Complementary

A

Enhancing the experience of Maynardville Park through a responsive architecture.

Matthew Shepherd SHPMAT006
Supervisor: Stella Papanicolaou
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School of Planning & Geomatics,
University of Cape Town
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STUDENT NAME: **Matthew Shepherd**
SUPERVISOR NAME: **Stella Papanicolaou**

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Date:

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ABSTRACT

This dissertation aims to preserve and enhance the existing narratives of Maynardville Park. The chosen site exhibits a long-established history of diverse social and cultural intricacies that all deserve careful consideration. The site presents a variety of layers within and around the park, outlining the scope of this inquiry to address the internal happenings and surrounding edges. The objective of this dissertation is to produce a type of responsive architecture that synergises with this particular context. The architectural intervention boarders the park and its urban edge and bridges these two conditions to create a more interactive space.

Presenting itself with a variety of both significances and shortcomings, Maynardville Park guides the trains of thought for the theoretical, technological, and architectural positions. The proposed architectural response is meticulously tailored to the specific attributes of Maynardville Park, ensuring its relevance and timelessness. Responsive architecture, by its nature, necessitates a degree of flexibility and user agency, qualities that this design inquiry thoughtfully incorporates into its programming. It collages the various narratives to create a sense of harmony among them.

In response to the physical characteristics of Maynardville, the architectural scheme develops a comprehensive urban and architectural strategy that forges multiple responsive edge conditions, designed to attract people to the site. The scheme creates a precedent for future development that addresses its context and initiates positive change for the site.

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INTRODUCTION

The notion of ‘Form follows function,’ a heavily contested architectural concept, was introduced by functionalists in Modernist Movement. This ideology underscored an architectural approach wherein the form of a building primarily aligns with its singular function, thereby becoming the main defining element of architectural design (Forty, 2000). Consequently, the formative aspects of a building were coerced to sustain the functionality in which it was initially conceived. However, this reductive manner of conceptualisation often produced designs that lacked the intrinsic quality of timelessness. Timelessness, in this instance, signifies the ability of architecture to consistently foster positive social engagement throughout its entire life span.

Over the course of its existence, a building inevitably encounters changes in its utilization, often surpassing its original function. When the disparity between a building’s social and physical aspects becomes evident, questions arise regarding its continued relevance. The conventional reliance on a singular emphasis on form or function to determine an architectural identity proves inadequate. To achieve true social and physical sustainability, architecture must transcend its mere utilitarian purpose. Bernard Tschumi, who redefined the term ‘programme’, advocates for a holistic characterization of buildings, wherein their definition encompasses not only their practical use but also the dynamic interplay with their users and contextual environment (Tschumi, 1996).

The focal point of this design inquiry revolves around the concept of responsive architecture, which harmonises with a specific context through its relevant programmatic intervention. Rather than disrupting the social context of a site, this design approach aims to accommodate and complement the existing narratives of the locale. In accordance with the overarching objective, this Design Dissertation explores the notion of ‘programme’ as conceptualised by Bernard Tschumi within the context of Wynberg. In particular, the focus is placed on Maynardville Park, which exhibits a long history with multiple owners and timelines, revealing a variety of uses and activities. The multifarious cultural histories and social activities, in conjunction with the relevant and disruptive social and spatial practises of Maynardville serve as the foundation of the investigation in this paper. In unpacking the various social layers of the site, this dissertation takes position to highlight the reasons why the narrative of Maynardville Park is worth preserving. Furthermore, an architectural lens is provided through which the methods to effectively analyse a site like Maynardville is unpacked.

This paper foregrounds a comprehensive investigation into the theory and technology of responsive architecture within the context of Maynardville Park. It is divided into a segments of thorough discussion, relevant technology and an insightful application section. The discussion draws on the complexities observed at the Maynardville site, as well as theoretical architectural dialogues that both align and challenge these conditions. It delves into how buildings and cities find meaning and identity. Subsequently exploring the intricacies surrounding the definition of architectural function and highlighting the interplay and disparities between function and programme. In response to the aforementioned problems, the paper then proceeds to explore the emergence of more sustainable and pluralistic architectural approaches that emphasise themes of continuity and connection, seeking to harmonise the various considerations of a complex site and infuse architectural voids with meaning. This develops a need for responsive, adaptable, and flexible types of architecture that addresses the multifaceted challenges uncovered during the theoretical discussions.

The technological section plays a complementary role in specifically focusing on case studies that compare the shortcomings of Maynardville with successful examples of precedent applications. It ultimately attempts to provide practical examples and tools to address the issues previously highlighted in the theory. Finally, application is developed in the section that follows through the extraction of core design concepts that reinforce themes such as significance, harmony, collage and edge in relation to Maynardville’s site conditions.

The application segment of this paper serves as a juncture that connects the theoretical and technological explorations, aligning them with the architectural concepts underpinning this Design Dissertation. The design inquiry attempts to create ‘edges’ that bridge the interaction of park and urbanity. The intersection of these two aspects of Maynardville Park intend to collage the various social and physical layers of the site. Subsequently, the paper unpacks the urban and architectural development of this design inquiry.

Figure 03

Sketch of Piers Road day time activity by author.

History of the Site

This research paper begins its investigation from a contextual narrative, looking at Maynardville Park in Wynberg, Cape Town, which serves as the chosen site of inquiry. The history and ownership of Maynardville Park play a crucial role in shaping the narrative that this design inquiry aims to convey and preserve. Over the years, the park has facilitated a diverse range of owners and activities which contributing to its valuable and multifaceted past. This brief historical information provides insights into how the parked has evolved over the years and what significant aspects have manifested.

Maynardville Park is subject of a fascinating historical evolution, starting with its origins as a military base under the ownership of the Dutch East India Company (VOC). Following the British Authorities' acquisition of the base in 1795, two officials, Louis Ellert and Ernst Eggar took private residence on the site. The Ellert family eventually bought the property off Mr Eggar and owned it until Mr Ellert died at war. Mr James Maynard, a financier, bought the property from the remainder of Mr Ellert's family who could no longer afford it, and named it Maynardville in 1836. Although initially serving as a private villa, Maynard opened the park for social events, gathers, and picnics to close friends, families, and members of his church congregation.

William Farmer, James Maynard's brother-in-law and the last private family owner, took ownership of the park, after Maynard's passing in 1880. This was during the Great Boer War and the park then allowed for British military service troops to take residence once again (Doyle, 2002). During this period, open-air performances were initiated to raise funds and provide entertainment for the stationed troops. Finally, The City of Cape Town bought the site in 1950, officially designating it as a public park, gaining its current name Maynardville Park (Robinson, 2005).

Figure 04

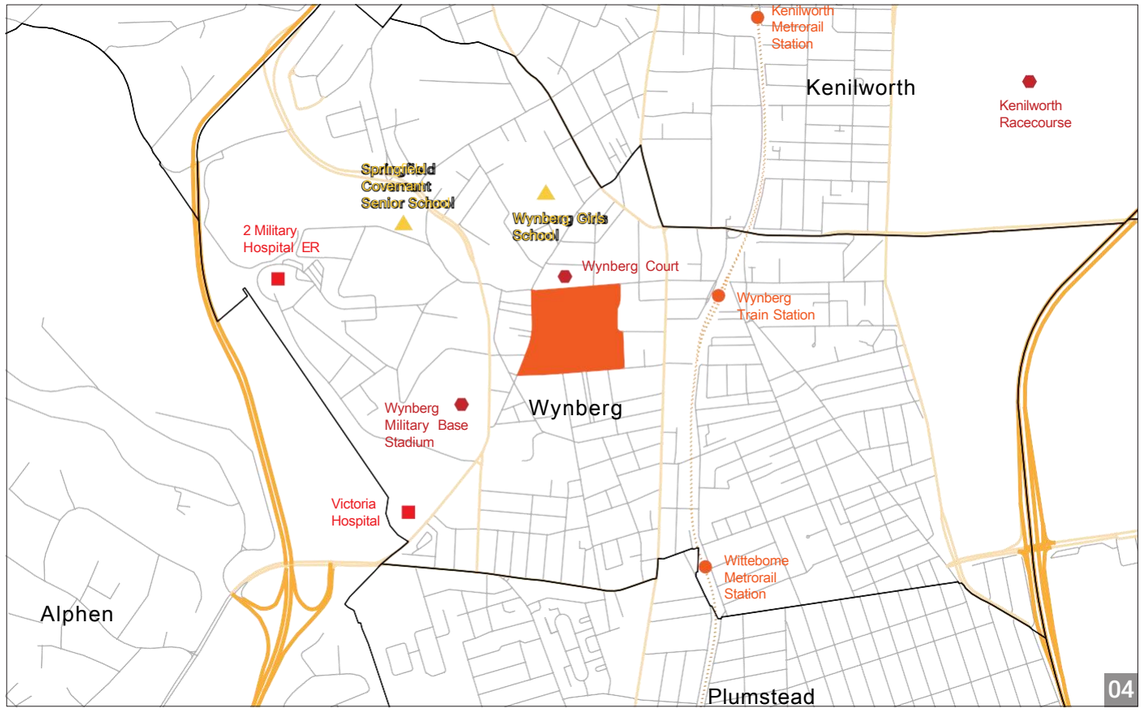
Map of Wynberg done by author.

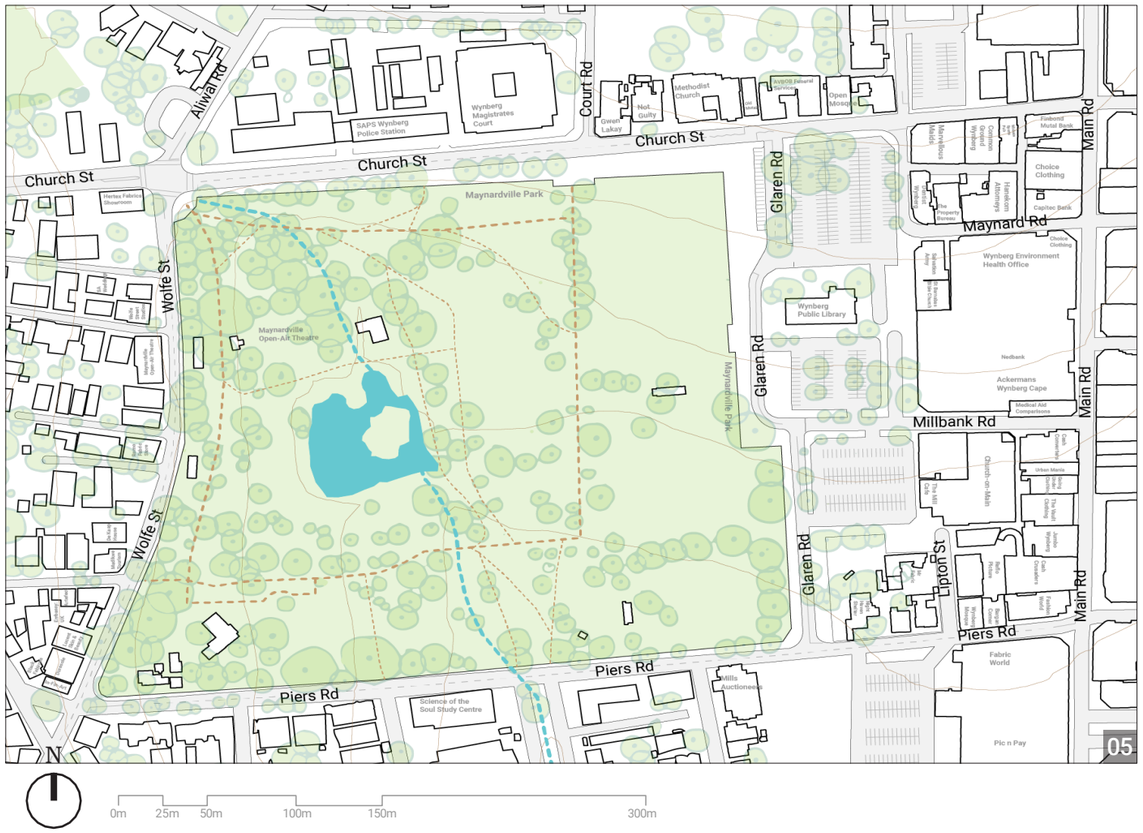
Notably, it stood as one of the first parks in Cape Town that was open to people of all races. A decision, that was greatly contested, given that apartheid era was rife. Consequently, regulations were implemented to govern interracial interactions during public events. The park thus in its originally dispensation had interracial regulations put in place for all public events (Chisholm and Hauptfleisch, 2021:26).

Each summer since 1956, Maynardville Park has hosted Shakespearean productions, a tradition that endures to this day. The theatre also stages an array of performances, encompassing ballets and dance recitals. While maintained by the Theatre Trust and Artscape, the theatre assists in raising funds for underprivileged schools and engages in social initiatives such as the enlarging of the Athlone Nursery School and the establishment of the Athlone Training College (Chisholm and Hauptfleisch, 2021:30).

Figure 05

Map of Maynardville Park, highlighting surrounding roads and building footprints done by author.





Present Conditions of the Site

While Maynardville Park does present itself with substantial historical motivation, the reasoning behind my interest in it, goes beyond this historic data. I have a personal relationship with the site as I am part of the Christian congregation of Church on Main, located adjacent to the park, and regularly partake in activities that are affiliated with them. It is this familiarity with the site that ignited a desire to further investigate it. Having limited, peripheral, and observational knowledge of the park has also inspired the theoretical lens of this paper, which revolves around understanding the programmatic and social conditions of the site. The knowledge gaps pertaining to the park afford an inviting opportunity to shed some light on aspects that might be overlooked or inadequately understood, offering a unique and insightful analysis.

Following an array of oral interviews conducted with diverse park users (consent forms of interviewees appended in the addendum), in conjunction with personal observations and direct engagement with the site, an intricate comprehension of its social fabric unfolds. The current site accommodates a diverse spectrum of activities, ranging from formal and organized events to spontaneous occurrences, each manifesting with unique and varying frequency within and around the park. In an informal capacity, the park serves as the backdrop for typical recreational activities such as picnics, celebratory gatherings, walks, and play. From one of the interviews, Nicolene Jaftha states that she “[loves] coming to the park the, the scenery, the quietness. I can appreciate life and nature, like the squirrels.” Nicolene is a frequent visitor, often making brief trips during her lunch breaks due to her proximity to the park. In another interview, a teacher shared his experience of taking his students on a field trip to the park, providing them with an educational excursion. Furthermore, a caretaker regularly accompanies an elderly lady on walks around the park, utilizing the park’s gym equipment to facilitate the lady’s mobility. A mom takes her kids regularly to play on the playground and jungle gym equipment. Collectively, these interviews and personal observations have unveiled a tapestry of insightful social layers inherent to the site. The intensity of these activities exhibits seasonality and typically relies on weather conditions, with weekends witnessing a notable increase in attendance, however one interviewee mentioned that the cold weather does not deter him from coming to the park. As mentioned earlier, situated within the park, is an open-air theatre which a hosts regular evening shows all year round. While the attendance remains consistent, it has experienced a decline in popularity compared to its pre-Covid-19 levels. Interestingly, only a handful of the interviewees reported having ever attended a performance at the theater. There are also fairs, expos and carnivals that are occasionally arranged on the east side of the park. Most notably the Community Chest Carnival and McClaren Circus have been held there since the parks public opening. These types of events, while they are well attended and lively, only occur annually and the area they occupy is left desolate for the rest of the year. Almost all the interviewees had attended at least one of the events that took place and have very fond memories of these events.

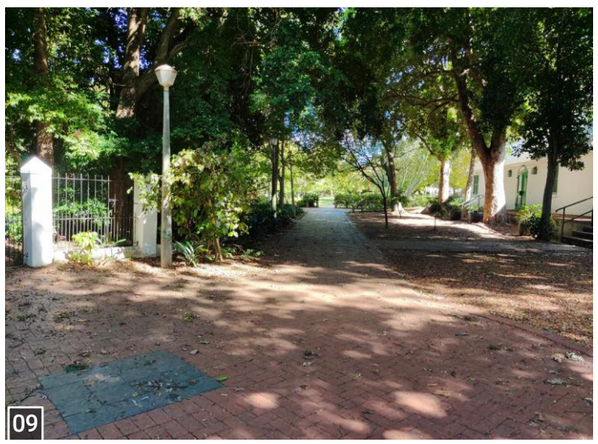


Figure 06, 07, 08, 09

Photograph of Maynardville park showing the play area, pond, Pavement/ expo space, Pathway outside the open-air theatre (top to bottom) taken by author.

Much like the renowned English Garden, characterised for its informality and its return to nature (Dutton, 1937), Maynardville Park shares many of these distinctive qualities. Maynardville exhibits an organic layout of meandering paths, a diverse array of vegetation, a lack of symmetry and pond in the middle of the park. Various structures within the park, including the bathrooms, the open-air theater, and the parks and recreation offices, bear a resemblance to the follies often found throughout a English Garden.

The park can be delineated into three distinct zones: the west side, which hosts informal activities; the open-air theater located to the north of this area; and the east side, which serves as the venue for carnivals and expos. The west side boasts ample shading, with the open-air theater nestled amidst a lush little jungle. This section maintains a vibrant year-round activity. In contrast, the east side remains a mostly barren expanse for the majority of the year. The play area of the park is quite safe as it is very regularly populated. However, some interviewees expressed concerns about the perceived safety of the South and East edges, even in the presence of security guards or police officers.
This discussion leads to an examination of the surrounding street edges of Maynardville Park. The Park is surrounded by four distinct roads - Church Street, Wolfe Street, Piers Road, and Glaren Road - each offering unique characteristics to consider. Church Street accommodates various religious and corporate buildings, but its busy and often congested nature is mainly due to the presence of the Wynberg Magistrates Court, attracting a notable amount of foot traffic. The street edges on the park's side are wide and are often occupied by parked cars. Wolfe Street has a commercial presence with an interactive street front that holds significant heritage value, attributed to its mix of residential and commercial properties. The street edges are small and closely packed, making it very human scale. Piers Road, although less interactive, is primarily residential and does not present the same level activity as Wolfe Street. Glaren Road is the least developed among the four surrounding streets, with much of its built environment having emerged after the 1950s (see fig 22). It is made up mainly of parking spaces, with the Wynberg Public Library sitting as an island in the middle of them. The presence of these parking spaces results in all the buildings being set back from the park's edge, offering no street-level interaction with the park.

Additionally, Glaren Road stands out as the only street without direct access to the park, except for the occasions when the gates are opened for carnivals or special events. In contrast, the other three streets - Church Street, Wolfe Street, and Piers Road - have several entrances along their edges, allowing for direct access to Maynardville Park. Given the distinctiveness of the conditions characterizing Glaren Road, it emerges as a more specific and appropriate site for this design inquiry. This paper looks to focus its architectural placement along this undeveloped urban edge, while considering the greater context of Maynardville Park and Wynberg. The diverse array of activities and interactions observed on the site forms the foundation of the theoretical themes explored in this paper.


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Figure 10, 11, 12, 13

Photograph of Church Street, Wolfe Street, Glaren road, and Piers Road (left to right) showing the various activity of street taken by author.

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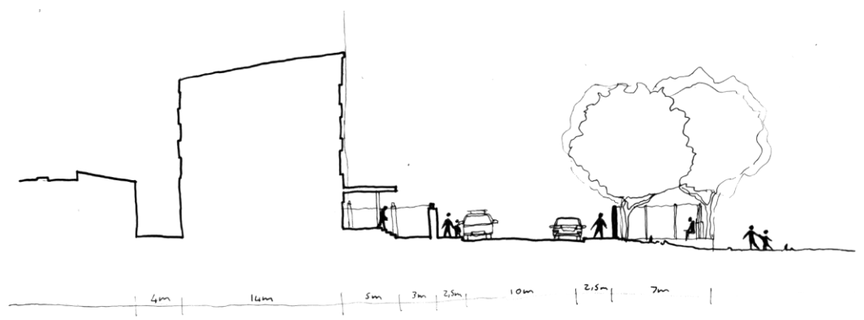

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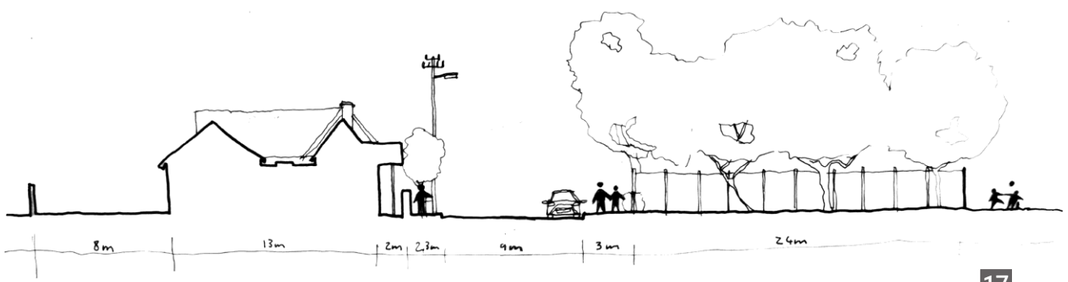

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Figure 14, 16

Photograph collage of Church Street and Wolfe Street (top to bottom) showing the edge conditions of each street.

Figure 15, 17

Cross Section of Church Street and Wolfe Street (top to bottom) showing the edge conditions.

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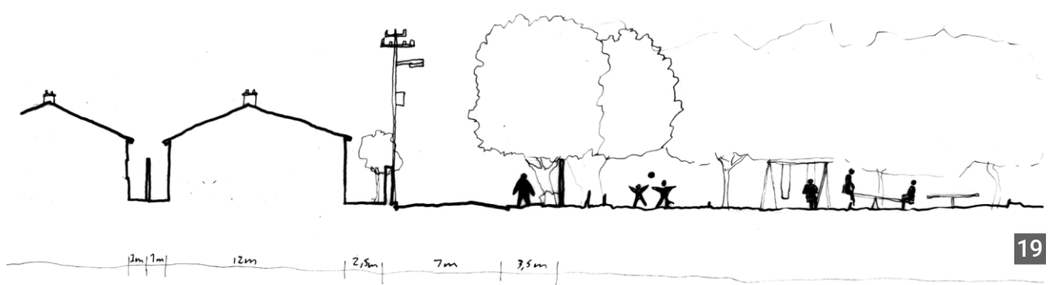

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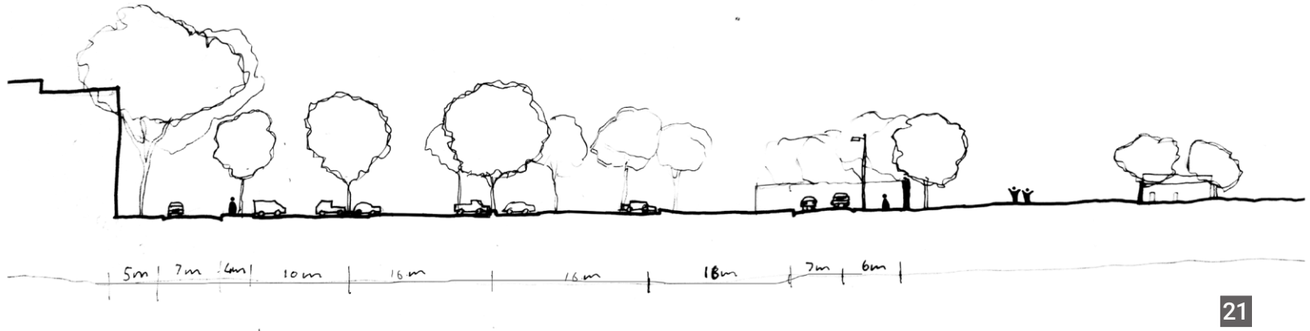

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Figure 18, 20

Photograph collage of Glaren road, and Piers Road (top to bottom) showing the edge conditions of each street.

Figure 19, 21

Cross Section of Piers Road and Glaren Road (top to bottom) showing the edge conditions.

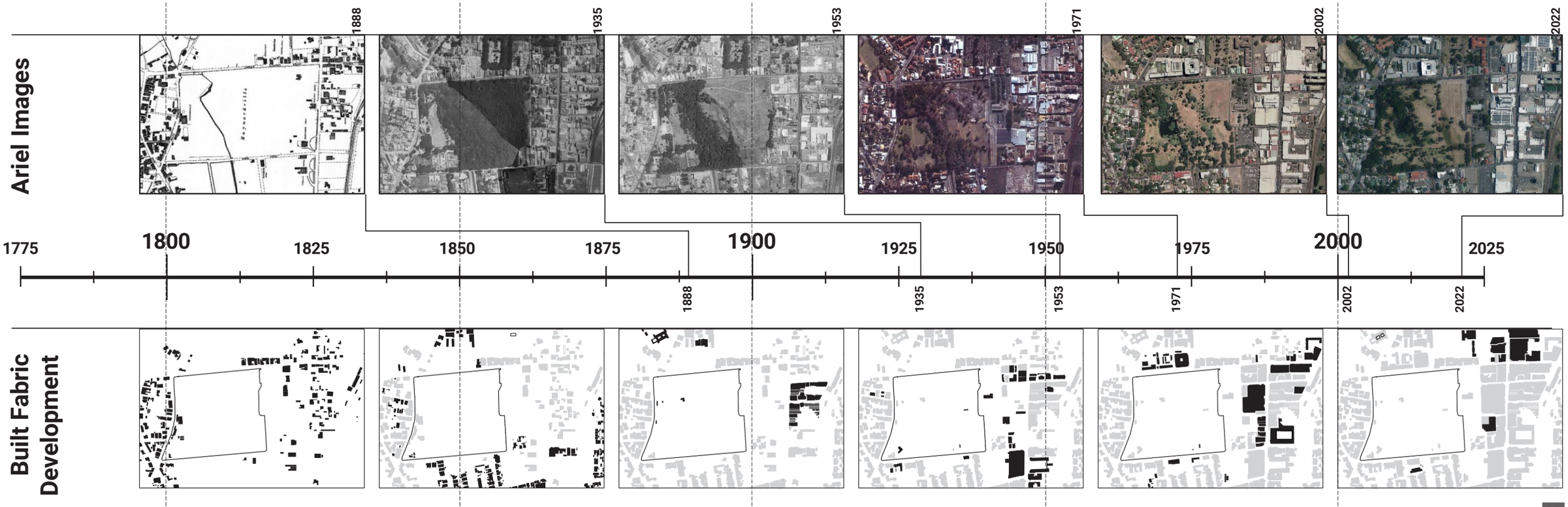


Figure 22

Diagram showing the physical development from 1888 until today done by author.

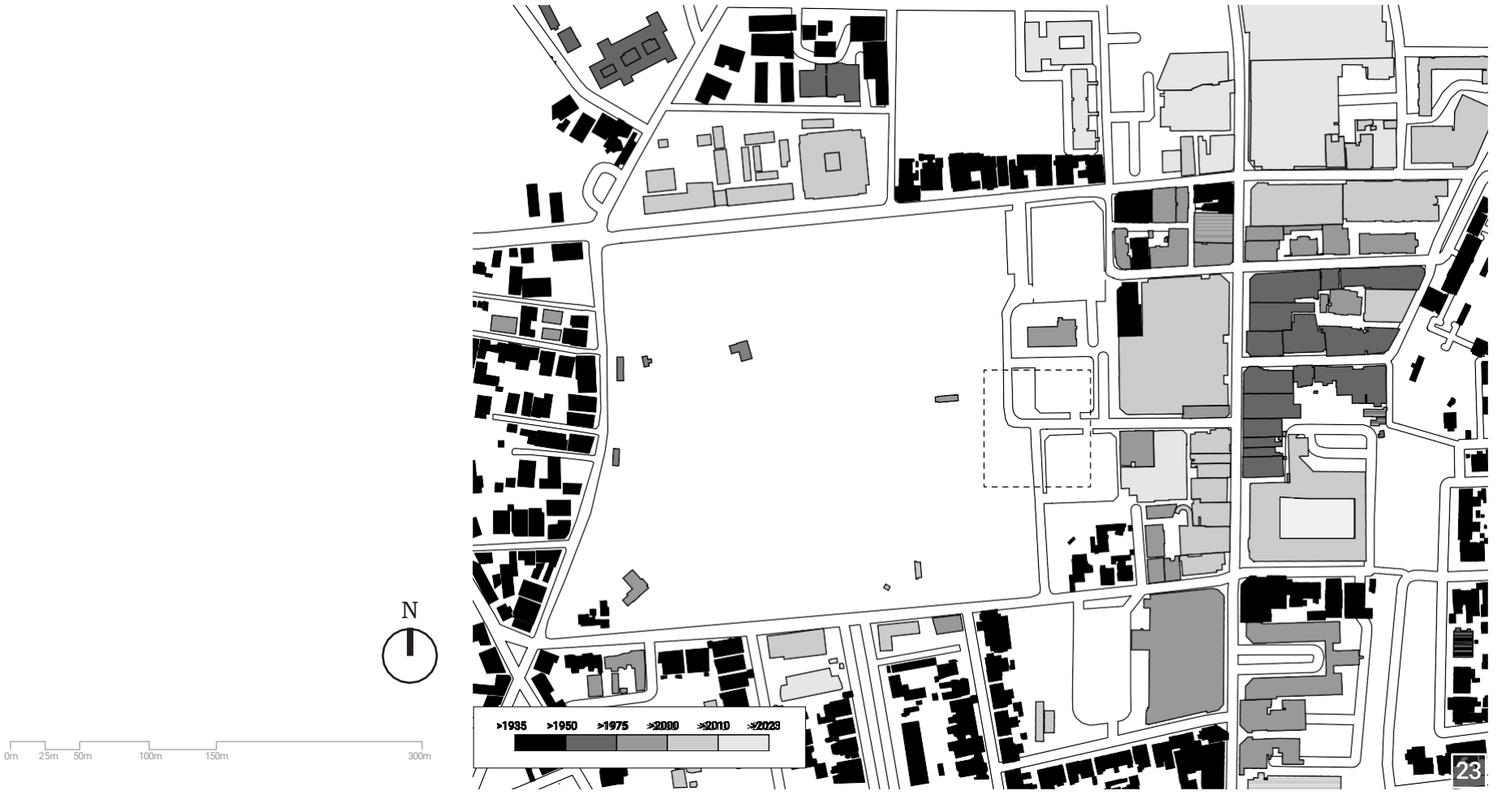


Figure 23

Diagram map showing the gradient of the physical development from 1888 until today done by author.

