RESCRIPTING THE PERMANENCE OF RAMKRAAL

A SKILLS DEVELOPMENT CENTRE WITHIN THE HISTORIC RUINS OF THE RAMKRAAL PRISON FOR THE COMMUNITY OF BATHO.



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RESCRIPTING THE PERMANENCE OF RAMKRAAL

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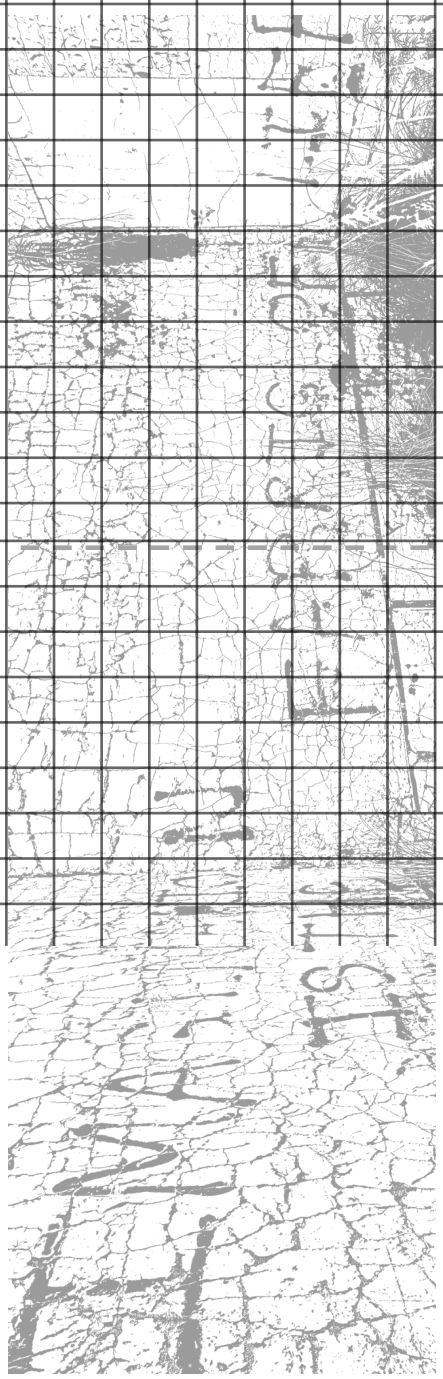
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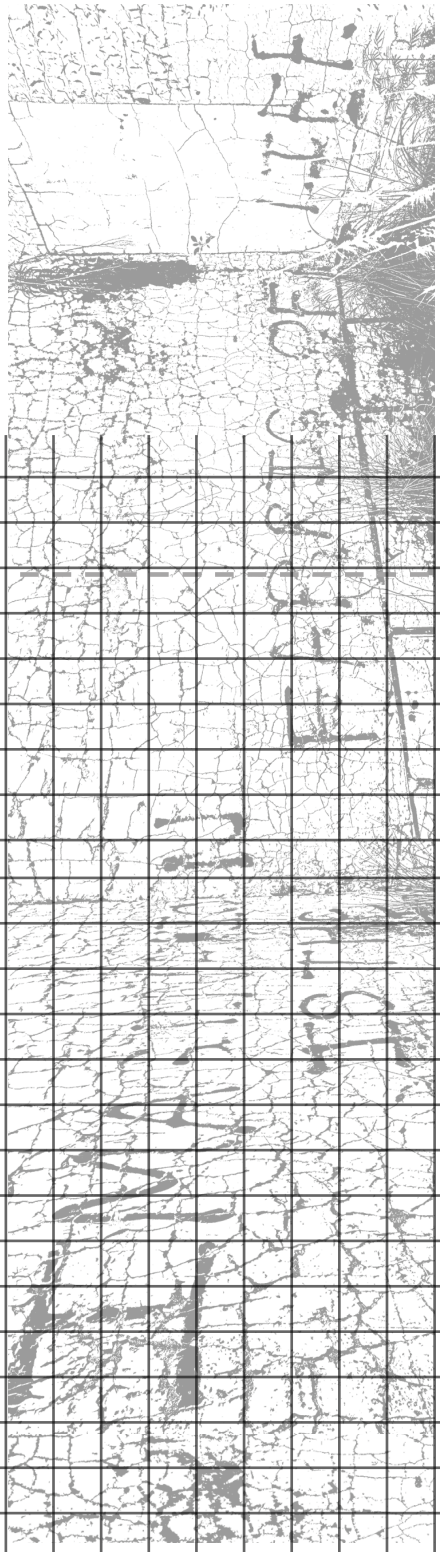
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For Mom, Dad, and Carmen (Kiepie) Coetzer, my late sister (8 April 2008), who would've loved to have the opportunity to study further and never stop learning.



ABSTRACT

Conservation and adaptive reuse projects help to reactivate long-forgotten places and offer a revived space for the growth of the next generation of South Africans. The question is: How can a community-catalysed skills development centre in-between Batho and the Bloemfontein CBD be sensitively integrated and rescripted within a ruin – the Historic Ramkraal Prison in Bloemfontein – thereby inverting the established power structure by activating learning settings aimed at self-liberation? When confronted with culturally significant and heritage-protected architecture, the usual response is to encompass it in time and turn it into a museum rather than analysing the immediate context and creating a place for growth for communities and people who need it. The proposed design offers a place of self-liberation while both retaining the existing structural fabric and sensitively adjoining new structures to these, in order to rescript established orders and architectural character. The study focuses on adaptive reuse of culturally significant heritage buildings and how the new can creatively respond to the old. After several failed attempts to preserve the Prison complex — all focusing on preserving the historic physical remains of the ensemble — the proposed design offers a community-centred solution where the preservation of heritage resources as historical beacons ultimately depends on the vitality of surrounding communities.



MANIFESTO

Architecture is more than just designing floors, walls, and roofs. It is about creating spaces that are functional and empathetic towards people. After all, people are arguably the most essential factor in architecture. That is why ergonomics plays a crucial role in designing spaces that are comfortable and intuitive to use. However, it is not just about people. The climate also plays a significant role in architecture. Buildings must withstand the elements and provide a comfortable environment for people to live and work in. Think of architecture as a vessel for life. The floors, walls and roofs are like the biological systems in our bodies, working together to create a functional whole.

Moreover, architecture can benefit from simplicity. By designing with a minimalist approach, we can create beautiful and sustainable spaces, but simplicity does not mean boring. Morphological simplicity uses tectonics to create moments and identity in architecture. By building only what is necessary, we can create functional and visually striking spaces. Furthermore, let us remember the context. Critical Regionalism helps to root architecture in its surroundings, creating an identity that people can recognize. This is especially important in a world where the International Style has led to a lack of identity and placelessness. So, when it comes to architecture, it is not just about designing floors, walls, and roofs. It is about creating spaces that are empathetic, sustainable, and rooted in their surroundings.

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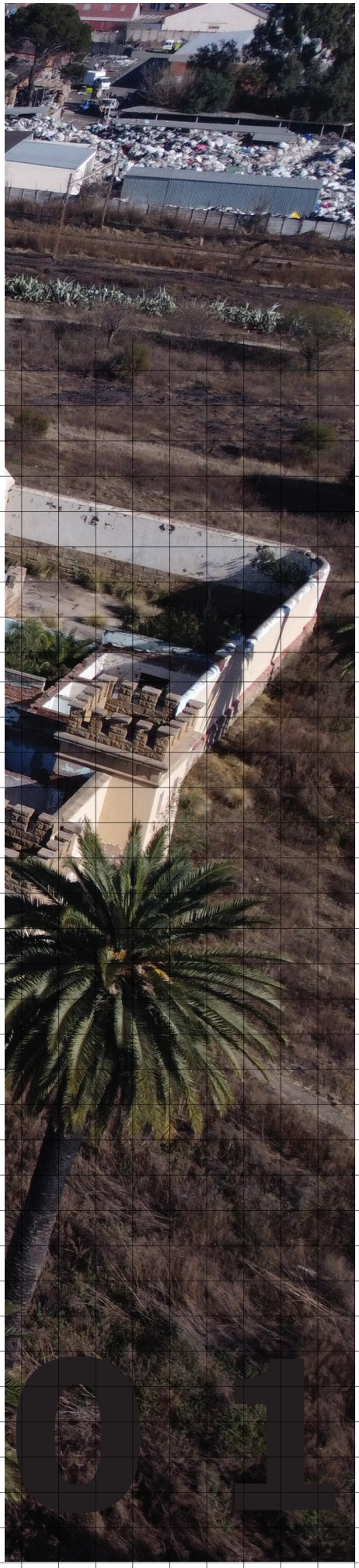
INTRODUCTION





Figure 1: The existing abandoned prison can still be seen as a stronghold or fortress, with two towers denoting its place on the site (van Tonder, 2023).





01

1.1 INTRODUCTION

"South Africa's unemployment rate in the first quarter of 2023 was recorded at 32,9 % and is among the highest in the world" (Stats SA, 2023: online). Education is fundamental to the growth of a person and a country; however, opportunities are scarce for those who need to dig themselves out of their situation. Training and skills centres can give people the tools to liberate themselves and pave the way forward as entrepreneurs, employees, or artisans. Ramkraal Prison (the existing prison complex which consists of different buildings that are dilapidated and abandoned will from this point on be referred to as Ramkraal Prison in this document) in Bloemfontein has a prominent contextual location, and primarily, it has historically been a site of oppression, segregation, and regulation. The prison is in a ruined state due to years of neglect and vandalism. It desperately needs conservation. However, conservation efforts often focus exclusively on the constructed artefact rather than considering the heritage project in terms of the community. This thesis proposes a community-centred approach able to rescript this strategically-located asset for generations to come. Ultimately, this proposal aims to subvert the historically-sedimented power structure of the situation and liberate the place to offer spaces for self-reflection, self-expression, and self-liberation.



Figure 2: The existing entrance to the Ramkraal Prison solidifies its permanence and fortress-like quality (Author, 2023).

1.2 PROJECT RATIONALE

The proposed approach prescribes community-catalysed adaptive reuse to pave the way for sustainable heritage preservation. People within the community already practise specific skills and have developed themselves with whatever knowledge or training they can find; therefore, by offering them facilities to practise their craft or skill and display their work, they can become teachers who can teach the next generation. The artisans or enthusiasts lend a hand in creating a community-driven relationship between the user and the proposed design. Clients are introduced to manage the centre and to organise these courses into a cohesive structure. The existing architecture has a restrictive and structured design, whereas the proposed program and intention are more akin to growth, inclusivity, and an open concept. Therefore, the proposed design can be addressed and analysed on different contextual levels to establish a unified and harmonious design seamlessly integrated with a conceptual framework that aligns with the project aims.

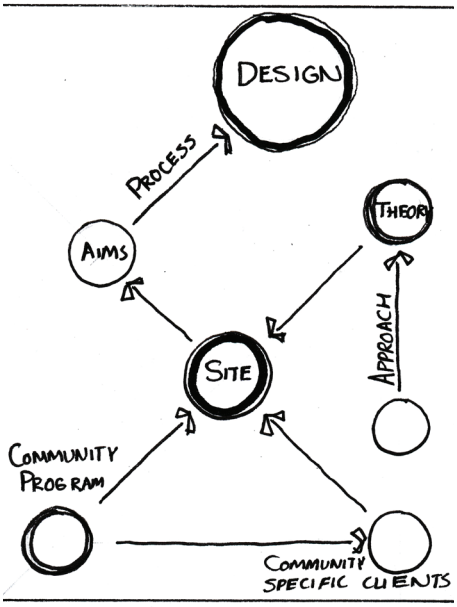


Figure 3: A diagram shows the segments that join to form the thesis proposal (Author, 2023).

1.2.1 SITE OVERVIEW

On the edge of Batho lies the site of the now abandoned Ramkraal Prison, that demands attention. This magnificent edifice, reaching for the heavens, is a testament to the rich tapestry of history and unwavering strength that defines this vibrant community. Amidst the endless commotion of daily life, the locals find themselves captivated by the formidable walls of the prison, an ever-present reminder of the difficulties that have shaped their existence. However, in its solemn atmosphere, Ramkraal Prison weaves itself into the very fabric of Batho's identity, an iconic landmark that binds the community together and breathes life into its narrative. A community-driven design requires a layered approach to how each space reacts to the next. Bloemfontein is the larger context, with Batho separated across the railway line and Ramkraal Prison acting as an in-between node that can bridge a connection between the two (figure 4). A skills development centre within Ramkraal Prison is a step towards that connection.





Figure 4: Batho's community is knit together by various places that aid its people. This aerial shot shows the relationship between these places (Google Earth, 2023: online).

However, there are clues in the existing community centres that can aid in the design process. By engaging with existing community centres (figure 4), the ingrained knowledge of the place and a more general 'sense of Batho' could be brought to the proposed centre. The taxi rank and bus station (figure 7) are located northwest of Ramkraal Prison, making it a significant hub for the residents of Batho. Their daily commute requires them to pass by Ramkraal Prison. In addition, the proposed design aims to achieve the secondary goal of creating a safe, stimulating and highly symbolic thoroughfare between Bloemfontein and Batho.

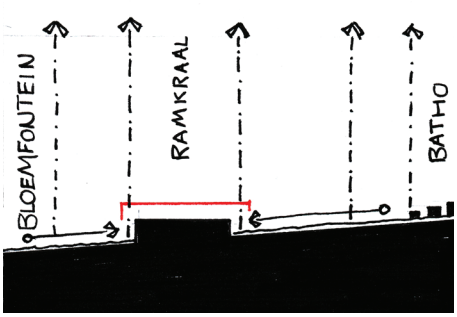


Figure 5: The relationship between the prison, Batho and Bloemfontein. The prison acts as a boundary between the two (Author, 2023).

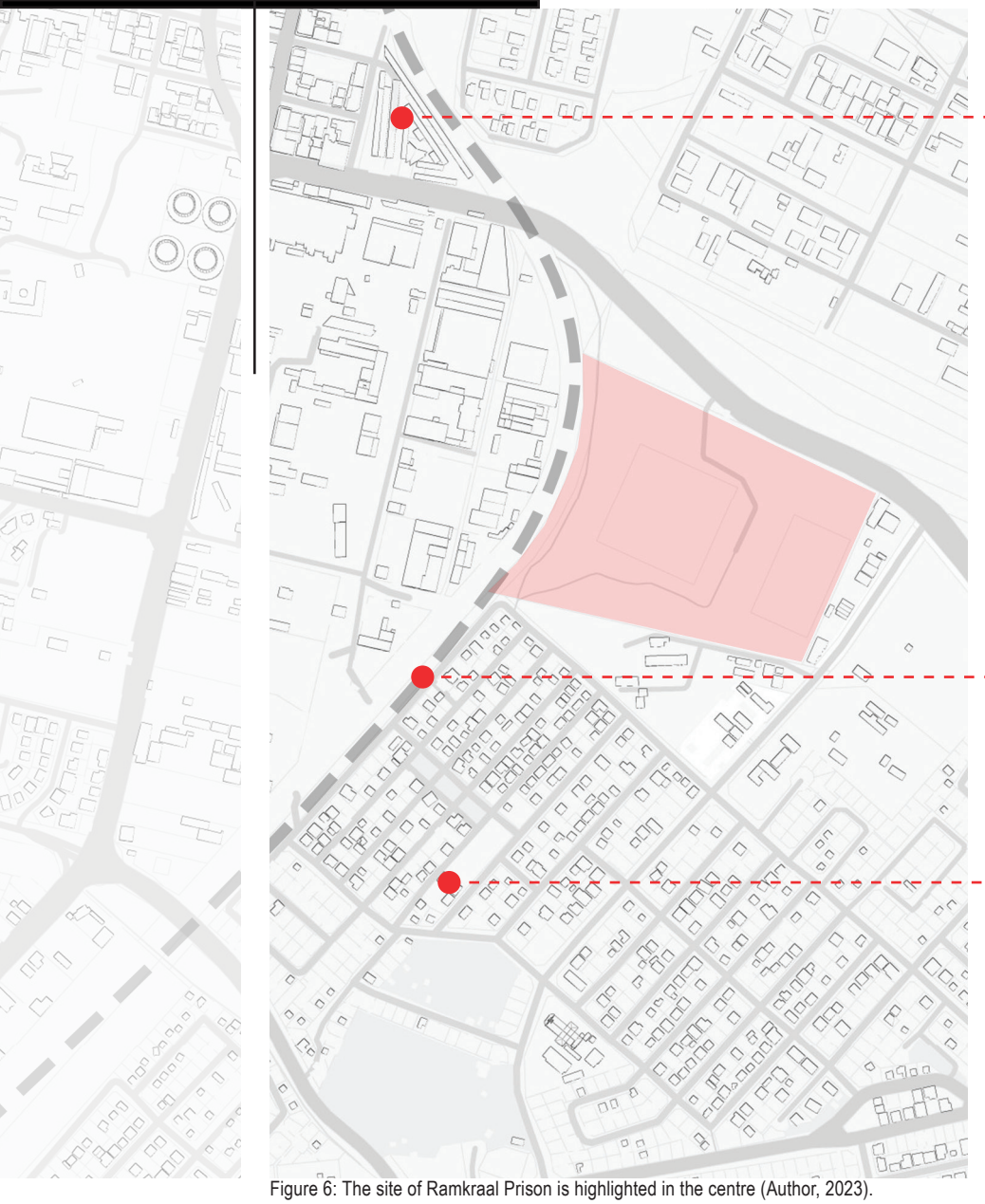


Figure 6: The site of Ramkraal Prison is highlighted in the centre (Author, 2023).

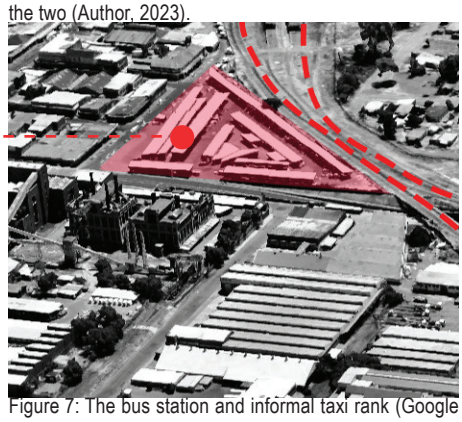


Figure 7: The bus station and informal taxi rank (Google Earth, 2023: online).

