            |
|                                                     | R1650                     | Electrical installation | 500sqm    |            | R825000             |
|                                                     | R1750                     | Hvac installation       | 1000sqm   |            | R1750000            |
|                                                     | R460                      | Fire installation       | 500sqm    |            | R230000             |
| TOTAL BUILDING COST                                 |                           |                         |           |            | R151165000          |

Figure 9.2-Construction Costs (By Author ,2024)



Clients And Funding

Professional fees

It is important to understand the cost implication of professional fees. As a community project NPOs opt for volunteer work however in the case of outsourced work professional fees are accounted to give full project understanding. Architect fees are calculated on project-based frameworks according to BOARD NOTICE 307 OF 2022 South African Council for the Architectural Profession a Guideline for Professional Fees in terms of Section 34 (2) of the Architectural profession act 2000 act 44 of 2000.  
Profession Act, 2000 Act 44 of 2000

**Fees = Primary + Secondary Fees (medium complexity cost bracket 9)**  
**Fees = R12 645 330.47 + (R151165000– 130 000 001.00) x 8.94%.**  
**= R 14 537 481.38**

Other consultants have been added to understand and engage with fee requirements attached to this project’s success. The total of construction cost and professional fees can be seen in Figure 9.5

Funding

The aforementioned clients and stakeholders play a vital role in the success of this project. Their contributions and funding in terms of percentages and values are listed in the figure 9.4

Income

As a community space is intended to be a free initiative there are still methods of attaining income especially in a developed and wealthy area. The madrassa building attains fees from its students and various charitable endeavors. The public space can occupy market stalls and be rented out for event spaces though free to use by the general public on a daily basis. The integrated sports facility as a flexible space is a lettable space and will earn income through its members and organizations wanting to use the space.

Expenses

Due to the variety of spaces there are a list of expenses within the project mostly consisting of maintenance and upkeep. These include service bills, staff and groundmen salaries and security.

Viability

The financial viability of this community enterprise is demonstrated by its diverse income streams, which include market stalls and event space rentals in addition to madrassa fees. It is feasible to meet operating costs and guarantee long-term profitability while offering crucial community services and amenities with careful cost and stakeholder contribution management. The income, expenses and viability to turn a profit margin for the project to turn self-sustainable in future is listed in Figure.It highlights donations from stakeholders and income possibilities.

Sustainability

Social sustainability: spaces aim to address the specific needs of a diverse group of residents in Northcliff, including those who identify with Islam as it is a fast-growing community within the area, by providing essential facilities that are currently lacking in the area, while fostering a culture of inclusivity and cultural exchange that transcends religious and cultural boundaries, ensuring that all demographics can benefit from and utilize the spaces provided. The intention however is not to create a bias towards one particular religious group. majority of the public space and facilities are meant to be a flexible multivalent and multipurpose area for religion, education, training, trade, and leisure for people of all faiths.

Economic sustainability – It allows for vendors to sell produce, within the public space and put back into feeding schemes, and gain an income. The imam and instructors will be able to find employment because of this facility. The sport facility which is multifunctional becomes a flexible lettable space that generates income.

| Professional      | Percentage       | Fees            |
|-------------------|------------------|-----------------|
| Architect         |                  | R 14 537 481.38 |
| Engineers         | 19%              | R2872135        |
| Quantity Surveyor | 8%               | R12093200       |
| Townplanner       | To be calculated | R0.00           |
| Land surveyor     | To be calculated | R0.00           |
| VAT (15%)         |                  |                 |
| Total             |                  | R33928238.8     |

Figure 9.3-Professional Fees (By Author ,2024)

| Funder                                        | Donation   |
|-----------------------------------------------|------------|
| City of Johannesburg                          | R70000000  |
| Department of sports, arts and culture        | R10000000  |
| Northcliff Rotary club                        | R30000000  |
| Northcliff country club and high schools      | R1000000   |
| Central Islamic trust                         | R30000000  |
| Religious associations                        | R2000000   |
| Tshepo community initiative with union church | 5000000    |
| Northcliff Resident association               | 5000000    |
| Total                                         | R153000000 |

Figure 9.4 -Funding (By Author ,2024)



PROJECT PROCESS CONSIDERATION AND IMPLEMENTATION

Procurement and Contracts

Professionals that can’t be procured through Government or the NPOs will be arranged through the PROCSA Client Consultant Agreement. City of Johannesburg will procure Architects and other professionals to assist in the project. Central Islamic trust will also opt for Architects and volunteered Professionals to assist in the Islamic Portion of the project.

Team

Architect: multiple architects will be working on different parts of the project as a team as well as various project consultants and agents due to the large scale of the project. This is viable in producing efficient design drawings

Landscape architect Utilised to produce an efficient walkable public realm and space

Resident Association: Viability and permission will go through the local resident association for processes to ensure the project aligns with the goals of the community.

Civil Engineer The building designs will be handled by a civil engineer since they need to be structurally sound.

Geotechnical Engineer In order to identify the precise locations where specific geological issues may have an impact on the site, this professional will be assigned to do a soil study.

Electrical Engineer Solar energy will be utilised in the buildings therefore, an electrical engineer will be hired to construct the electrical infrastructure.

Land Surveyor: The site’s features, including water lines and contours, will be assessed by the land surveyor. These will establish the site’s limitations as well as the means of obtaining water and other utilities.