02

THEORY: DISCUSSION

Context

Understanding a site goes beyond just the observable physical fabric and activity. To provide a structured analysis in this paper, I will delve into three different yet interconnected aspects of a site. The first aspect, I've termed the "static site" because it does not move. This is the physical built fabric of the site. The second being the dynamic, which encompasses the social condition and life of the site. This refers to the inhabitants that use the space. Lastly, the third aspect is a mixture of the first two, the static that moves, referring to the temporary structures and organised events that inhabit the site occasionally. It is important to consider all three aspects as Maynardville Park accommodates diverse manifestations of each. However, their varying degrees of presence and interaction bestow different degrees of significance upon them.

While the built fabric appears to be a static object in space, it does act as the generator for the relationship between person and form. In the book, *Housing: a comparative evaluation of urbanism in Cape Town*, the author David Dewar believed that there is duality between man and his environment. Dewar writes, "man both influences his environment and total man (physical, economic, cultural, social, psychological man) is influenced by that environment" (Dewar, 1977:7). The environment we find ourselves in, whether it be positive or negative determines the limitations of a space. On the one hand an environment can act as an enabler for 'man' but on the other, it can also restrict the opportunities in a space.

The four roads surrounding Maynardville Park each contribute their own unique character and historical significance. The built fabric, barriers, and programmatic elements of each road shape and define their respective street edges in distinct ways. As a result, the performance and success of each street edge vary. Dewar continues in his book by highlighting his theoretical position for contributing factors that define and sustain an urban edge condition. While his analysis of Cape Town suburbs only looks at the physical conditions, they bring to light the various qualities and potentials of an environment. Dewar identifies the principles necessary to hold and achieve urbanity (Dewar, 1977:7-8). As a designer we observe and operate through a filter of understanding structure, function, process, and form. This allows us to understand a space in varying scales to understand how man operates at varying capacities. How is movement and access addressed, how does the site flow? Determining continuity by understanding what the barriers, enclosures, and connections of the site. What relationships can be found and do the spaces perform how they are designed to? What is the relationship to the street? Addressing these questions can be initiated through a comprehensive examination of these physical urban conditions of an environment (Dewar, 1977:9-14). In attempts to understand Maynardville Park and its urban condition, this paper can begin to determine what the successes are of the site.

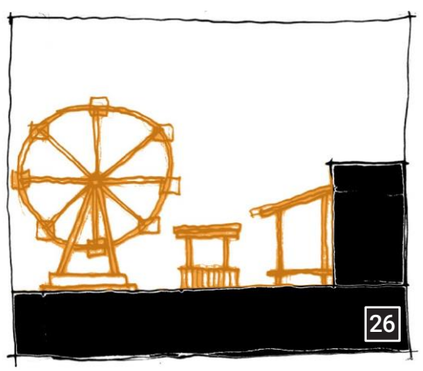
Henry Lefebvre in his book, *Rhythmanalysis: Space, Time, and Everyday Life*, introduces a useful lens to capture the essence of a site, this being the pulse of the place/site. This is what I have called the dynamic. Lefebvre advocates for us to perceive and understand the rhythms that flow within the site over time, providing insight into the patterns of life and activities that unfold in the everyday. From observing these rhythms, we can gain a deeper understanding of the social conditions and characteristics of the site. Lefebvre emphasizes the importance of acknowledging the diverse collage of rhythms that coexist within a context, from the sensory experiences of sound, sight, touch, and smell. Each of these collages help connect the user with the site and even how they remember it. Being conscience of one rhythm can infer another, fast rhythm implies there is a slow rhythm. Loud rhythms infer soft quiet rhythms and one can see how they can exist in harmony (Lefebvre, 2013). The collage of rhythms enables one to look at a site through a holistic perspective to understand a site as one context acting together.

The third potential aspect of a site combines the static and the dynamic. A form of built fabric that is not designed to last. Rahul Mehrotra in his book, *The kinetic city & other essays*, delves into the idea that many cities around the world, particularly in developing countries, are not built to last forever. Instead, they evolve and change over time in response to the needs of their inhabitants and the prevailing social, economic, and environmental conditions (Mehrotra, 2021).

Mehrotra in his one paper, *Conservation and Change*, talks about the concept of 'intense pluralism' in urban India, where contrasting elements coexist - modern and traditional architecture, prosperity and poverty, medieval and technological influences. He examines the dichotomy between the static city, characterized by monumental built structures representing diverse cultural identities, and the kinetic city, a dynamic realm pulsating with constant change and activities like vendors, weddings, and festivals. The kinetic city's vibrant, bazaar-like form is a stark contrast to the static city's colonial heritage. Festivals and vendors often attach themselves to historic municipal buildings or temples using temporary structures made from renewable materials like cloth and bamboo, which can be assembled and dismantled quickly (Mehrotra, 2007:342-346). Since Maynardville Park hosts various carnival events, this prompts the discussion around how architecture can support another type of event that is temporary intended not to last. These three distinct aspects of the site provide a framework for the design inquiry, informing the architectural response to the site's characteristics. The conceptual response is unpacked in the Application section.

Static Site

Dynamic Site



Kinetic Site

Figure 24, 25, 26

Diagram showing the static site, the dynamic site and the kinetic site (top to bottom) done by author.

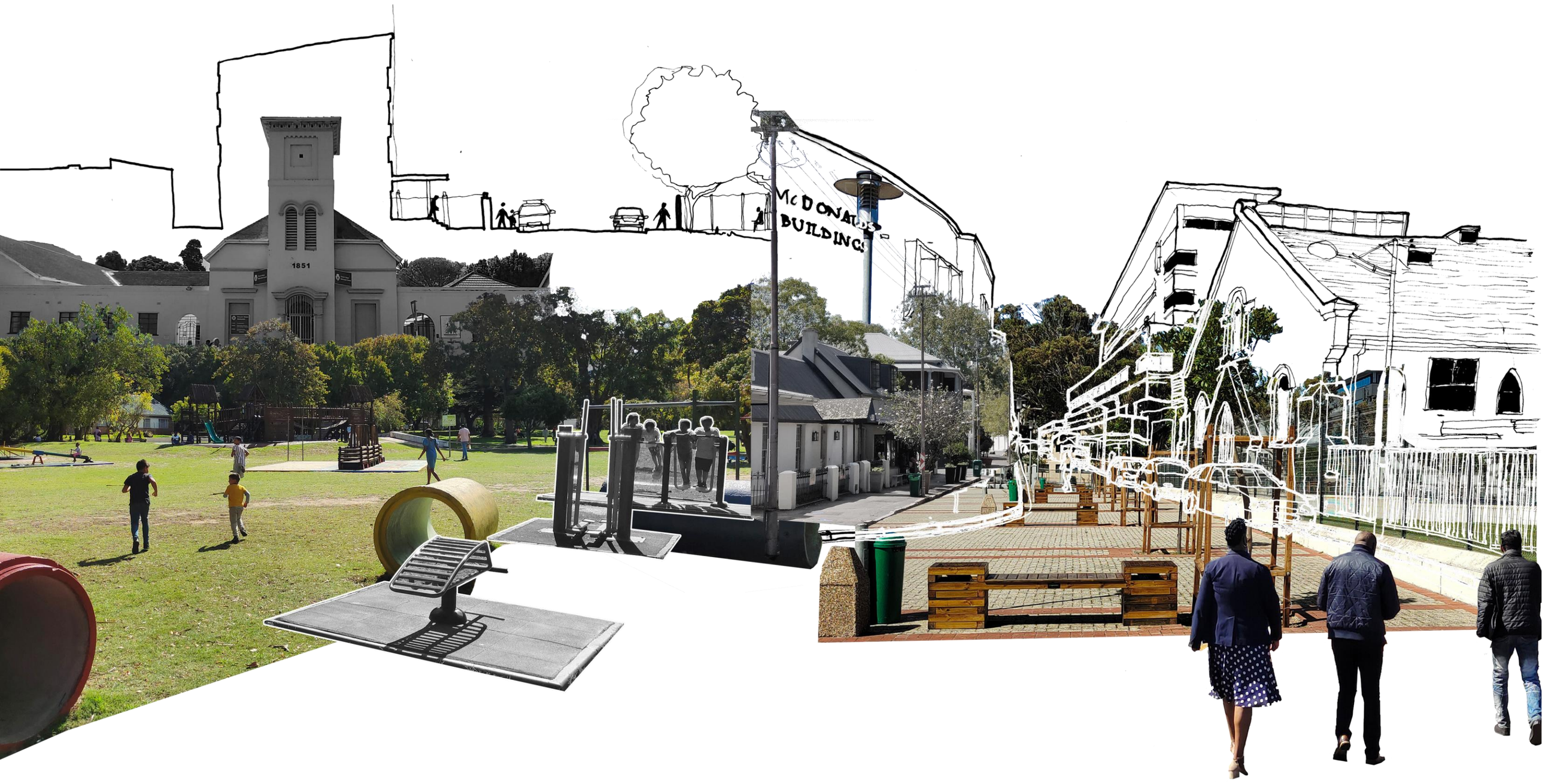


Figure 27

Photo collage of the life of Maynardville author.

Meaning

Mehrotra introduces the concept of constructing significance as a means to generate new identities within a space through the negotiation and accommodation of both the kinetic and static city. These new identities help to construct or maintain the cultural significance of a space (Mehrotra, 2007:352). Meaning in a space therefore comes from the valued interaction of the built form and people. In *The Production of Space*, Henri Lefebvre outlines three principles for understanding space by which he called them "spatial practice," "Representations of Space," and "Representational Space." He describes "representational space" as space that 'embodies complex symbols' (Lefebvre & Nicholson-Smith, 1999:33). It is a space that is given meaning by how a user (or group of users) understands a space to be lived in. The French architect and theorist, Bernard Tschumi, expands on these spatial principles from an architectural perspective in his paper titled "*Concept, Context, Content*." Tschumi refers to representational space as "content", which encompasses what people do in the space. Tschumi also explains that this content can be utilitarian or symbolic, implying that the content does not only refer to how a sites gets used but also what one associates with it. It is these two factors that either qualify or disqualify a site (Tschumi, 2005).

Figure 28

Diagram showing the aspects the create a sense of place in a public space done by Project for Public Spaces.

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Figure 29, 30

Images of the Medellín, Colombia Ariel tram case study taken by Project for Public Spaces

Mina Najafi and Mustafa Kamal Bin Mohd Shariff in their paper, *The Concept of Place and Sense of Place In Architectural Studies*, argue that it is the sense of 'placeness' that gives a space significance and that architects need to consider 'placeness' as a design objective for the users of a space. Najafi and Shariff define 'place' as a space where people find meaning, everlasting resonance, and familiarity. It is related to a feeling of safety and certainty within a space. The significance of these environments is determined by the experiences they evoke, encompassing not only their physical aspects but also their social and symbolic dimensions (Najafi & Shariff, 2011).

As an example, in one of the case studies, The Project for Public Space looks at an edge condition of the town Medellin in Columbia in their article, *Placemaking and the Future of Cities*. The town has an aerial tram system the runs above the street, giving access to the main subway system. Below this street an urban design initiative was developed to create plaza spaces, with vendor spaces, landscaping, and benches at the base of the support systems. As a result, the previously gang infested streets are more vibrant and a safe social space for local and external residents. Additionally, the nearby public service infrastructure like parks, sports fields, and libraries, now have easier access to these activated plaza spaces. This created a more desirable street which can be seen as a highly successful urban edge (Project for Public Spaces, 2012:17). Its meaning is developed through the now positive associations and activity taking place on the site. The plaza creates an opportunity of prosperity for the social character of Medellin.


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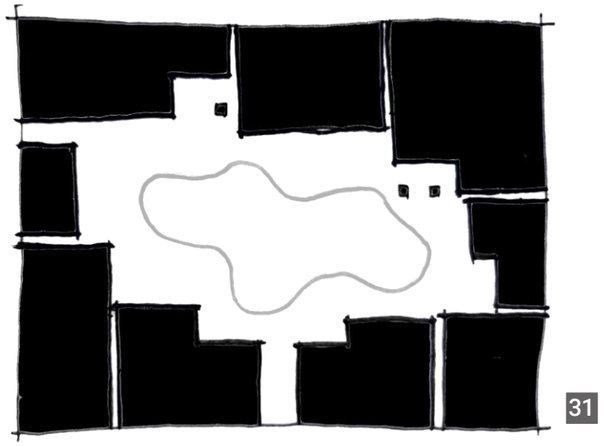
Edge & Void

When a space lack meaning or ‘placeness’ it can be labelled as a void within its context. A void in architecture can described in two ways; the physical and the abstract. The physical referring to the tangible barriers that create a space where an object is absent. The abstract referring to a space where emotion, meaning or information is absent. This implies that an empty space can still have significance in architecture if it is given meaning. Jason Eugen Giovanni Thuer and Sung-Taeg Nam describe these concepts in their article, *The collage of void versus solid: Ungers and Koolhaas*. This article looks in the works and positions held by Rem Koolhaas and Oswald Ungers about ‘voids’ in architecture (Thuer & Nam, 2023).

Koolhaas’ approach, in the *Melun-Sénart* competition, took the stance of design by looking at ‘where not to build’ rather than ‘where to build’. This can be understood as the ‘Swiss cheese’ method, where you are essentially subtracting from a context and proposing a type of undetermined intervention (Thuer & Nam, 2023:8-9). Here Koolhaas focuses on the void itself and its potential to be designed. Thuer and Nam continue conversations of alternate interpretations of the void by also looking into the works of Louis Khan, where he quotes “[it] is not a space unless you can see the evidence of how it was made. Then I like to call that a room” (Thuer & Nam, 2023:5). This suggests that a void is defined by what it is made up of, this being its edges. While both have different focuses, they still suggest that the relationship between the void and edge is what defines it. The Glaren Road edge condition, presents itself as void that must be defined by its edges. While the physical conditions of the voids immediate edges are for the most part un-interactive, the activities and functions of the nearby context begin to give some potential ‘meaning’ and ‘form’ to this edge.

Kevin Lynch defines the physical city as a series of overlapping images, each contributing to a person’s lasting impression of the city. These impressions are encapsulated in a mental map composed of one (or more) of five key elements: ‘Paths, edges, districts, nodes, and landmarks’. These elements do not exist in isolation; instead, they interrelate to shape our perception of the city. Lynch states that, “districts are structured with nodes, defined by edges, penetrated by paths, and sprinkled with landmarks” (Lynch: 1959:48- 49). Drawing from the research on street edges and the identified shortcomings of Glaren Road’s edge condition, the design inquiry concentrates on the creation of positive and interactive edges. Lynch defines an edge as linear elements that are not considered paths. Edges are not obvious barriers because they can act as boundaries between two areas or divide a space. They may not be immediately apparent, as an edge could manifest as a railroad, topography, or thoroughways. Similar to paths, edges guide people in specific directions and facilitate movement from one space to another. However, what sets edges apart is their capacity to foster interaction through their physical and visual attributes. An edge can either initiate movement or restrict it, it can create nodes or divert it. (Lynch, 1959). Thus, an edge plays an important role in relating two distinct spaces and activating these spaces through a visual or a physical connection.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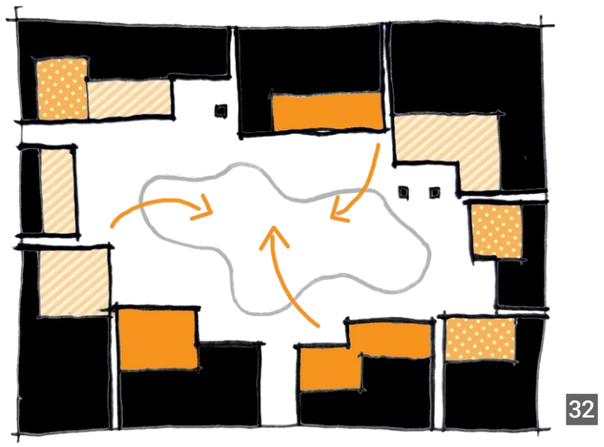
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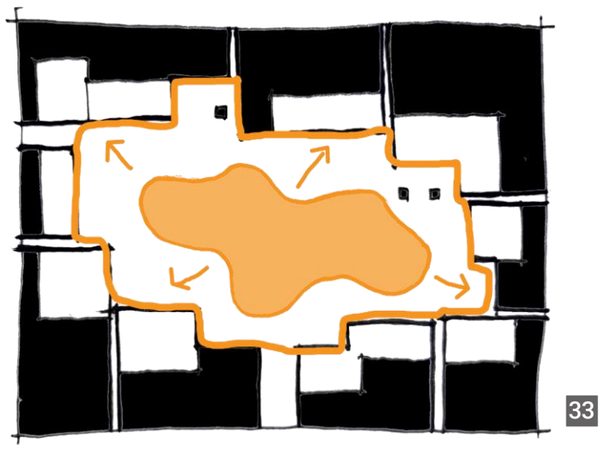
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Figure 31

Diagram representing the a plan of an edge and void done by author.

Figure 32

Diagram representing the edge giving meaning to a space that lacks objects done by author.

Figure 33

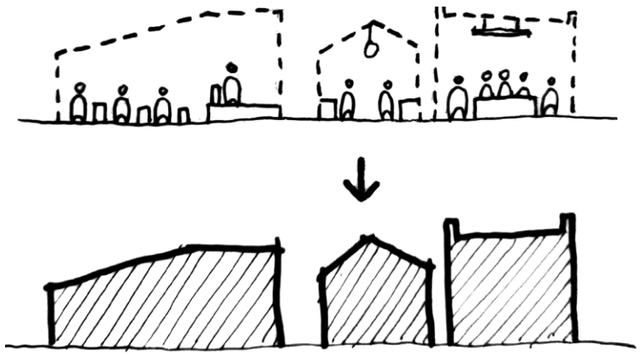
Diagram representing the void giving meaning to the surrounding edges of a space done by author..

Function

The term ‘function’ as an architectural concept has a diverse and often unclear interpretation, even during the functionalist movement, until it was contested by the Post-modernist Movement in the 1960s. This diversity in interpretation lead to the term ‘function’ having too vague of a meaning, and architects during this period gave mixed insights. Theorists and architects like Adrian Forty thus sought to have the term done away with in the architectural context (Poerschke, 2016).

Adrian Forty in one of his chapters of his book *Words and buildings: a vocabulary of modern architecture*, which he called Function, starts to define the word in different practises outside of architecture. Forty then explains, compared to other professions, it becomes more complicated and contested to use the word function within an architectural context. Some relate function to meaning, or to use, or to purpose, or a mixture between them all. As a result, defining the term became imprecise and pointless.

Forty later employs a study of the relationship of many organisms and their surroundings as an analogy. The relationship appeared to be unstable, however these organisms seem to attach themselves to their environment regardless of conditions. They appear to adapt to their context. This could be applied to the social process of people adapting to an environment that they find themselves in (Forty, 2000). The modernist ideology with its mono-purpose and singular vision for the architecture and the city did not do well to allow a city to grow and adapt within its social context.



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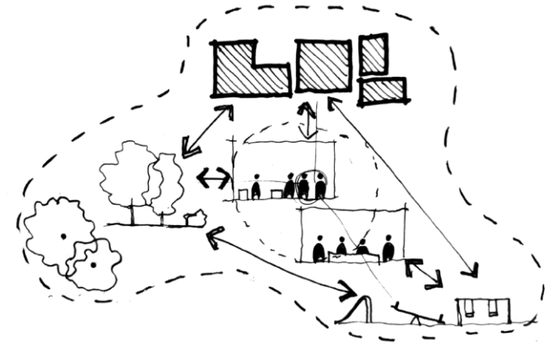

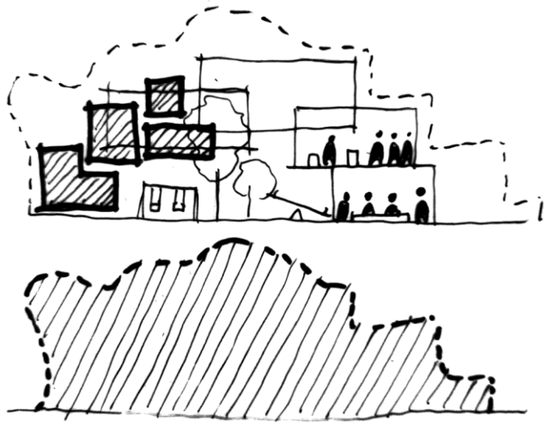

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Figure 34

Diagram representing the concept of ‘Form following Function’ done by author.

Figure 35

Diagram representing the concept of ‘programme’ as explored by Tschumi done by author.

Aldo Rossi in his book, *The architecture of the city*, suggests that function alone will not sustain a building because the form generally outlasts its function. Suggesting that one cannot define a building/artefact by its function but rather by its form (Rossi & Eisenman, 1982). Does this make function irrelevant in defining architecture? Not quite, as form alone also does not become an adequate term to define architecture. According to Bernard Tschumi while he does suggest that function becomes an insufficient concept to describe how a building is used, form is not solely left as the architectural device to replace 'function' as a way to give architecture meaning. In his book, *Architecture & Disjunction*, Tschumi challenges the concept of 'form follows function', where he argues that there is no architecture without action, no architecture without events, no architecture without program. There is a relationship between space and events (program) and building. Tschumi further explains that the term 'disjunction' in this paper refers to the apparent discourse between the expected and unexpected use of a building. There are some architectural projects that reject a specific program for a building but leave it open for the contextual use (Tschumi, 1996). Programme becomes the system of both the architecture, context and users all collaborating to create a successful and relevant building.

An example could be the Civic Centres around Cape Town. While one does not only associate these buildings with their form (having a distinctly prototyped style with their high pyramid roofs), it is also their flexibility to host various programs that make the building resonate with a community. These centres are often fully booked year-round and host a variety of events like weddings, dance classes, meetings etc (City of Cape Town, n.d.). This building is almost completely given over to the public to use the venue how they desire, with respects to the limits of what the building has to offer. A deeper level of relationships needs to be considered as Tschumi states, 'Programmatic context versus urban typology, urban typology versus spatial experience, spatial experience versus procedure' (Tschumi, 1996:147). The term 'programme' of a building takes into consideration event, space, action, movement and becomes a better term to define a building beyond its physical form.


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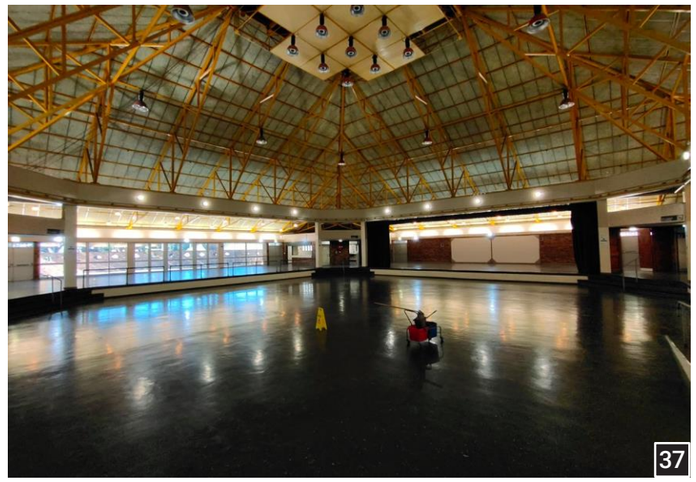
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Figure 36, 37

Exterior and interior photographs of the Wynberg Civic Centre (left to right) taken by author.

Continuity

Richard Buckminster Fuller in his book, *Operating Manual for the Spaceship Earth*, emphasises the approach to look at the greater systems of variables rather than focusing on each smaller system individually. Fuller stressed the importance for the synergies that make up the system of parts. He focused on the relationship of the 'parts' that all influence each other, as well as the degree of reliance among the parts (Fuller, 2008).

In a chapter titled Continuity, within his book *An American Architecture*, Frank Lloyd Wright discusses a new definition for the concept 'organic architecture.' Wright expands on a larger way of thinking about architecture that looks at material, construction and place making all as one entity which he calls 'continuity'. He challenges the typical 'post and beam' construction techniques by blurring the lines that differentiate a wall from and floor and ceiling. Wright explains that it is the way architecture is conceived and put together as whole in its sequence of actualising that makes architecture 'organic' (Wright, 1955). The concept develops the idea of achieving unity within a building, where all its constituent parts are designed and processed in harmony with each other. While Wright speaks of this idea at an architectural level, this concept can also extend to the urban level, where one must now consider a series of programs, spaces, and social significances within the design.

The position to harmonise the various historic and current entities of a context, promotes a form of cultural and social continuity. Colin Rowe in his book, Collage City, addresses the same modernist problem where the urbanists, designers, and architects all strive for a unified city. Rowe's *Collage City* advocates for a pluralistic type of architecture that resists the modernist objectives to unify the city through a singular vision, highlighting the difference between unity and harmony. It advocates for a city rather embracing a diverse array of architectural styles, historical layers, and social functions. (Rowe, 1978). Lefebvre's lens to perceive a context as a collage of rhythms are reinforced by these same positions. It is the collage of rhythms that work together that need to be preserved and the rhythms that are disruptive or disconnected create opportunity for intervention (Lefebvre, 2013).

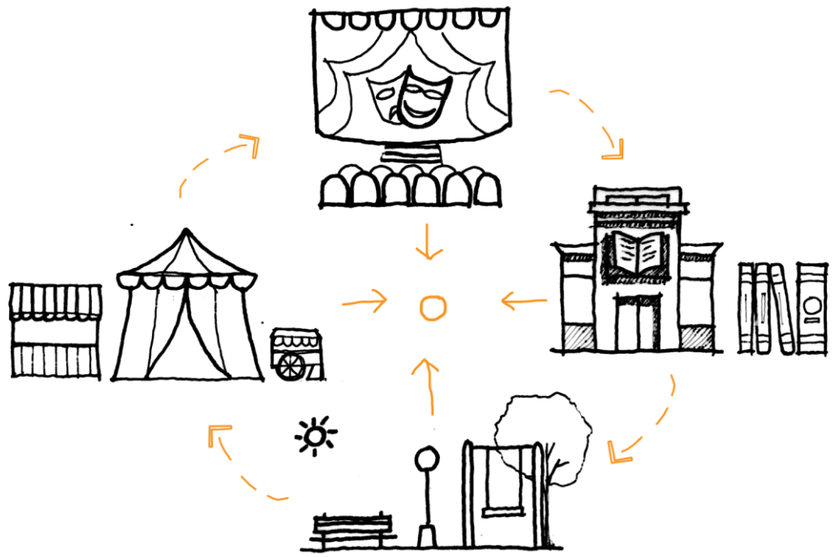
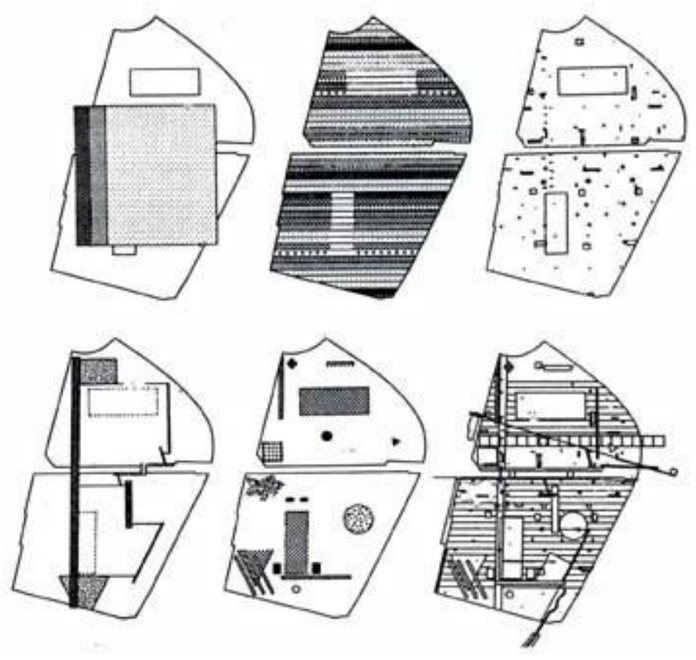


Figure 38

Diagram of the various programmes around Maynardville Park that all occur in proximity of one another done by author.

This discussion lends itself to the design intentions and strategies of Bernard Tschumi and OMA in their competition entries for the *Parc de la Villette* competition. The project involved the reimagining of an old slaughterhouse and the surrounding land, a task made particularly demanding due to the extensive programmatic and cultural requirements. This resulted in both entries being very complex and noteworthy. Both approaches (although very different) sought to address these complexities in layers of urban analysis and intervention.

OMA addressed the site's demands by not designing a park but rather introducing a staged process of design. Their proposal first focused on organizing the programmatic requirements into linear bands. They then introduced various architectural follies in a grid layout around the park site, followed by the incorporation of a circular forest element. OMA's design further featured a primary path for movement and circulation and culminated in the introduction of superimpositions, overlaying all these layers. OMA intended for the park to be generated through the juxtaposition of architectural intervention and programmatic instability (Koolhaas, 1998). Tschumi (the winner of the project) had some similarities in his approach where the proposal also involved a superimposition of various layer of sort. Tschumi's proposal broke up his scheme into three layers of strategic paths routes, unplanned lawn areas and a grid of follies. This proposal however did not propose specific programmes but left it up the users of the park. The grid of follies was nonspecific in their use and could host a wide array of events (Tschumi, 2012). OMA's proposal found that it was the found points of intersection of the various layers of his scheme (programme, movement, follies) to be what brought life to this project. Tschumi's proposal used the various layers to organise his scheme, while the diverse array of flexible follies with flexible lawn space could enable the desires of the users, relying on a level of user agency to activate his scheme.