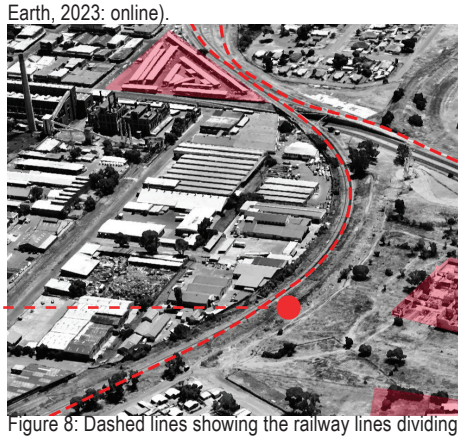


Figure 8: Dashed lines showing the railway lines dividing Bloemfontein and Batho (Google Earth, 2023: online).

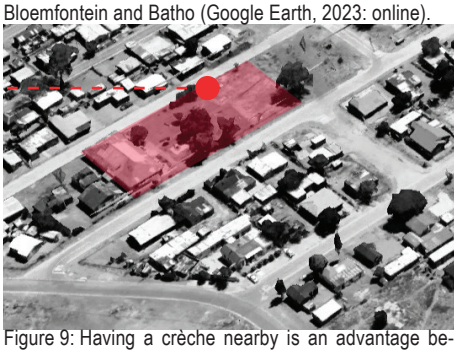


Figure 9: Having a crèche nearby is an advantage because it can create a sense of community where parents and families can interact and build relationships (Google Earth, 2023: online).

1.2.2 CLIENT

Establishing a client will support the proposed skills development centre's facilities and accommodation requirements. The two main clients identified for the proposed centre are Anchor of Hope and POPUP (People Upliftment Programme). Other parties involved in the project are the Department of Sport, Arts, Culture and Recreation and the Free State Heritage Resources Agency (FSHRA). The clients will provide the necessary resources and expertise to teach select artistic skills, digital literacy skills and other essential life skills. The skills taught at the centre will help empower the community and allow those needing access to such skills to gain the knowledge and skills necessary to become successful.

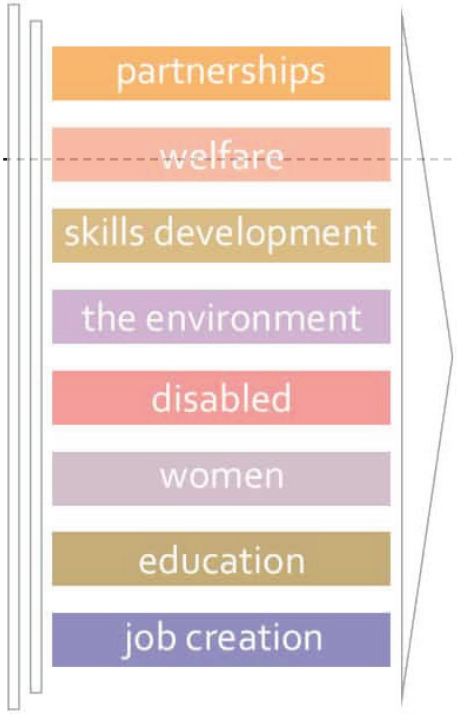


Figure 10: The pillars of social impact (Anchor of Hope, [n.d.]: online).

Anchor of Hope

Anchor of Hope is a "non-profit umbrella organisation comprising of seven different divisions, each concentrating on its field in the community of Bloemfontein" (Anchor of Hope, [n.d.]: online). They focus on "eight pillars (figure 10) of social impact: partnerships, welfare, skills development, the environment, individuals with disabilities, women, education and job creation" (Anchor of Hope, [n.d.]: online). The proposed skills development centre focuses on skills development, the environment, women, education, and job creation while catering to people with disabilities. As part of Anchor of Hope's vision, it offers pregnancy crisis support (which consists of teaching new mothers' childcare), carpentry and upholstery, community infrastructure projects, and sewing projects. Anchor of Hope also partnered with POPUP to offer classes and programmes for communities.

POPUP (People Upliftment Programme)

POPUP provides proficient skills training and development. The value of skills lies in their application and practice. POPUP provides a platform for individuals to practice their skills. This platform helps individuals refine their skills and encourages them to stay motivated and committed to their learning journey. Their skills programmes are divided into life skills, skills and enterprise development. The proposed centre will only focus on a select set of skills. The Foundation for Life (life skills) programme is "Biblically based, Christ-centred and is compulsory for all learners before any Skills Programme at POPUP can be attended" (POPUP, [n.d.]: online). In the skills programme, learners explore their values, beliefs, and vision as they discover their God-given purpose through continuous personal restoration and work readiness programmes. Additionally, hospitality services and computer and office management are offered.

Anchor of Hope and POPUP already have a small centre in Hamilton, Bloemfontein (figure 13), that trains keen individuals. Therefore, offering these facilities closer to the CBD can broaden their reach. The combination of diverse courses allows individuals to pursue their passions within a single centre. The following part will explore contemporary, traditional, and transitional skills into which the mentioned skills will be divided.

Figure 11: (Top)The logo of Anchor of Hope (Anchor of Hope, [n.d.]: online).

Figure 12: The logo of POPUP (POPUP, [n.d.]: online).



Figure 13: Anchor of Hope and POPUP partnership in Hamilton, Bloemfontein, with an operational POPUP centre (Author, 2023).

1.2.3 BRIEF DEVELOPMENT AND USERS

Step into the vibrant city of Bloemfontein, where development and growth are prominent. This bustling city stands proudly at the forefront of progress, driven by the unstoppable force of technological advancement and fuelled by a constant stream of contemporary (figure 14) ideas. Meanwhile, nestled on the edge of this dynamic city lies Batho, a place rich in tradition (figure 17) and community spirit. Though it may not boast the same infrastructure as Bloemfontein, Batho holds a timeless charm. Furthermore, the industrial area is a hub of conformity that plays a vital role in expanding cities. Here, transitional skills (figure 15) relate to that conformity of the industrial area since it is skills that are present in everyone's daily life, guiding individuals through the different stages of life. So, the choice is between the cutting-edge allure of Bloemfontein, the rich heritage of Batho, or the transformative power of the industrial area; each offers a unique experience to explore and embrace.

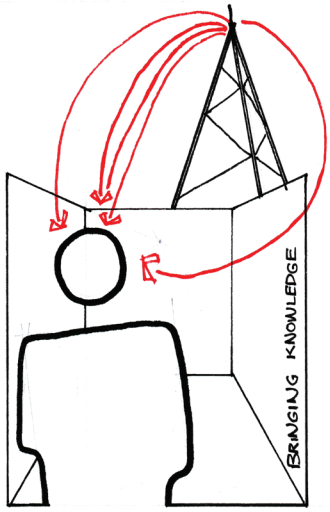


Figure 14: Contemporary skills is the idea of bringing new knowledge in, mainly digitally (Author, 2023).

The proposed skills development centre offers different fields of skills that could spark an interest in a new generation of young adults or better equip them for employment; these are contemporary, traditional, and transitional skills. Ramkraal Prison is already a physical stepping-stone between Bloemfontein, Batho and the industrial area. The new centre must also serve as a pedagogical stepping-stone for community members.

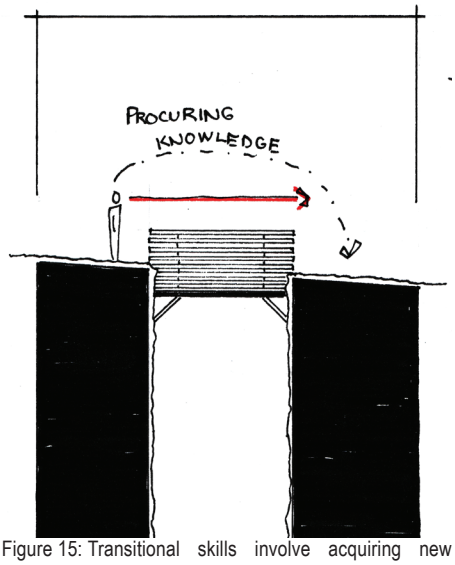


Figure 15: Transitional skills involve acquiring new knowledge that an individual previously lacked, bridging the gap in essential life skills education (Author, 2023).

The contemporary skills include teaching digital skills, computer literacy, entrepreneurship, STEM (Science, Technology, Engineering and Maths) classes and marketing with a maker space workshop for laser cutting, 3D printing and a digital library with audio and visual recording studios (figures 18-21). The transitional skills include teaching gardening, hair styling, languages, cooking, home economics and baby care courses (figures 22-24). Lastly, traditional skills include wood carving, pottery, weaving, sewing, quilting, beading and wirework workshops. The studios open into a courtyard open to the public for the selling and interaction between artisans and the public, with a traditional library above (figures 25-29). The centre focuses on life skills and filling the gaps in the different stages of one's life; therefore, skills that every generation will benefit from and could pass down to the next generation without changing significantly.

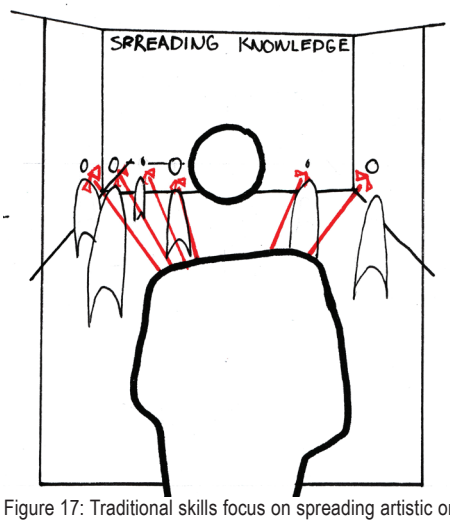
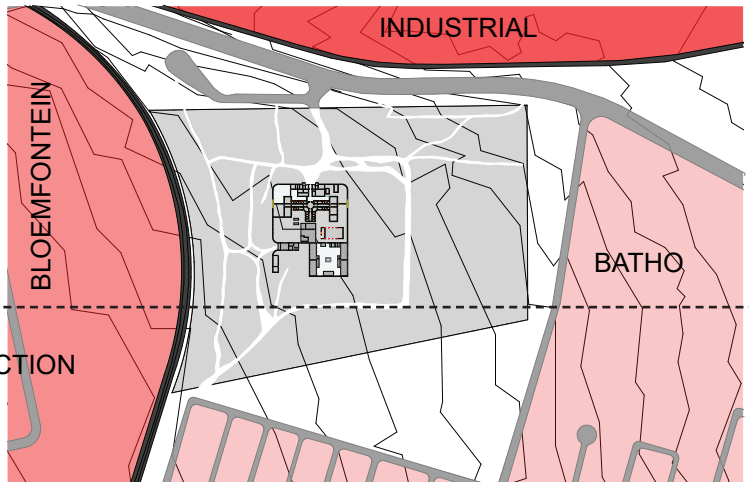


Figure 17: Traditional skills focus on spreading artistic or hard skills where people use their hands to create something worth marketing (Author, 2023).

Figure 16: Diagrammatic maps show the relationship between Bloemfontein, the industrial area and Batho (Author, 2023).



CONTEMPORARY



Figure 18: Students using 3D printers (Mashambanhaka, 2019: online).



Figure 19: Laser cutting and laser engraving workshop (Li, 2023: online).

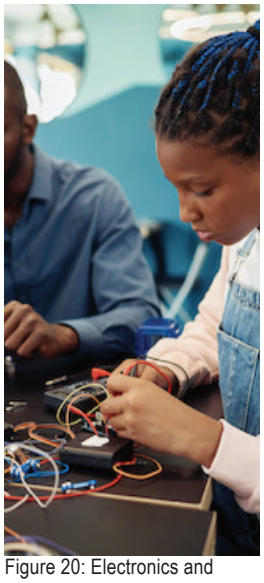


Figure 20: Electronics and robotics workshop (Ascione, 2023: online).



Figure 21: Computer class and digital library (Monzon, 2021: online).

TRANSITIONAL



Figure 22: Cooking classes (Strickland, 2012: online).

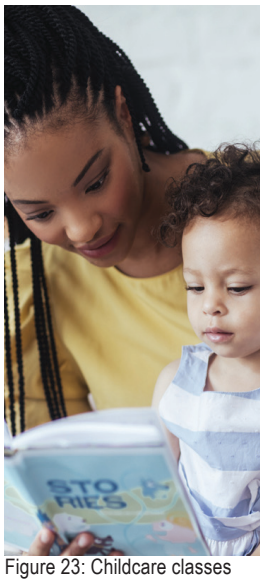


Figure 23: Childcare classes (Firstaid4u, 2023: online).



Figure 24: Understanding the basics of gardening and growing fruits and vegetables (Québec, 2023: online).

TRADITIONAL



Figure 25: Quilting and sewing fabrics (Lee, 2022: online).



Figure 26: Weaving baskets and place mats (Obakki, 2023: online).



Figure 27: Beading jewellery (Boylen, 2023: online).



Figure 28: Pottery workshop (Platt, 2020: online).



Figure 29: Wood carving (Duffin, 2022: online).

1.2.4 THEORETICAL APPROACH

The theoretical chapter lends credence to the design approach of focusing on community concerns as primary design drivers. After explaining these concerns, it will be discussed how established power structures (figure 30) will be rewritten and how they will be reflected in the proposal. By rescripting a heritage site, these concerns can manifest into a conceptual approach to facilitate self-liberation. In order to support this approach, a traditional heritage analysis must be conducted regarding the heritage site. Only then can a community-catalysed approach be understood as to how it would support traditional heritage assumptions and motivate places where the proposal deviates from what is expected. It will shed light on areas where the proposal may deviate from the norm, offering insights into how these deviations can be motivated and justified. By combining this heritage analysis with the community's active involvement, the true potential of the design can be unlocked. This collaborative approach will honour the site's history and empower the community to shape its future. Together, they can create an approach that respects tradition and embraces innovation and progress.

RESEARCH QUESTION

COMMUNITY-CATALYSED

CONCEPTUAL APPROACH

HERITAGE ASSESSMENT

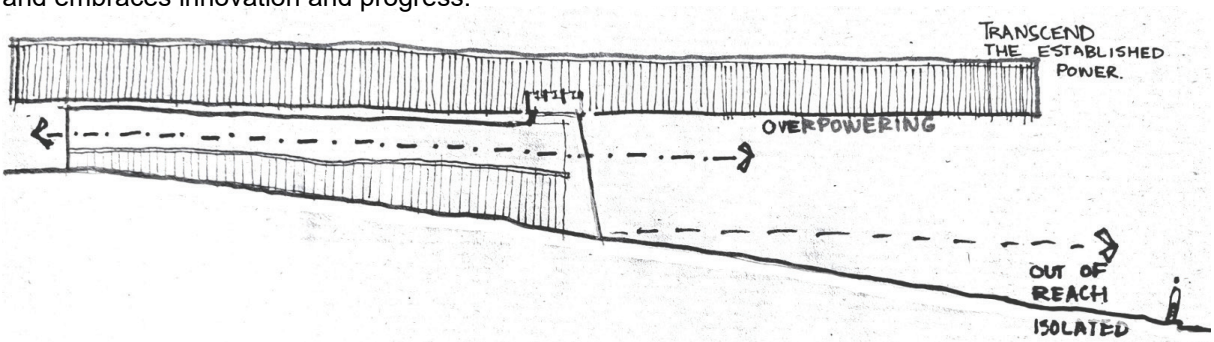


Figure 30: Ramkraal Prison is isolated from the surrounding areas, and the existing power structure still lives on within the ruined spaces and fortress like characteristics. These characteristics must be rescripted to make way for community-catalysed places, thereby transforming the ruined spaces (Author, 2023).

1.2.5 PROJECT AIMS

This proposal aims to establish an inclusive environment that fosters empowerment, support, and skill development for community members, enabling them to thrive and achieve personal growth, ultimately attaining self-liberation. After years of neglect, the Ramkraal Prison can be preserved in a way that draws on community-derived narratives and functions. Acknowledging the historical significance and involving the community can ensure its long-term conservation while fostering a sense of ownership and pride among Batho residents. To contribute a historically-remedial route to the urban fabric of Bloemfontein, creating a link or threshold between Bloemfontein and Batho.



Figure 31: Ruined spaces with potential (Author, 2023).