Timeline

Establishing the conceptual aims and goals for each project phase would be the main task of the project phase. The process of design and development will be explained, important deliverables and milestones will be specified, stakeholders will be identified along with their responsibilities, project schedules and budget allocations will be established, and project management and supervision procedures will be outlined. It also entails specifying the standards by which project success will be judged and making sure that these standards are in line with the project’s overall goals and vision. This comprehensive approach enables an orderly and transparent transition from planning to implementation, which eventually results in the accomplishment of the project’s goals.

Three separate phases will make up the project in order to guarantee a planned and effective approach. To make sure that the plans and project objectives are in line with local laws and community requirements, it will initially present it to the local authority for approval. The design process will then start, with engineers and architects working closely together to translate concepts into intricate working drawings. Ultimately, the project will be realized during the building phase, with contractors and subcontractors carrying out the designs precisely and with quality control.

Conclusion

To put it simply up, this Northcliff community initiative offers a comprehensive strategy to fill in social, cultural, and spatial gaps, promoting diversity and life in the area. The project provides a transformational beacon for resilience and community participation via thorough analysis of programming requirements and partnership with varied stakeholders. It exhibits financial sustainability while offering necessary services and amenities by combining flexible design solutions, sustainable practices, and a variety of revenue streams. This initiative aspires to establish a vibrant and integrated urban community that benefits people from all backgrounds, with an emphasis on environmental stewardship, cultural exchange, and inclusion.

| PROFESSIONALS                                                                               | ROLES                                                                                                                                |
|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| LEGAL TEAM                                                                                  |                                                                                                                                      |
| ATTORNEY                                                                                    | • ALTERATIONS TO TITLE DEED<br>• TRANSFER OF PROPERTY                                                                                |
| PLANNING TEAM                                                                               |                                                                                                                                      |
| TOWN PLANNER                                                                                | • AMENDMENTS TO TOWN PLANNING SCHEME (REZONING)                                                                                      |
| LAND SURVEYOR                                                                               | • IDENTIFIES SITE BOUNDARY PEGS<br>• AMENDMENTS TO SG DIAGRAM                                                                        |
| DESIGN TEAM                                                                                 |                                                                                                                                      |
| ARCHITECT                                                                                   | • ARCHITECTURAL PROFESSIONAL<br>• PRINCIPAL CONSULTANT (manages other consultants)<br>• PRINCIPAL AGENT (manages building contracts) |
| ENGINEERS:<br>1. CIVIL<br>2. MECHANICAL<br>3. STRUCTURAL<br>4. FIRE DESIGN<br>5. ELECTRICAL | • GEOTECHNICAL DESIGN<br>• MATERIALS SCIENCE<br>• STRUCTURAL DESIGN<br>• FIRE ESCAPE DESIGN/EQUIPMENT<br>• ELECTRICAL LAYOUT DESIGN  |
| QUANTITY SURVEYOR                                                                           | • PAYMENT CERTIFICATES<br>• CONSTRUCTION COSTS                                                                                       |

Figure 9.5-Professional Team (By Author ,2024)

| Viability           | Donation per month | Donation per annum |
|---------------------|--------------------|--------------------|
| Income              | R150000            |                    |
| Donations           | R210000            |                    |
| Expenses subtracted | R53000             |                    |
| Total Profit        | R307000            | R3684000           |

Figure 9.6 -Profit (By Author ,2024)

| Item                | Per month                              | Per annum |
|---------------------|----------------------------------------|-----------|
| Market stalls       | R10000                                 | R120000   |
| Sporting facilities | R75000                                 | R900000   |
| Madressa fees       | R50000 (assuming 100 students at R500) | R60000    |
| Office hire         | R15000                                 | R180000   |
| TOTAL               | R150000                                | R1260000  |

Figure 9.7-Income (By Author ,2024)

| Item          | Per month | Per annum |
|---------------|-----------|-----------|
| Salaries      | R70000    | R         |
| Maintenance   | R11000    | R         |
| Electricity   | R13000    | R         |
| Water         | R7000     | R         |
| Internet wifi | R3000     | R         |
| Security      | R4000     | R         |
| Services      | R8000     | R         |
| TOTAL         | R53000    | R636000   |

Figure 9.8 -Expenses (By Author ,2024)

| Funder                                 | Donation per month | Donation per annum |
|----------------------------------------|--------------------|--------------------|
| City of Johannesburg                   | R30000             |                    |
| Department of sports, arts and culture | R20000             |                    |
| Northcliff Rotary club                 | R30000             |                    |
| Central Islamic trust                  | R100000            |                    |
| Northcliff Resident association        | R30000             |                    |
| Total                                  | R210000            | R2520000           |

Figure 9.9 -Donors(By Author ,2024)

|                   | Cost        |
|-------------------|-------------|
| Construction      | R151165000  |
| Professional Fees | R33928238.8 |
| Total             | R49044738.8 |

Figure 9.10 -Fees (By Author ,2024)





20 August 2024

Nabeel Mahomed

2186890

TO WHOM IT MAY CONCERN

RESEARCH ETHICS APPROVAL

Interconnected Voidscales: Reimagining Northcliff's Cultural Landscape through Architectural Intervention

This letter serves to confirm that the Ethics application for the above titled study has been approved. The researcher has been granted clearance to proceed with the research study or project.

Protocol/clearance number is: SOAP027/03/2024

Yours sincerely

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# Ethical Clearance



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