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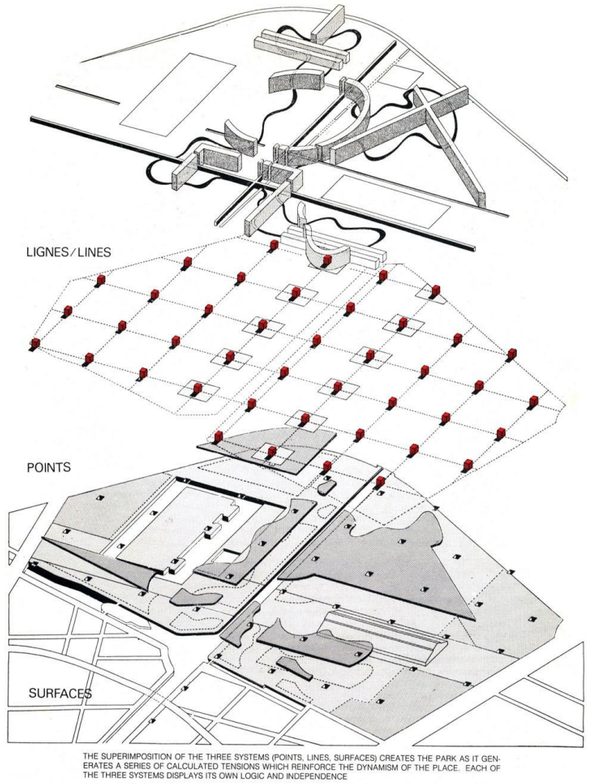

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Figure 39

Site proposal layers of OMA's 'Parc de la Villette' Competition entry by Rem Koolhaas

Figure 40

Site proposal layers of Bernard Tshumi's 'Parc de la Villette' Competition entry.

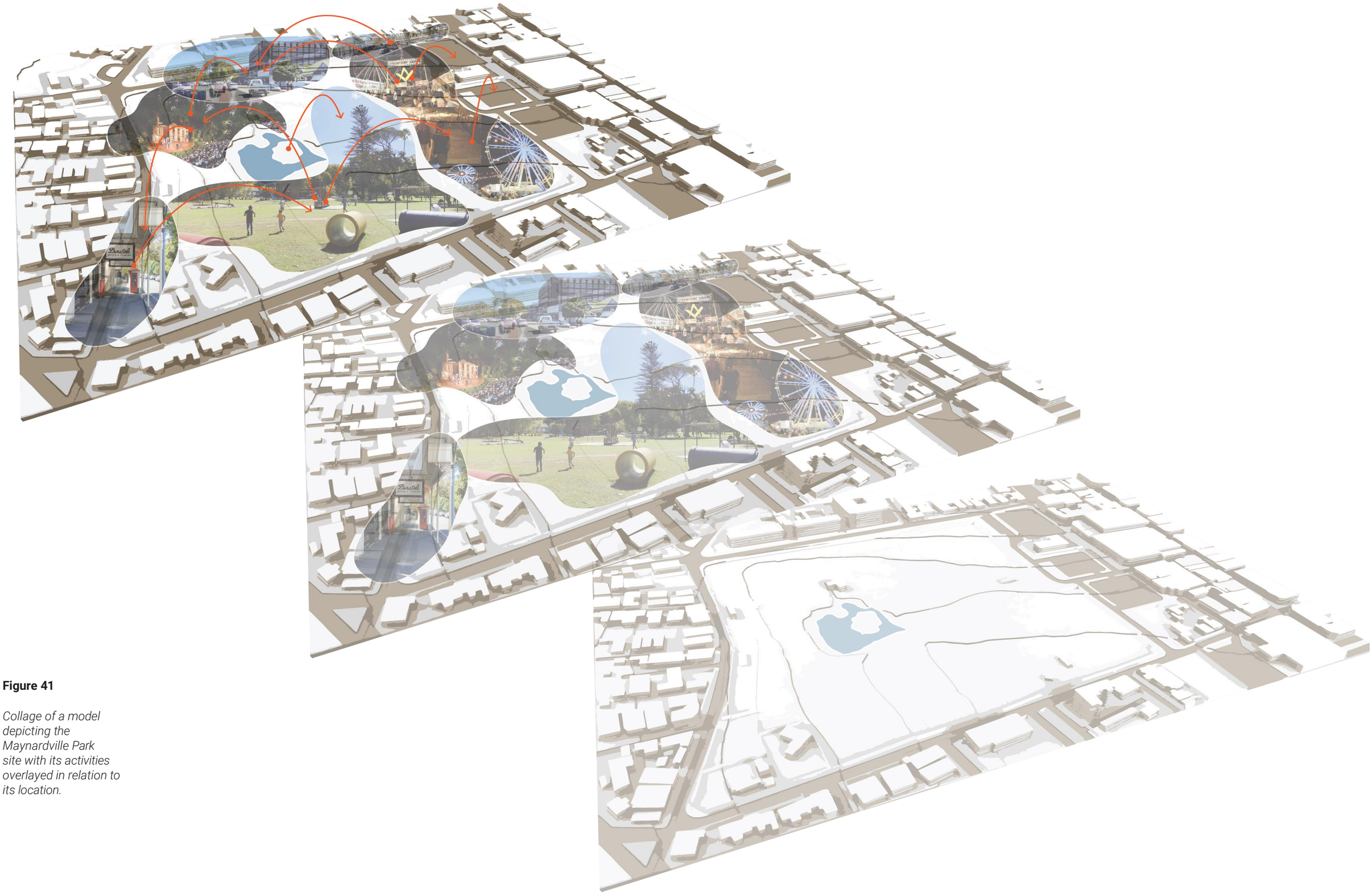

Figure 41

Collage of a model depicting the Maynardville Park site with its activities overlayed in relation to its location.

Adaptive & Responsive

Rem Koolhaas in his paper *Whatever happened to Urbanism*, holds a position of designing for uncertainty. This came after his contestation of the type of architecture 'modernisation' produced. Arguing that modernism just made buildings that addressed a singular directive, and this type of architecture does not allow for an urbanism that considers many moving parts (as Fuller argues). It is just architecture that 'defines, excludes, limits, separates from the "rest"'. It is architecture without urbanism (Koolhaas, 1995:29). Koolhaas believed that planners, urbanists, and architects all focused their attention on matters that could not be solved due to the inevitable outcome that they too become criticised and redundant (Koolhaas, 1995).

OMA's 1985, competition entry for Ville Nouvelle *Melun-Sénart* (as briefly mentioned earlier in this paper) attempts to address these problems Koolhaas mentions in his paper. The competition entry proposes a masterplan scheme that focuses on the undesigned. It develops a framework that leaves spaces of the site open and undetermined. It is 'a project that focuses on what not to build and where not to build' (Jang, 2018). The scheme emerged of out a client that had an exhaustive number of demands. The scheme offers a framework for programs as it still proposes certain programs, they act as placeholders and are open to negotiation. The dangers of an 'undesigned' space arises when a user or client is given too much freedom to do what they desire, but nothing is actualised due to a vacuum of possibilities. Koolhaas also believed that a certain level of curation is required, where an architect still needs to provide systems to support the various programs (Koolhaas, 1995).

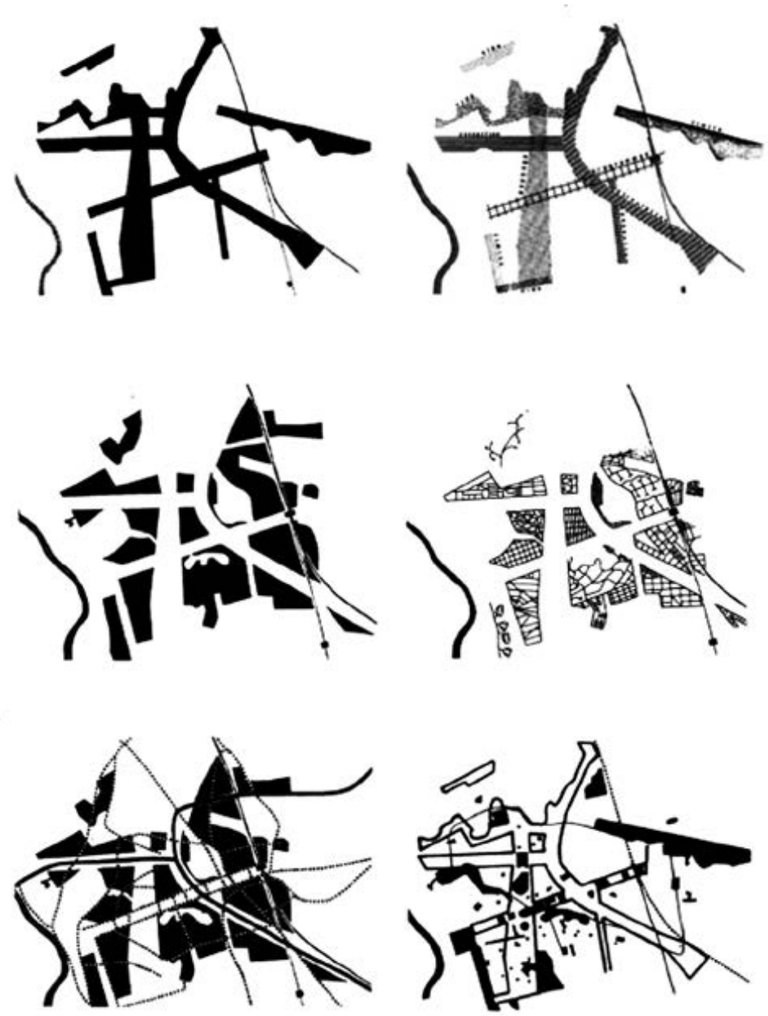

Figure 42

OMA's "Ville Nouvelle Melun-Sénart," via Six Canonical Projects by Rem Koolhaas

The concept of the *'Non-plan'* as introduced by authors, Reyner Banham, Paul Barker, Peter Hall and Cedric Price (specifically looking at Cedric Price's work) emphasises the importance of flexibility, adaptability, and responsiveness in urban design. The concept aimed to provide a framework that facilitated continuous change and user participation. This arose out of the notion where Price felt that cities did not respond well to the complex and ever-changing needs of their inhabitants because designs were too definitive and absolute. Thus, as a response, the 'non-plan' concept introduced a scheme where rather than a pre-determined design, it proposed open adaptable spaces. The concept also emphasised the need for user participation, as Price believed user agency was crucial to a city remaining relevant. A user-centred design approach where local knowledge, community involvement and individual empowerment is all taking into consideration insures continual evolution of the city (Banham, et al., 1969).

Cedric Price delved into the concept of the 'non-plan' at an architectural level, introducing the notion of 'anticipatory architecture' in his books, *The Square Book* and *Opera*. These concepts were quite revolutionary for the time and Price continued to apply them to many of his architectural projects. Most notability his project, 'Fun palace' which was conceived in 1961, was the most successful design concept at incorporating these principles. The project looked to create a more inclusive, interactive, and participatory environment that broke down disciplinary barriers. With emphasis on its flexibility, the Fun Palace sort to cater for a diverse range of users and activities that were able to adapt and respond to the changing needs of the user. The project also became revolutionary in its introduction to explore modular and temporary technologies within in its structural design (Price, 2003:53-62). However, this project faced a similar problem to the Ville Nouvelle Melun-Sénart as it offered too many possibilities for any user to create a recognisable place one could resonate with (Goldhagen & Lagault, 2000:128).

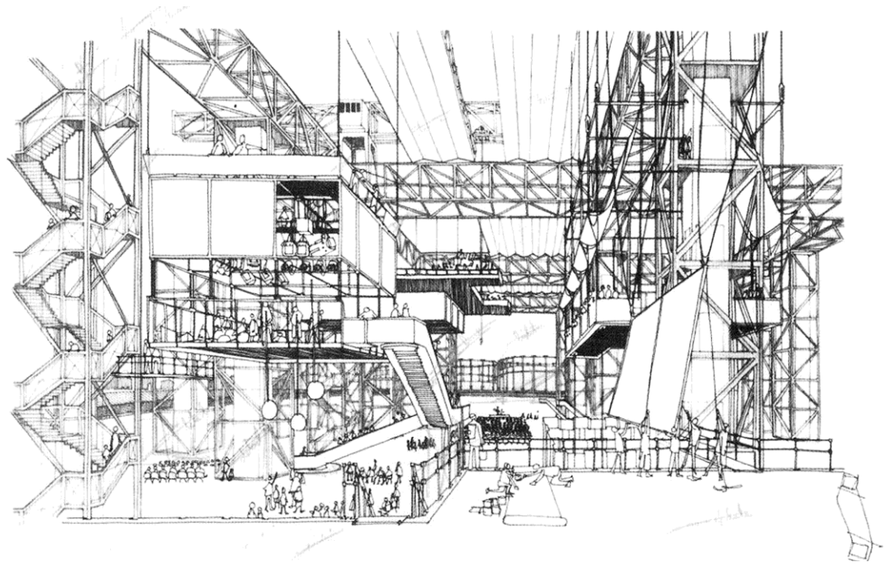

Figure 43

Perspective drawings of the Fun Palace by Cedric Price

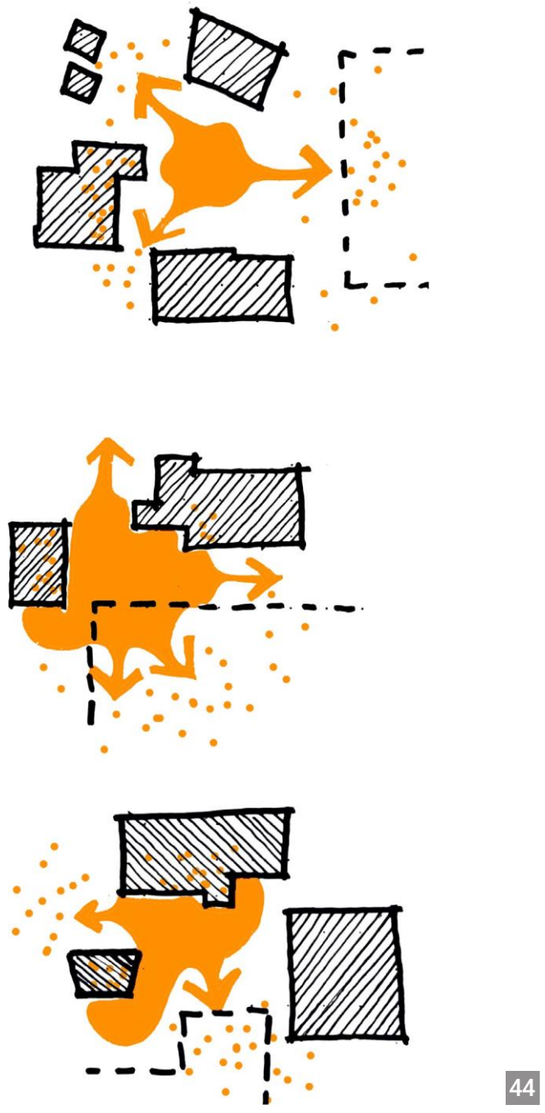

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Figure 44

Conceptual sketch depicting how an architecture can mould and adapt itself to its surroundings while being undisruptive. Diagram done by author.

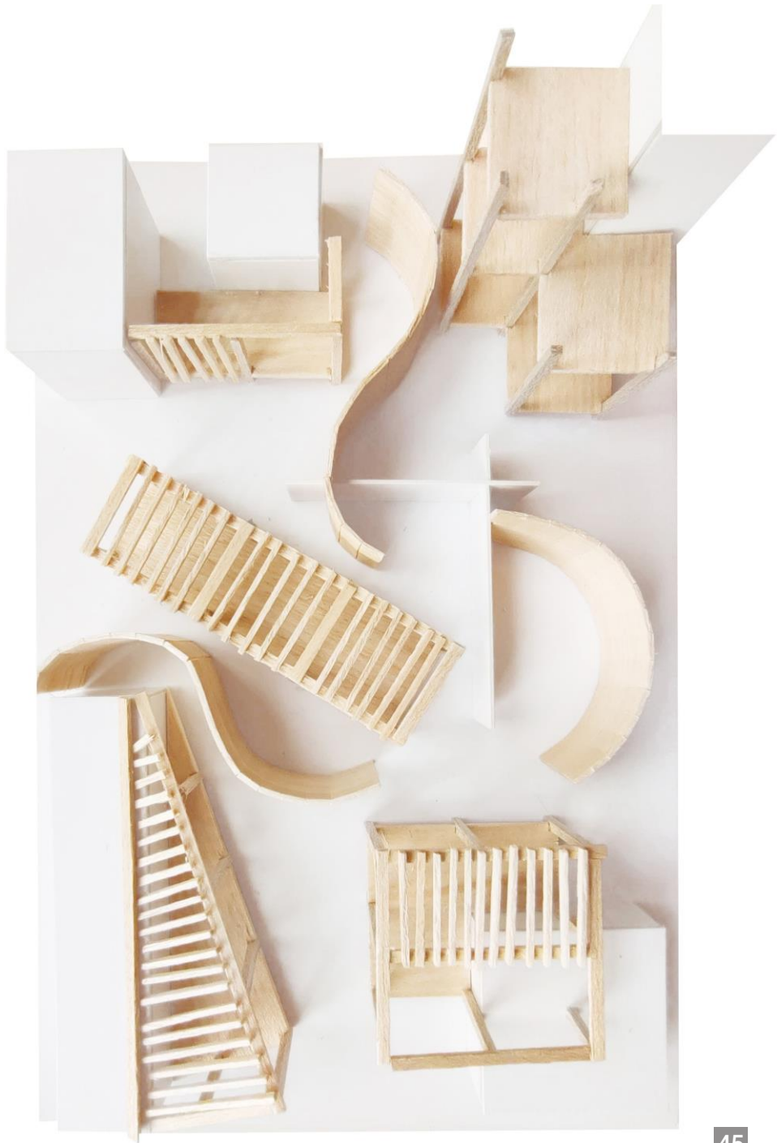

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Figure 45

Photograph of the Archi maki 01 which is study model depicting two types on architectures. The balsa wood elements represent a temporary lightweight architecture that attaches itself to the white triplex with represents a permanent architecture that has established itself in a context. The balsa aims to complement the triplex's existing form in a harmonious way. Diagram done by author.

N. John Habraken, a Dutch architect and theorist, introduces a similar concept of adaptable architecture and user participation which he called ‘Open building’ in his book *Supports: An Alternative to Mass Housing*. Open building held design principles that broke up a building into two distinct layers, the support structure, and the infill elements. The support structure refers to the permanent elements of a building, like the structural frames, floor slabs and service cores. These elements do not possess the ability to be removed, changed, or adapted in any convenient or safe way. The infill structure refers to partitions and non-load baring structure. Habraken makes the point that it is the infill structure that shape and facilitate the furniture and activity of a space. Thus, in having the infill structure be flexible and adaptable, the user of this space can then change the programme of a space to facilitate their ever-changing desires (Habraken, 1972).

Habraken states that “The purpose of design for flexibility by whatever name is to enable individual control in an otherwise collective environment. The concept of distribution of control, therefore, is at the roots of flexible architecture” (Habraken, 2008:293). This suggests that the architecture should create an environment that encourages change and user participation, by distributing the control and influence one has on a space. Relevant architecture no longer follows the traditional process where the architect formulates an absolute design that users must adapt to. Instead, it embraces a more user-centric approach, wherein architects offer opportunities for users to actively participate in shaping and customizing the design according to their desires and preferences. A desirable, flexible, and personal design for a user.

A coherent thread can be discerned through the various precedents and examples discussed in the sections above, including the Medellin case study, Cape Town’s Civic centres, the *Parc da le Villette* entries, The Fun Palace and Habraken’s theories. All these examples to their own degree reinforce Dewars positions where he states that architecture is an enabler of man’s potential. These precedents collectively emphasize that, as architects, our role is not limited to designing for specific programs, but rather, we craft curated spaces that have the capacity to accommodate a diverse array of events and activities.. The set of events can be categorised and organised in themselves but need to be flexible enough to change with the desires of man. User agency is required for all types of architecture to be socially and physically sustainable.

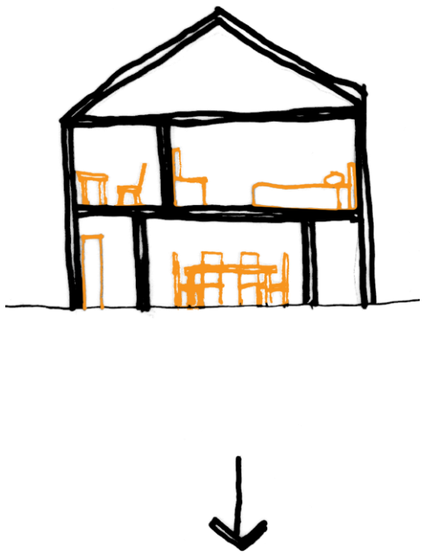


Figure 46

Diagram representing Habraken’s Support and Infill structure concept. The orange in the left diagram depicts the infill content in a typical house like the furniture and the orange in the right diagram depicts internal walls acting as movable and adaptable ‘infill’ structure like furniture. Diagram done by author.

03

TECHNOLOGY

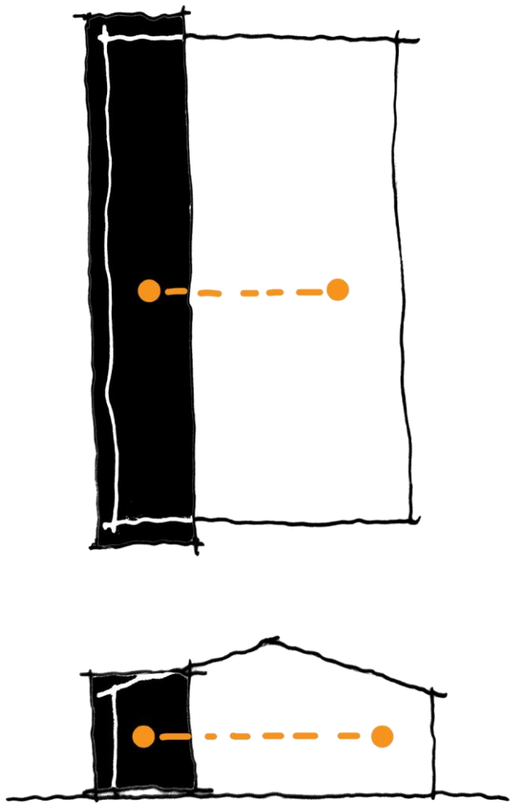
The technology exploration of this paper will unpack mixed-use auditorium spaces through the framework of contextualised social programme and influence. Throughout this paper, the site of Maynardville has served as a guiding consideration for the topics explored and discussed. In focusing on the edge conditions of Glaren Road, the programmatic demands of this specific site require a space that can house a variety of events. Thus, this section of the paper delves into case studies that show the versatility of this typology and how it addresses issues discussed in the preceding section. It considers the proposed design position, presenting how this typology can address and respond to the mentioned challenges through the discussed concepts of significance, harmony and flexibility.

Auditoria

In their chapter on '*Auditoria*,' Ian Appleton and Stefanie Fischer write that "the three-dimensional volume of an auditorium is conditioned by the need for all members of the audience to be able to see the whole of the platform or stage; and to hear the actor, singer, musician or speaker" (Appleton et al., 2018:520). This definition implies a space should be open planned, flexible, and uninterrupted by permanent structure. Consequently, such auditoria can accommodate various types of events and programs efficiently due to their open floor plans. This typology provides a spatial design logical in event spaces that remains consistent throughout most precedents. Where are private and public spaces, the service and served spaces, and what is the scale and positional relationship of these types of spaces.

This typology necessitates secondary spaces that house the service programmes therefore, it also needs consideration in the structural and programmatic design conception. Auditoria type structures are particular in that they require a specific type of architectural design accommodating large spans to support roofs or floors. This is not an exhaustive list of considerations for auditoriums; however, these are the specific considerations focused on in this paper. These characteristics will be explored in various case studies in relation to the themes introduced.

Auditoria Spatial Diagram



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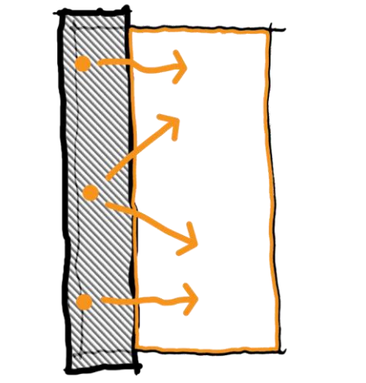

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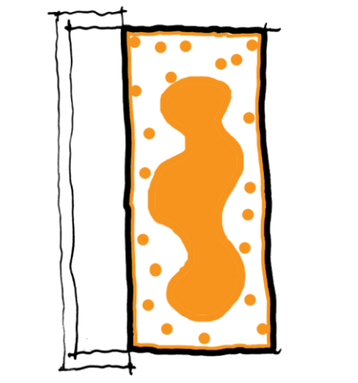

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Figure 47

Spatial diagram showing the showing comparing the service space (black) with the exhibition space (white). Diagram done by author.

Figure 48, 49

Diagram 45 shows the service spaces as fixed and grounding that aims to service the exhibition. Diagram 46 shows the flexible openness of the exhibition space. This is where the main activity of the building occurs. Diagram done by author.

Case studies: Spans

This next section explores the structural theme of spans and the capabilities of specific materials at achieving these spans. While there are many good examples of auditoriums where the roof/floor structure is constructed out of all tension bearing materials (timber, concrete, steel), I will be focusing this study on steel and timber for its structurally lightweight capacities. Timber also resonates at an aesthetic level with the natural context of the park which makes it an excellent consideration. Due to the strength to weight efficiencies and mechanical versatilities, steel also needs to be explored as a viable option (Appleton et al., 2018:628-676). Typically, these materials come in a variety of profiles that vary in shape, size, and thickness. These variants determine the structural span of these materials. The criterion for achieving a span is defined by the materials' ability to adequately withstand the designed load without experiencing buckling, bending, or breakage (Appleton et al., 2018:678-686). These formations do have lower span limitations for how they perform as a singular element, but when used in a truss, space truss or space frame system their span capabilities are greatly increased (Sanaker et al.,2011). The following two case studies focus their technological exploration around the structural systems used to achieve their span.

Figure 50 & 51

Interior and exterior images of the Congress and Exhibition Centre by Studio Bressan.

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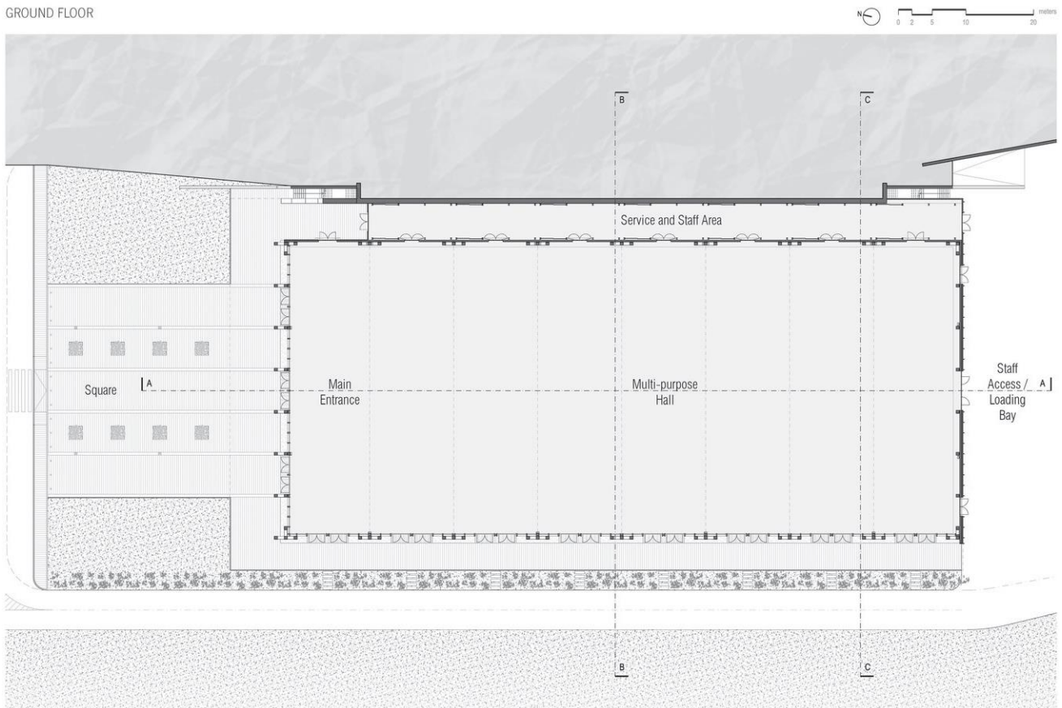
51

The Congress and Exhibition Centre

The Congress and Exhibition Centre, located in Agordo Italy, was designed by Studio Botter and Studio Bressan. The project is located in an industrial area in between the urban context and natural context. The centre is designed to host a variety of functions like concerts, theatrical performances, conventions, conferences, art exhibitions and expos. The design layout is open plan auditorium space that has its service/staff area located on the east edge of the building. The buildings materiality is almost completely constructed from timber and glass. The form of the building presents a zig zag roof with large cantilevers to maximise shading for generous use of glazing (Studio Bresson, 2018).

This centre makes use of a timber truss and column system as its structural members. This structural system uses laminated timber system which allows the truss to be constructed from multiple timber planks so that it is not restricted by the length the of the standardised plank (fig. 58). These members vary in profile size, (I do not have the specific size members for this project but calculated proportionally) with a thickness (Width) of about 450-500mm. The bottom and top cords (650-700mm depth) house the web frame members (450-400mm W). The whole truss system (5 m depth) uses a typical Pratt Truss system with the laminated member put together by steel bolt and nut joints (fig. 57). The truss system allows the building to span 44.80m without any structural members (fig. 56).