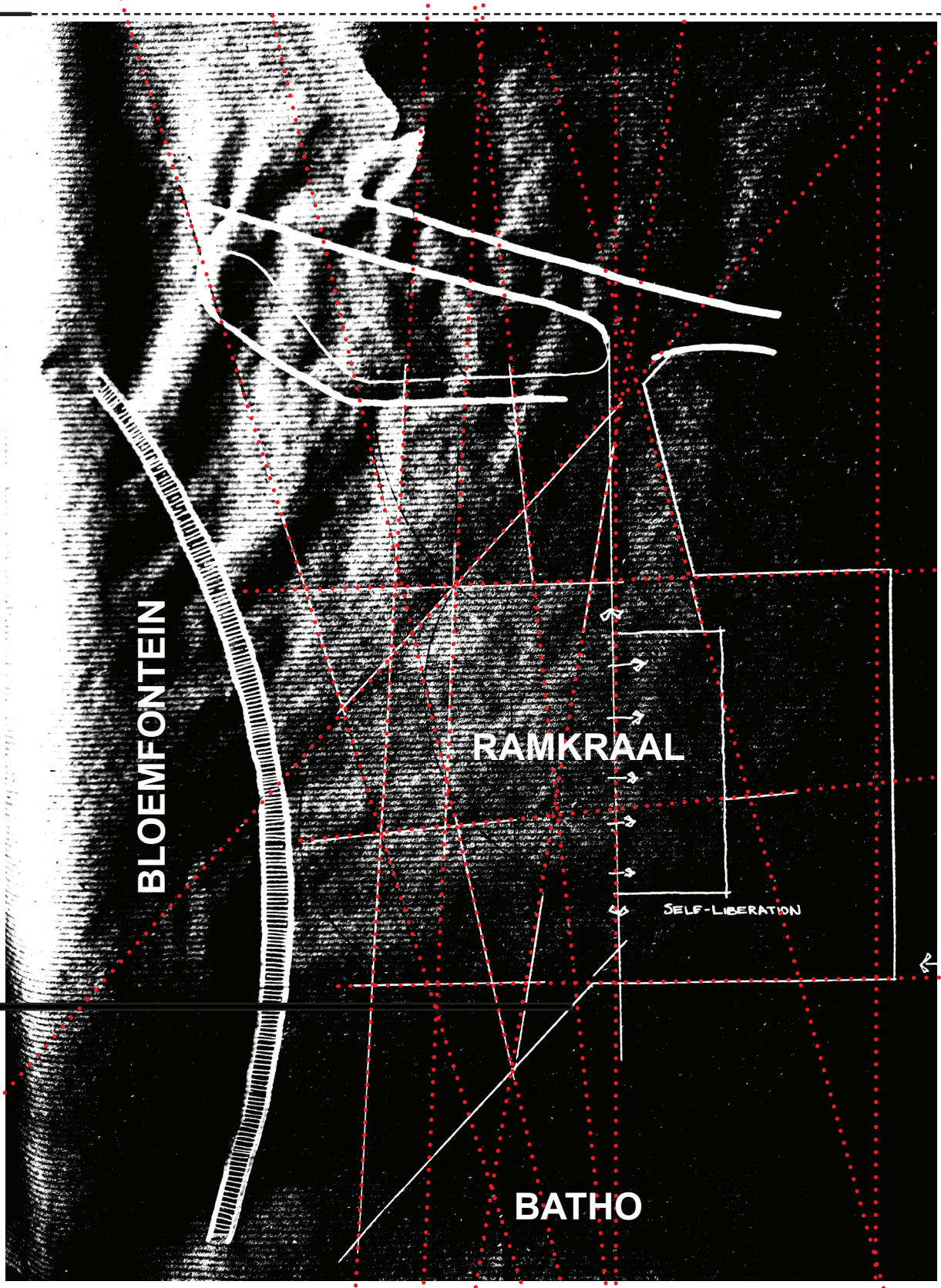
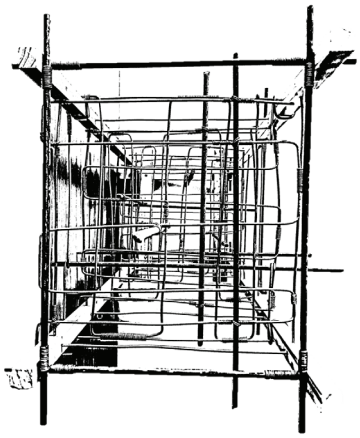


Figure 32: The site's rich history and contextual geography offer a unique chance to unleash creativity and express innovative ideas. Batho and Ramkraal Prison's intertwined historical significance creates a perfect platform to explore new perspectives. This approach slowly bridges a connection between Batho and Bloemfontein through Ramkraal Prison (Author, 2023).

1.3 TOUCHSTONE: DEVIATING A MATRIX

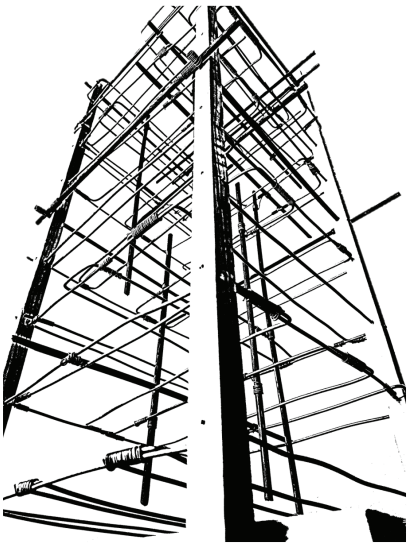
The initial concept of the touchstone at the project's inception was to serve as the guiding principle, and as the design progressed, the plaster could be linked to the community, and the Ramkraal prison (the touchstone's structure) served as a host for the community-catalysed places to come. The touchstone's structure (figure 34) establishes a matrix carefully organised in a strict grid. However, the plaster (figure 35) boldly challenges the established power structure within this space. It boldly attempts to create its unique identity while honouring the existing elements. As a result, a remarkable sense of seamless continuity and fluidity is created within this space. Therefore, to achieve sustainable preservation, community preservation is a non-negotiable part of the process; otherwise, nothing changes. The next chapter analyses the context and site to understand the historical background and existing conditions.



WHAT WAS (THE EXISTING)
The touchstone before the plaster is casted is the abandoned Ramkraal Prison



Figure 33: In Latin, a matrix can be translated to a womb; in essence, it is something within or from which something else originates, develops, or takes form. Using a cartesian grid when designing architecture implements a matrix that shapes the end product. The grid creates an architectural mould that shapes a deep impression on its inhabitants (Author, 2023).



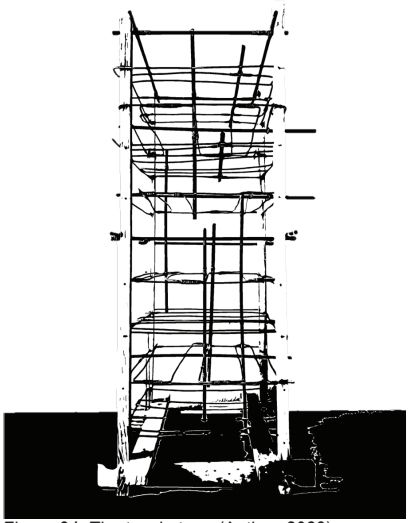
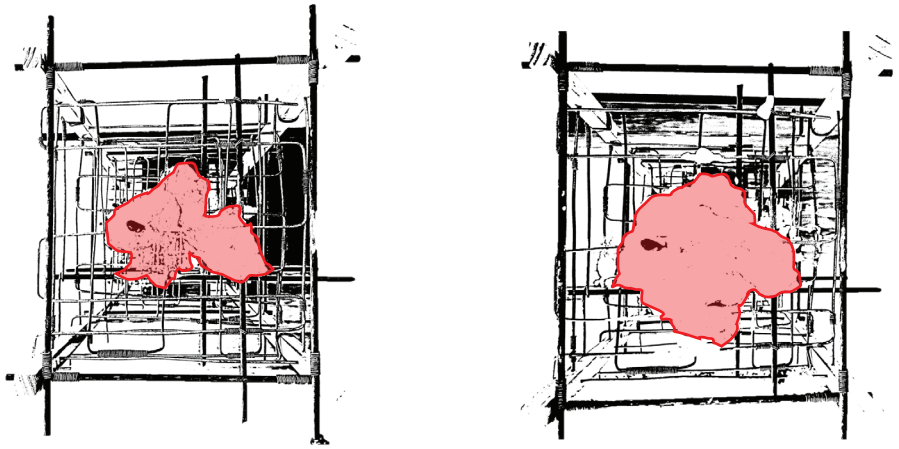


Figure 34: The touchstone (Author, 2023).



WHAT WILL BE (THE INTEGRATION)

Once the plaster is cast, the existing structure of the touchstone guides the movement of the plaster. What the plaster does is use the existing elements to shape its existence. The plaster creates an unpredictable shape, creating a new identity for the existing touchstone structure.

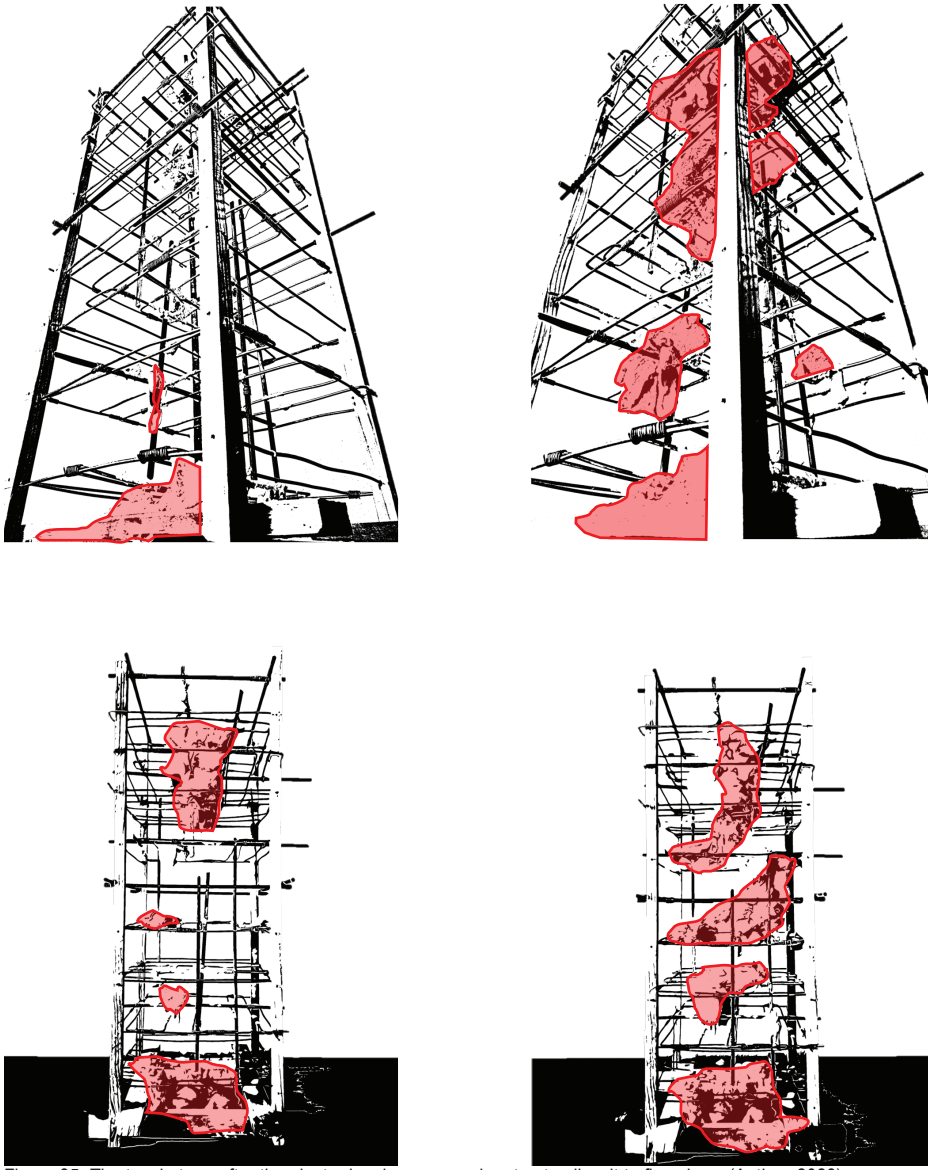


Figure 35: The touchstone after the plaster has been poured on top to allow it to flow down (Author, 2023).

IMAGINATION IS THE FABRIC OF LIFE

SITE

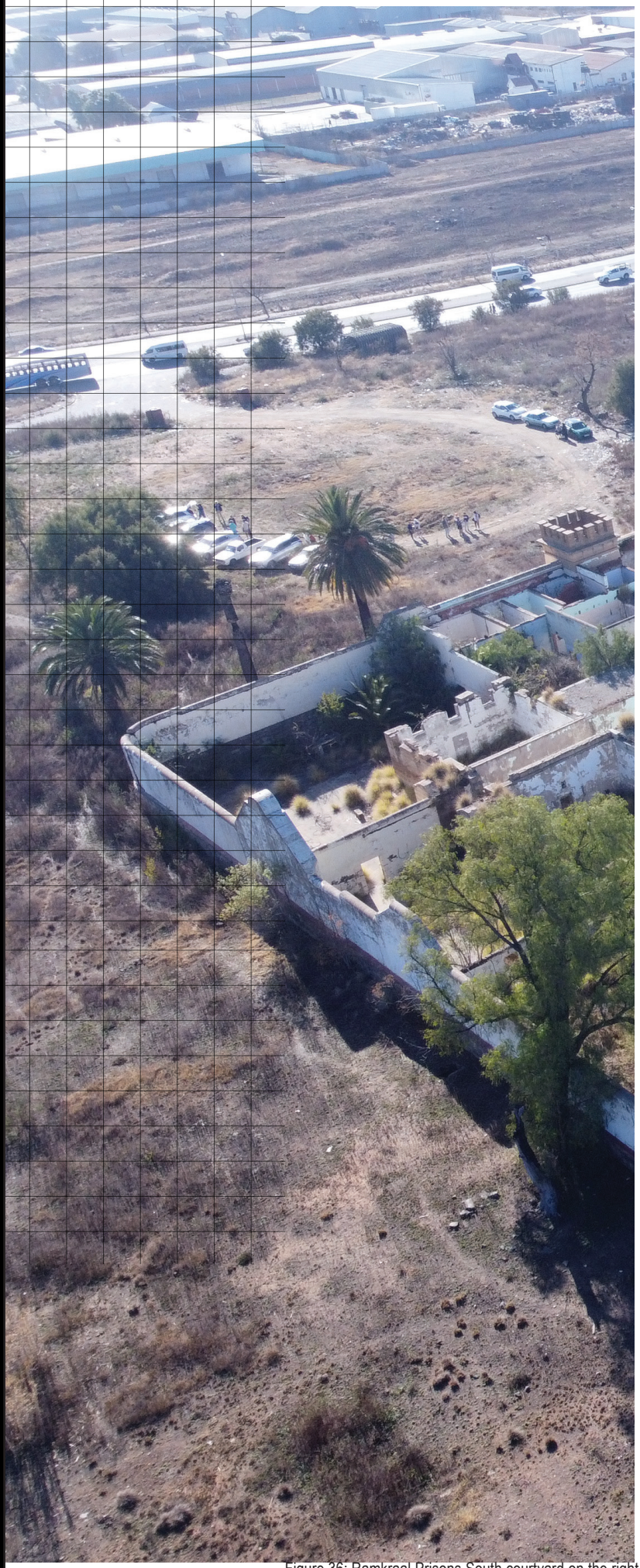
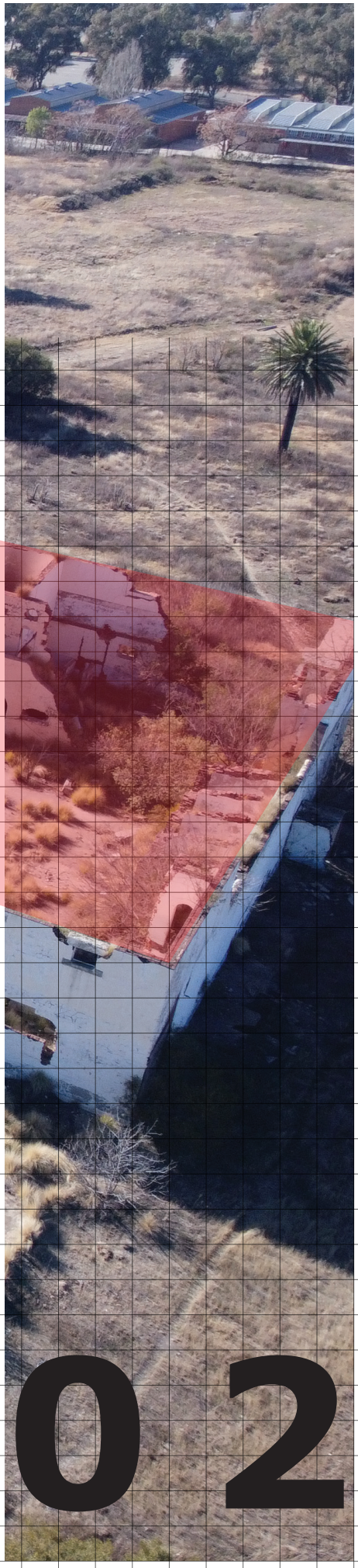




Figure 36: Ramkraal Prisons South courtyard on the right, equipped with 3 watch towers that look into the courtyard with a central water feature (van Tonder, 2023).