With these dimensions in mind, this building's generous span and truss depth and lack of ceiling accentuate the scale of the building, making the user feel small. It is the zig zag form, scale, and natural choice of material that allow the building to resonate with its surrounding mountainous context. The configuration of the structural design also resembles the local Alpine typologies in the context (Studio Bresson, 2018). Here the choice of timber necessitates larger structural members which work in favour for the objective to create a large sense of scale. The design of this building, beyond its ability to facilitate various events, also facilitates a contextual resonance through it scale and materiality. The building achieves a contextual harmony by responding to both the landscape and urban context in its form. Being typical in most exhibition centres, this project is no exception in facilitating a range of programmes determined by needs and desired of the local community.



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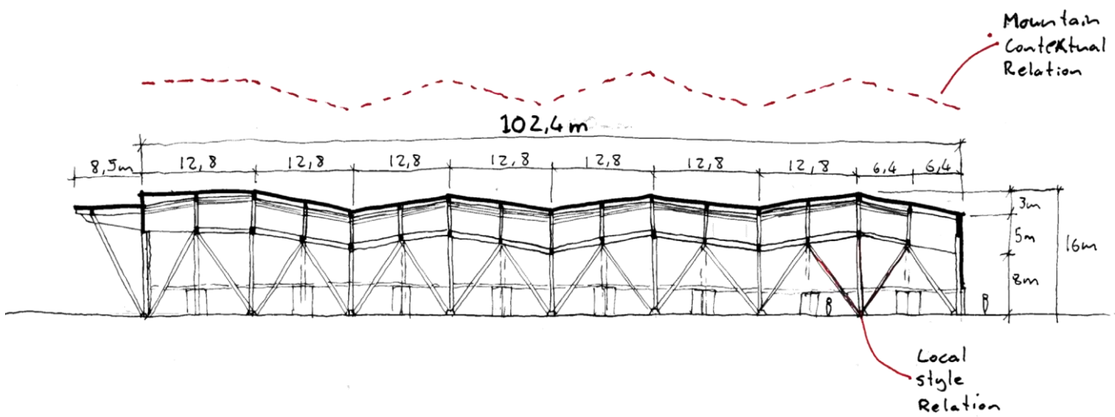

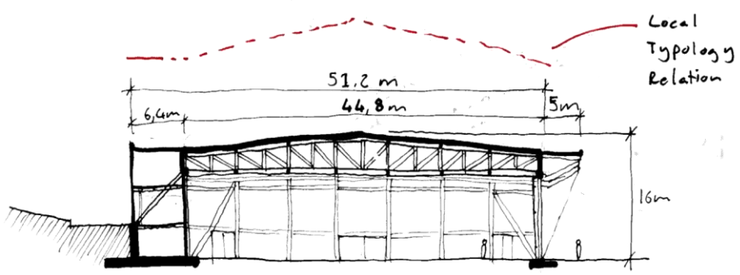

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Figure 52

Ground Plan of the Congress and Exhibition Centre done by Studio Bressan.

Figure 53

Long and Short section drawing showing the size and span of the Congress and Exhibition Centre done by author.

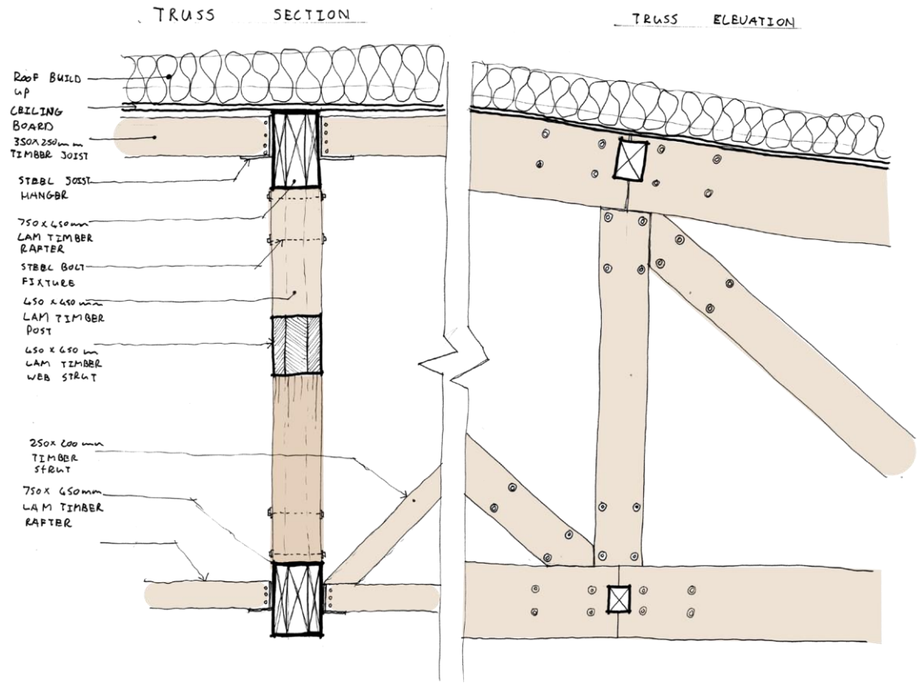

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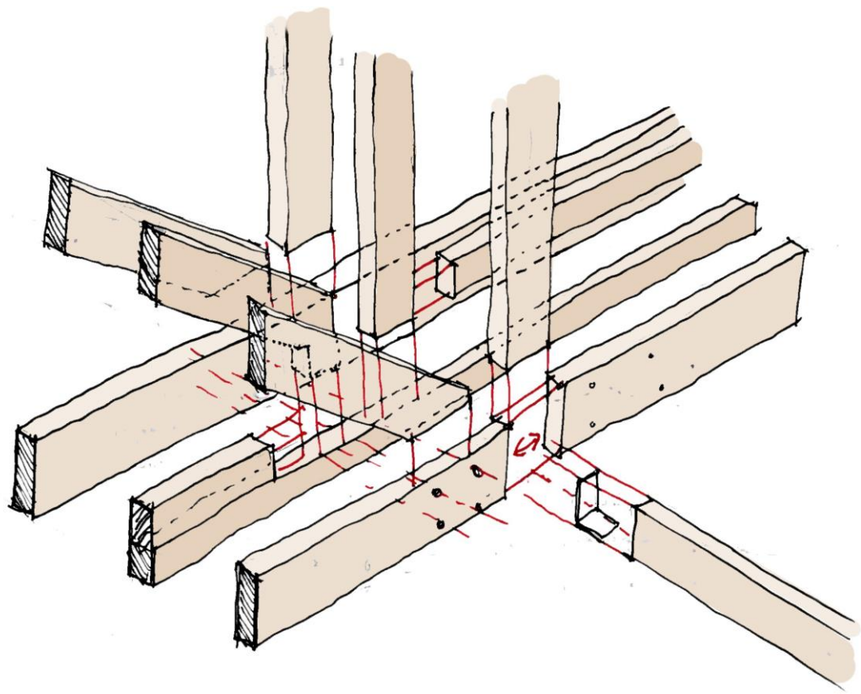
Figure 54

Detail drawings showing the timber truss in section and elevation done by author



55

Figure 55

Assembly drawings of the laminated timber truss done by author.

The MEETT Toulouse Exhibition and Convention

The MEETT Toulouse Exhibition and Convention Centre, located in Aussonne, France was designed by OMA Architects. The project (like the previous case study) is also located in an industrial area near the French Toulouse-Blagnac airport and the Aeroscopia Museum. Like its neighbouring context the architecture of this project resembles a warehouse and hanger typology. The project consists of 3 main building, the Conference Hall, the Exhibition Hall, and Parking lot.

With the Conference Hall and Exhibition Hall both exhibiting a similar architectural design language, this section will refer to just the Exhibition Hall building. This hall (700m length and 60m width) offers 7 different modular halls that are all open plan spaces with the internal structure occurring at each division. Each span is measured across each division which vary in size, with the largest span being 52 metres (fig. 63). In these division the hall provides modular movable doors to either divide or open up these spaces (OMA, 2020). This roof system makes use of a space frame system which can be understood as a network of interlocking members arranged in a 3-dementional configuration. This allows for the load of the structures to be distributed to the joints of these steel members (Sanaker et al., 2011:235-237). This project makes use of straight circular profile (200mm Ø) steel members that are put together in 3m x 3m triangular cell systems, making the depth of the truss also 3 metres high (fig. 65). The joints make use of circular steel joints to allow for connections at all angles as each joint receives ± 8 connections. These trusses are received by cylindrical steel tree-like column at each end of the span occurring at every bay of the hall (OMA, 2020).

The space frame system also allows for expansion as steel members can endlessly be added to continue the roof system (given that vertical supports are also implemented). It is this design choice that promotes an architecture that is flexible and adaptable, allowing for multiple programs and potential future programs to take place under one roof. Considering the nearby industrial context this project exhibits a contextual awareness and consideration through its scale, materiality, and form. Like the Studio Botter and Studio Bressan's case study, a continuity is achieved through a contextual harmony. In this case study is it also achieved through its ability to be timeless and remain relevant. Given the structural design choice and the projects flexible programme the potential for this project to expand, develop, and adapt becomes a possibility.

The precedent intends to show an extreme example of span potentials using timber and steel roof construction, by also implying that smaller spans require less structural material build-up. While both precedents function the same programmatically (in essence) and respond contextually in some way, they do perform differently in their tectonics. The Congress and Exhibition Centre could be argued to celebrate its material systems and construction. While the MEETT Toulouse puts more emphasis on its ability to be modular and scalable.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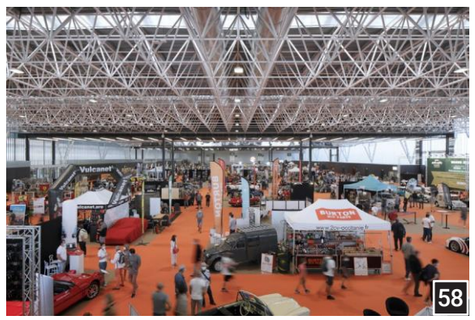


58

Figure 56

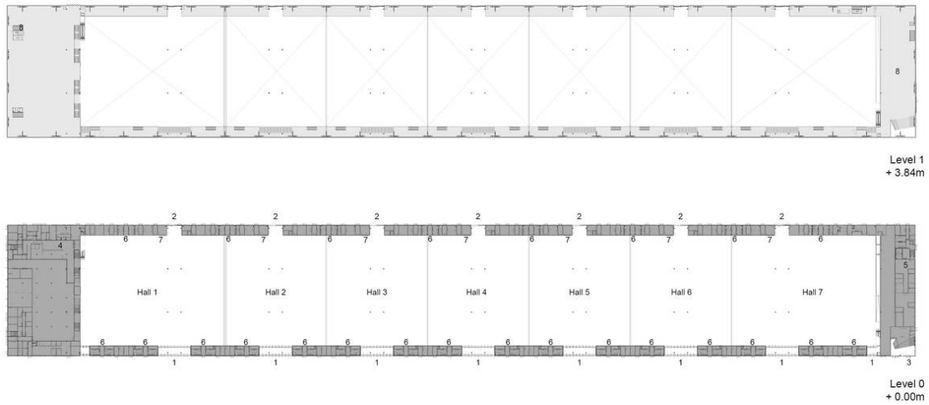
Exterior photograph of the MEETT Toulouse taken by OMA.

Figure 57

Exterior photograph of the MEETT Toulouse Exhibition Centre taken by OMA.

Figure 58

Interior photograph of the MEETT Toulouse Exhibition Centre taken by OMA.



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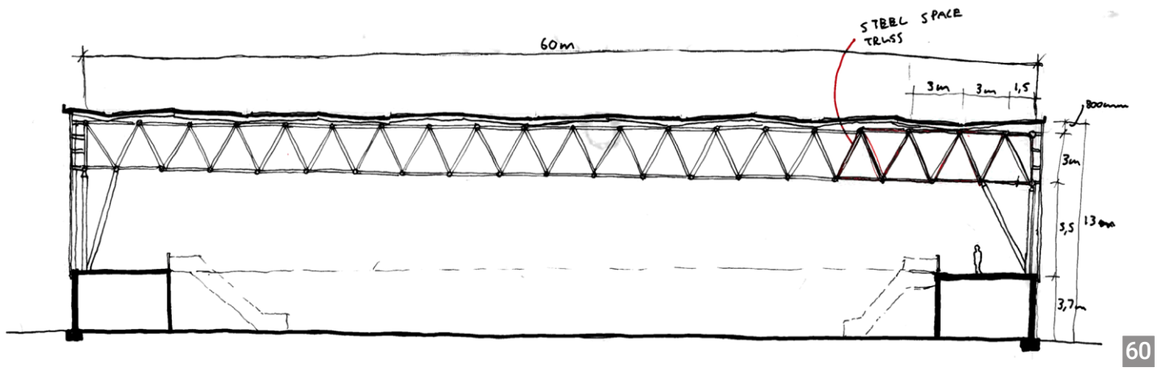


60

Figure 59

Ground and First floor plan of the METT Toulouse Exhibition and Convention Centre done by OMA.

Figure 60

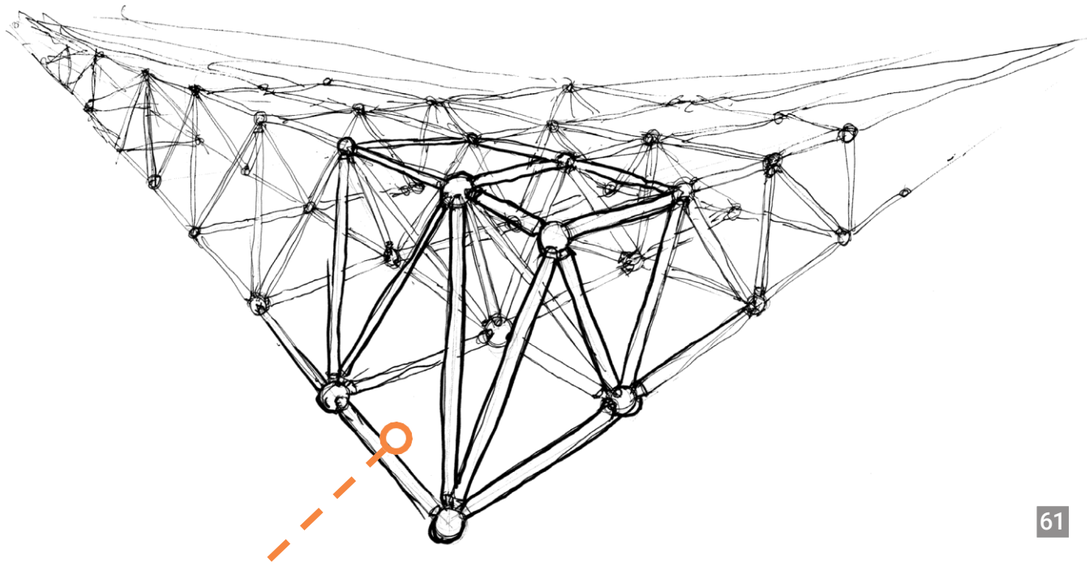
Cross section drawing of the Exhibition Hall showing the span of the building done by author.

Figure 61

Isometric drawing of the steel space truss done by author.

Figure 62

Detail drawing of the Exhibition Hall corner condition showing envelope build up and space truss join connection done by author.



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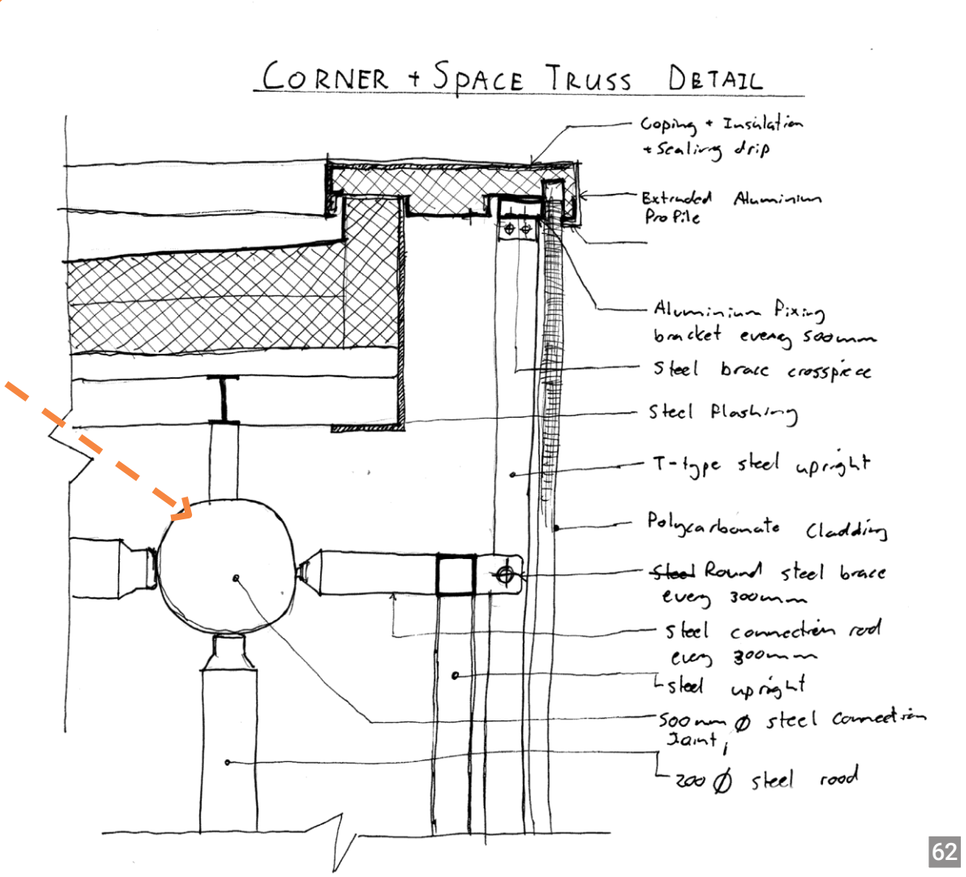

62

Modularity, Scalability, and Hierarchy

For auditoria spaces like exhibition halls and concert halls, a balance of curation and open-end flexibility and fixed spaces is required. An architect needs to both define spaces and provide supporting system for distinct sets of users. Robert Schmidt in this paper, *Adaptive Architecture: theory and practise*, highlights positions held by Frank Duffy and (later expanded on) Stewart Brand that argued that when it comes to design for adaptable architecture, a building must not be measured by its materiality but by time (Schmidt et al., 2016:59-60). This introduces a hierarchical concept where the proportional duration of a programme in a building should relate to its materiality and construction systems. Temporary and volatile programmes should be supported by building technologies that change with its life span. More permanent programmes must be supported by building technologies that ground the programme within its architectural system. This also borrows from Habraken's discussion around "supporting elements" and "infill structure". The supporting structure acts as a permanent architecture component and the infill remains flexible and adaptable. The following two case studies focus their technological exploration on the discussed hierarchical concept of tectonic permanence.

The Watershed

The Watershed is a renovated industrial electrical shed located at the V&A Waterfront in Cape Town. The Watershed currently facilitates a market for local traders, restaurants, and office and think-tank spaces. The Watershed before its renovation acted as a barrier that disconnected the two Oceans Aquarium from the rest of the waterfront. The new proposal for the Watershed maintains a thoroughfare through the shed promoting foot traffic throughout the V&A Waterfront. This project also aimed to be undisruptive in both its construction and current performance. Very little demolition took place because the project reuses the original shed structure and allows the internal structure to be flexible and adaptable. This outer shell of the shed acts as an anchor that allows all the program and activity that take place within it (Wolff, 2019).


63


64


65

The ground floor facilitates most flexible level of program, being the vendor platform stalls provide spaces for local businesses (fig. 67 & 72). These platforms can be disassembled and reassembled were necessary and are also modular as they be expanded upon and built up. These platforms can also all be taken away, should another type of program that requires more room need the space. The next level of permanence could be categorised as the enclosed stalls, were encasement stalls house other types of shops and restaurants (fig. 68 & 73). These stalls are not permanently fixed to the shed structure but are less easily moved. The permanent structures and programs are predominantly housed at the first and second floor (with exception of the *HintHunt* escape room), which include the office and think-tank spaces (fig. 69 & 74).

It is the combination of these varying level of programmatic permanence that help give the Watershed timelessness quality. By incorporating flexible, semi-permanent and permanent technologies, the design creates an adaptable and responsive programme. It is this balance of user curation and prescription of program that create an effective use of the building. There is also a duality in the use of materials, timber mainly being used in the temporary structures like the platform and encased business stalls. Steel is prominent in the more permanent structures and programs being present in the existing shed enclosure and the office spaces, both collaborating with each other throughout the Watershed. This case study demonstrates harmony through the effective use of materiality, and the consideration for its physical and social context.

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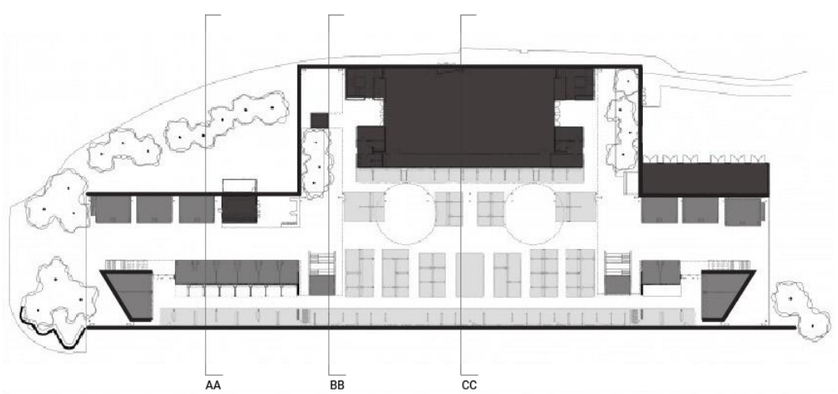
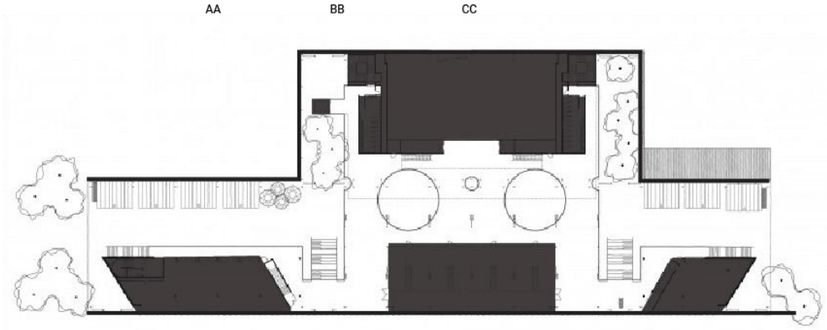
Figure 63, 64, 65

Interior photograph The Watershed showing the stall platforms, stall enclosures and office spaces (left to right) take by author.

Figure 66

Exterior photograph of the Watershed main entrance taken by author.





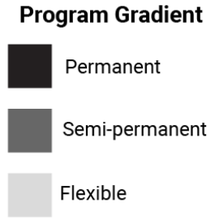


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Figure 67
Sections plan showing gradients of programmatic permanence done by Wolff Architects and edited by author.

Figure 68

Ground & first floor plan showing gradients of programmatic permanence done by Wolff Architects and edited by author.

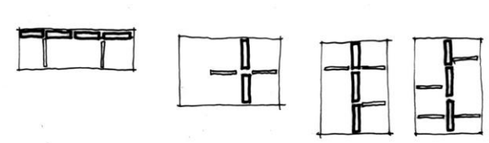
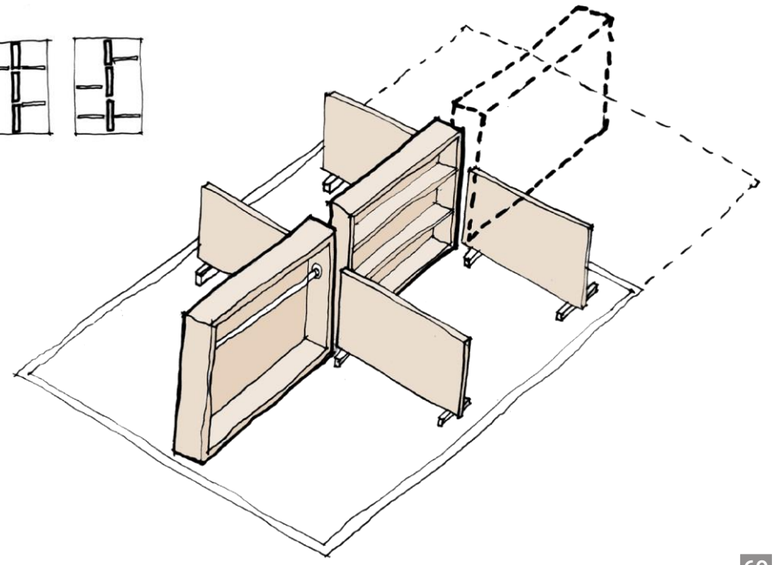


Figure 69

Illustration showing the flexible and movable platform stall spaces. These spaces are modular and scalable, should the user need it. Illustration done by author.



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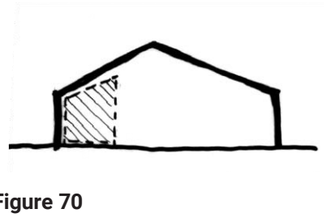

Figure 70

Illustration showing the semi permanent stall capsules. These stalls are not fixed to the building, thus can be moved should the need arise. Illustration done by author.

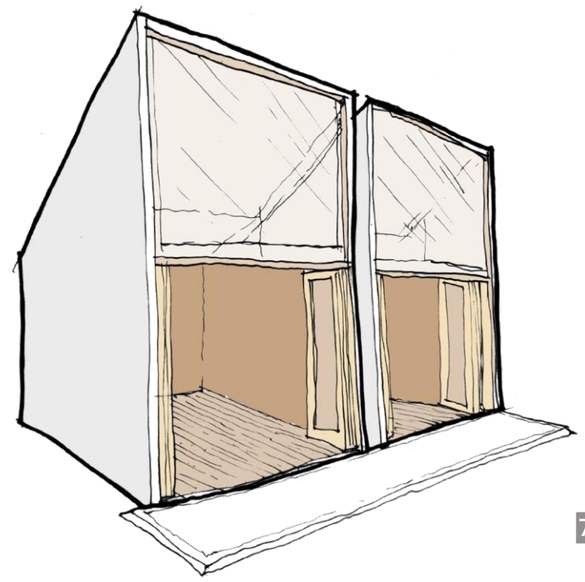

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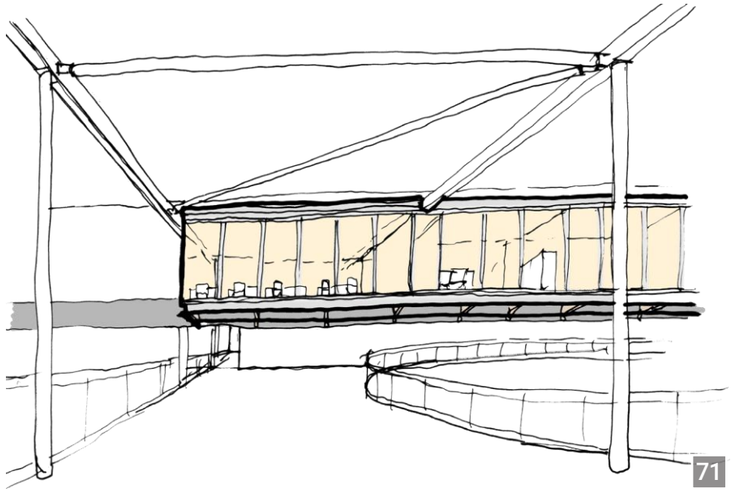
Figure 71

Illustration showing the permanent office spaces. These rooms are fixed to the building and cannot be scaled or moved. Illustration done by author.



71

The Kunstlinie Theater and Cultural Center

The Kunstlinie Theater and Cultural Center, located in Almere, Netherlands, was designed by SANAA. This project also adopts this hierarchical concept but in a slightly alternative way. This building houses various sized performances halls, exhibitions spaces, studios, and various music rooms. The form of the building, while also being under a continuous flat roof, extrudes above each performance hall. There are also various courtyards that puncture the continuous roof and give light in the deep areas of the building.

This case study provides a type of organised adaptability in the studios and music rooms. Each space is rectangular in shape and generic in dimension where the layout of the plan offers flexible in its configuration of rooms. While the building current prescribes a programme, it blurs the lines what is circulation and what is a room. These rooms currently complement the existing programme, but its generic form creates a possibility for future change in use. While all these programmes have a level of permanence, there is a clear distinct between the materiality and functionality of the performance halls and music/studio rooms. The performance halls wall division is structural and specifically caters for auditoria events like operas, theatricals, and public speaking. The studio and music halls are subdivisions of a large hall and constructed with lightweight material and offer less specific programme facilitation (Sejima et al., 2007). Like the Watershed, this case study also present levels of programmatic permanence that influence its structure and materiality.

The continuous glass façade creates resonance to the shorefront water by its colour and reflection. The project, as typical of most SANAA projects, exhibits a consistent external material language on all faces of the building. This project, therefore, also presents a noteworthy contextual sensitivity and harmony within its materiality.

What these two case studies intend to highlight is how to implement different types of material systems that correspond to the type of program it facilitates. This relationship is dependent on the anticipated life span of the program. They both also offer different forms of modularity. The Watershed offers modular spaces for market stalls, allowing change in capacity of stalls the get housed in a single unit. While the Kunstlinie Theatre and Cultural Centre offer a form of room modularity that can morph between circulation, program, and open space. These findings help to enlighten different types of ways to interpret and implement modular and flexible spaces.

Figure 72

Exterior photograph of the Kunstalinie Theatre and Exhibition Centre taken by SANAA.

Figure 73

Exterior photograph of the Kunstalinie Theatre and Exhibition Centre outer corridor taken by SANAA.

Program Gradient

Permanent

Semi-permanent

Flexible

74

Figure 74

Ground & first floor plan showing gradients of programmatic permanence done by SANAA and edited by author.

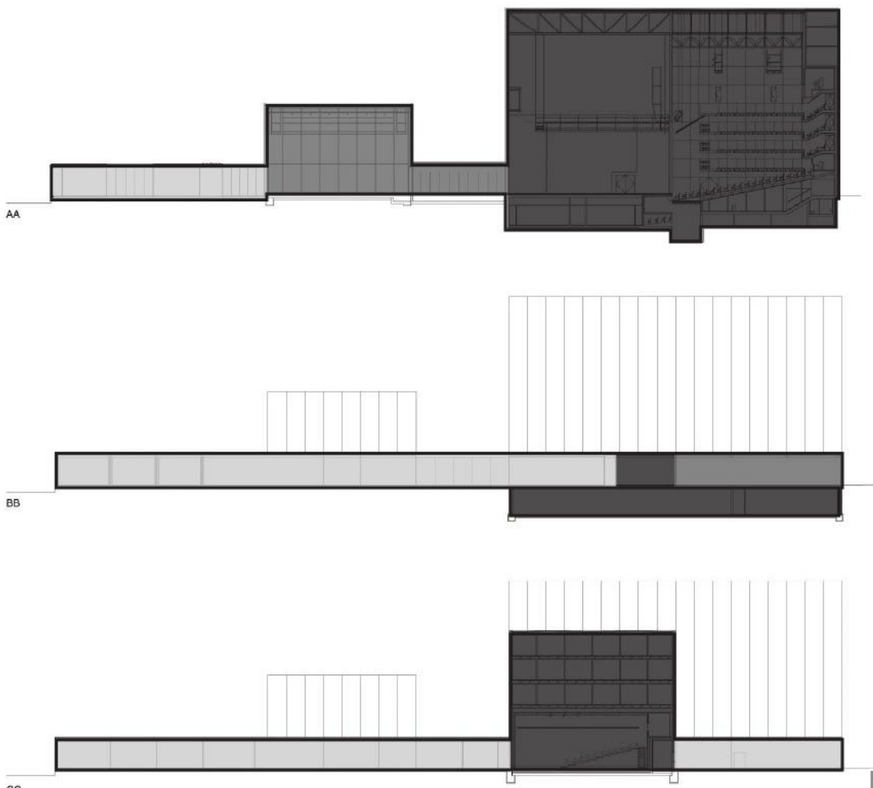


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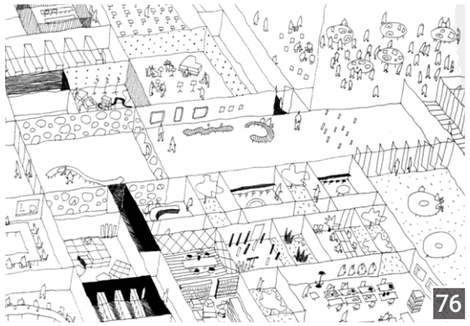
Figure 75

Sections plan showing gradients of programmatic permanence done by SANAA and edited by author.



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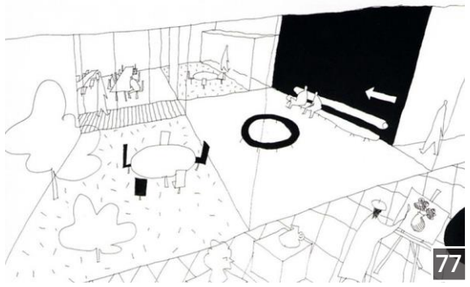

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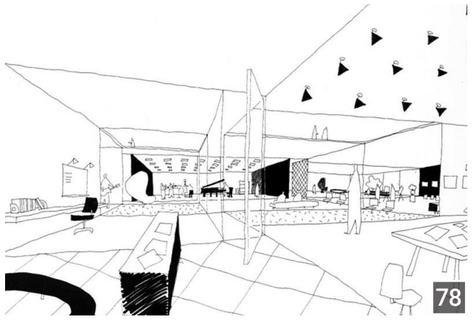

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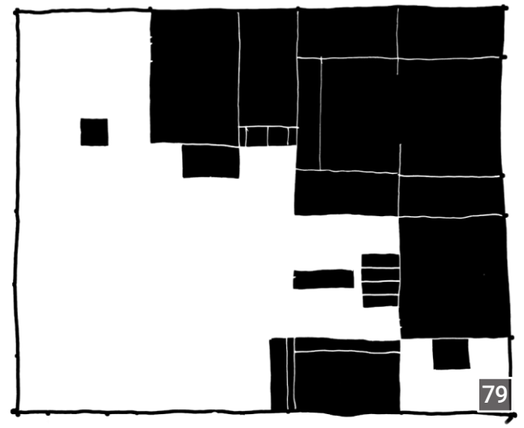
Figure 76, 77, 78

Perspective concept drawings showing interior spaces of music and studio rooms of the Kunstalinie Theatre and Exhibition Centre done by SANAA.



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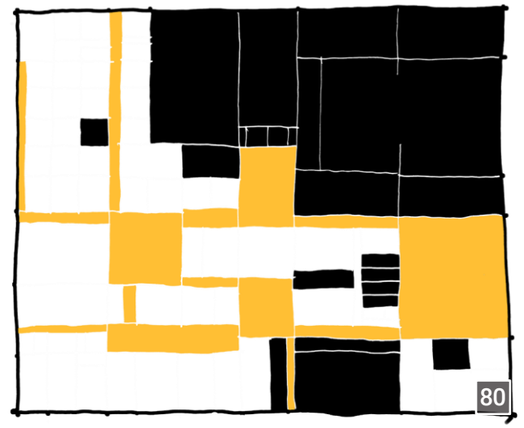

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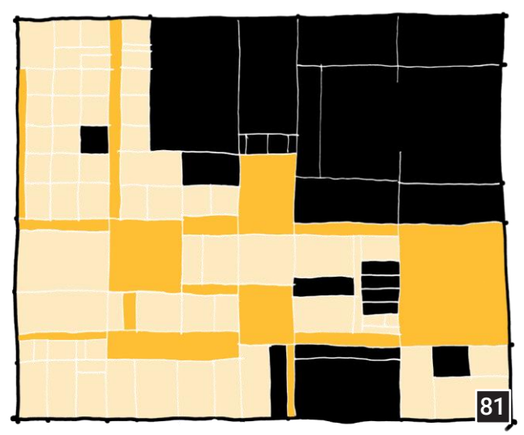

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Figure 79, 80, 81

Diagram plans showing (top to bottom) the permanent spatial layout, the circulation layout, and the lightweight flexible room layouts.

04

THEORY: APPLICATION

This section of the paper aims to pull arguments and positions that were introduced in the discussion section and formulate key concepts to apply to the Maynardville site. By highlighting these derived concepts in relation to Maynardville, one can begin to identify relevant issues that direct the design inquiry. From the previous discussions of identifying meaning, achieving continuity and responding to a context with complex set demands, this section develops objectives that build upon them. It demands an architecture that constructs a type of significance within a context while maintaining harmony with all the 'moving parts' and initiates a type of user agency and flexibility to keep the intervention relevant.

Significance

Mehrotra explains that in Urban India where there is a dichotomy of the kinetic and static city (explained in the previous section), preserving these distinct architectural expressions depend on their evolving cultural significance. The negotiation between the static and kinetic sides of the city constantly shape their roles and interactions. Architects must adapt to this evolving urban landscape and understand how the city perceives and engages with significant spaces. Mehrotra suggests that constructing new identities in a space can leverage its interest and usage, allowing for the construction of significance within the urban fabric. Accommodating and overlapping varying uses, perceptions, and physical forms become essential in navigating the multifaceted and diverse urban environment of India (Mehrotra, 2007).

In the case for Maynardville Park this duality exists in the many facets that make up this site, but it is how they intercept that can create a type of significance. The activity within Maynardville Park exhibits distinct pulsations, with the West side being perceived as more desirable due to its abundant shade, benches, and jungle gym facilities. In contrast, the East side, occasionally hosting carnivals, remains quiet, barren, and less favoured for resting. These differences in shade, amenities, and user presence play a crucial role in shaping the perception of each side and contribute to a sense of safety and desirability. The Project for Public spaces addresses some of these principles as a strategy to create placeness and it is where the park lacks these principles that make it an uninviting to use (Project for Public Spaces, 2016). Upon observing the fairs and carnivals, it becomes apparent that the East side does not effectively integrate with the rest of the park or the surrounding streets. The significance of this space appears to hinge solely on the occurrence of organized events. During these events, the space gains importance and meaning. However, once these events come to an end, the space tends to lose its activity and significance. This space needs an intervention that can consistently bring a type of user activity year-round and not just on occasion. Unfortunately, this space has many factors working against it relating to position, barriers and edges and opportunities for programmatic interception.

The four edge conditions of Maynardville Park each perform differently in how one finds significance. Church Streets offers a municipal and corporate services, Wolfe Street offers a commercial presence and Piers Road is a residential area. They all offer some sort of interaction to street and park and hold their edge in relation to their context. Glaren Road, otherwise presents itself as an undesirable void of meaning, a substantial portion of its edge is dominated by parking lots, with the Public Library isolated amidst these vast expanses. The absence of entry points to the park further worsens the situation, rendering this edge a mere passageway to travel from one point to another without any inclination to stay within the space Moreover, the majority of occupied parking spaces are allocated to the Magistrates Court building, prompting users to park their vehicles temporarily before departing to interact with another edge. There is a disconnect between the space and its use, and as a result a disconnect with the relationship of this the urban edge to its meaning. This edge is left undefined, it acts as void within the urban context of Maynardville. This edge almost seeks its relevance from the other edges nearby and cannot hold itself well as space with a significant purpose. While there is motivation to keep parking due to the amount of people using the Municipal Court and the other buildings, to dedicate this amount of space to parking is a waste of opportunity for a more interactive intervention.

Harmony

Glaren Road has a plethora of various programmes happening nearby to this edge. This edge sits in between the park and all its activities, public services like the public library and municipal court, various churches and community service properties, and commercial and corporate buildings. All these programmes are near each other, but rarely ever intersect. There is a lack connection and continuity in the various narratives present in the site. As the discussions of Fuller (2008) and Wright (1955) convey a consideration of all the components and variables of context within the design process. It is the harmony of all the parts that produce a desired and inclusive architecture.

The design inquiry takes the position to preserve and respond to the existing narratives and attempt to synergise with them. When considering Glaren road, the intervention intends to establish a connection between the park and its activities, the public library, and the various peripheral buildings. The design objective is not aimed at unifying all the existing diverse programmes within the space, instead, it seeks to introduce an intervention that harmonizes with these programmes. However, the introduced proposal also holds the potential to play a role in harmonizing the various narratives that exist within the space. A potential design strategy could then be to create a building that facilitates some of these programmes while simultaneously creating a desirable space for the other nearby users.

The Wynberg Public Library in Glaren Road sits in isolation as it does not interact with any neighbouring buildings or the park. Further research revealed very little overlap with the initiatives organised by the library and the park. The library does however collaborate with educational institutions like Voortrekker High School and Simon Van Der Stel, as well as some crèches like Pram Jams and Happy Hearts. All these programs are situated outside the immediate context of Maynardville Park. Additionally, the library rarely utilizes the park for outdoor meetings or gatherings, which may be attributed to the park's lack of facilities and limited access from the east side. The proximity of expos and carnivals on the park's east side also warrants consideration. Given the cultural and social significance of theatre, plays and event have within the park, these elements represent additional layers that require integration into any architectural intervention.

This scenario presents a unique opportunity to collage all these layers of the immediate site by proposing a design that looks to extend the park, incorporate the library in a meaningful way and cater for the events that take place nearby. The design can offer a flexible architectural program that bridges park and urbanity to create an architectural intervention that is complementary to all the existing layers present.

Chosen Edge

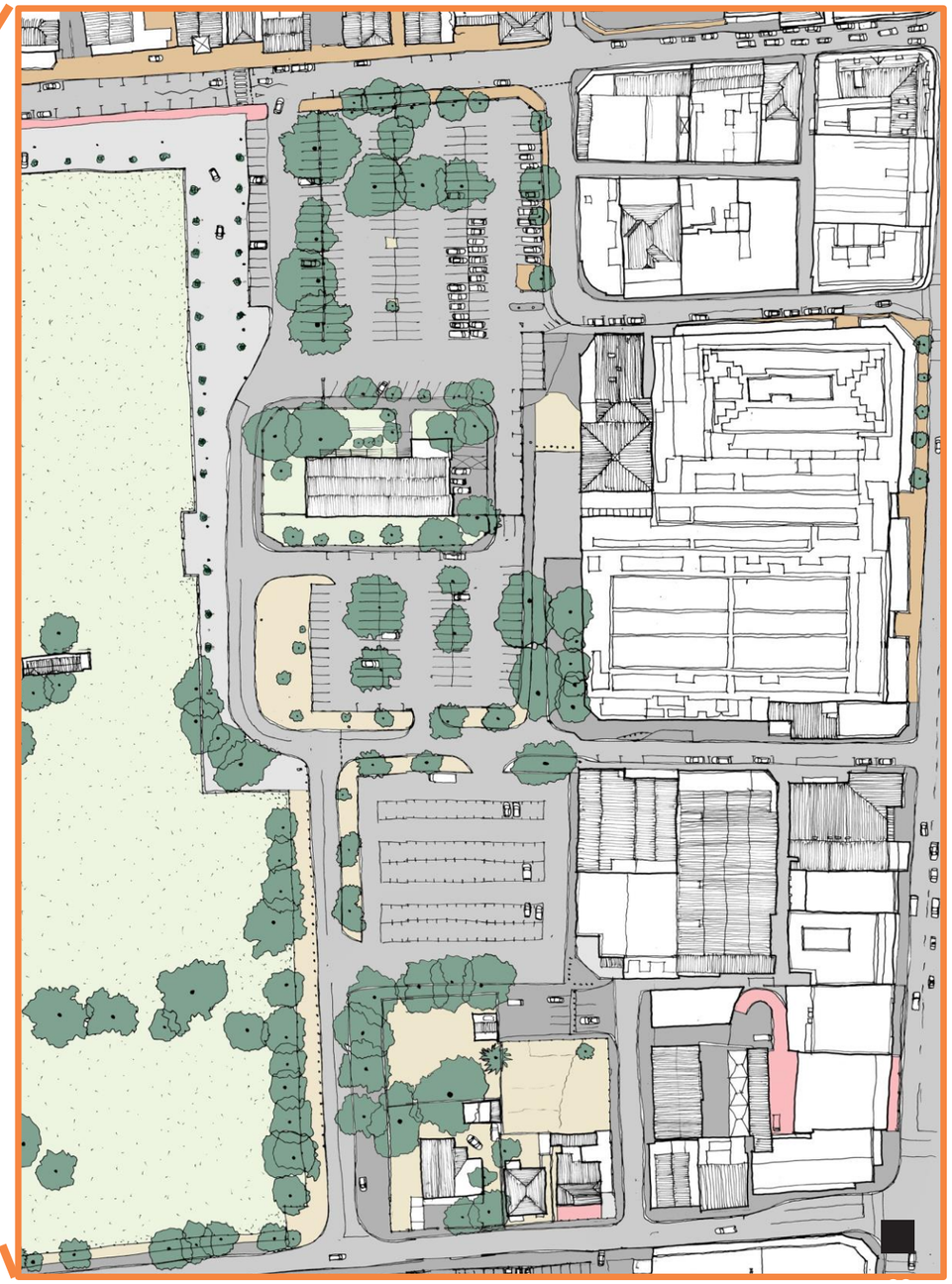


Figure 82, 83

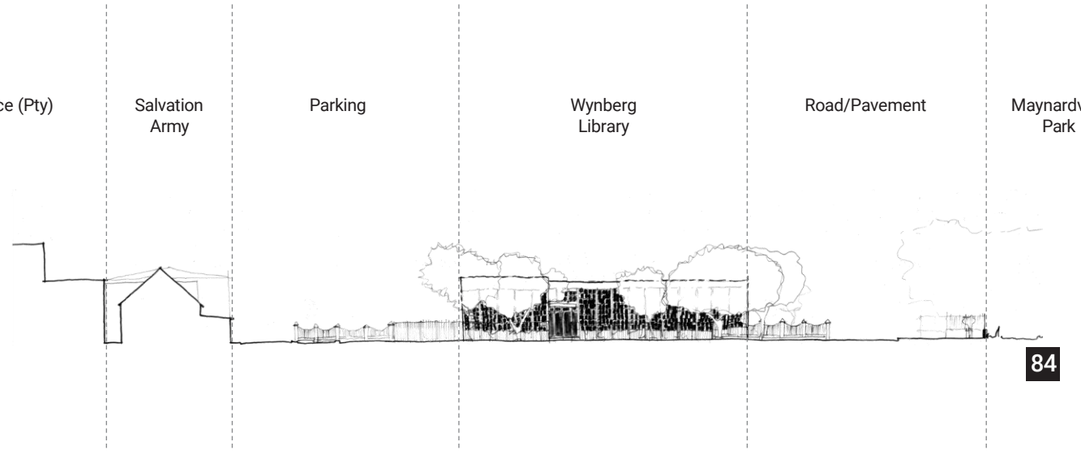
Map of Maynrdville Park (left) and a callout of Glaren Road edge (right) done by author.

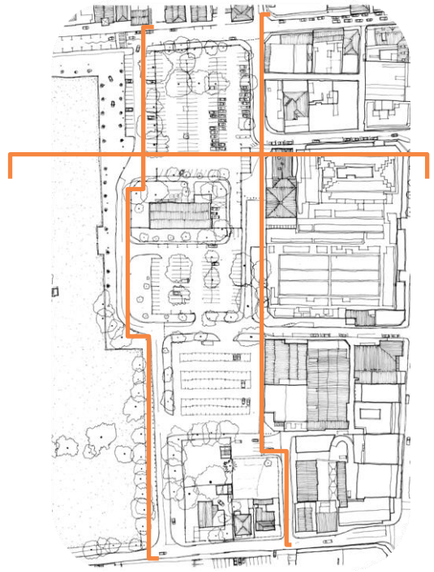
Figure 84

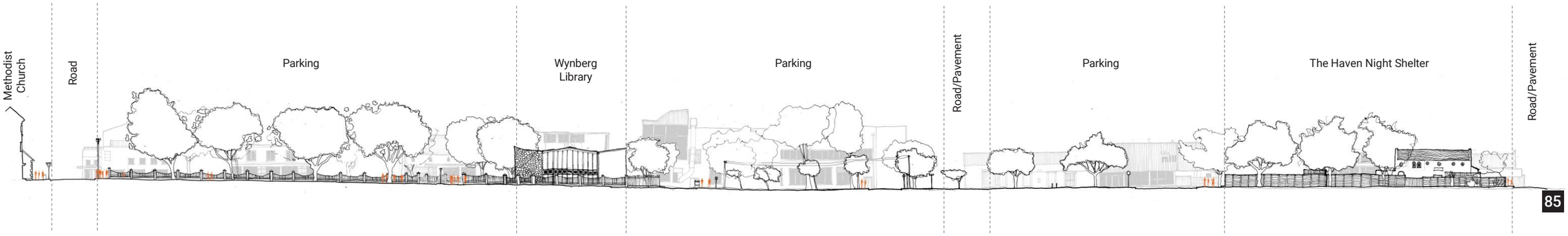
North Elevation of Glaren Road done by author.

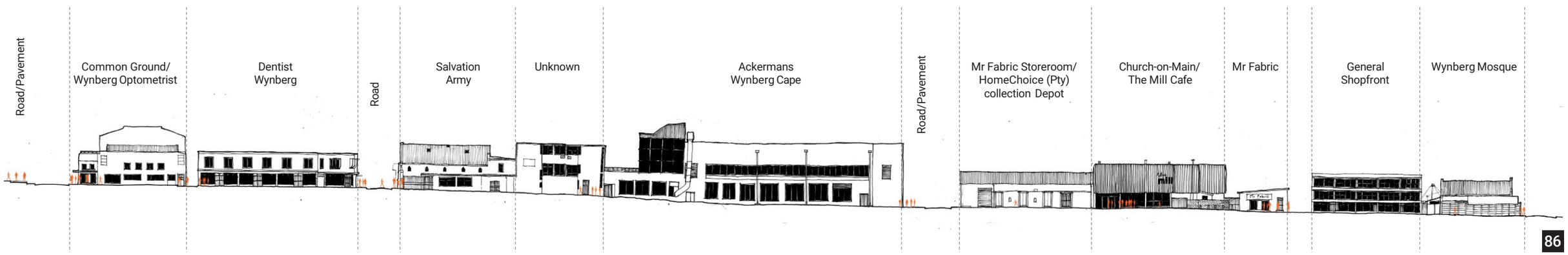
Figure 85, 86

Front & Back West Elevation (top to bottom) of Glaren Road done by author.









05

CONCEPT

This paper has previously explored an architectural framework for comprehending the site by delving into the static, the dynamic, and the kinetic. These three aspects of the site each revealed particular concepts and positions the design inquiry holds. The architectural concepts that emerged from the theory section are titled as Meaning, Collage, and Edge. While the technological section reinforces a typology and material approach emphasising flexible spaces.

Meaning
This concept strives to create a space that counteracts the undesirable character of the site's edge, with a focus on generating a scheme that encourages positive urban densification and architectural presence. The kinetic site also reveals a need for a type of architecture that caters to both a consistent programmatic need throughout the year as well as a temporary programmatic need when the carnivals and expos take places annually. An architecture that responds to the temporary events by being flexible and responds the permanent activities by being a facility that enhances the existing site conditions.

Collage
The dynamic site analysis exposed the site's social fabric and the need to preserve and enhance its existing narratives. It became evident that any sort of architectural intervention, needed to harmonize with its context by overlapping various social, cultural and economic events that take place. The concept of Collage addresses this need programmatically by catering to new urban densification, the library, expo and carnival events, and flexible community spaces (this is unpacked later in this paper).

Edge
The static site revealed the edges around Maynardville Park that work and the edges, like Glaren Road that do not. This observation prompted the formulation of the Edge concept, emphasizing the creation of an edge that is responsive to its neighbouring edges and the broader context, fostering meaningful interactions. It is essential to develop both an architectural and urban edge, as the project encompasses the entirety of Glaren Road. This road sits between the realms of the park and urban surroundings and as such, it needs to address both edges appropriately. Thus, this Edge concept aims to stitch together park and urbanity.
These concepts collectively intend to generate the complementary architecture this Design Dissertation aims to produce.

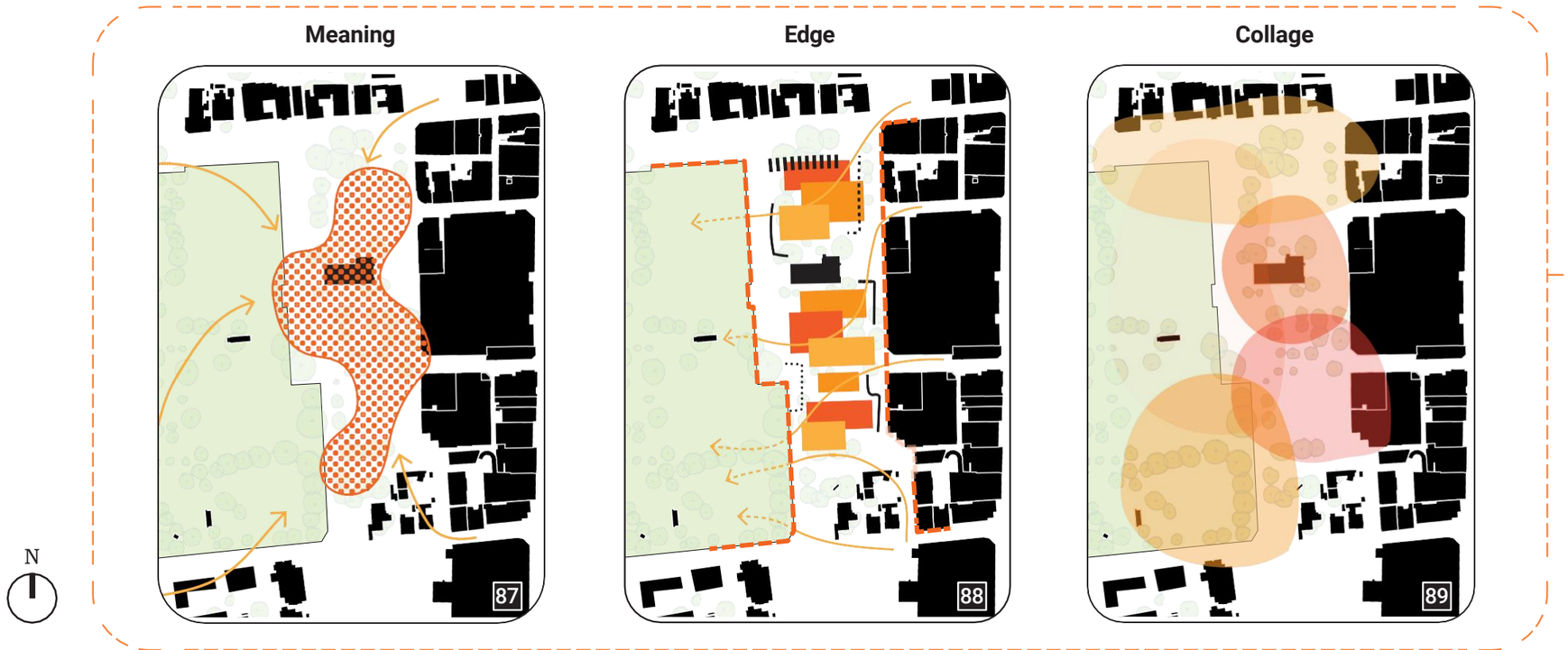


Figure 87, 88, 89

Diagrams of the discussed concepts: Meaning, Edge, Collage (Right to left) applied to Glaren Road.

06

URBAN DEVELOPMENT

Site Issues

The Glaren Road edge needs to be dealt with as a whole and thus an urban development scheme was developed. This urban development scheme has a dual purpose: to enhance Glaren Road on a broader scale by addressing previously identified issues and to create incentives for the architectural intervention. The scheme primarily seeks to resolve three key problems: the lack of interactive edges (both for the park and the urban context), the excessive allocation of space for parking, and the little incentive for people to visit and stay along the edge.

Figure 90, 91, 92

Diagrams of the problems of Glaren road as an edge.

Urban Development Informants

The urban proposal draws from various sources of information beyond the aforementioned issues. The East/West connecting roads from Main Road informed the orientation of the urban fabric. The road that connects Church Street and Piers Road was informed by the existing roads that did not originally connect, but with a greater offset from the existing fabric to allow for more interaction. The sequence of East/West urban strips both allow for filtering into the park through urbanity, avoiding the creation of a lengthy linear barrier of urban fabric along the North/South edge. Additionally, the scheme introduces more nodal points and corner conditions, creating opportunities for increased activity and contributing to a sense of place and familiarity.

The urban scheme proposes a mixture of commercial, corporate and residential programmes for the built fabric. Church Street is the busiest and fastest street, and the urban edge responds such that it allows for linear uninterrupted movement with minimal breaks in urbanity. In contrast, the Glaren Road edge is intended to facilitate slower movement, encouraging users to meander between the urban fabric and the park, fostering greater interaction with the proposed new buildings. The scheme as a whole will also incentivise the existing urban fabric to develop into a more interactive street edge. The introduction and integration of new urban elements into the existing fabric will contribute to the development of an interactive edge along Glaren Road.

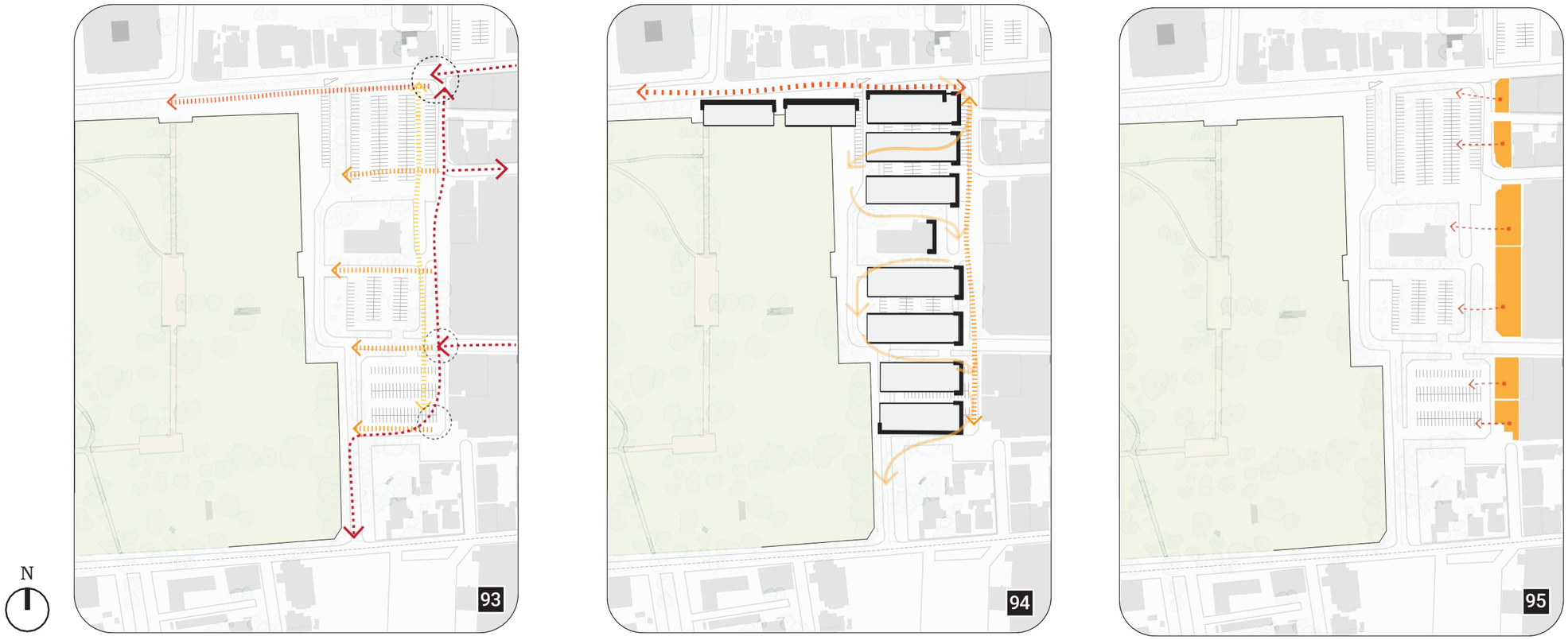


Figure 93

Diagrams showing the West/East & North/South Road informants done by author.