02

SITE

2.1 INTRODUCTION

2.2 MACRO ANALYSIS (BLOEMFONTEIN)
2.2.1 BRIEF HISTORY OF BLOEMFONTEIN
2.2.2 CLIMATIC INFLUENCES AND STUDY

2.3 MESO ANALYSIS (BATHO)
2.3.1 BRIEF HISTORY OF THE COMMUNITY OF BATHO
2.3.2 EXISTING COMMUNITY FACILITIES
2.3.3 MOVEMENT OF PEOPLE IN AND AROUND THE SITE

2.4 MICRO ANALYSIS (RAMKRAAL)
2.4.1 BRIEF HISTORY OF RAMKRAAL PRISON (GAOL)
2.4.2 EXISTING PHYSICAL CONDITION
2.4.3 SITE EXPLORATION: BURNING MATRIX AND RISING FROM THE ASHES

2.5 CONCLUSION



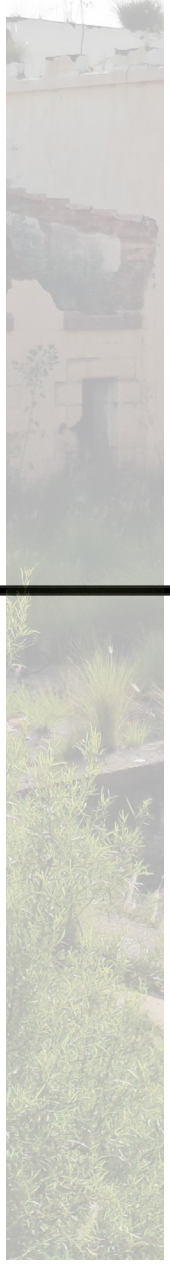
2.1 INTRODUCTION



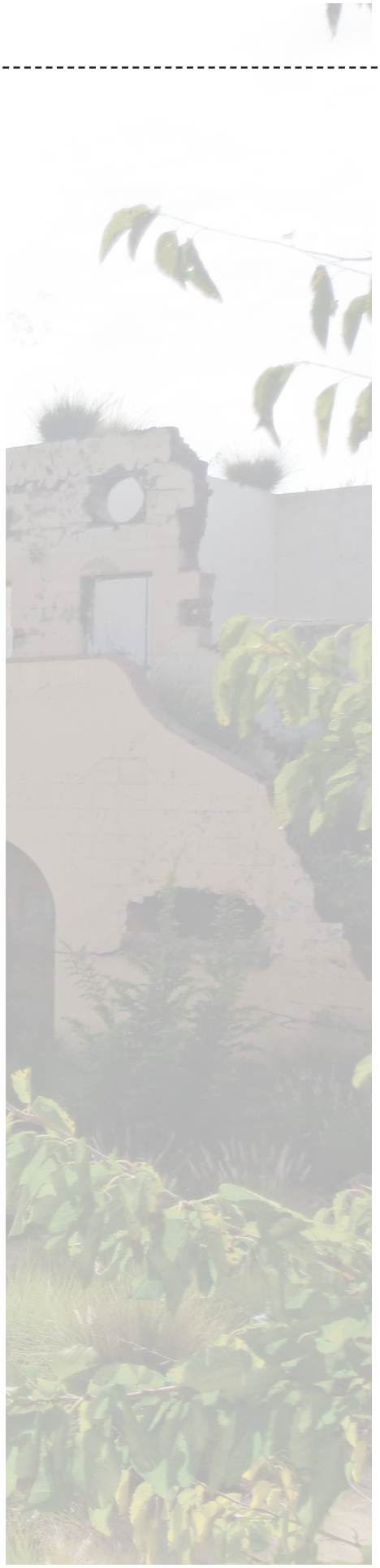
Bloemfontein's establishment in 1846 set in motion events that significantly shaped the city's contextual landscape in which people live today. Chapter 2 of this report focuses on the proposed design's macro, meso, and micro-level context to understand the factors impacting the outcome of the skills development centre. The historical significance of Bloemfontein is explored, particularly its effect on Batho and Ramkraal Prison. Additionally, the area's climate is analysed, as it will play an essential role in resolving aspects such as orientation, sun control, shading, rainfall control, and material use.

For a design appropriate to the present-day urban fabric and existing nodes, new entrances must be provided to invite people from the main road (Fort Street) into the proposed Skills Development Centre. The proposed Centre is intended to serve the people of Batho, and as such, its history and existing community centres must be considered in the design process. The location of Ramkraal Prison, with its unique history and position, makes it an ideal candidate for redevelopment into a beneficial aid to a community in need.

The site has existing pathways that can provide valuable clues for developing the centre's entrances and the landscape design. The Centre can create a meandering journey between Bloemfontein and Batho, ultimately linking and bringing people together while fostering community. Therefore, the site exploration confidently showcases a design approach where materiality is vital in transcending boundaries. It offers valuable insights into expressing this idea. Overall, the proposed design must embrace modern forms of transportation and be designed with the local community's needs in mind.







2.2 MACRO ANALYSIS (BLOEMFONTEIN)

2.2.1 BRIEF HISTORY OF BLOEMFONTEIN

In 1846, the town of Bloemfontein was established as “a fort by British army Major Henry Douglas Warden” (UFS, [n.d.]: online). Different groups of people have occupied Bloemfontein, and it went through different phases, namely, “the Orange River Sovereignty (1848- 1854), the Orange Free State Republic (1854-1902), Bloemfontein was the capital of the Orange River Colony (1902–1910) and it became the capital of the Free State, one of the provinces of the Union of South Africa in 1910” (UFS, [n.d.]: online).

Bloemfontein, a former independent Boer Republic from 1854 to 1902, witnessed significant developments. In 1890, introducing the railway (figure 38) system connecting Cape Town and Bloemfontein marked a notable milestone. Concurrently, the construction of the Ramkraal Prison commenced in 1895. Shortly after that, in 1899, the Bloemfontein Conference took place at the railway station. Regrettably, despite the gathering’s intent to reconcile the differences between the British Empire and the South African Republic (the Transvaal Republic or ZAR), it failed to achieve a resolution. Consequently, a conflict erupted between the Boer Republics (the Transvaal Republic and Orange Free State) and Britain.

The war concluded in 1902, leading to South Africa’s establishment as a union in 1910. Over time, the National Party assumed governance in 1948, initiating and implementing the policy commonly referred to as Apartheid. The era of Apartheid eventually came to an end in 1994, marked by the first democratic elections in South Africa. Furthermore, in 2001, the region (Bloemfontein and surrounding towns in the Free State) “underwent an official renaming, with the Demarcation Board amalgamating the area into a unified local authority, now recognised as Mangaung” (Marais, 2021: 119).



Figure 38: The Bloemfontein railway station circa 1890 (Atom, 2023: online).

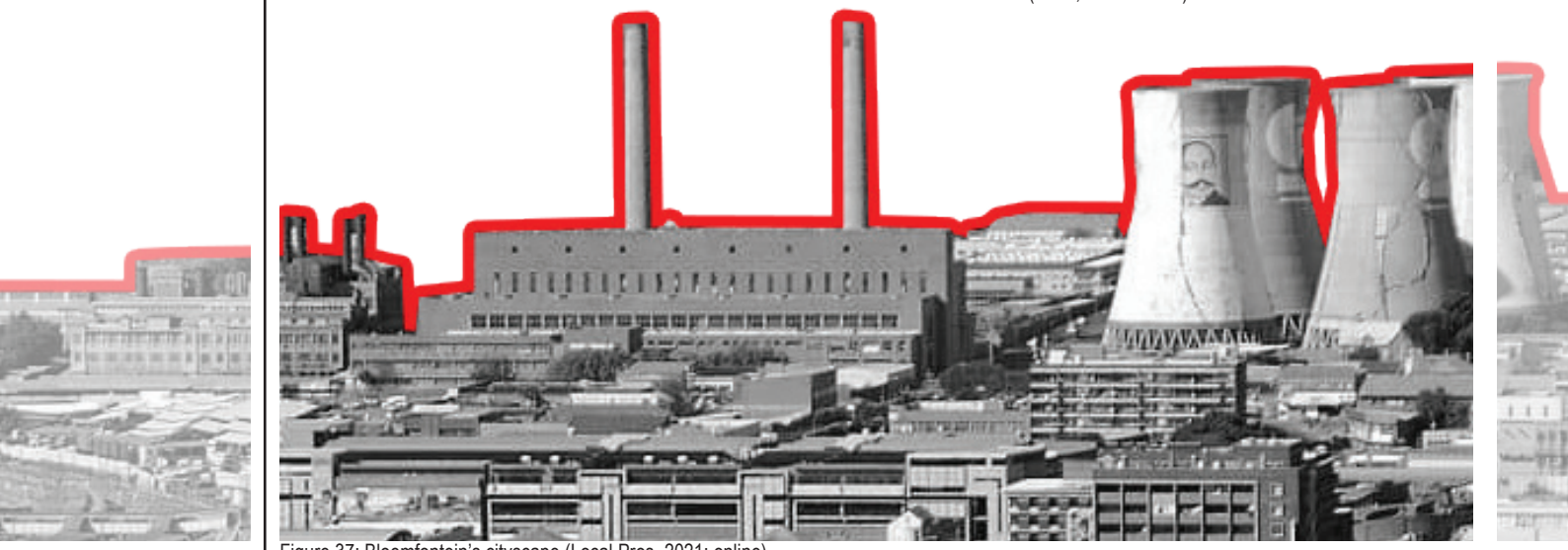


Figure 37: Bloemfontein’s cityscape (Local Pros, 2021: online).

2.2.2 CLIMATIC INFLUENCES AND STUDY

Climatic factors have a significant impact on our environment and design. They shape our surroundings and greatly influence design outcomes. Understanding these factors has many benefits and can be utilised effectively. Bloemfontein, located in South Africa's interior plateau, has a semi-arid climate. This type of climate means the region has low precipitation levels and distinct seasons. In the summer, afternoon showers provide some relief from the heat. However, the rainfall is not abundant, and the region remains relatively dry. Winters in Bloemfontein are cold and dry, with frequent frosts. The lack of rain during this season contributes to the area's dryness. The prevailing wind direction in Bloemfontein is from the northwest. These winds can affect the climate and weather patterns in the region. They can bring cooler air from the interior, affecting the temperature and creating a breeze. The north-westerly winds also influence cloud movement and rainfall distribution. In the southern hemisphere, Bloemfontein experiences different sunlight patterns throughout the year. North-facing walls receive more sunlight during winter, providing warmth and natural light. On the other hand, western walls are exposed to harsh sunlight throughout the year.

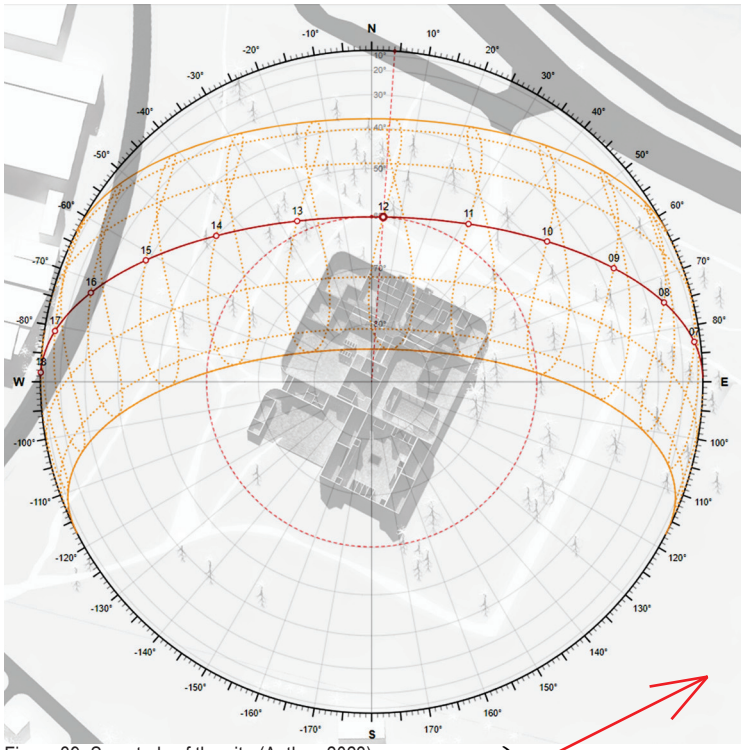


Figure 39: Sun study of the site (Author, 2023).

Important factors

- North orientation (using vertical louvres on West facades to capitalise on northern sunlight).
- The site's slope (about eight metres from the Southwest corner to the northeast corner) (figure 40).
- Wind (cross ventilation).


Figure 41: Existing vegetation that can help shape the pathways on site (Author, 2023).

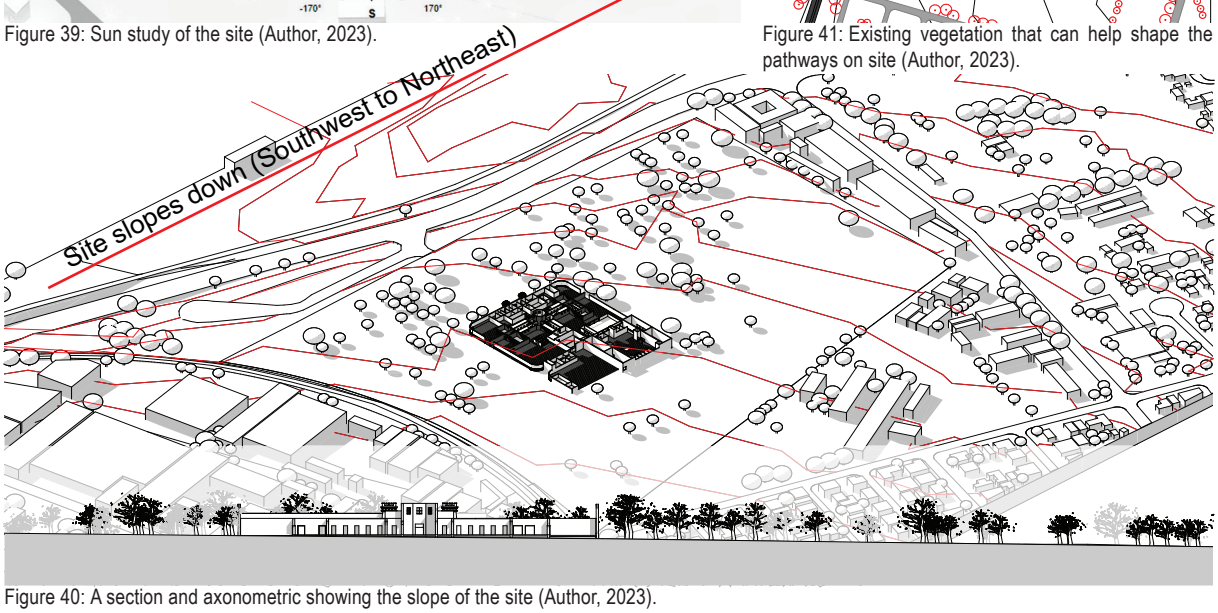


Figure 40: A section and axonometric showing the slope of the site (Author, 2023).



2.3 MESO ANALYSIS (BATHO)

2.3.1 BRIEF HISTORY OF THE COMMUNITY OF BATHO

Batho was “established in 1918” (Du Bruyn, Oelofse, 2019: 47), and the main reasons for Batho’s founding and Waaihoek’s demolition were: “i) prejudiced and troubled race relations and racial attitudes; ii) Waaihoek’s proximity to white Bloemfontein; iii) the growing urbanisation of black and coloured people; iv) the Spanish Influenza epidemic; and v) the building of a new power station for Bloemfontein” (Du Bruyn et al., 2019: 47). The railway became the line separating Black and White communities in Bloemfontein.

But Batho was also an essential location for the South African Native National Congress (present-day National African Congress or ANC) gatherings and meetings and a haven for activists who needed to hide or hold secret discussions. In addition to facilities like a town hall, clinic, library, swimming pool, and recreational areas, the plan included large land areas for bigger plots. These plots were intended to accommodate larger houses, gardens, and backyards. Batho was referred to as a “model location” (Du Bruyn et al., 2019: 49). This term does not celebrate Batho, but rather, it should be understood within the “framework of the racist and discriminatory segregationist policies implemented by South African local authorities in the 1920s and 1930s” (Du Bruyn et al., 2019: 49).

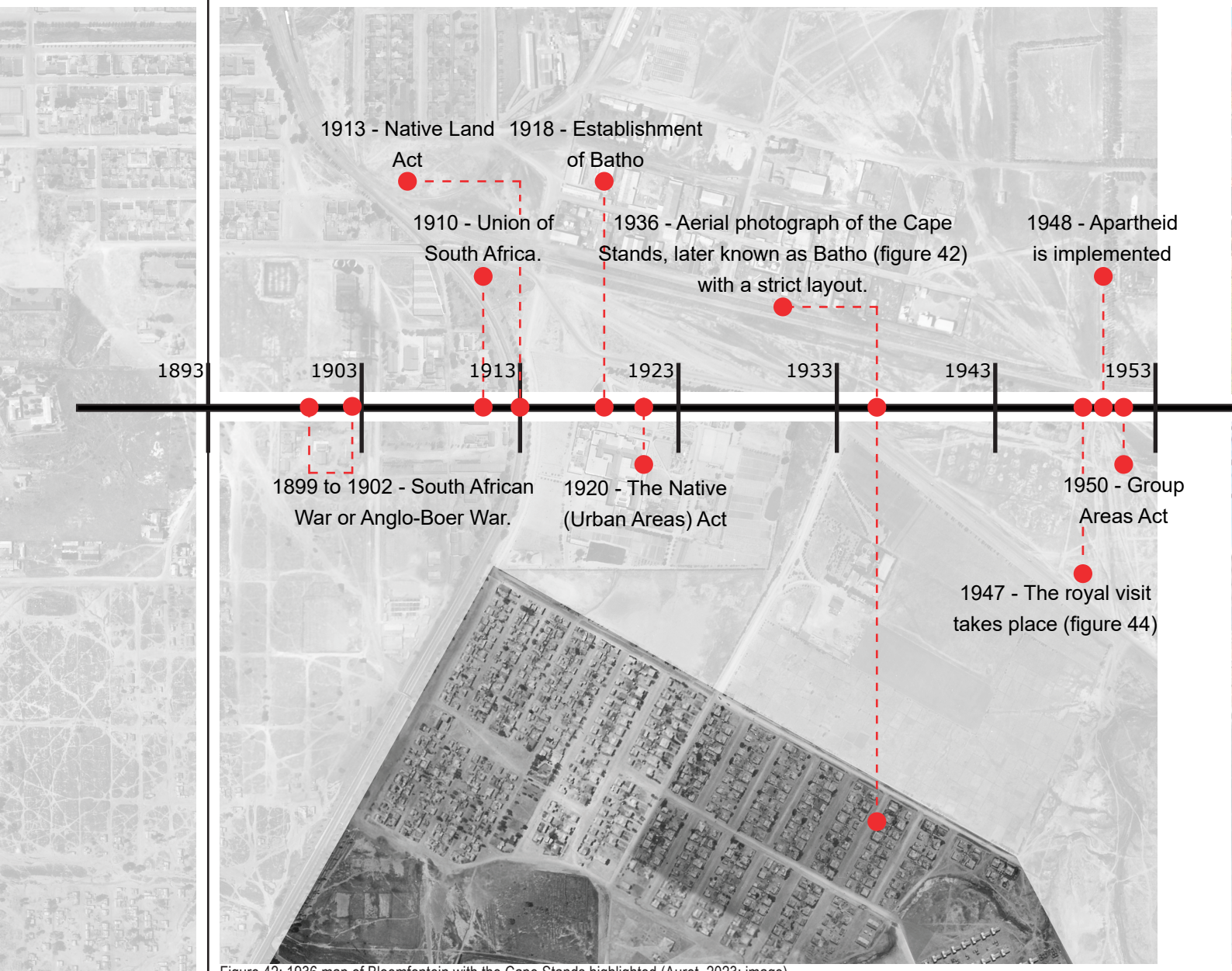


Figure 42: 1936 map of Bloemfontein with the Cape Stands highlighted (Auret, 2023: image).

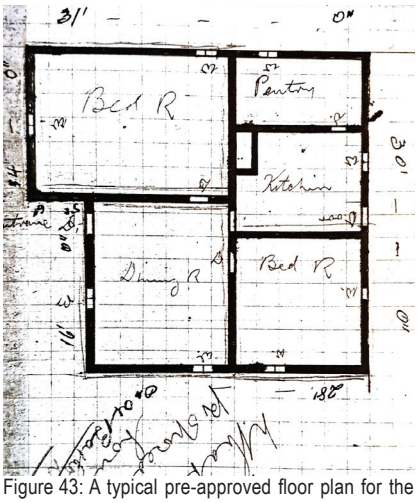


Figure 43: A typical pre-approved floor plan for the houses in Batho (Du Bruyn, 2021: 8).



Figure 44: King George VI, Queen Elizabeth, Princess Margaret and Princess Elizabeth in 1947 during their visit to Bloemfontein (Du Bruyn, 2021: 89).



Figure 45: A Batho street with houses that share some characteristics like 'stoeps', metal sheeting roofs, face-brick or turquoise painted and plastered walls and some form of vegetation in the front garden (Du Bruyn, 2021).

1963 1973 1983 1993 2003 2013 2023



Figure 46: A typical house in Batho (Du Bruyn, 2021: 32).

2.3.2 EXISTING COMMUNITY FACILITIES

The proposed design aims to harmoniously integrate a skills development centre within the local community and an existing culturally significant site. Bordering the Ramkraal Prison site are the old Academy of Excellence School (relocated to Raceway Park in 2023), CRC Phetoho Community Centre (figures 47 & 51), Phahamisang Primary School, and Phahamisang Foundation Phase School. The proposed skills development centre can connect with these neighbouring facilities using landscaping and pathways. Additionally, the CRC Phetoho Community Centre has the potential to be linked to the proposed design, serving as an extension of the Proposed Centre.

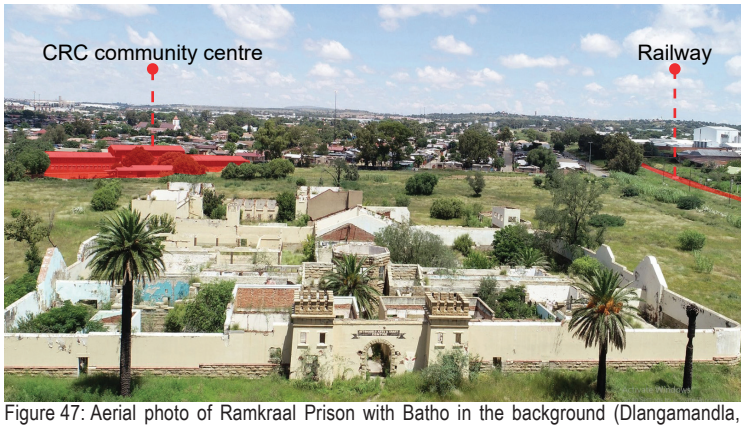


Figure 47: Aerial photo of Ramkraal Prison with Batho in the background (Dlangamandla, Green, Nortier & Thom, 2021: online).


Figure 48: Susanna Ollemans Crèche (Du Bruyn, 2021: 43).

There are several facilities in Batho, such as the Batho Community Hall (figure 49) and Court, the Caleb Motshabi Centre, and the CRC Phetoho Community Centre. The court and community hall are close to a soccer, rugby, and cricket field (figure 50). There is also the Mangaung Primary School and the Sehunelo Secondary School.

The Batho Community Hall and Court is used for community events, meetings, and gatherings. It can accommodate many people and has hosted political debates and events. The Caleb Caleb Motshabi Center is primarily a sports centre that offers indoor spaces to practice karate, dance, and yoga and host events. It also has tennis and netball courts. The CRC Phetoho Community Centre supports and assists vulnerable groups, such as orphans, older adults, and people with disabilities, by providing food, clothing, blankets, and toys.

The soccer, rugby, and cricket field near the court and community hall is also open for recreational activities. Mangaung Primary School is a public school that educates children from the surrounding areas. Sehunelo Secondary School is a high school that offers a comprehensive curriculum to its students. Overall, Batho has a range of facilities and services that cater to the needs of its residents. These facilities are essential in promoting community development and enhancing the quality of life for people living in the area.


Figure 49: Batho Community Hall (Du Bruyn, 2021: 21).


Figure 50: Masenkeng Sports Grounds circa 1968 or 1969(soccer, cricket and rugby Field) (Du Bruyn, 2021: 23).

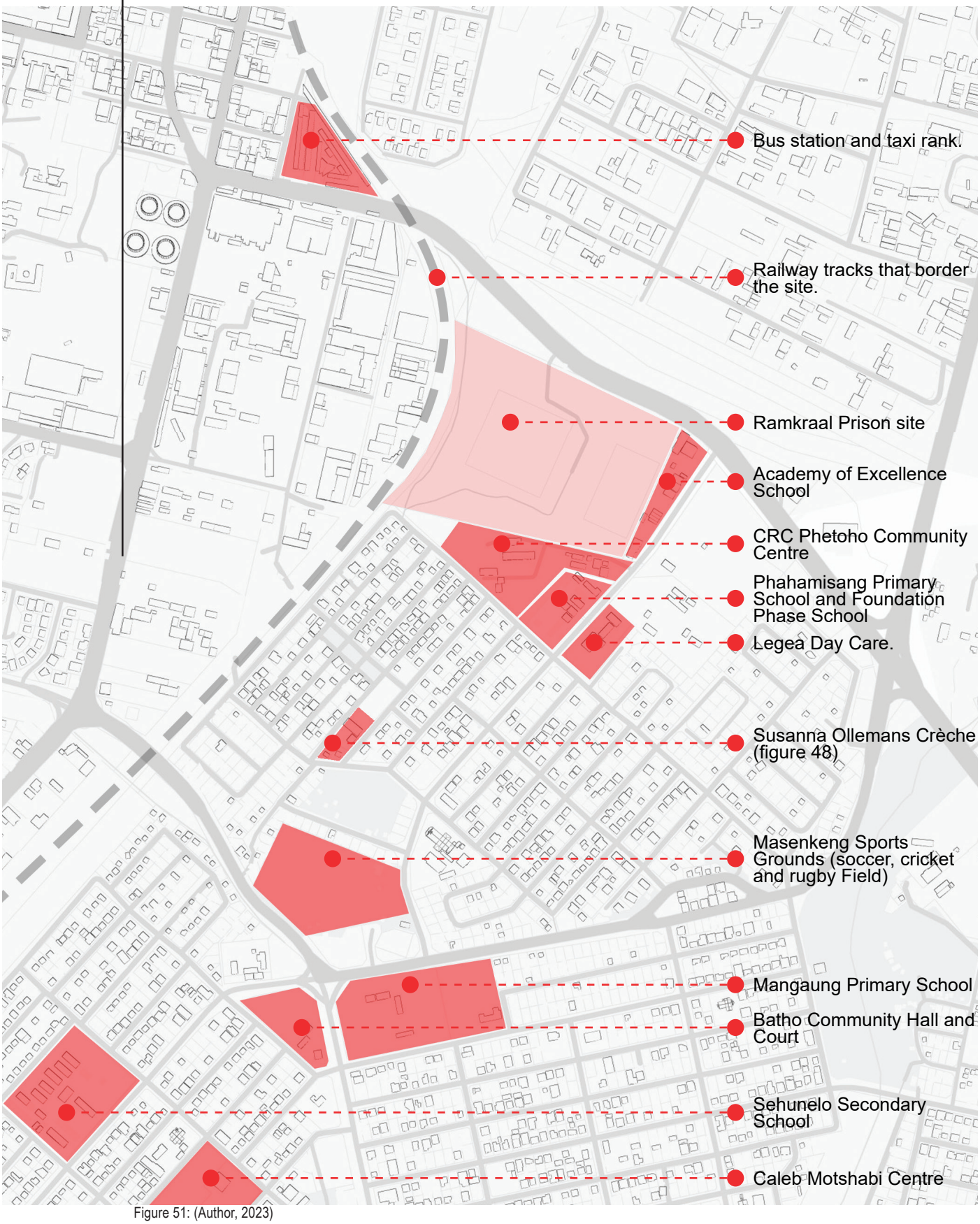


Figure 51: (Author, 2023)

2.3.3 MOVEMENT OF PEOPLE IN AND AROUND THE SITE

To the northwest of Ramkraal Prison lies a taxi rank and bus station, frequented mainly by taxis. Taxis are the primary mode of transportation for Batho residents, who rely on them for daily commuting to work or other destinations. Therefore, people travel through the area between the railway and Ramkraal Prison. Nevertheless, the residents of the Batho community still have access to the facilities in the heart of Batho that they can use. Because there are different modes of transportation, vehicles must be considered at the Ramkraal prison site. Currently, there are no roads except for the entrance on the North (figures 53 & 55) edge, which can be accessed from Fort Street. Vehicular entries on the South and East sides will also be added to improve access. The new East entrance will primarily serve the Primary school, and a parking area will be created for the school and its events near the proposed soccer field, tennis courts, and netball courts on the outskirts of the Ramkraal Prisons site.

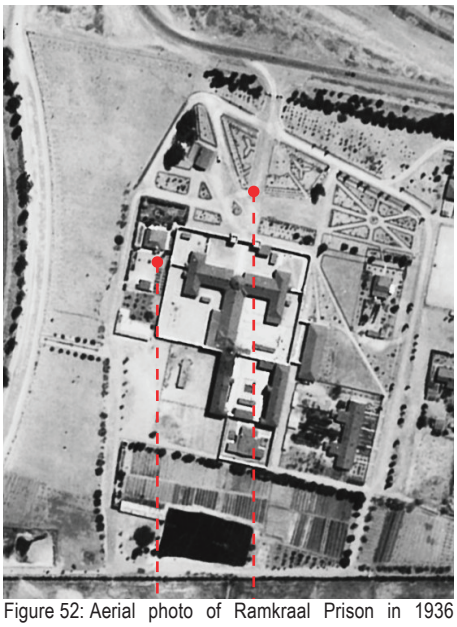


Figure 52: Aerial photo of Ramkraal Prison in 1936 (Auret, 2023: image).

The outskirts of Ramkraal Prison boast a network of natural pathways (figure 57) that have organically formed over time, courtesy of the countless footsteps that have traversed them day after day. These well-trodden trails, etched into the landscape by the constant movement of people, present a unique opportunity to transform the area into a vibrant public space for the residents of Batho. By repurposing these pathways, the community can benefit from a safe and accessible environment that encourages walking, exploration, and social interaction. Creating a public space in this location would provide a much-needed recreational area and symbolise revitalisation and transformation for the entire neighbourhood. Imagine a picturesque setting where families, friends, and neighbours can stroll, enjoying the beauty of nature and the fresh air—the pathways, meandering through lush greenery and perhaps even incorporating small gardens or seating areas.

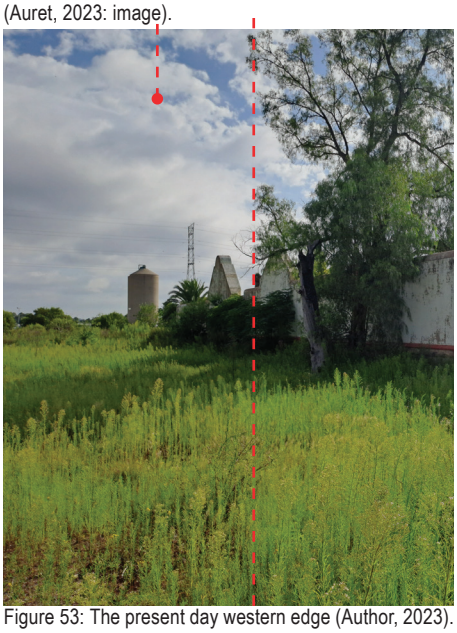


Figure 53: The present day western edge (Author, 2023).

Moreover, this public space could become a hub for community gatherings and events. With ample room to assemble, it would serve as a natural gathering point for festivals, markets, or cultural celebrations. The pathways could be equipped with exercise stations or fitness equipment, enabling individuals to incorporate exercise into their daily routines. Furthermore, transforming the outskirts of Ramkraal Prison into a public space would contribute to the overall beautification and revitalisation of the area.

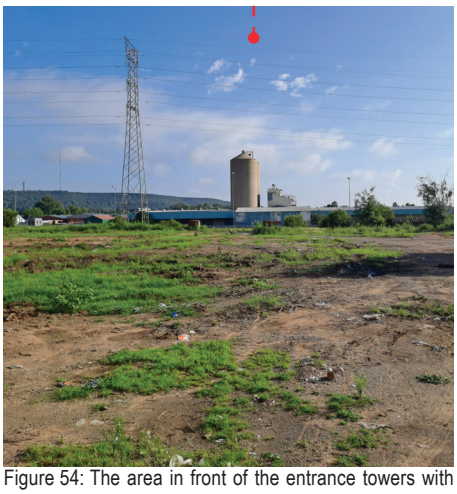


Figure 54: The area in front of the entrance towers with no trace of the old gardens (Author, 2023).

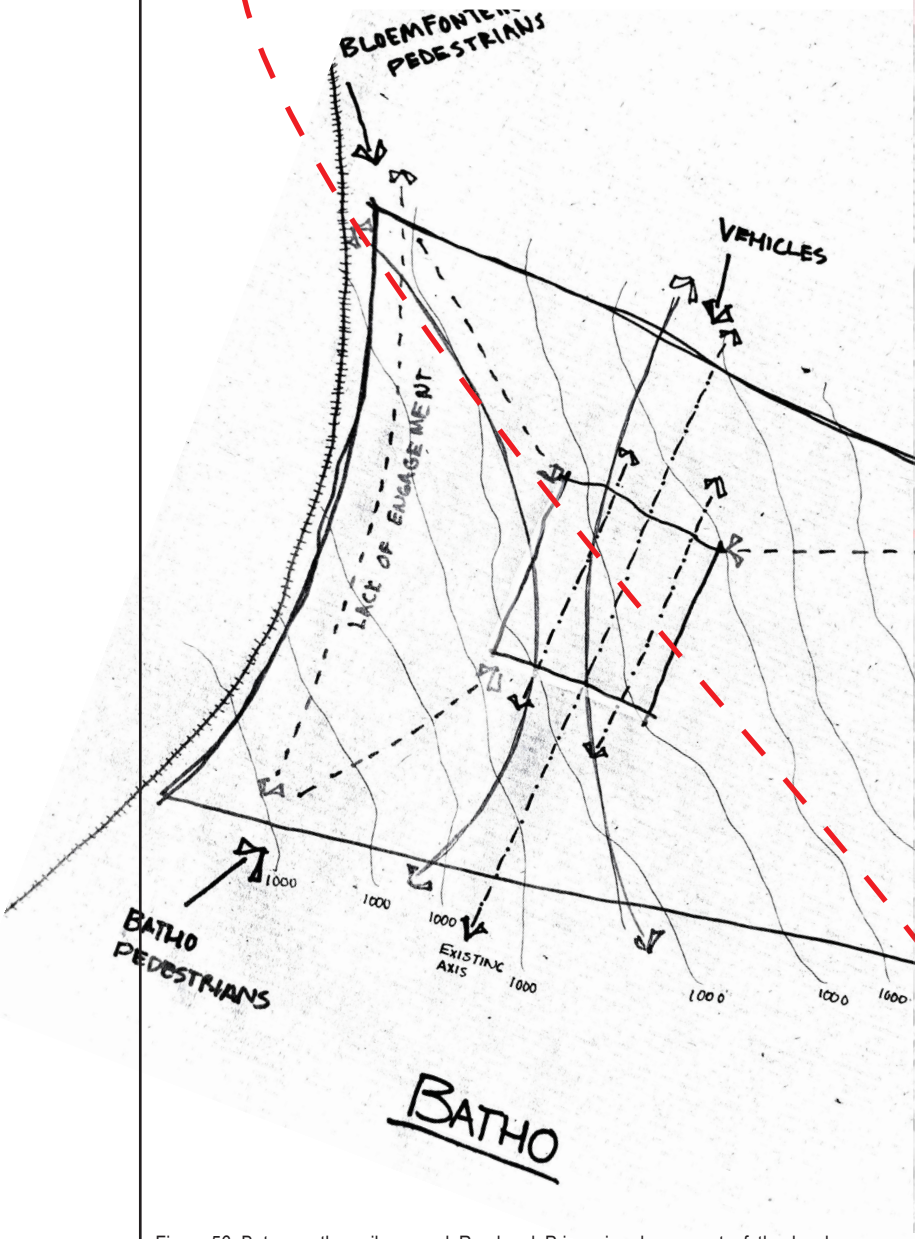


Figure 56: Between the railway and Ramkraal Prison is where most of the locals move through the site. The east edge borders the old academy of excellence school. The south edge borders the CRC community centre (Author, 2023).

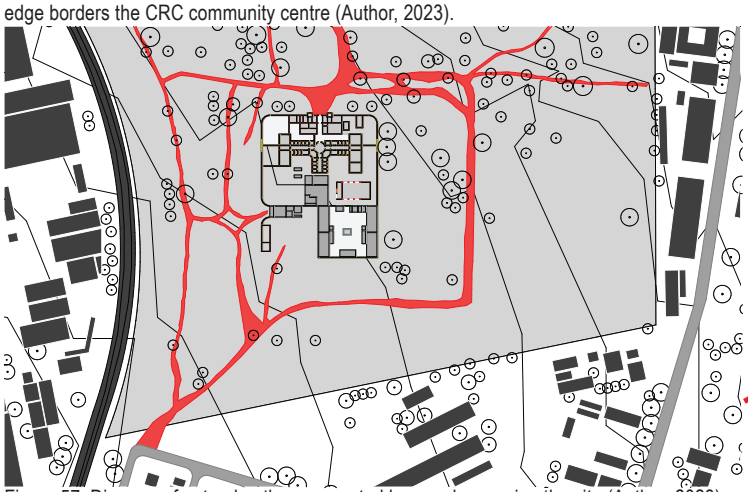


Figure 57: Diagram of natural pathways created by people crossing the site (Author, 2023).