Figure 94

Diagrams showing the two types of edge conditions created done by author.

Figure 95

Diagrams showing new potential urban development intersection exisiting fabric created done by author.

96

97

Figure 96

New Urban Proposal programme scheme done by author

Figure 97

New Urban Proposal of Glaren Road edge done by author.

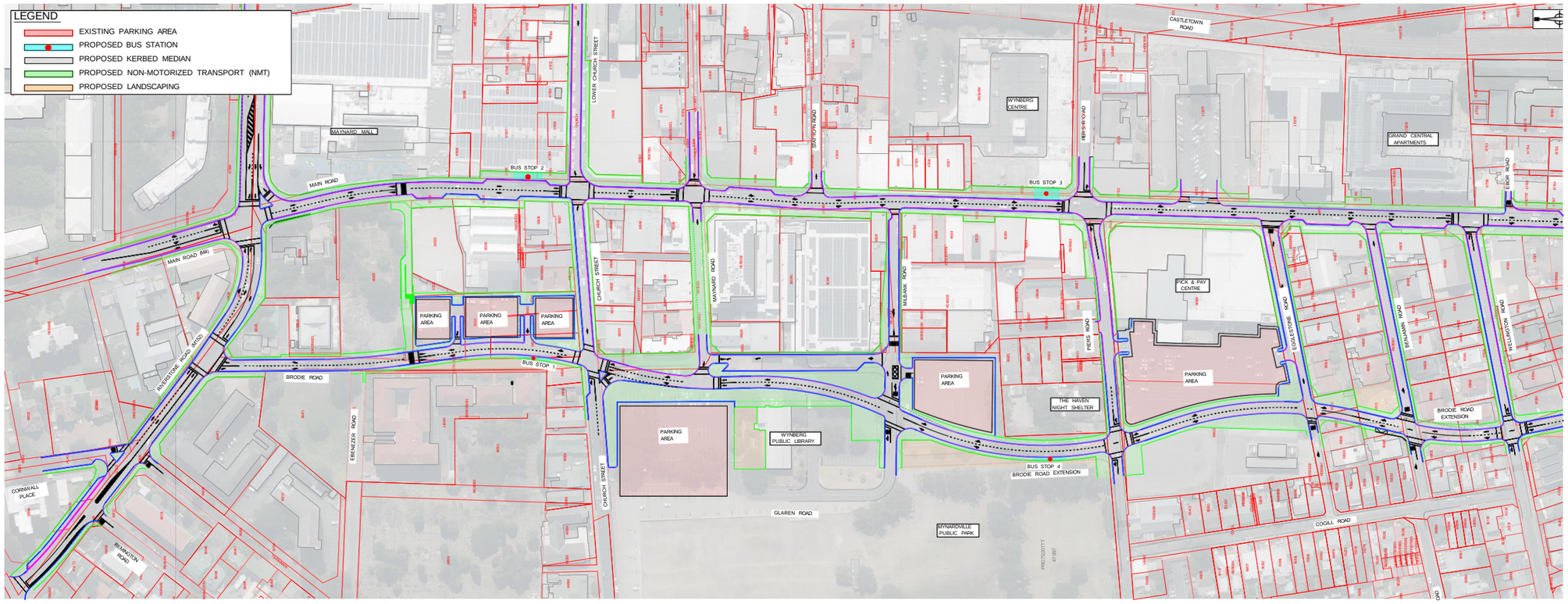
MyCiti Proposal

An urban Proposal for a new MyCiti bus route along this very edge is currently in the process of implementation. This proposal aims to make Wynberg a bigger urban hub, a direction that aligns closely with the stance taken by my current proposal in terms of urbanizing this edge. When overlayed with my proposal, very few changes are required to align with what the City of Cape Town is proposing for Glaren Road (MyCiti, n.d.). Apart from some build fabric shifts and road alignments, the scheme of this dissertation keeps all the edges, bus stops, and corner conditions the MyCiti scheme proposes.

This urban proposal is consistent with the concepts emphasised throughout the Design Dissertation, by maintaining an interactive edge, collaging various potential programmes in proximity to each other, and creating meaning through commercial, residential and corporate urban densification.

Figure 98

MyCity Urban Proposal of Glaren Road edge done by City or Cape Town.



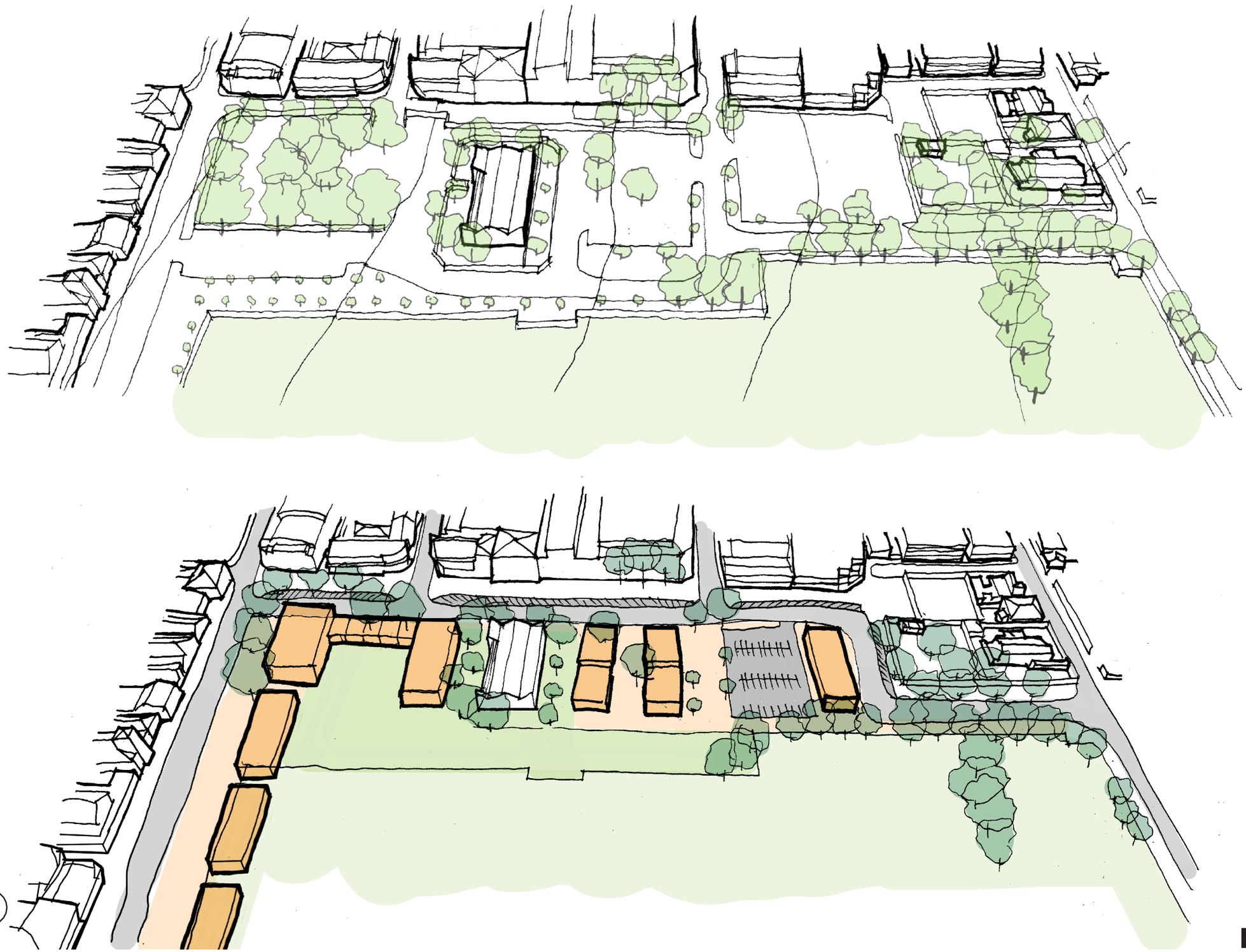


Figure 99, 100

3D site drawing showing the before (top) and after (bottom) urban development.

07

Architectural Realisation

Chosen Site

From the urban development, this design inquiry positions itself at the North-east corner of the chosen edge. The corner seems like the most logical choice, as it aligns perfectly with the conceptual approach of this inquiry. It offers several advantages that reinforce the central concepts of this project.

Firstly, this corner has a relationship with both the urban street edge and the park, creating a unique opportunity to bridge the two conditions. This allows for a natural filtering of people into the park. It is situated such that there is a relationship to the Wynberg Library and can then develop its entrance edge condition. Finally, since it is a corner conditions, it will become an intersection point for activity and can develop an prominent entry point into the park.

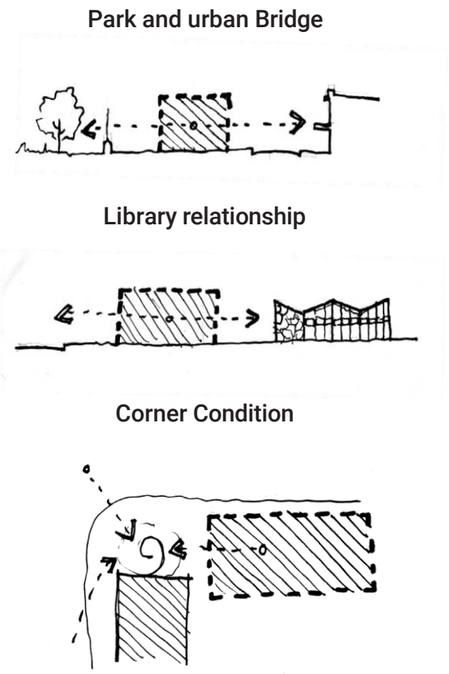
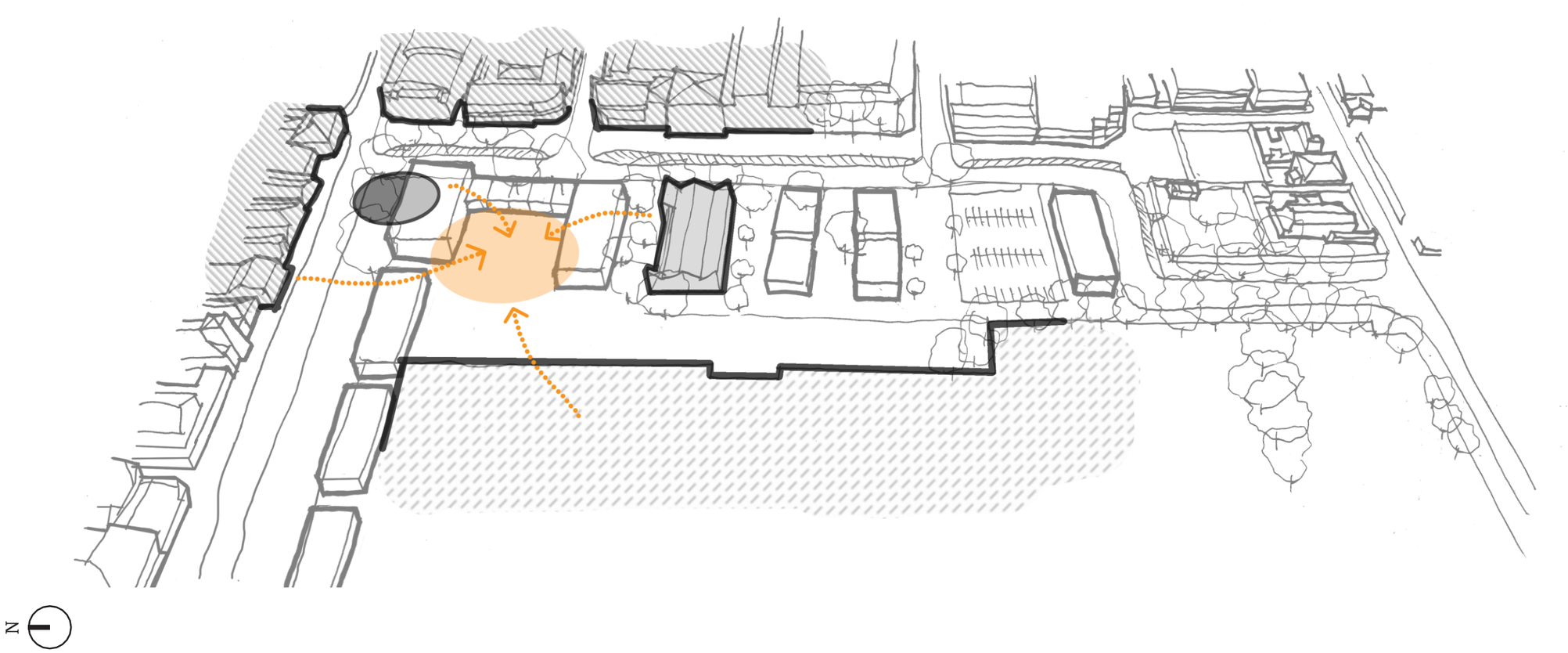


Figure 101

3D site drawing with diagrams showing the chosen site done by author.



Site Plan

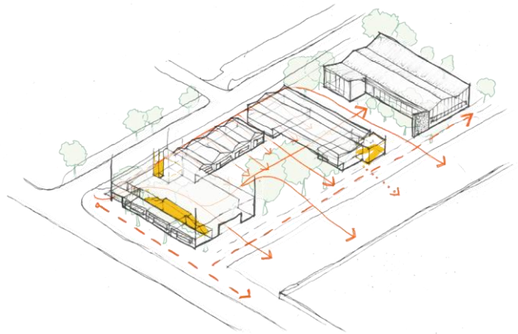
Figure 108

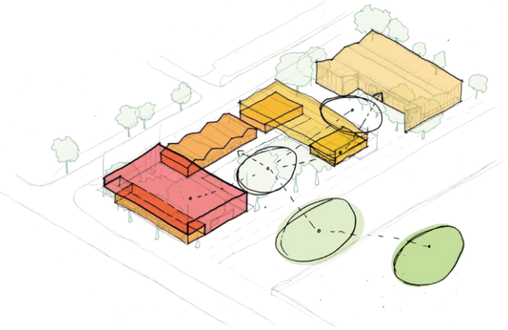
Site Plan of intervention done by author.

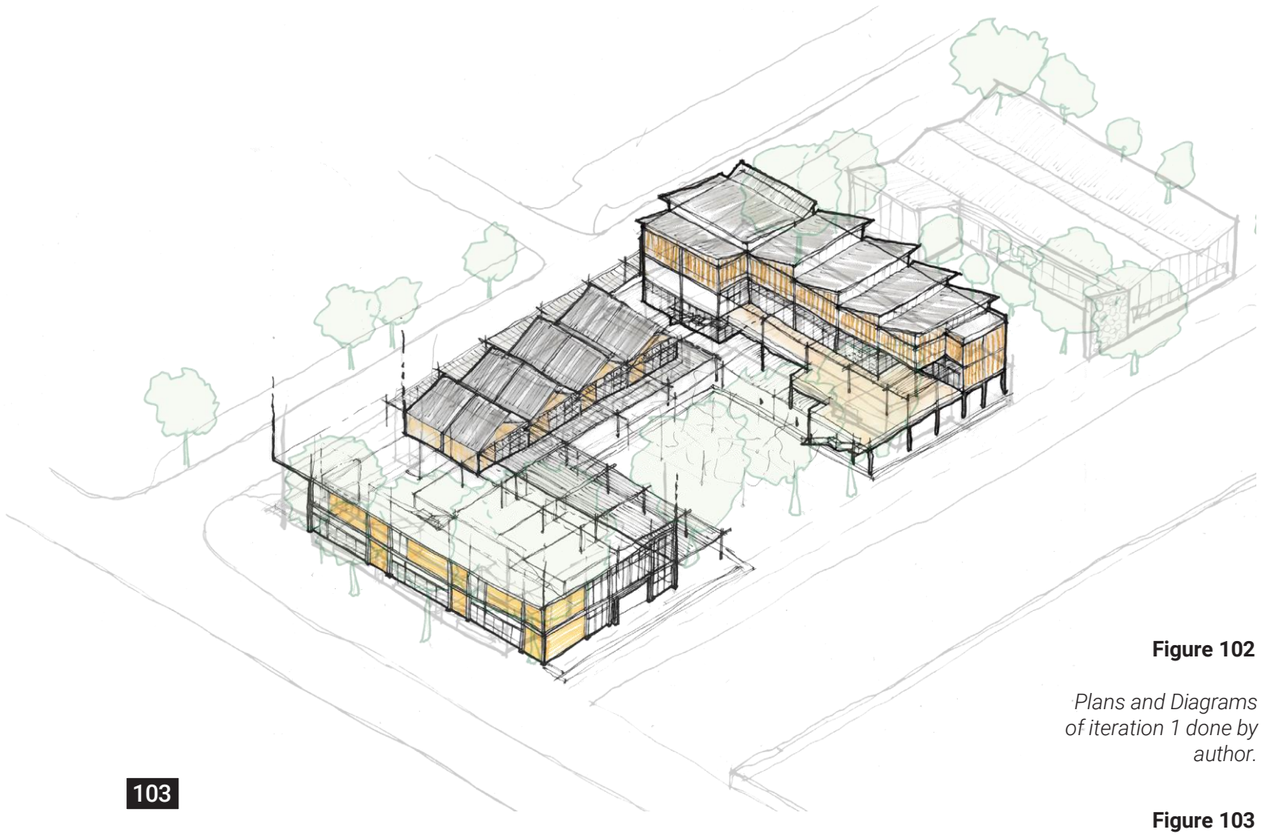
Iteration 1

The course of the dissertation saw a variety of attempts to fulfil the objectives outlined in this paper. This first attempt (if realised completely) for the most part addressed all the edge requirements and shortcomings. Creating a variety of spaces and miniature parks that could all facilitate varying levels of activity. It had a good relationship with the library and created opportunity for safe and quitter spaces. It created urban edges internally and externally and allowed for filtration into these spaces and the park. The downsides of this iteration were its reserved conceptual approach and made little bold design moves. This iteration also did not do well to blend urbanity and park and continued to create separate spaces that did not interact with each other well.

102







103

Figure 102

Plans and Diagrams of iteration 1 done by author.

Figure 103

Axos and Diagrams of iteration 1 done by author.

Iteration 2

The second iteration saw the conceptual leap to literally stitch together park and urbanity like a set of interlocking hands The main focus of this iteration was the overlay of park spaces and urban fabric, with an emphasis on areas where the park seamlessly integrated with the built environment or where the building became part of the park. However, this iteration took a somewhat overly literal approach, resulting in the creation of “fingers” of urban fabric that lacked the capacity to form interactive edges. These structures lacked a clear sense of prospect and recognizability, and there was a lack of hierarchy and organization in the spatial layout. This made it challenging to establish open, flexible spaces that could be effectively incorporated into the overall design scheme.

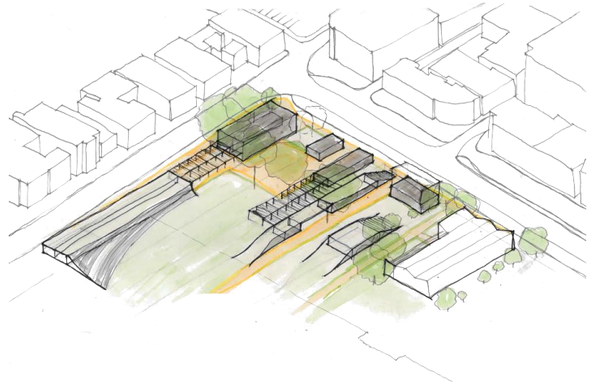
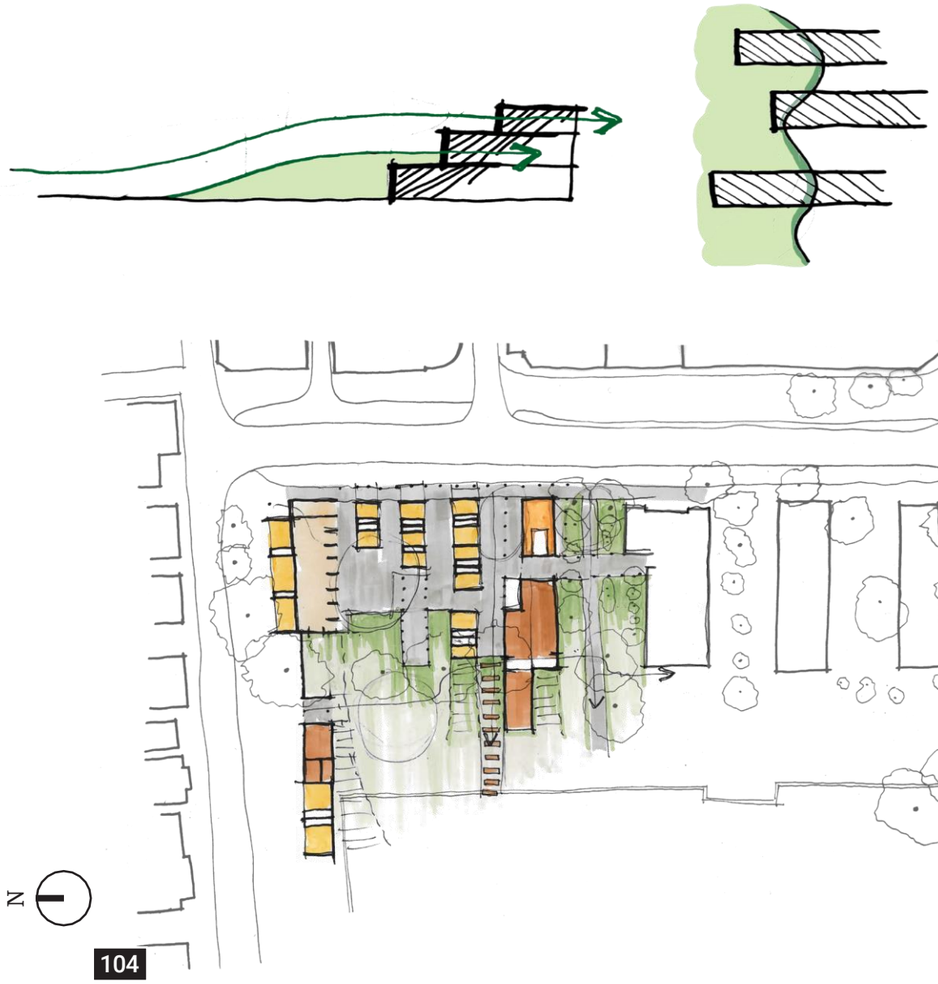


Figure 104

Plans and Diagrams of iteration 2 done by author.

Figure 105

Axos and Diagrams of iteration 2 done by author.



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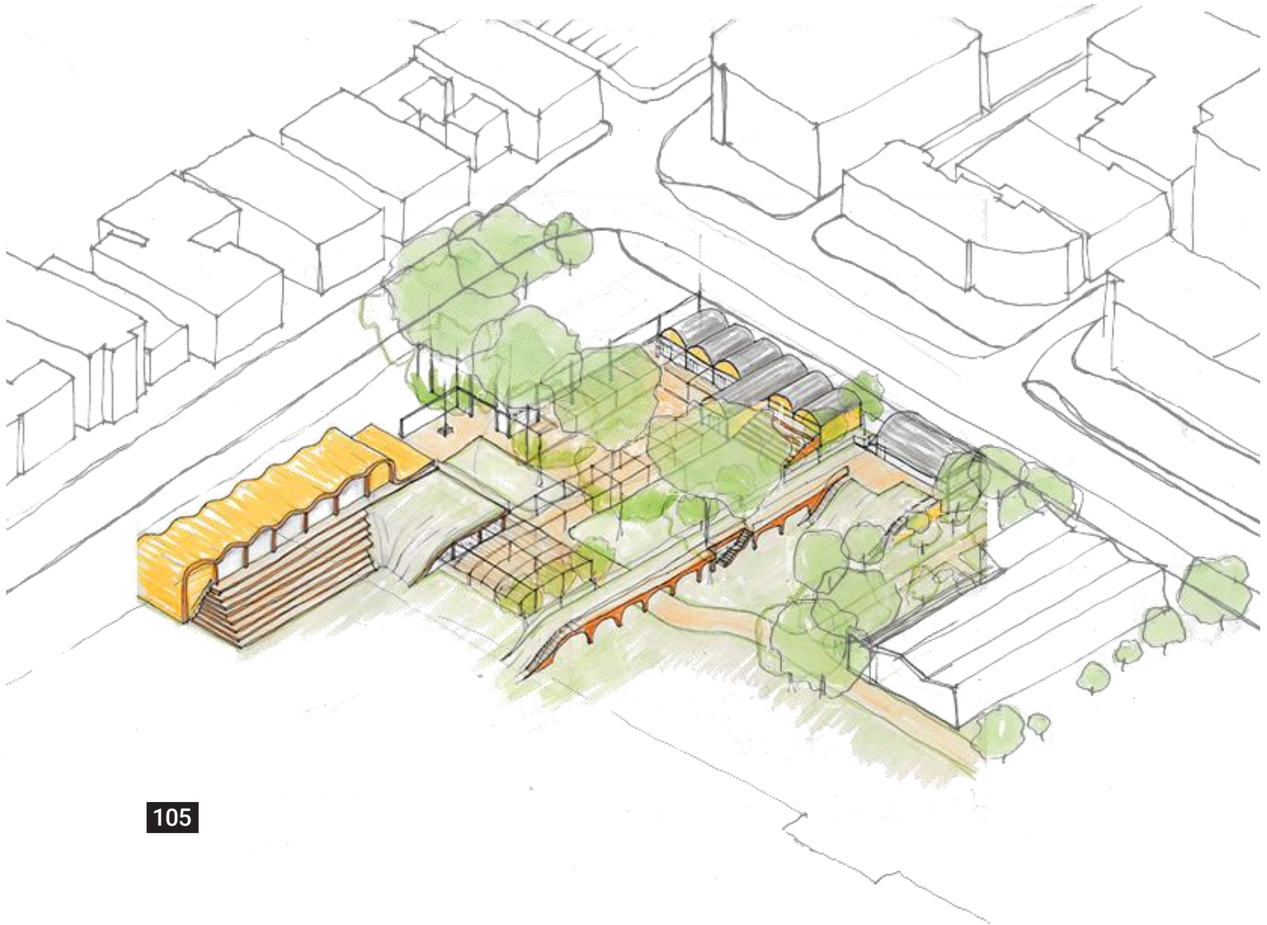
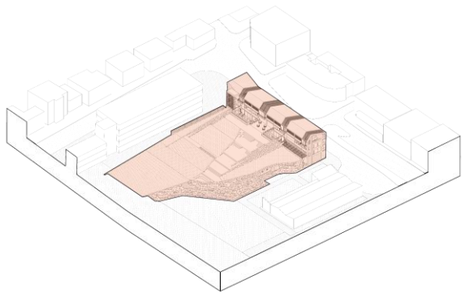
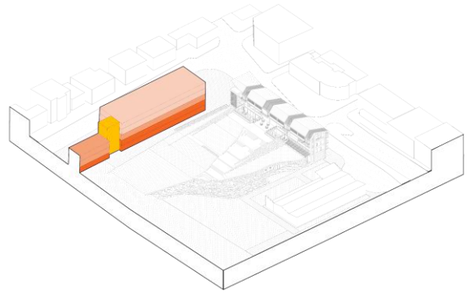


105

Final Iteration

I believe that the concept introduced in the second iteration is a robust one, and it was effectively carried through to the final iteration. The final iteration retained many of the positive qualities of the second iteration while incorporating interactive edges similar to the first iteration. Hierarchies of space and edges were more confidently rationalised which allowed for progression of the architectural form and programme to be established. This iteration responds well to all the edges it creates as well as the edges that boarder the building. It also merges park and urbanity more effectively to create usable and interesting spaces. In light of this, the primary focus of this inquiry is to advance the architectural development of this “urban mound,” while the urban proposals surrounding it will primarily involve programmatic allocation.