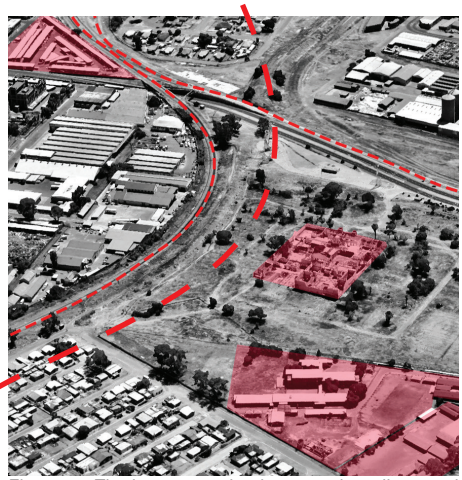


Figure 55: The important edge between the railway and Ramkraal Prison (Google Earth, 2023: online).

2.4 MICRO ANALYSIS (RAMKRAAL)

2.4.1 BRIEF HISTORY OF RAMKRAAL PRISON (GAOL)

In 1890, the railway lines in Bloemfontein were up and running, leading to increased crime rates. The existing prison on “St. George Street” (Botes, 2015: online) could not hold all the new prisoners. Due to the increase in crime and the terrible conditions in the existing prison, there was a desire to build a new jail on the eastern side of the railway, away from the city centre. The construction of Ramkraal Prison started in 1893 and finished in 1895. However, further improvements and expansions were made to the prison during the 1900s.

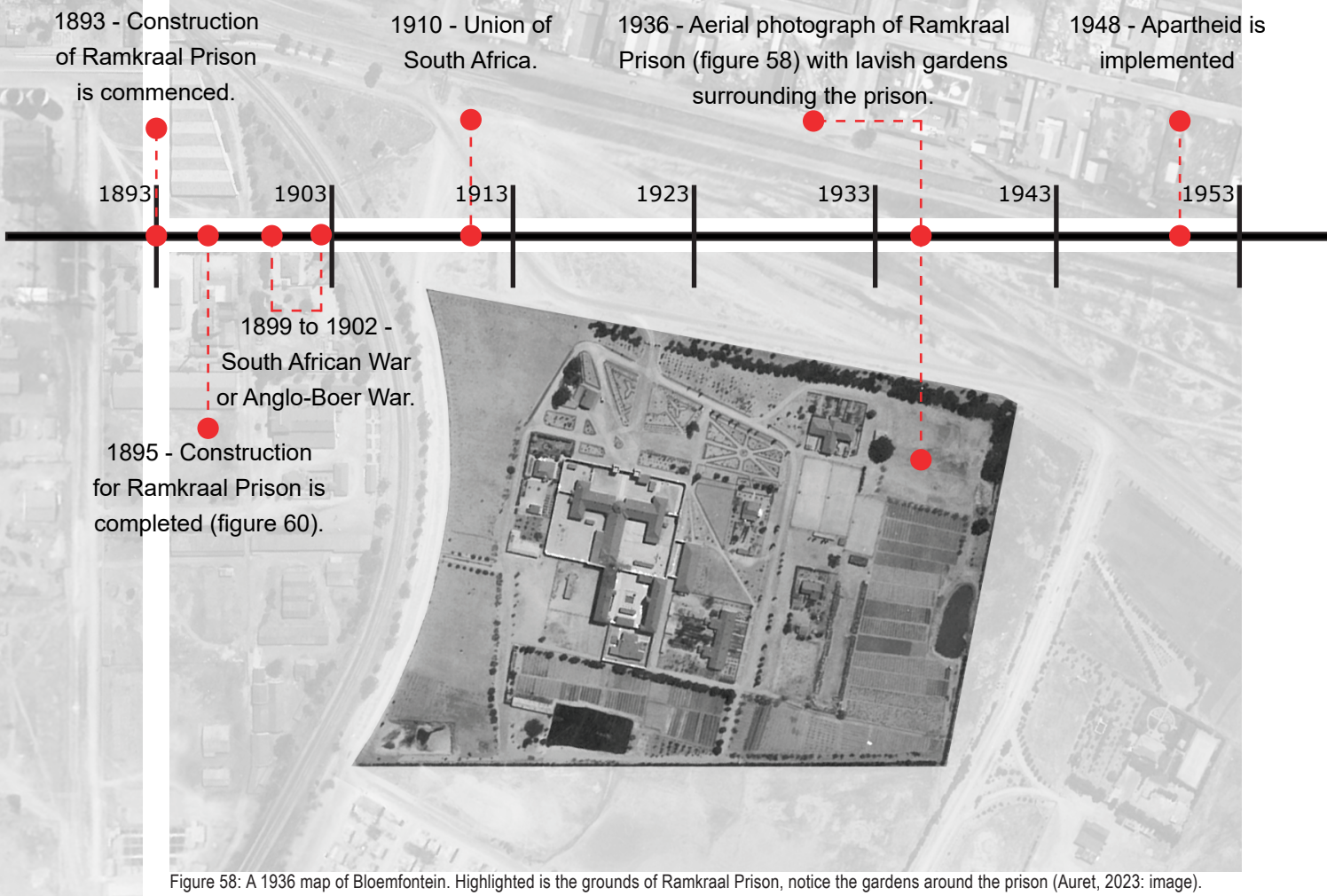


Figure 58: A 1936 map of Bloemfontein. Highlighted is the grounds of Ramkraal Prison, notice the gardens around the prison (Auret, 2023: image).





Figure 59: Ramkraal Prison before the towers and perimeter walls were built circa 1894 (Botes, 2015: online).

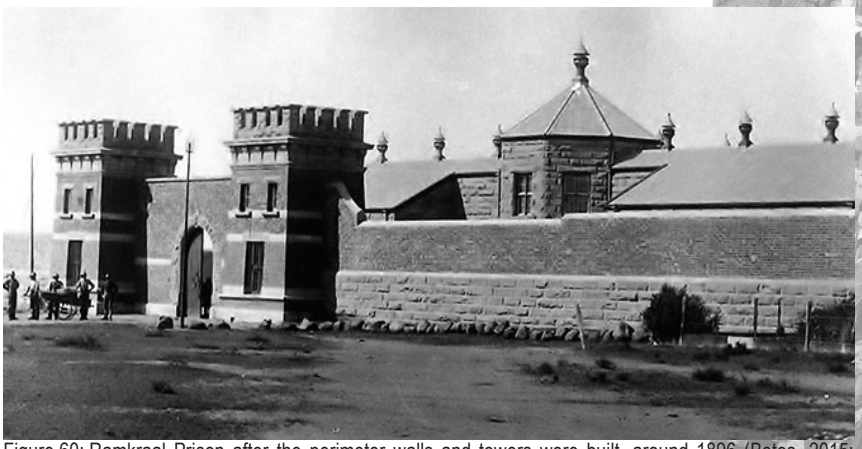


Figure 60: Ramkraal Prison after the perimeter walls and towers were built, around 1896 (Botes, 2015: online).

1990 - Ramkraal Prison registered as immovable property and deemed as conservation-worthy

1994 - Grootvlei Prison opens and Ramkraal Prison closes. First democratic elections and the end of Apartheid.

2012 - To make way for the new legislature court (figure 61), Mangaung's municipality conducted evictions and demolitions.

1963 1973 1983 1993 2003 2013 2023

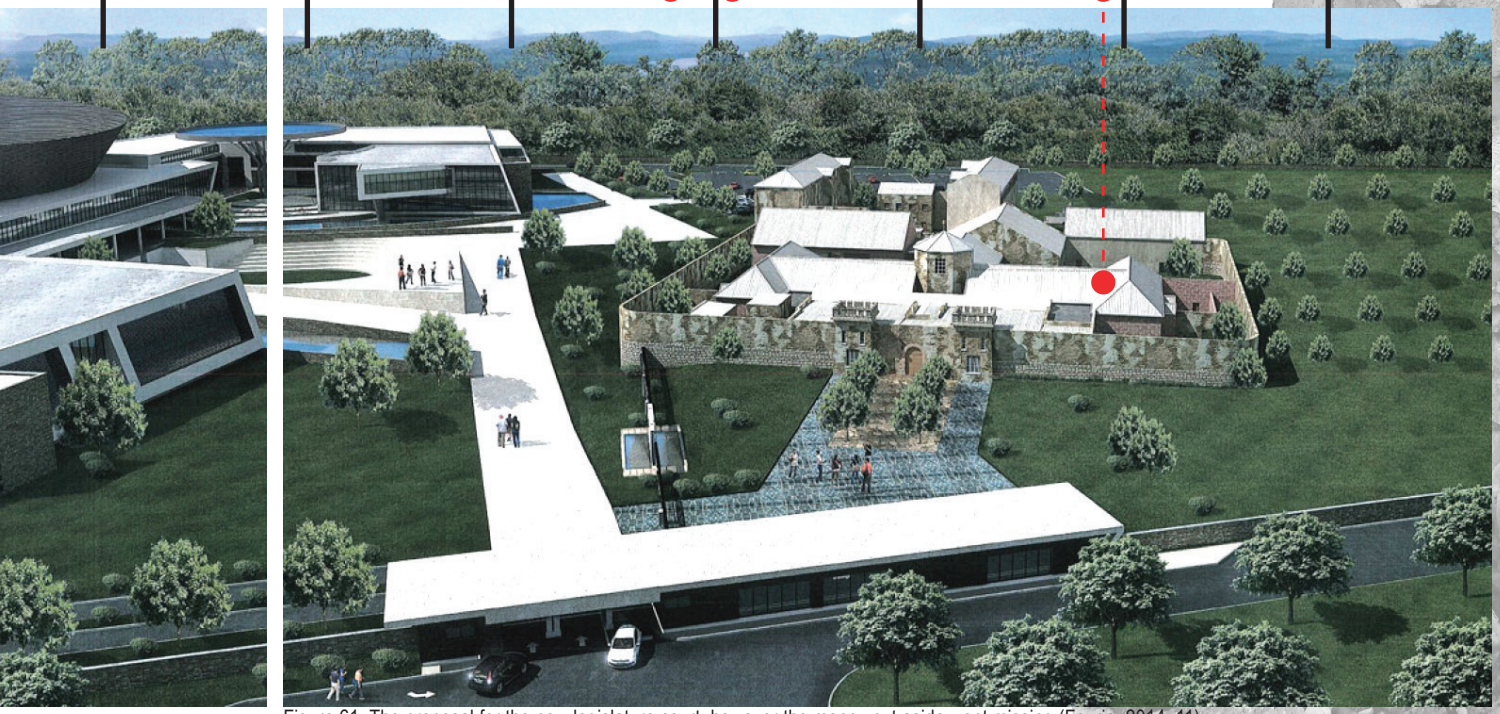


Figure 61: The proposal for the new legislature court, however the money put aside went missing (Fourie, 2014: 11).

2.4.2 EXISTING PHYSICAL CONDITION

Ramkraal Prison underwent improvements and expansions during its active years. However, after its closure in 1994, most of the structure and its components were looted, destroyed, burned, or deteriorated due to weather conditions. Ramkraal Prison has thick, tall walls (figures 62-64) to prevent prisoners from escaping. Unfortunately, the original doors and window frames were taken away. The walls have suffered significant damage (figures 65-67), mainly in areas where there used to be openings. Without lintels or supports, these weakened sections of the walls are at risk of collapsing. The roofs (figures 68-70) of Ramkraal Prison were made of metal sheets and wooden trusses, making them susceptible to theft. As a result, the prison no longer has any roof structures except for concrete slabs above the cells in the main building. The main building (figures 72-74) retains most of its original cells and the octagonal centre. Over time, vegetation has grown uncontrollably, causing cracks in the walls and floor. What remains are mostly the sandstone, brick, and plastered walls (figures 75-77) that were used to confine prisoners.

WALLS


Figure 62: (Author, 2023)

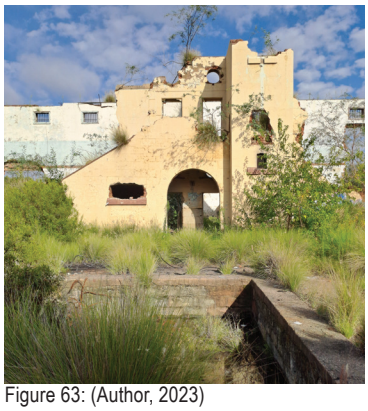

Figure 63: (Author, 2023)


Figure 64: (Author, 2023)

DAMAGE


Figure 65: (Author, 2023)


Figure 66: (Author, 2023)


Figure 67: (Author, 2023)

ROOF STRUCTURE


Figure 68: (Author, 2023)


Figure 69: (Author, 2023)


Figure 70: (Author, 2023)

EXISTING LAYOUT AXONOMETRIC

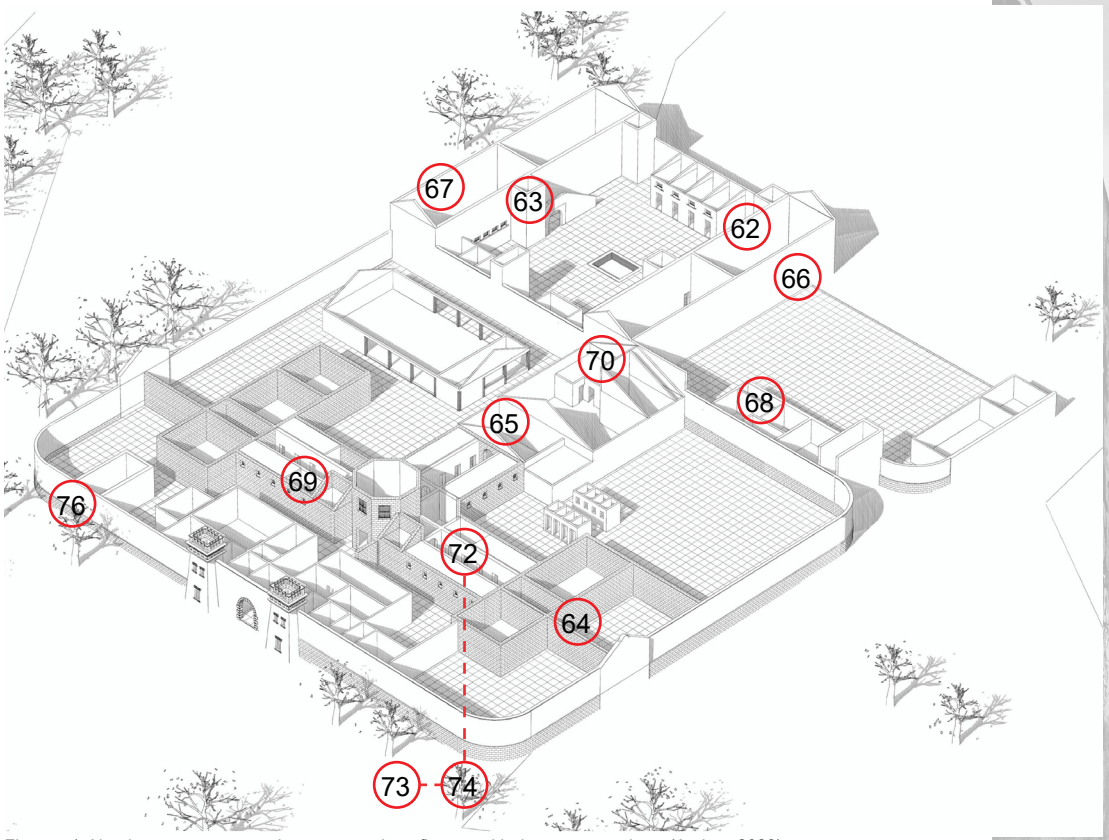


Figure 71: Numbers on axonometric corresponds to figures with the same numbers (Author, 2023).

PRISON INTERIOR

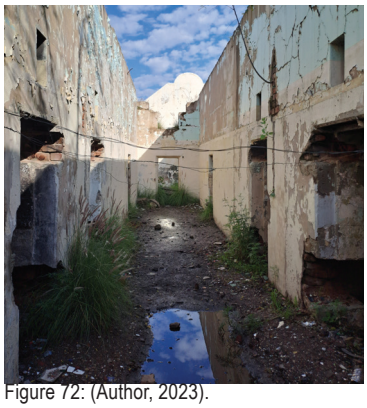


Figure 72: (Author, 2023).



Figure 73: (Author, 2023)



Figure 74: (Author, 2023)

MATERIALITY



Figure 75: (Author, 2023)



Figure 76: (Author, 2023)



Figure 77: (Author, 2023)



Figure 78: The homeless make fires that create the soot on the walls (Author, 2023).



Figure 79: (Author, 2023).

2.4.3 SITE EXPLORATION: BURNING MATRIX AND RISING FROM THE ASHES

The imprints left by fire and soot (figures 78 & 79) on the walls found at Ramkraal Prison reveal a hidden narrative, a story of transformation and rebirth. The act of burning transcends the physical boundaries of the prison, breaking down the walls that were once confining and restricting. It is a powerful symbol of liberation and liberation from the past.

The site exploration investigate the essence of being and non-being, exploring the profound impact of burning on the materiality of its surroundings. The controlled fire becomes a catalyst for change, a medium through which new meanings can be created and expressed. It is a process of destruction and creation, where flames consume the old, and the new emerges from the ashes.

The objects (figure 84) used in the site exploration become vessels for this transformative process. They witness the dialogue between fire and man-made objects, capturing the essence of their interaction. The longer the objects are exposed to the fire, the more they decay and transform, revealing the beauty of ruins and the mark of soot and fire. The architect becomes a guide for change in this space between being and non-being. They navigate the boundaries of what already exists, pushing the limits of creativity and allowing a new response to appear. The destruction of the prison becomes an opportunity for reinvention, a chance to create something authentic and meaningful.