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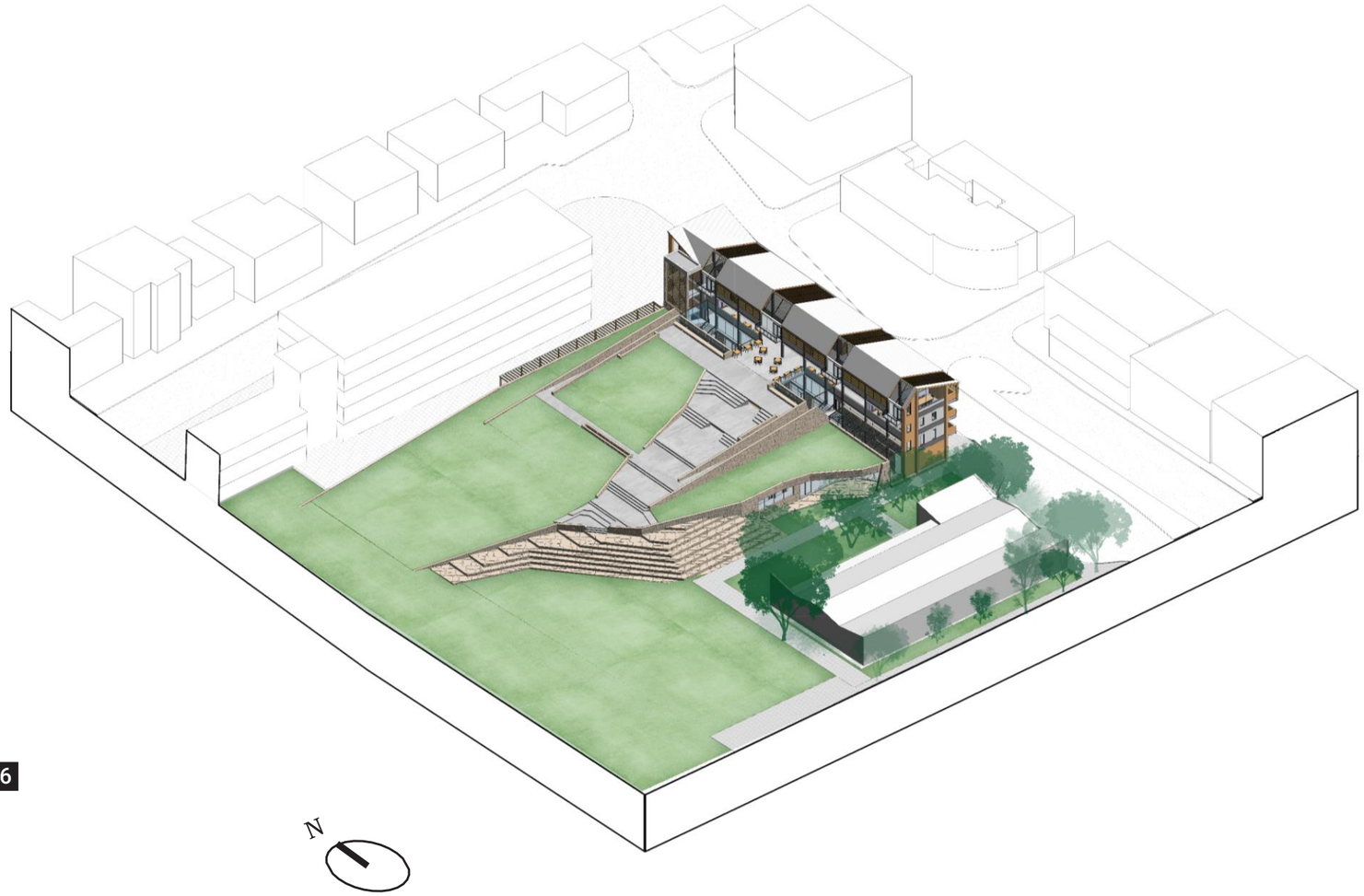

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Figure 106

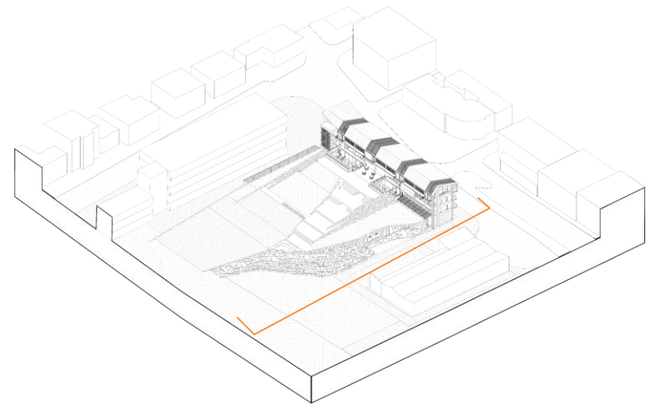
Axo illustration of the final iteration done by author.

Figure 107

Axo Diagrams showing scope of intervention done by author.

Site Section

The site section highlights the core conceptual interactions and form of this scheme. It shows how the park comes up from the ground and intersects with urbanity. One can arrive at the urban intervention from the park, or one can enter the park from the urban intervention. While they appear and operate as one form, they still create internal edges at the intersection point. The one form collages two architectures, the mound (which represents the park) and the urban edge. Together they harmonises and benefit off each other's adjacent edges.



Park coming up to the urban

Creating internal & external edges

Stitching 2 architectural elements together

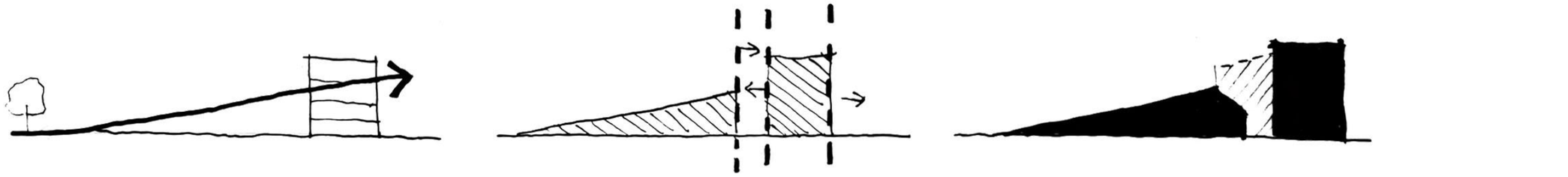
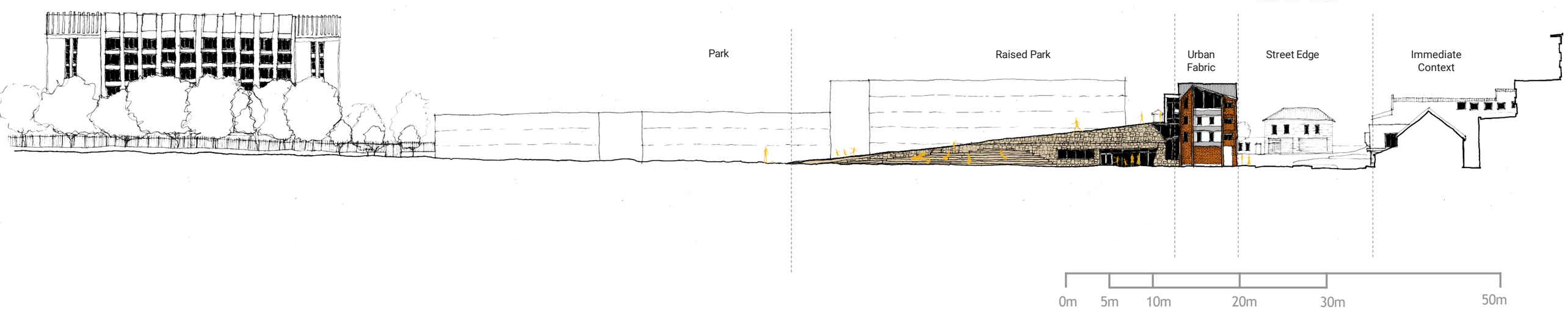


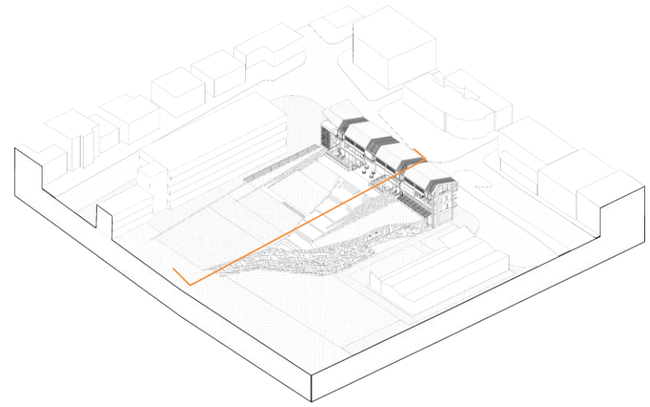
Figure 109

Site section and diagrams done by author.



Long Section

This section is designed to emphasize the interrelationships between the spaces within the mound and those in the urban fabric. The mound is separated from the urban fabric by a ‘open aired canyon’ and connected together by a series of bridges The floors of the mound extend into the urban structure, and conversely, the upper floors of the urban structure can reach onto the mound. This interplay between the spaces and programs within the scheme effectively collages and integrates various areas. The upper floors benefit from the space on the mound and the activity that occurs below. The section not only depicts a raising of park but also the carving away of park underneath the mound to allow for parking and event spaces. The mound has a series of lightwells that allow natural softened light into the event space. These spaces are strategically placed to also function as seating for the activities that could happen on top of the mound.



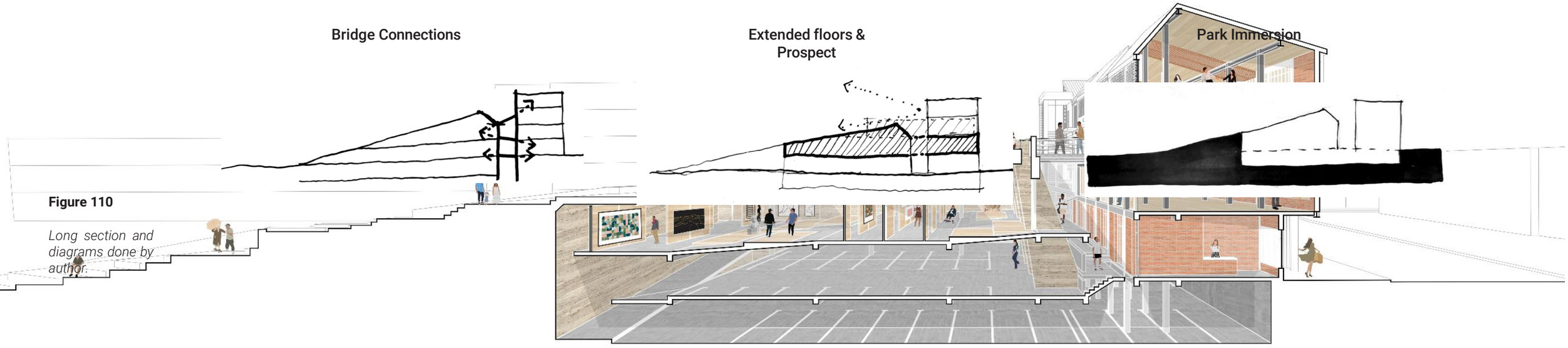


Figure 110

Long section and diagrams done by author.

Technical Section

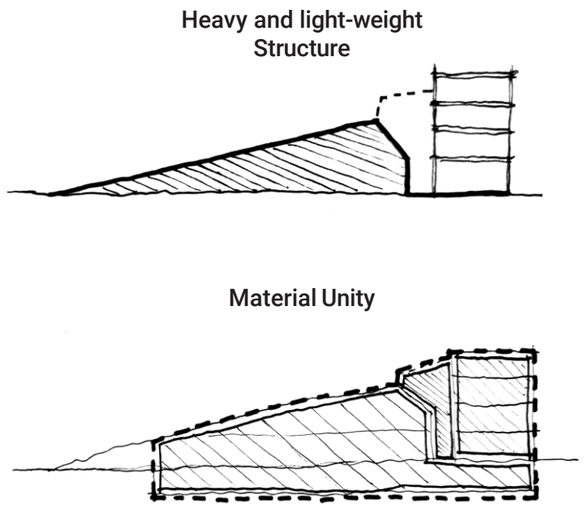
Although not fully realised or resolved the technical scheme for this design merges two architectures, the mound and the urban fabric. The mound, symbolizing the park, will be constructed as a heavyweight structure, mirroring the earthy, substantial nature of the park itself. The mound will have the dual role of retaining the earth it has excavated while supporting the rooftop garden above. As such, its materiality will consist of a concrete structure with stone cladding to convey a natural aesthetic.

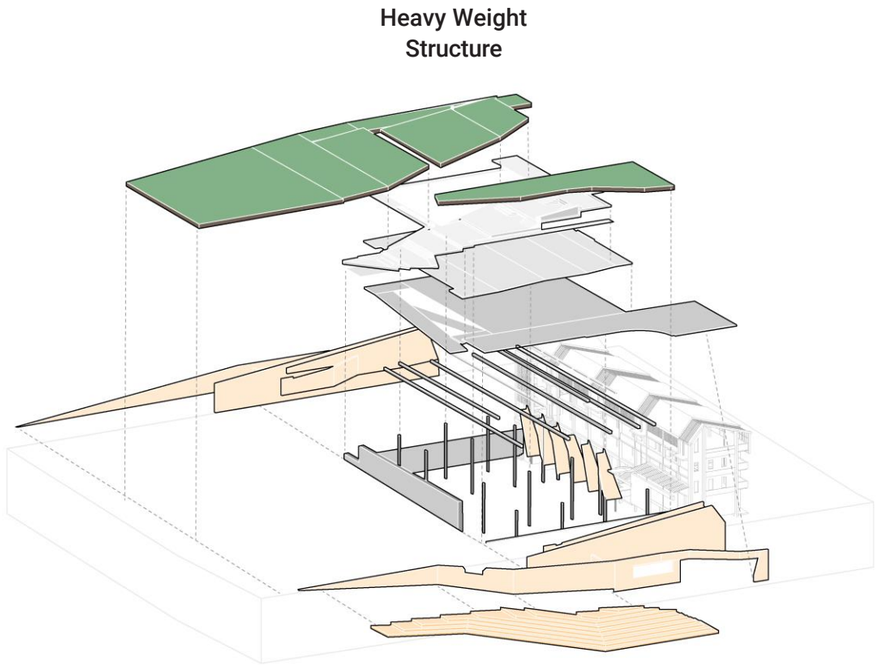
The urban fabric structurally, will be light weight as to juxtapose the heavy weight of the mound. The urban fabric resembles a non-destructive inception of urbanity onto the park and will touch the ground ‘lightly’ in this sense. The materiality of this architecture will use a steel frame system with brick infill. This system both allows for an efficient weight to material relationship as well as the ability to be modular and expandable, should the need arise.

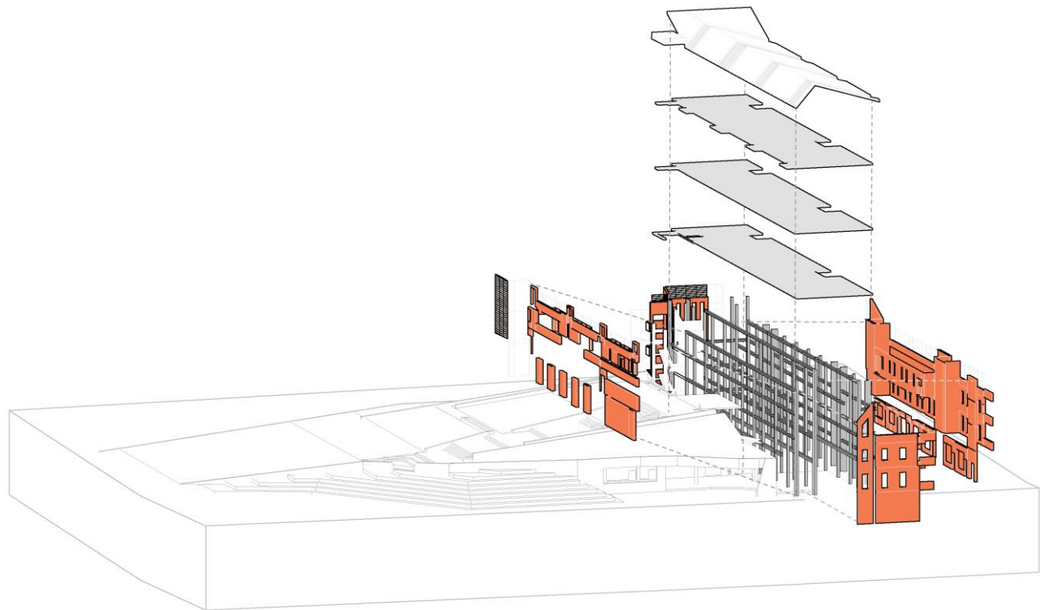
The canyon that divides the two architectures will be encased in glazed roofs and curtain walls to highlight the distinction. It is both functional as it allows for light and ventilation into the deep areas of the building but also creates a unique space of inhabitation. It almost allows complete visual access into and through the building. The design aspires to be a collage of diverse material languages, each complementing the others while maintaining its own unique material expression It seeks to be distinct yet unified, pulling Rowe’s concept of the Collage City that looks to acknowledge the distinct layers of context and harmoniously unify them (Rowe, 1978).

Figure 111

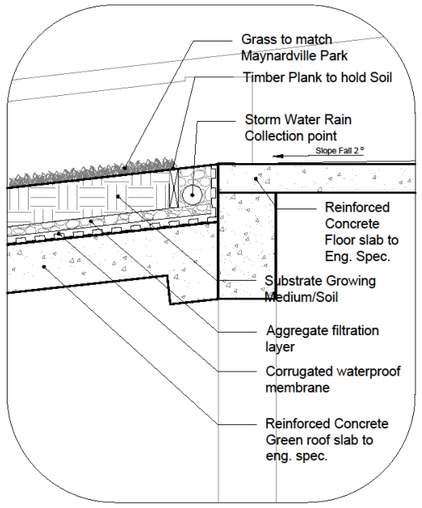
Technical section and diagrams done by author.



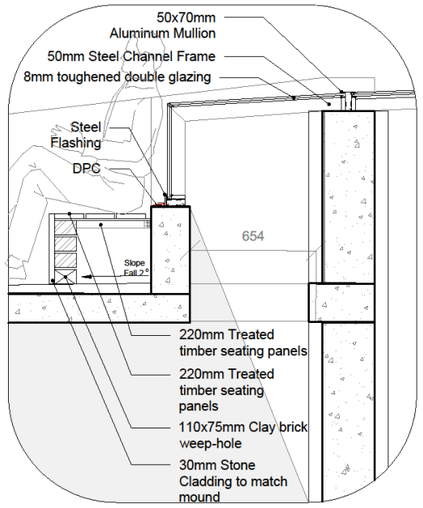




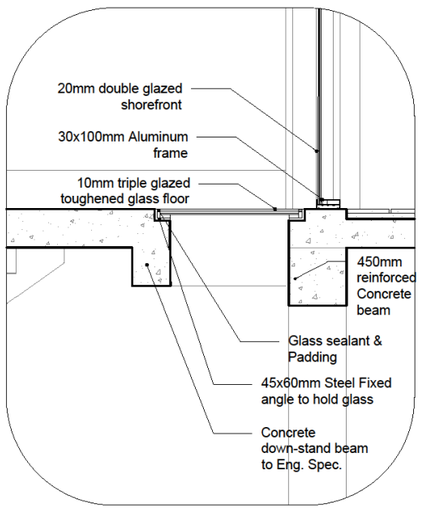
Detail 1



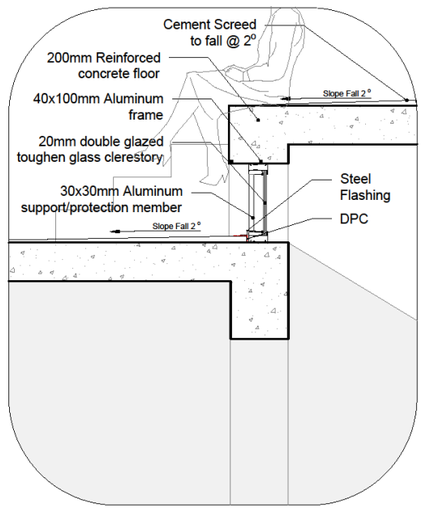
Detail 2

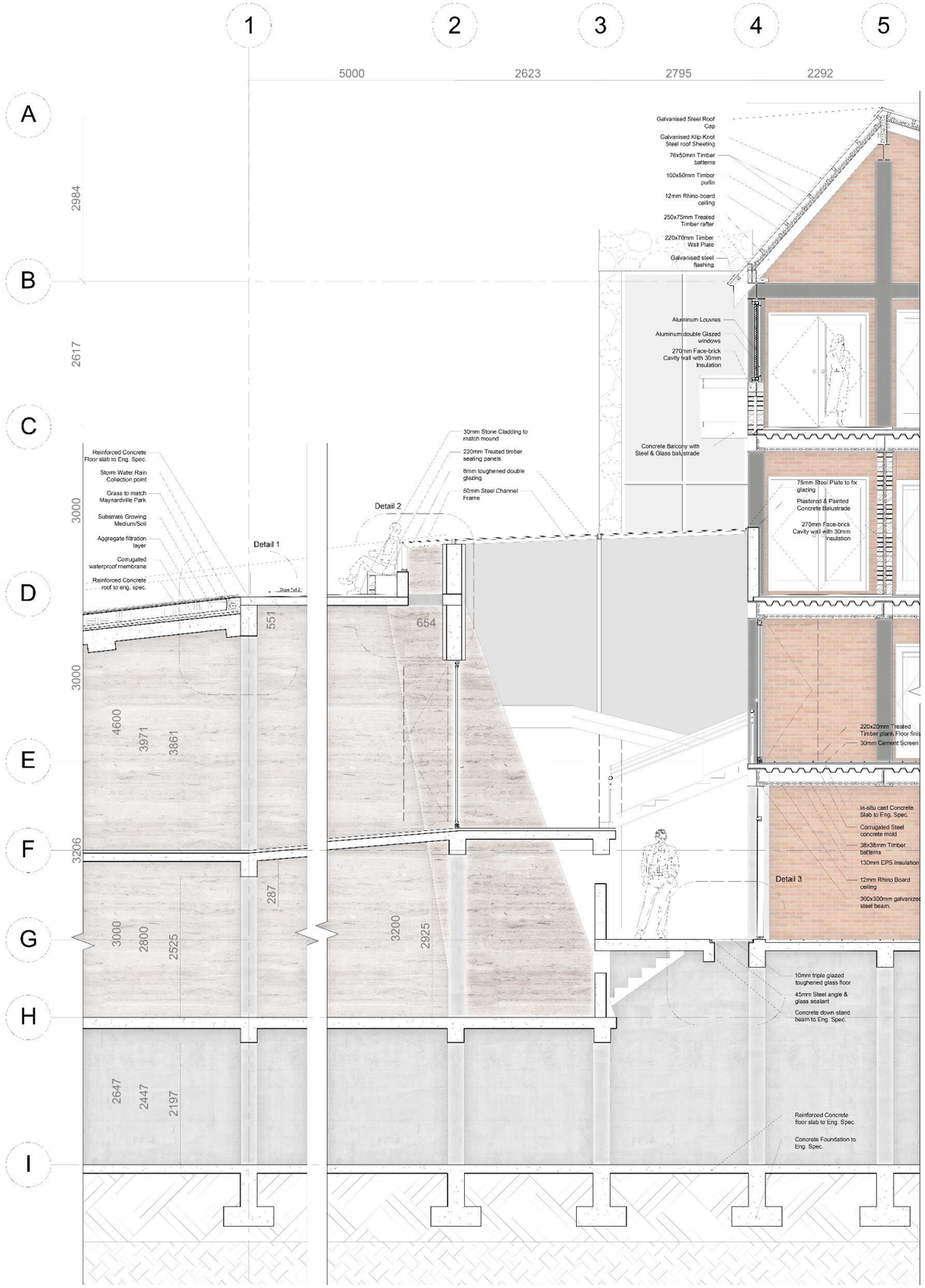


Detail 3



Detail 4





Ground & First Floor Plan

The building consists of 4 above ground floors and one basement floor, which is primarily designated for parking and storage purposes. The ground floor has 3 urban edges, the north and east edge accommodate flexible retail spaces to respond to the street edges that boarder it and create a commercial presence. The south edge houses a creche' that aims to respond to the library, creating a quieter and safer space where parents can drop off their children. Parking is housed underneath the mound behind the retail spaces.

The first floor houses the flexible exhibition/event space that makes use of the urban fabric floor as well as the mound floor. This allows for a variety of events to take place with little disrupted structure in two distinct types of spaces. The circulation at the north end connects to all 5 floors and houses the reception area for these floors.

Figure 112

Ground floor plan with program diagrams done by author.

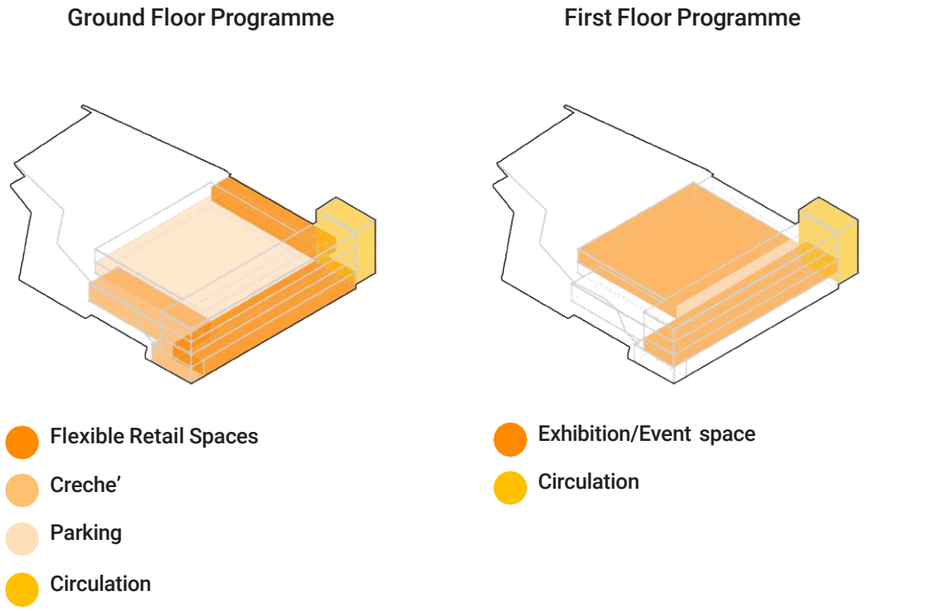
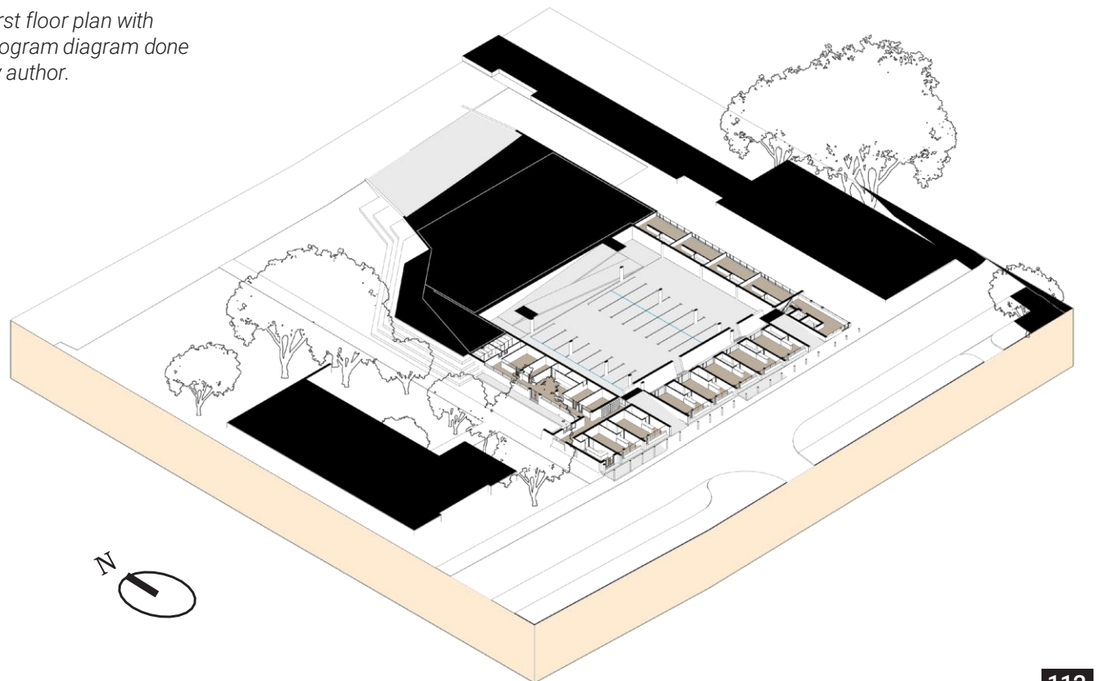


Figure 113

First floor plan with program diagram done by author.



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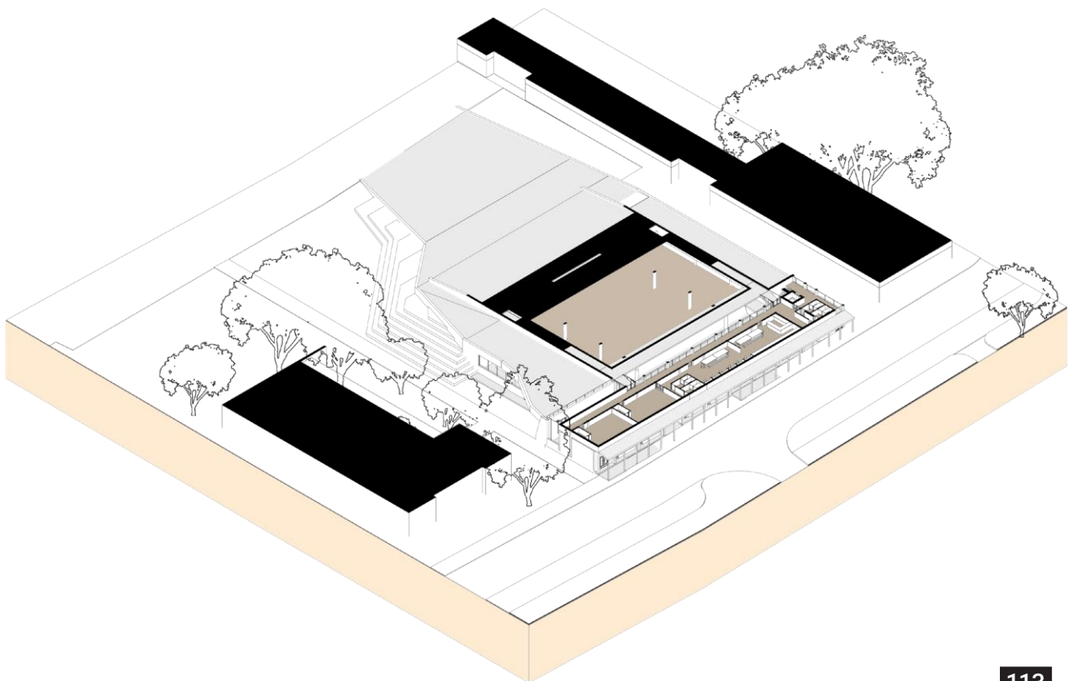


113

Second & Third Floor Plan

The second floor plan is dedicated to a restaurant, strategically positioned on this level to take advantage of the views over the mound. Its location allows it to cater to visitors coming directly from the park, creating a seamless transition. The restaurant then also has a variety of seating areas, some with open views of the park and others sheltered within the urban fabric.