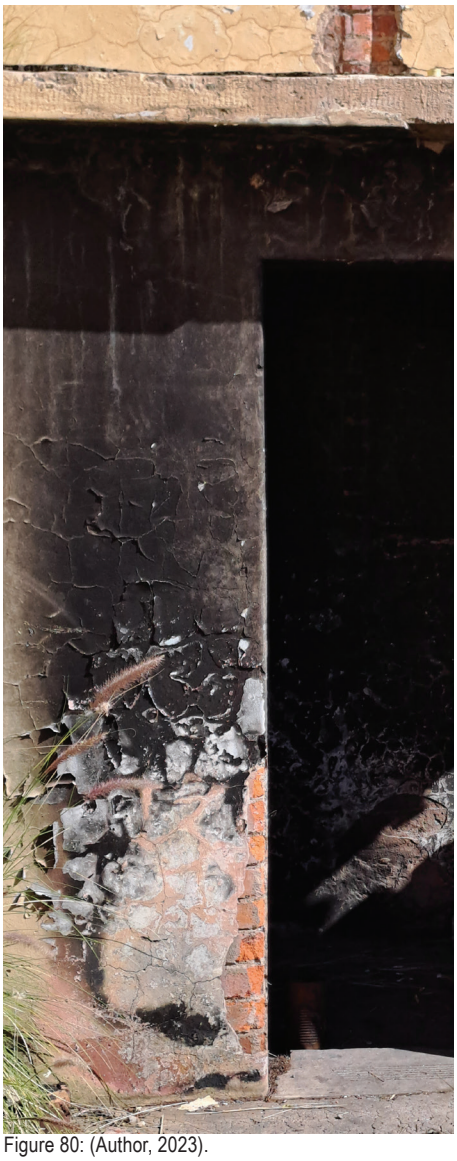


Figure 80: (Author, 2023).







Figure 81: The fireplace using exiting bricks on site (Author, 2023).



Figure 82: The grass was first placed on the medium, but no imprint was left since fire rises (Author, 2023).



Figure 83: (Author, 2023).



Figure 84: So the medium was placed on to capture the imprint from the fire and grass (Author, 2023).

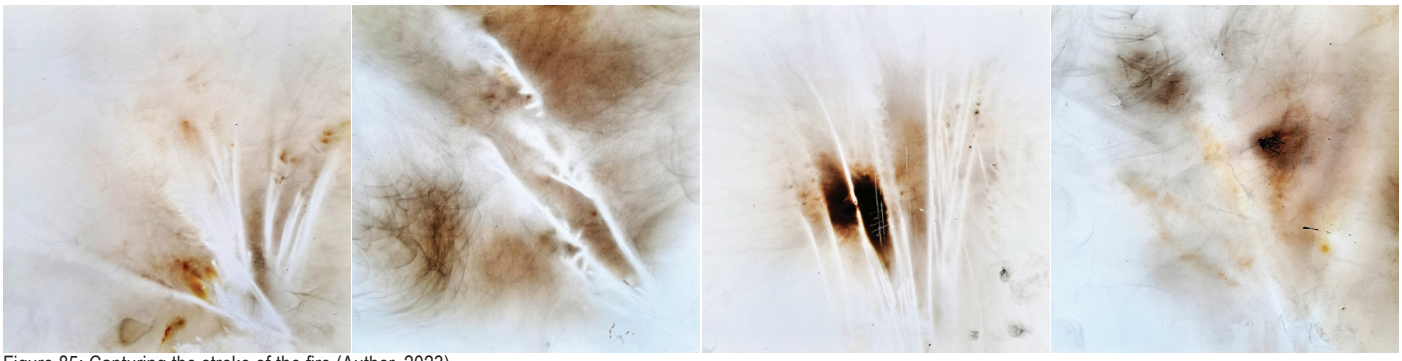


Figure 85: Capturing the stroke of the fire (Author, 2023).

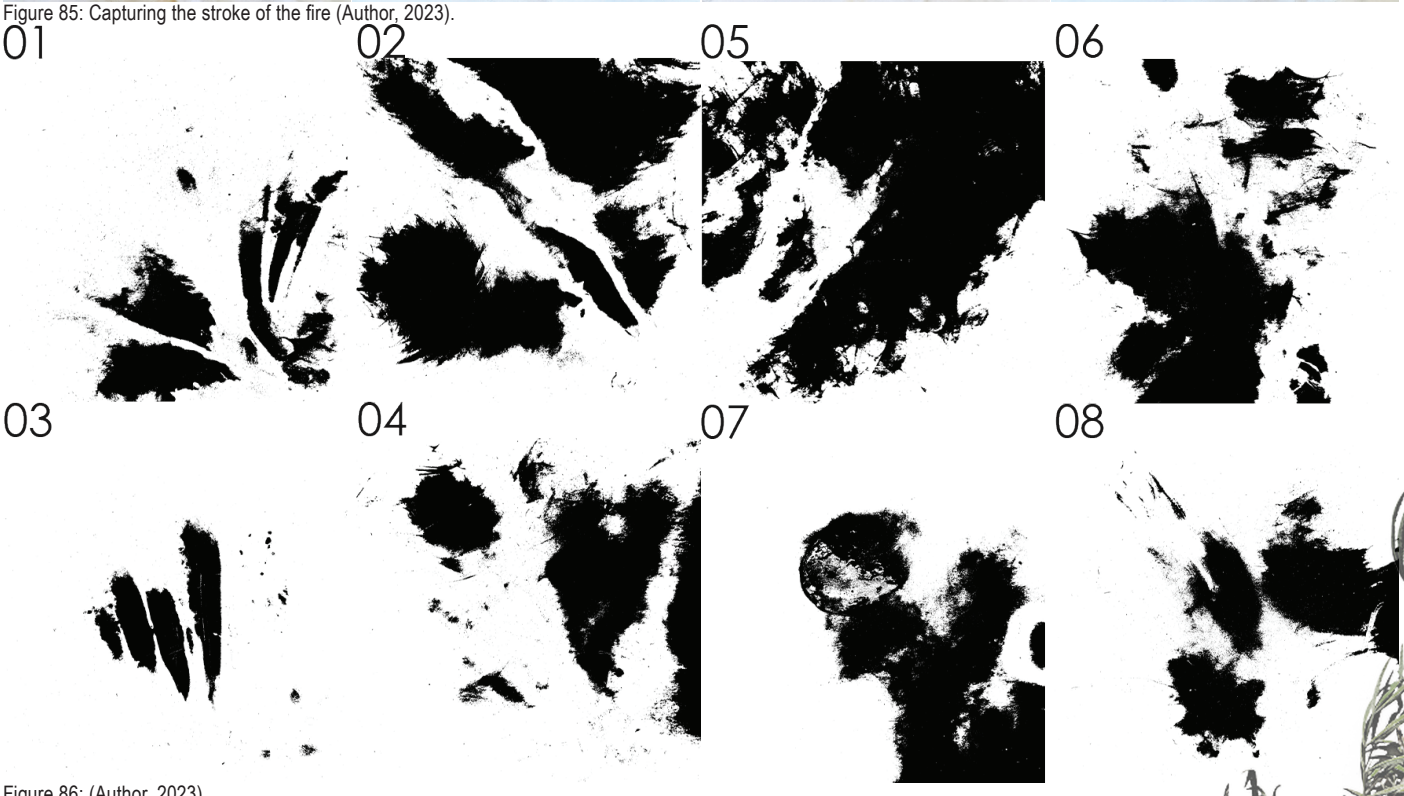


Figure 86: (Author, 2023).

Upon reflection of the site exploration, it becomes evident that it served as a foundational starting point for the conceptual approach. This endeavour introduced key concepts, namely enfilade, inverted panopticon, and lived matrix, each representing a distinct layer of exploration. An inverted panopticon involves utilising preexisting bricks to construct a fireplace or a secure space for the fire to thrive. Conversely, enfilade incorporates natural elements such as plants strategically positioned between the old and new, serving as a conduit or transition from the fire to the medium. Lastly, the lived matrix refers to the medium itself, be it plastic or chipboard, which captures the impressions left by the fire and plants, thus creating a new space that draws inspiration from the old. The concepts will be explored further in Chapter 3.

The imprints left by the fire and soot on the objects at Ramkraal Prison are physical marks and symbolic representations of the hidden in-between. They speak of the liminal space where boundaries are blurred, and new possibilities arise. It is a space of transformation and exploration, where the old is left behind, and the unknown is embraced. It is a reminder that despite defeat, there is always the potential for renewal and growth. The imprints of the fire and soot tell a story of resilience and transformation, a story of leaving something behind and embracing the unknown.

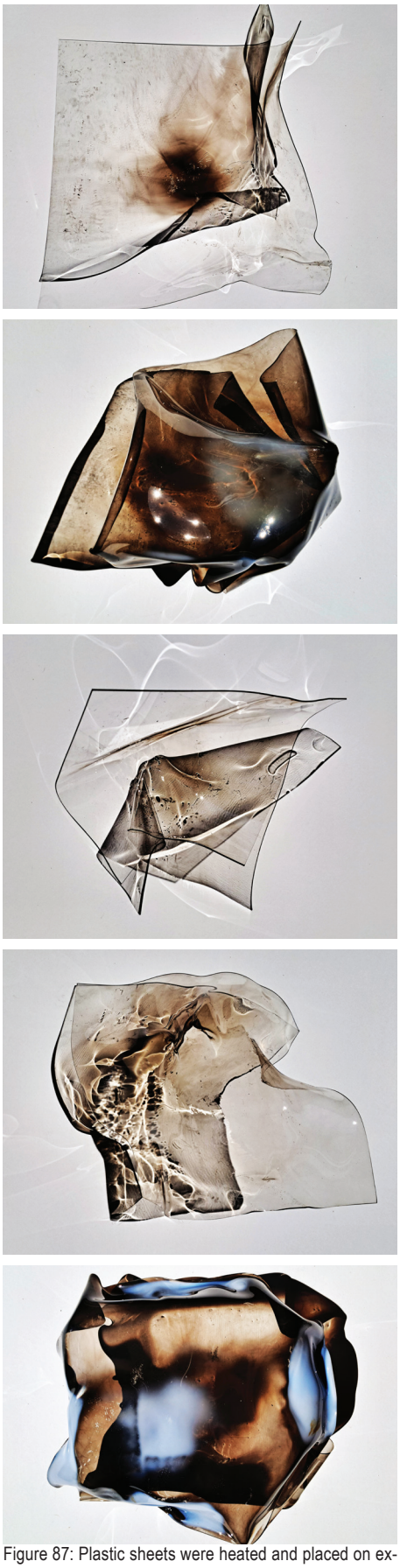


Figure 87: Plastic sheets were heated and placed on existing bricks on site to capture an imprint (Author, 2023).

2.5 CONCLUSION

Studying climatic patterns and trends is crucial for understanding the environmental conditions that shape the context and impact its inhabitants. By examining factors such as temperature, rainfall, and wind patterns, there can be a better understanding of the challenges and opportunities of the site's climate.

Moving on to the meso analysis of Batho, the community's history has provided valuable insights into the area's development. These insights can aid in identifying activity and potential growth areas by studying influential urban nodes, such as community centres or transportation hubs. Additionally, understanding the existing community facilities, such as schools, halls, historical locations, and recreational spaces, is crucial for assessing the residents' quality of life and well-being. Furthermore, analysing the movement of people in and around the site can reveal patterns, transportation infrastructure, and social dynamics that shape the community.

The micro analysis of Ramkraal has focused on the physical attributes of the heritage site and the exploration of its potential for development. Examining the site's existing features, such as walls, damage, materiality, roofs, vegetation, and existing orders, can assess the area's suitability for a skills development centre. The site exploration lastly introduces the conceptual approach of enfilade, inverted panopticon, and the lived matrix.

Therefore, this chapter provides valuable insights into the development and potential of Ramkraal Prison. By understanding the macro, meso, and micro context, informed decisions and strategies that promote sustainable development, enhance the quality of life, and harness the site's unique characteristics and opportunities can be implemented in the design process.



Figure 88: The joining of old and new (Author, 2023).

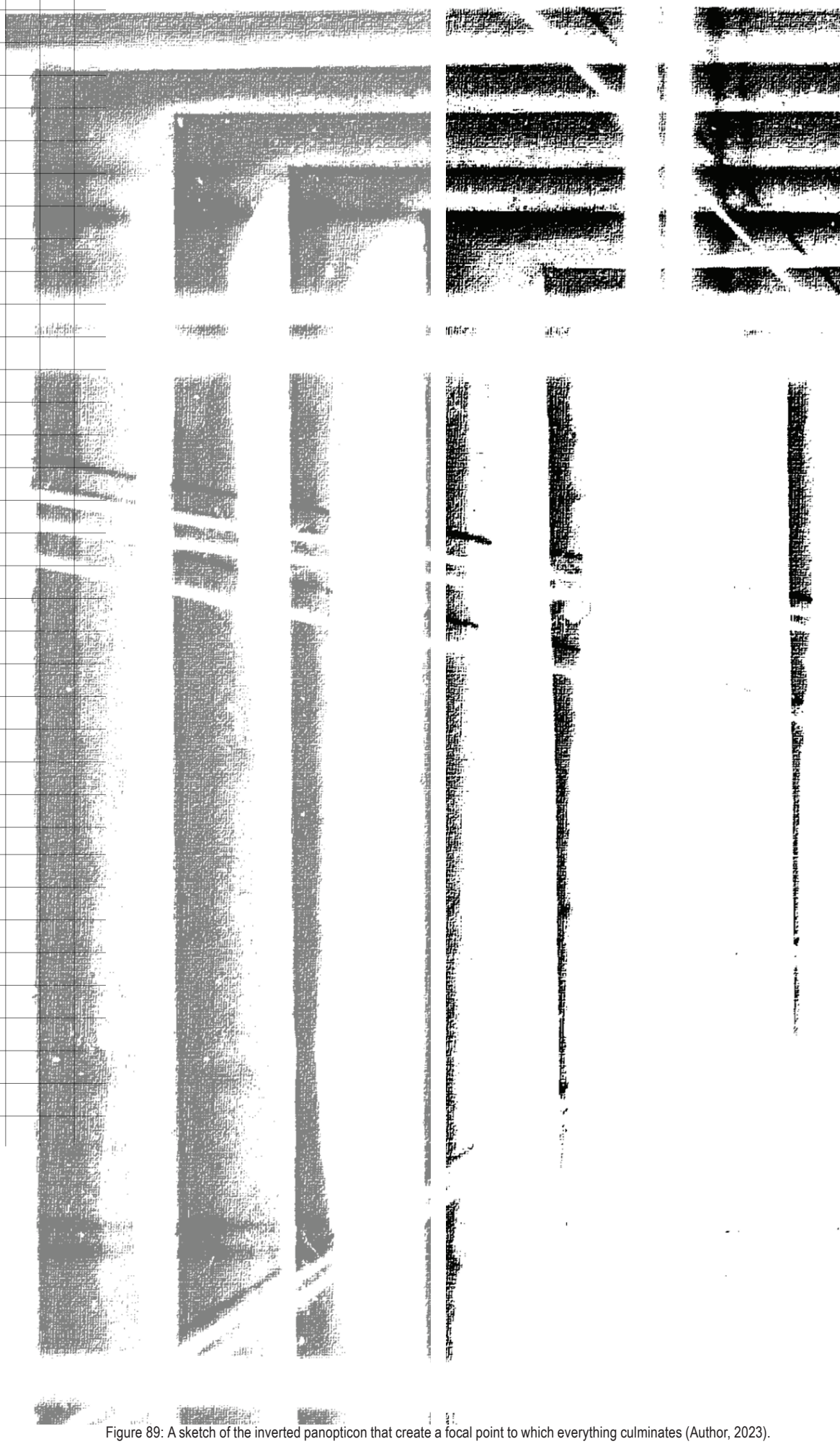
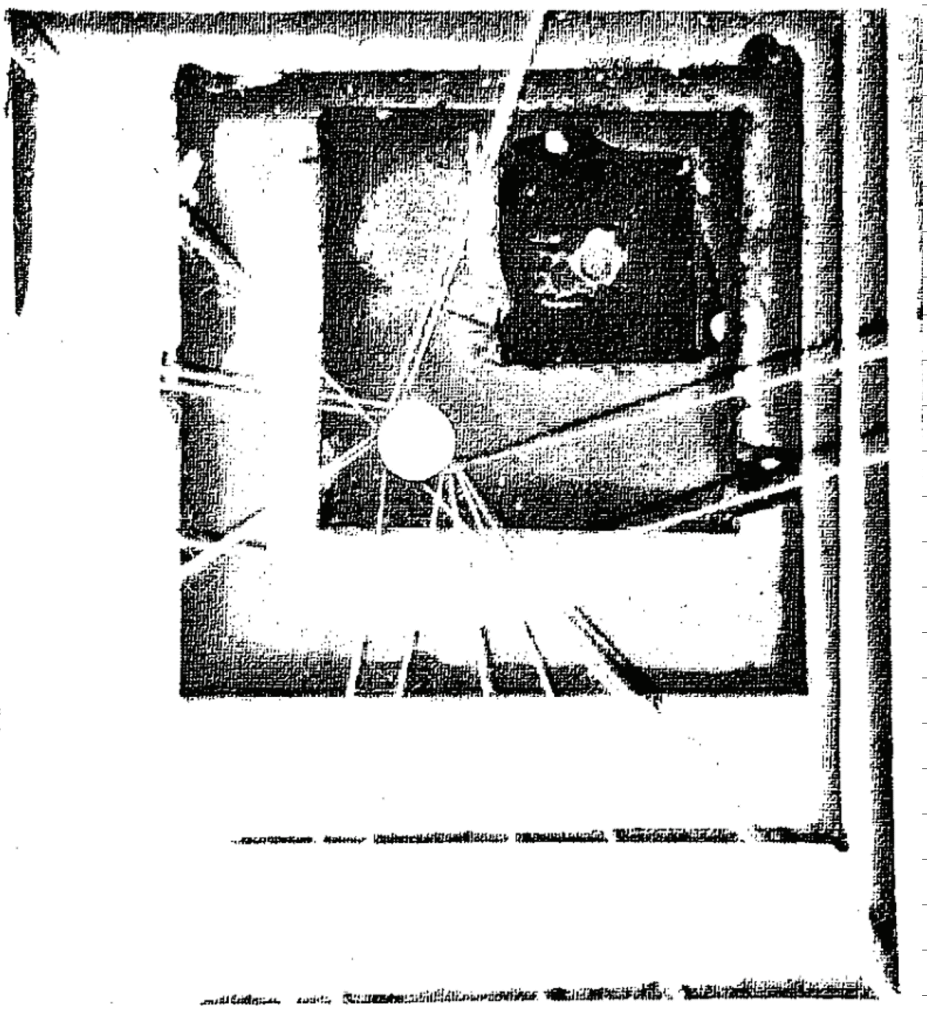


Figure 89: A sketch of the inverted panopticon that create a focal point to which everything culminates (Author, 2023).