The third floor is the least programmatically prescribed floor, but much like the first and second floors of the urban building, it contains few disruptive structural elements making it flexible. I have proposed co-working offices or teaching spaces so that the staff and users of the library can have a place to study or hold conference meetings. This is a space that is offered specifically to the needs of the community of Wynberg.

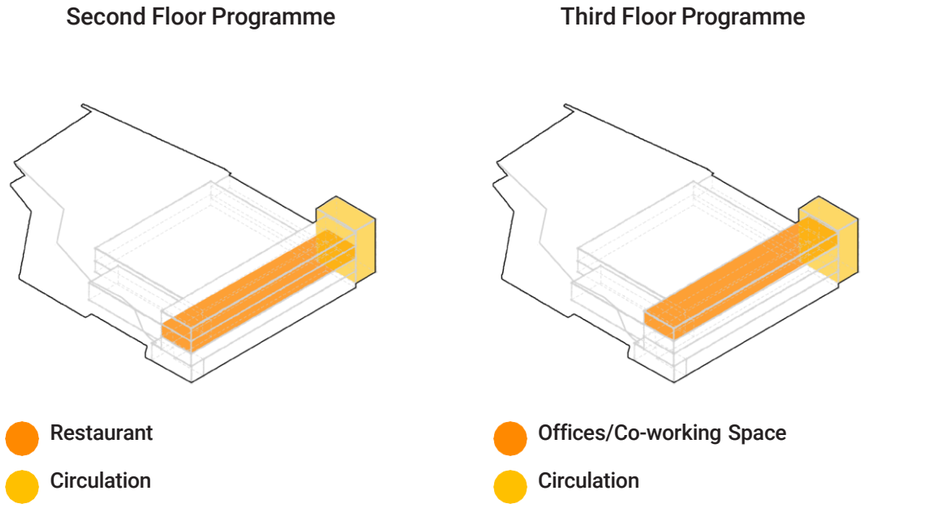


Figure 114

Second floor plan with program diagrams done by author.

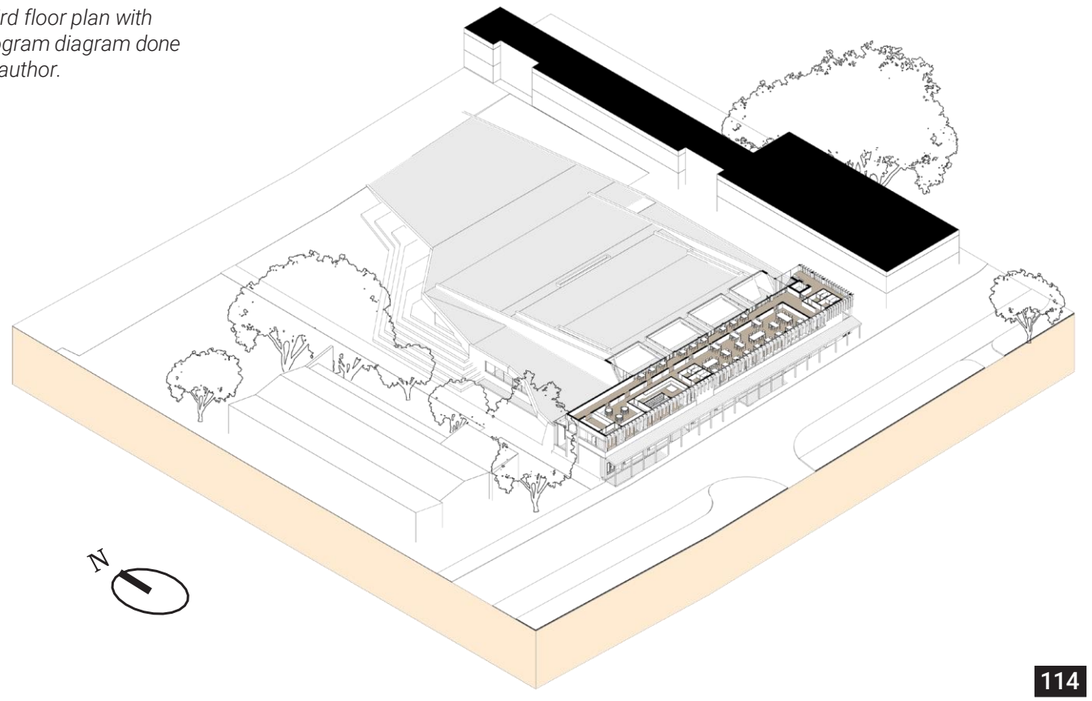
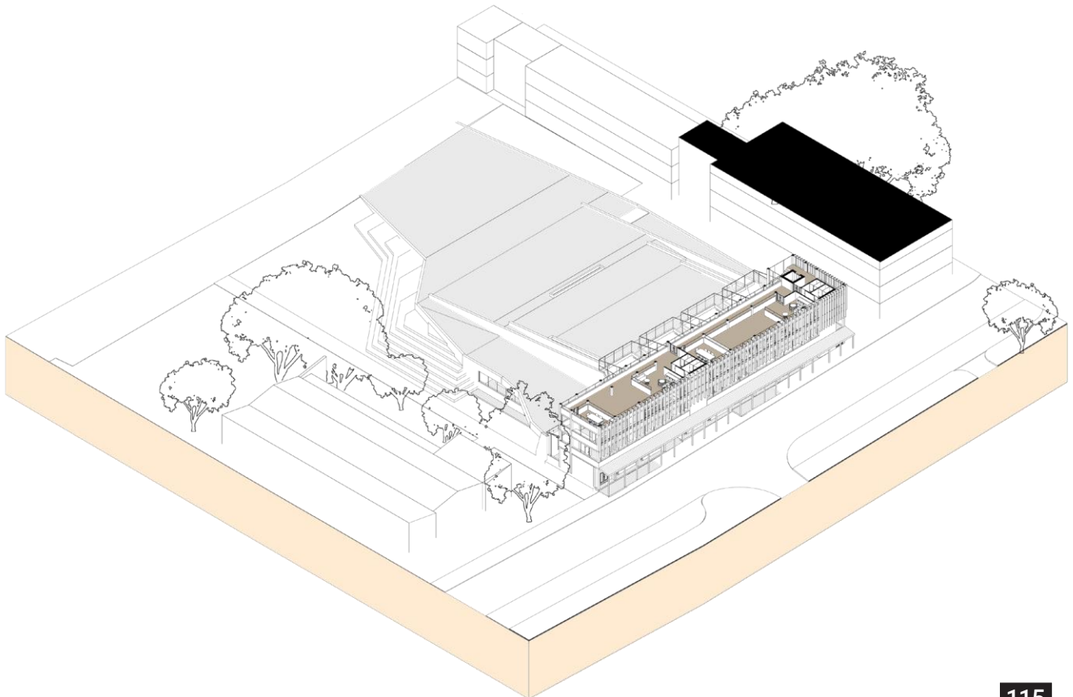


Figure 115

Third floor plan with program diagram done by author.



Habraken levels

The programmatic scheme of this inquiry aligns with the theory of Habraken and supporting theory from Frank Duffy and Stewart Brand regarding levels of permanence (Habraken, 1972). The Scheme hosts a variety of programmes with varying levels of permanence and flexibility.

The Creche' is the most permanent program as it responds to the park and library which are permanent fixtures in the community. The ground floor has flexible retail spaces as this edge will always require some active commercial presence, but the type of retail is undetermined. The floors above all present a generic shell of structure that can easily change to the needs of the user. The materials used also correspond to the intended duration of permanence, heavier durable materials cater for a longer established programme and the lighter materials cater for programmatic and spatial flexibility.

Figure 116

Diagram showing levels of permanences done by author

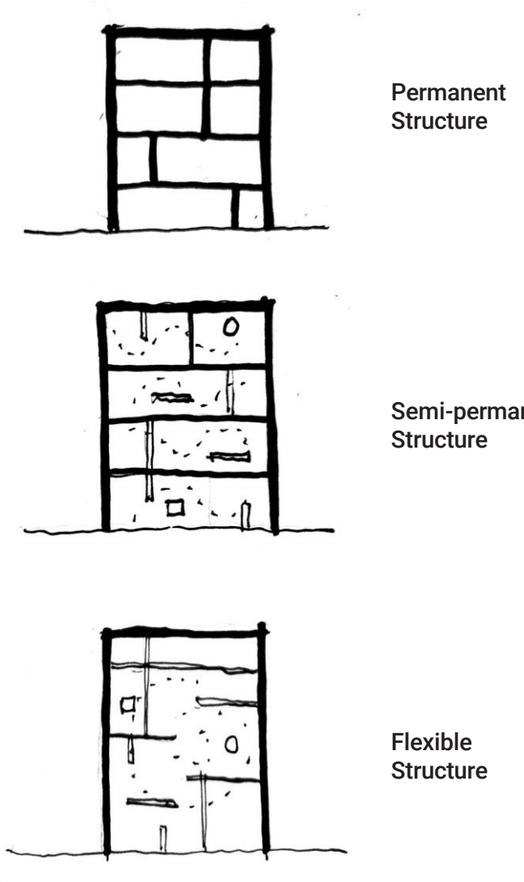
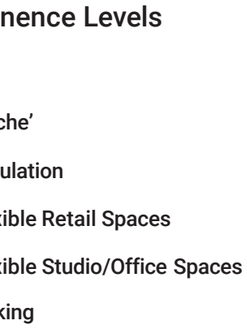
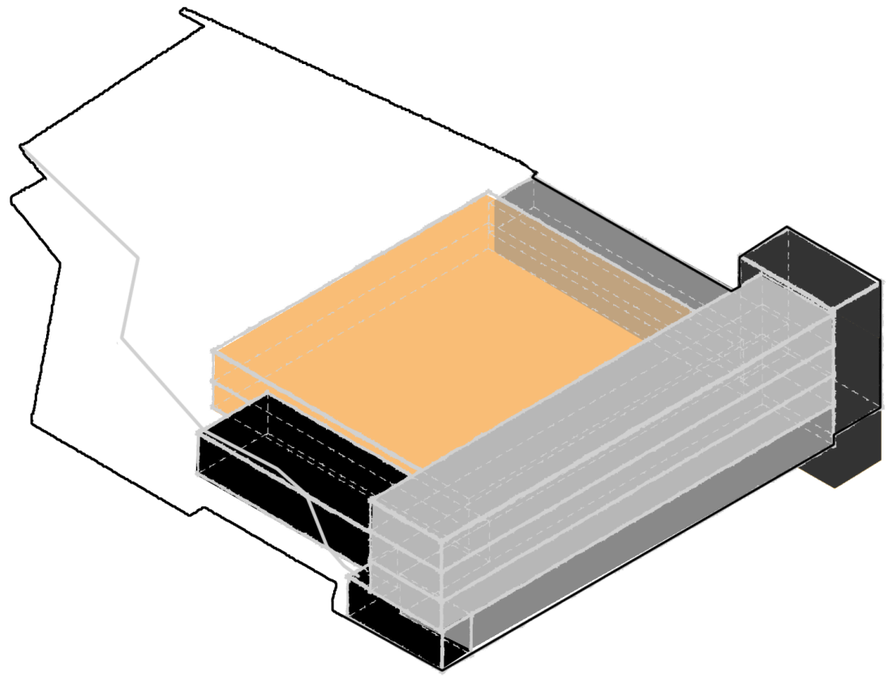


Figure 117

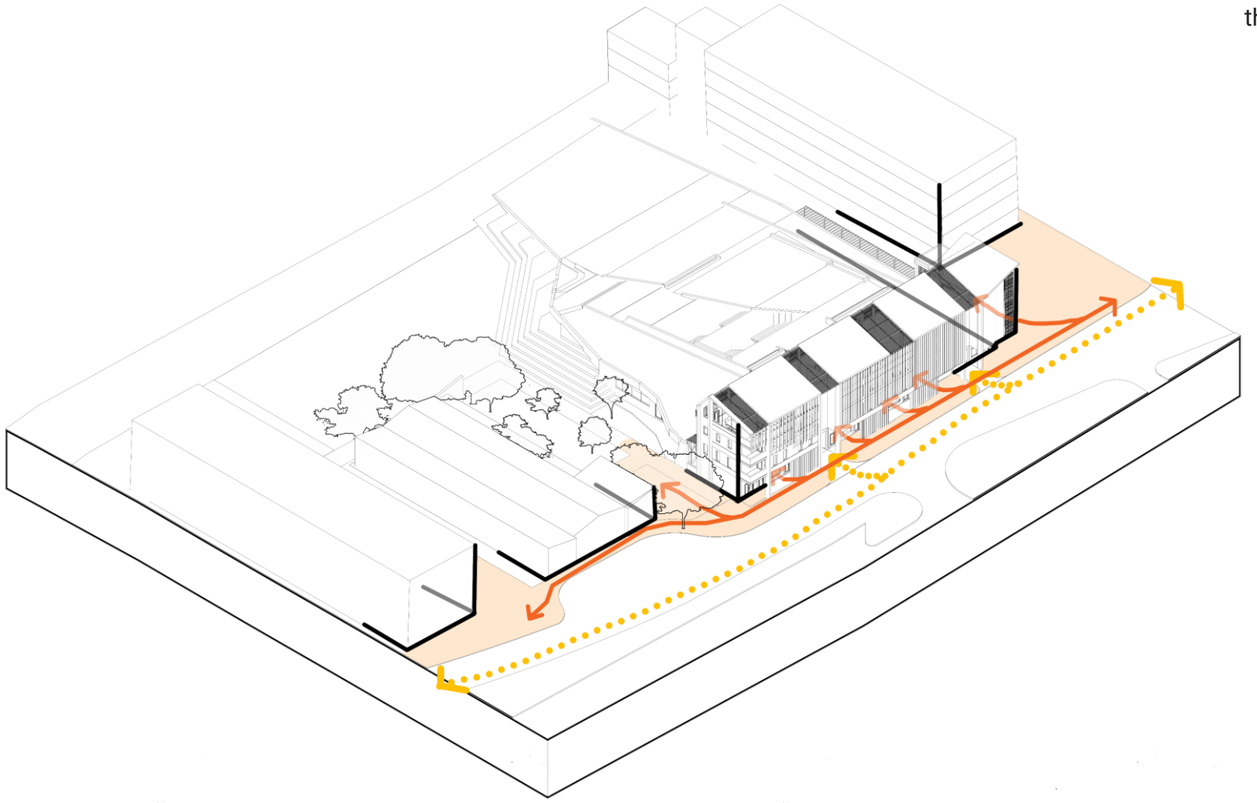
Massing diagram showing the levels of program permanences in intervention done by author





Street Edge

The street edge is quite important as it creates two corner conditions that act as entrances to the park. The north corner is the main entrance to the park from the street and further south is the library entrance. The activity is intended to have a gradient of intensity as you move from the busy corner entrance down to a quieter library entrance, with the commercial retail spaces acting as buffer that slows down the movement along this edge. The entrance to the parking area (as marked in yellow) is also situated along this road edge.



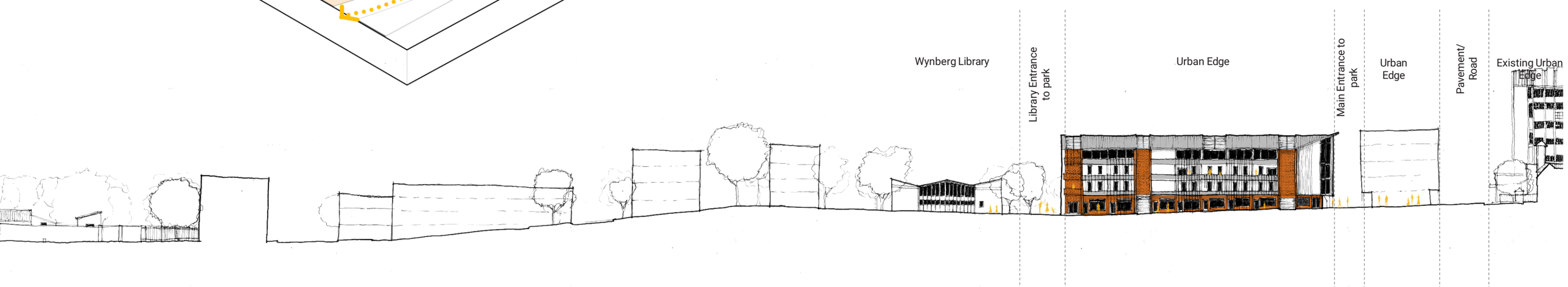
118

Figure 118

Street isometric diagram done by author.

Figure 119

Street site section done by author.



119

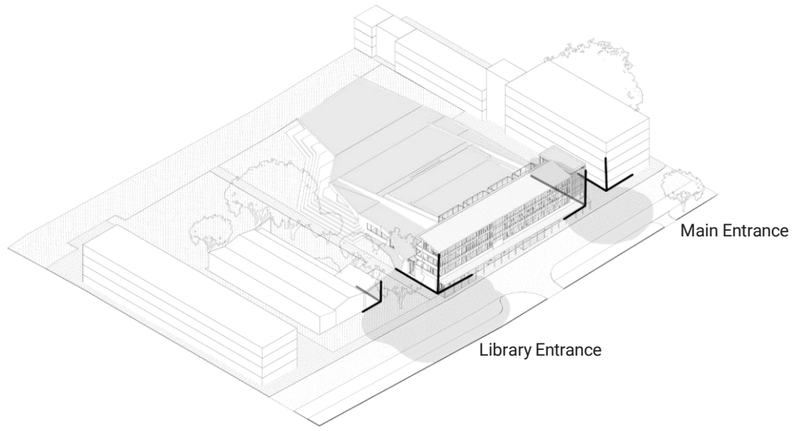


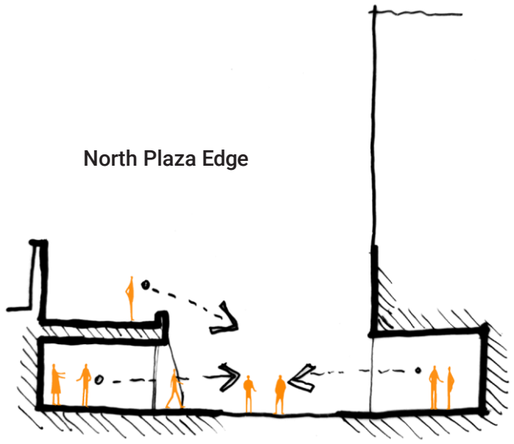
Figure 120

Perspective drawings and diagrams of Main corner edge done by author.

Figure 121

Perspective drawings and diagrams of library corner edge done by author.

North Plaza Edge



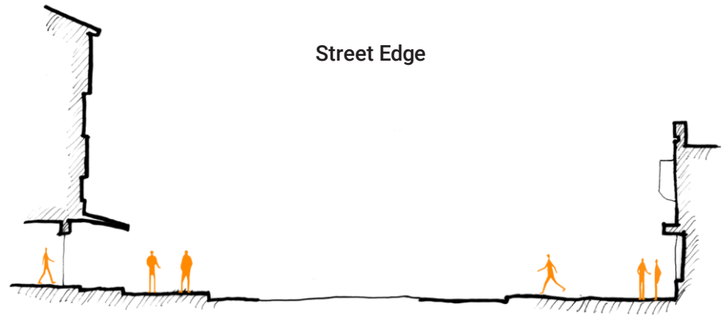
Corner Edges

The corner edges are meant to receive people into the park. The north corner, situated at the Church Street and Glaren Road intersection, acts as the main entrance, featuring a plaza and a drop in the mound above the retail spaces to engage with the plaza.

The retail edge is intended to encourage users to filter in and out, responding to the urban edge across the road with a single-storey, canopied design that mimics the built form.

The south corner, being the library entrance serves as a drop off zone for parents to leave their children at either the library or creche'.

Street Edge

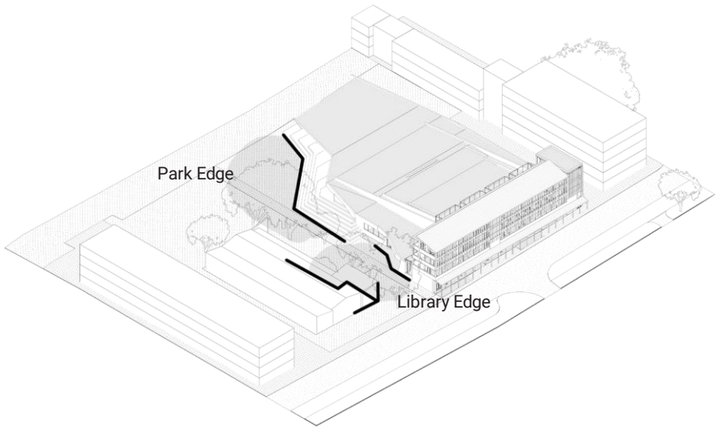


Main Entrance Corner

120

Library Entrance Corner

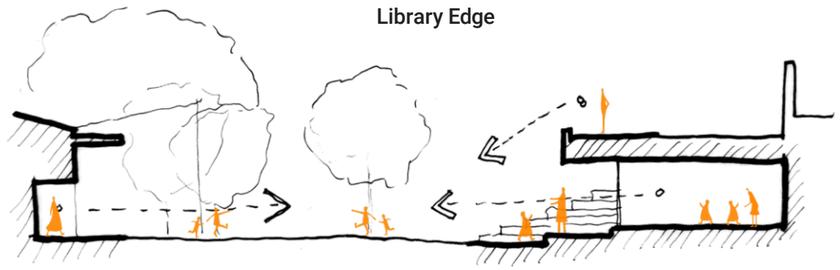
121



Park Edges

The south edge presents two conditions, the library edge and the park edge. The library edge is designed to provide a safe and quieter space, positioned just around the corner from the bustling street edge. The area in front of the library is shaded by existing trees, creating a pleasant environment for the children at the creche to play under and forming a natural barrier for this space.

The park edge features an amphitheatre carved into the mound, serving as a play area for children and a potential performance space at ground level. Users can either sit on the steps or on the grassy lawns of the mound. This amphitheatre primarily caters to the expo and carnival events that occasionally take place, while also encouraging more events to occur at this corner of the site.



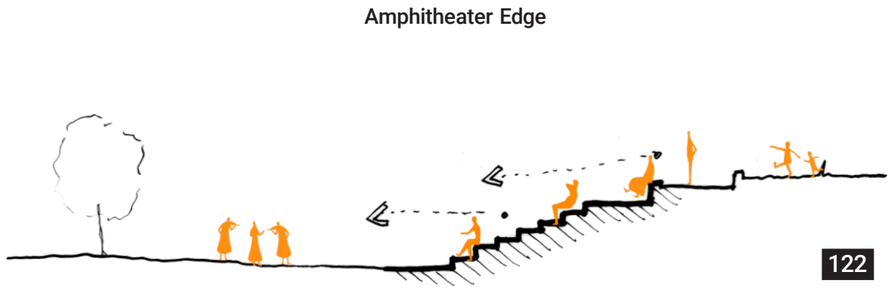


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Figure 122

Diagrams of the library and amphitheater edge done by author.

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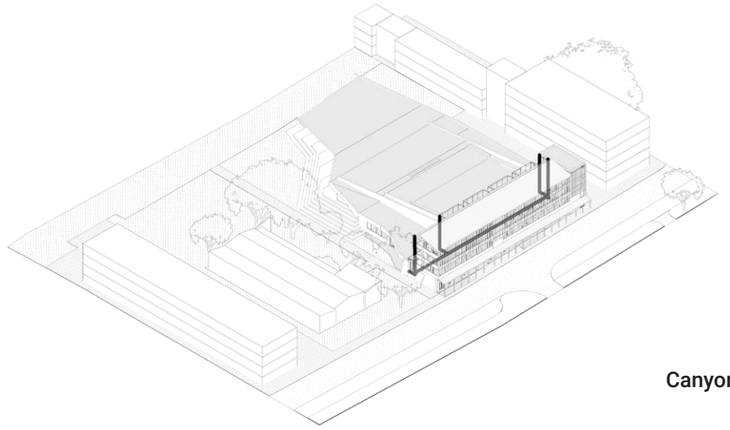
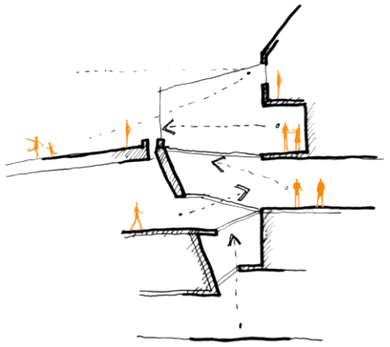
Figure 123

Perspective drawings of amphitheater done by author.





Canyon Edge

Canyon Edge looking up

Figure 124

Diagram of the 'canyon' edge done by author.

Figure 125, 126

Perspective drawings of 'canyon' (looking up & looking out) done by author.

Canyon Edge

The 'Canyon' edges intend to give prospect to not only the park but to the programme that takes place within the building as well. From within the canyon there are bridges at varying levels to observe the events in the exhibition spaces or the commercial edge on the ground floor. This 'canyon' draws inspiration from the concept of the 'Ha-ha' found in old English and French gardens. The 'Ha-ha' served as an invisible barrier, often in the form of a dry canyon, creating a division between the safety of one's house and the untamed natural landscape, all while maintaining a visual connection with nature (Dutton, 1937). The 'canyon' in this design, however, reverses the original function of the 'Ha-ha.' Instead of creating a barrier, it preserves the visual connection to nature while encouraging access to and from nature, particularly Maynardville Park. The upper two floors benefit from the boundless prospect to the park created at 'canyon' edge. The upper two floors particularly benefit from the unobstructed views of the park created at the 'canyon' edge.

Canyon Edge Prospect

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126

08

Conclusion

This Design Dissertation paper aimed to produce an inquiry that holds itself within a particular context. It accomplished this by delving into the historical and significant aspects of this context through the lenses of architectural theorists and authors. These perspectives guided the investigative process and the subsequent intervention. The current urban conditions of the chosen site, Maynardville Park, enforce a theoretical and practical position of contextual preservation. The approach this inquiry took to preserve Maynardville's narrative, was to explore an architecture that is flexible, timeless, and complementary. These design objectives require an architecture that must be adaptive and responsive in both programme and form. To establish a foundation for defining program and form, this paper examined how these subjects have been debated and discussed throughout architectural history and how these discussions have effectively been applied within the architectural realm.

Both the theoretical and technological studies into these topics aimed to show a relevant architectural discourse and a relevant architectural application. The theoretical lens of this paper led to an exploration of mixed-use auditoria spaces as they are designed to facilitate a variety of activities and programmes. With Maynardville's multi-layered history and current programme, an architecture of this type proved relevant. The concepts developed for this inquiry (Meaning, Collage and Edge) intends to both preserve and enhance Maynardville Park. Throughout the design process the conceptual inception, the urban development and architectural realisation align with these concepts. At each level, there is a thoughtful consideration of the context, program, materiality, and time as integral components of a unified architectural system. Ultimately this architectural intervention aims to position itself in the context of Maynardville, establishing its relevance, complementing the narrative and facilitating the inevitable social change that comes with it.

[13531 words]

Figure 127

Photograph of Wolfe Street Avenue taken by author.

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Figure 97 Author, 2023. *New Urban Proposal of Glaren Road edge* [digital illustration].

Figure 98 MyCiti, n.d. Proposed permanent road closures and bus stop locations in Wynberg, MyCiTi. Available at: https://www.myciti.org.za/en/contact/media-releases/proposed-permanent-road-closures-and-bus-stop-locations-in-wynberg/ [Accessed: 25 October 2023].

Figure 99 Author, 2023. *3D Site drawing before* [drawing].

UNIVERSITY OF CAPE TOWN
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2023/06/07

EBE/00156/2023

RE: Research Ethics Committee Project Approval Letter

Dear Matthew Shepherd,

Your application for ethics review of your project titled

A Complementary Architecture: Looking into an adaptable architecture that contributes to the existing narrative of the site by enhancing its programmatic condition.

has been reviewed and evaluated by the

Engineering & Built Environment Committee.

You may proceed with your research project titled:

A Complementary Architecture: Looking into an adaptable architecture that contributes to the existing narrative of the site by enhancing its programmatic condition.

Please note that should:

(i) any serious or adverse effects to participants occur and/or,

(ii) aspect(s) of your current project change and/or

(iii) any unforeseen events that might affect continued ethical acceptability of the project occur then you should immediately report this to the approving REC. You may be required to submit an amendment to this application, in order to determine whether the changed aspects increase the ethical risks of your project.

Based on the information supplied your application has been successful and is approved.

Please note the following additional conditions associated with this approval:

(i) Should the informed consent form also be translated into Afrikaans or isiXhosa?
The proposed research will not include persons under 18 years, which is appropriate from an ethical perspective but the reviewer asjs if interviewees older than 18 could still be asked if and how children/younger people use the park, just to get a more exhaustive sense of the various demographics spending time there.

Regards,

Engineering & Built Environment Committee.

CENTRE FOR HIGHER EDUCATION DEVELOPMENT
UNIVERSITY OF CAPE TOWN

Huri oaxa (Hoerikwaggo) Building,
North Lane, Upper Campus
Private Bag #3 Rondebosch 7701
Telephone: (021) 650-5730

This report can only be generated for ethics application review records assigned to the Centre for Higher Education Development Research Ethics Committee