03

DISCOURSE

3.1 INTRODUCTION
- 3.1.1 STATING THE RESEARCH QUESTION

3.2 TURNING RUINED SPACES INTO COMMUNITY CATALYSED PLACES
- 3.2.1 INTRODUCTION
- 3.2.2 RUINED SPACES
- 3.2.3 COMMUNITY-CATALYSED PLACES
- 3.2.4 TEACHING CENTRE, MOROCCO
- 3.2.5 A 'MODEL LOCATION'
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- 3.3.3 ENFILADE
- 3.3.4 LIVED MATRIX
- 3.3.5 TRANSLATING CONCEPTS INTO APPROACHES

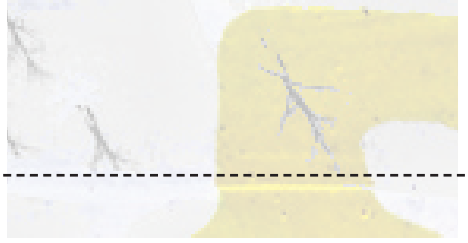
3.4 RESCRIPTING THE PERMANENCE OF RAMKRAAL PRISON
- 3.4.1 CONSERVATION
  - 3.2.1.1 THE REASON FOR CONSERVATION
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3.5 DESIGN APPLICATION

3.6 CONCLUSION

3.1 INTRODUCTION



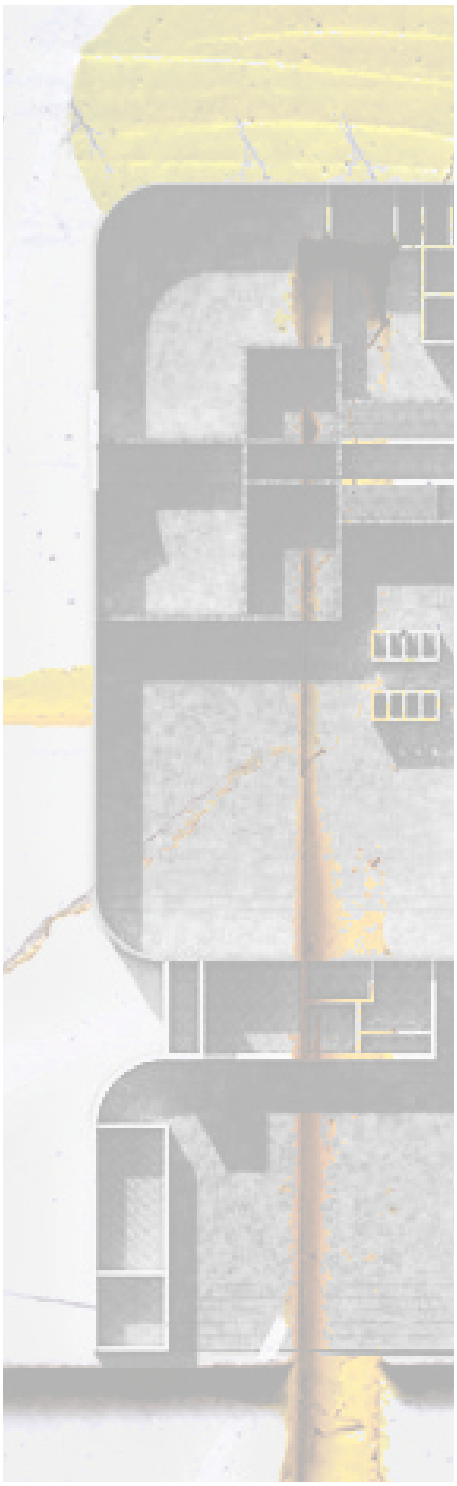


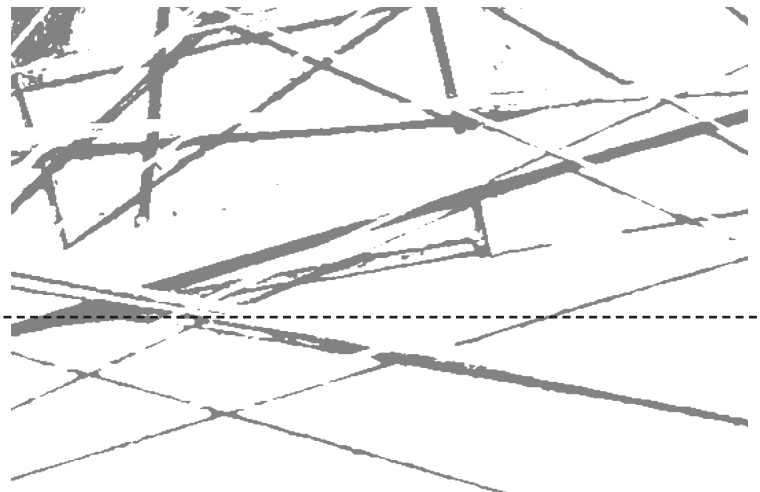
A new prison was needed—a prison with a strict layout or cartesian grid to enforce the regulation of inmates. The reason for a new prison was because the new “railway in Bloemfontein created an increase in crime” (Botes, 2015: online). This strict order left minimal freedom for creativity, development, or self-expression.

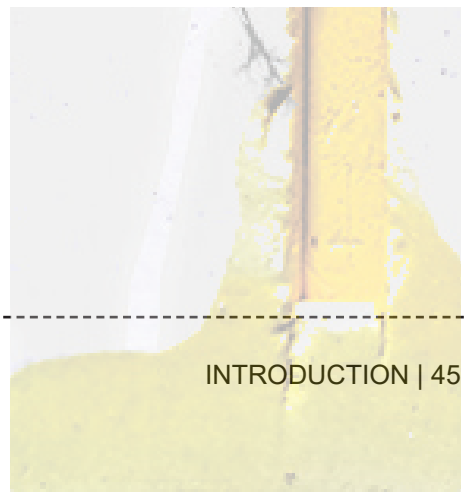
In order to prioritise community concerns as the main drivers of the design, it is crucial to understand and address the established power structures that currently exist within Batho and the Ramkraal Prison. The proposal can create a more inclusive and equitable environment by redefining these power structures. The production of space and the conceptual approach can create a framework for rescripting the Ramkraal Prison. Therefore, reimagining a heritage site allows one to address these concerns and promote self-liberation within the community. By incorporating the community’s values, aspirations, and needs into the design, the proposal can empower individuals and groups to take ownership of their heritage and shape their future, aiding in conserving the Ramkraal Prison.

Using different conservation charters and precedent studies can aid in formulating a framework to conserve as much as possible but create a significant enough change that brings new life into the complex that was once a prison. A comprehensive analysis of the heritage site is necessary to validate this community-catalysed approach. This analysis will examine the site’s historical, cultural, and social significance, as well as its current condition and potential.

Understanding the site’s context and significance makes it possible to identify areas where the community-catalysed places can be introduced. This analysis will also shed light on deviations from traditional heritage assumptions and provide insights into how these deviations can be justified and motivated. Ensuring that the proposed design respects and preserves the site’s heritage while addressing the community’s concerns and aspirations is crucial. Combining a heritage analysis with community involvement can create a design that respects tradition while embracing innovation and progress.







3.1.1 STATING THE RESEARCH QUESTION

How can a community-catalysed skills development centre in-between Batho and the Bloemfontein CBD be sensitively integrated and rescripted within a ruin – the Historic Ramkraal Prison in Bloemfontein – thereby inverting the established power structure by activating learning settings aimed at self-liberation?

WHAT? | Community-catalysed skills development centre.
FOR? | For the community of Batho.
HOW? | By sensitively integrating and rescripting, in a way that primarily draws on the concerns of the community.
WHERE? | Within the historic Ramkraal Prison in Bloemfontein.
MANNER? | Inverting the established power structure on various levels.
BY? | Activating learning settings.
WHY? | In order to facilitate self-liberation.

One possible way to integrate a community-driven skills development centre between Batho and the Bloemfontein CBD to the Historic Ramkraal Prison in Bloemfontein is by initiating a dialogue and relationships between the new skills development centre and the old buildings within the prison complex.

The next step would be to develop a comprehensive plan for connecting the two locations. This plan could include physical infrastructure, such as establishing designated pathways between Batho, the CBD, and the prison. Additionally, the skills development centre could offer vocational training programs for the people in the community. The training programs could include courses in various trades, such as carpentry, sewing, pottery, or computer skills. By providing people with practical skills and knowledge, the centre would empower them to gain employment opportunities.

Furthermore, the skills development centre could also offer educational programs focused on personal development, entrepreneurship, and social skills. These programs could help them to build resilience, self-confidence, and a sense of agency. By equipping individuals with the tools and knowledge necessary to navigate the job market and pursue their entrepreneurial ventures, the centre would contribute to their empowerment and self-liberation.

Connecting a community-driven skills development centre between Batho and the Bloemfontein CBD to the Historic Ramkraal Prison can transform the existing power dynamics and create educational spaces that empower individuals to liberate themselves. This collaborative effort would benefit the community by providing valuable skills and knowledge.

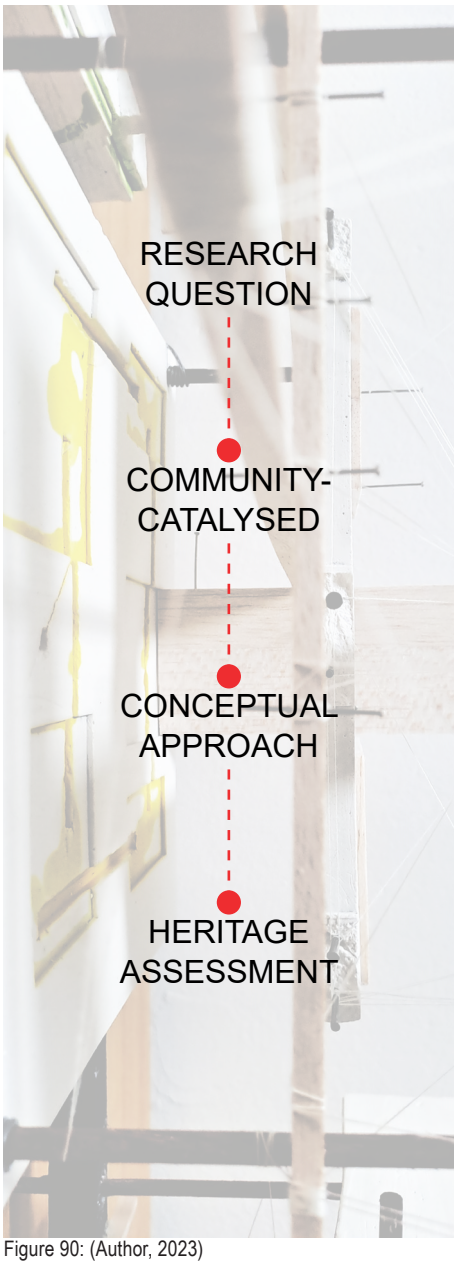
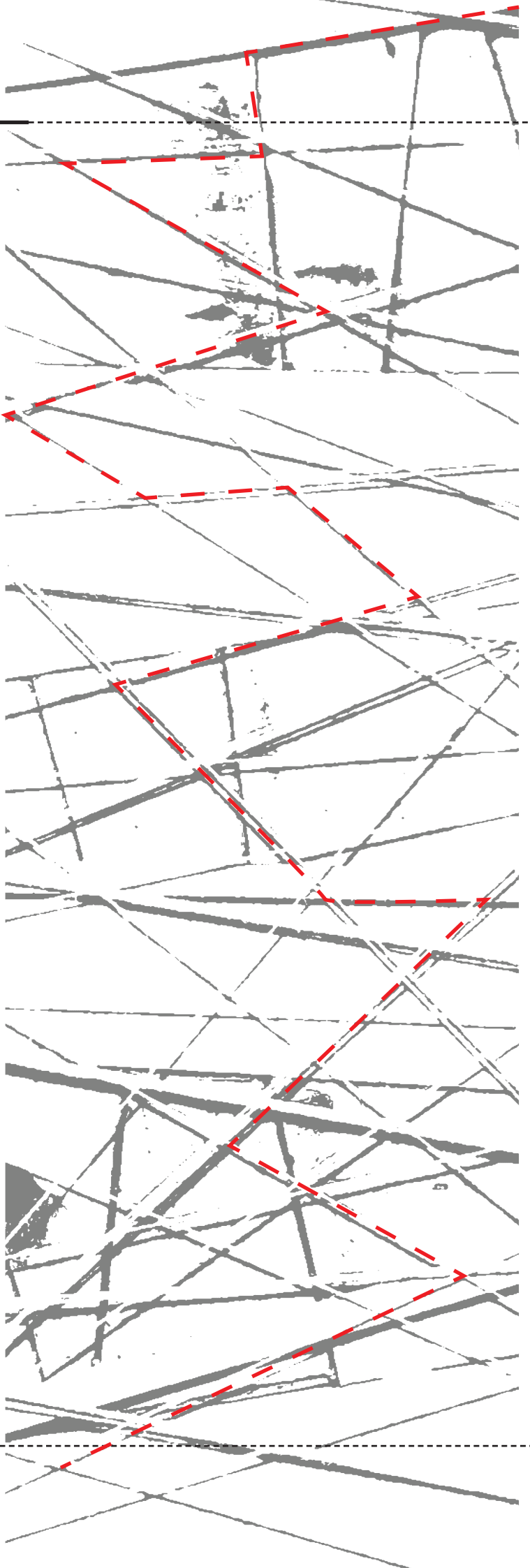


Figure 90: (Author, 2023)



3.2 TURNING RUINED SPACES INTO COMMUNITY-CATALYSED PLACES

3.2.1 INTRODUCTION

There is a good chance the spaces will be destroyed when dealing with an existing institution, particularly one that has been deserted for 29 years (since 1994). Due to the surviving remnants and scars left behind by neglect, the spaces within can be considered ruined. Redesigning ruined spaces (figure 91) is essential to accommodate a new program. The new program mainly targets the Batho community, so the spaces should be community-catalysed. Therefore, it is necessary to define the term community-catalysed, and studying a precedent that focuses on the community could provide a strategy for making these places. As a community, Batho has concerns that can be addressed through this strategy.



Figure 91: Ruined spaces within the Ramkraal Prison (Author, 2023).

3.2.2 RUINED SPACES

Since The Ramkraal Prison is in disrepair, it can be regarded as a ruin. Its current condition resembles an old fortress that a great battle has torn apart—a liberation struggle. “Ruins are profoundly ambiguous” since they are “complex and multifaceted, bringing their own form of time-space compression with them” (Dale & Burrell, 2011: 113). The Ramkraal Prisons’ strict order hinders the sense of freedom, and its original function is no longer relevant. Therefore, change is inevitable. This change should coincide with the existing circumstances and be influenced by contextual insights. The scarring and damage left on The Ramkraal Prison symbolise its downfall and, ultimately, the fall of a suppressive government. The idea is not about rebuilding Ramkraal Prison but conserving the physical remnants of the past, designing for the community, and creating community-driven or community-catalysed places.

3.2.3 COMMUNITY-CATALYSED PLACES

An empowered community starts with empowered individuals. Therefore, adaptive reuse architecture can act as a catalyst for community empowerment, and community engagement can act as a catalyst for community-catalysed places. Approaching the design like this can promote a sense of community identity, ownership and pride and provide economic, social, and environmental benefits. The redevelopment of Ramkraal Prison can provide a platform for creativity and innovation. So, “community-catalysed means a building that, if remediated, would provoke more economic growth or reinvestment in the community. Economic growth may include the creation of additional jobs, growth of new or existing businesses, development of new housing units, increased property values, or potential population growth” (United States of America. Government Gazette, 2023: 1). A community-catalysed project will be expected to have a notable effect on the community.

3.2.4 TEACHING CENTRE, MOROCCO

Anna Heringer (1977) is a German architect advocating sustainable architecture and positioned her emphasis on community projects such as the METI Handmade School in Rudrapur, Bangladesh. Another precedent designed by Anna Heringer is the Teaching and Training Centre for Sustainability in Morocco (figures 92-96) , which “aims to transform natural, immediate available resources on the lowest possible level of entropy, with maximum benefit for the local population, into beautiful architecture with a strong local identity” (Heringer, 2011). The centre has a prominent “garden, an exhibition hall, a cafe, a library and an auditorium” (Heringer, 2011) that the public can use. This project is not adaptive reuse; instead, using local materials relates to using existing architecture. Because Ramkraal Prison has stood for so long, it can be regarded as an urban artefact and local material that can be reused. This adaption offers a unique insight into the social and cultural history of Ramkraal Prison and its inhabitants, while being rescripted for modern uses can help conserve cultural heritage and create economic opportunities. So, what principles can be acquired from Morocco’s Teaching and Training Centre related to community-catalysed places?

- “A dynamic architectural sculpture that surrenders patios and gardens plays with sun and shades, static massiveness and rhythmics, rough surfaces, and refined shining renderings” (Heringer, 2011).
- “The building opens up for patios with intimate niches for contemplation or communicative exchange” (Heringer, 2011).
- There is a balance between outdoor and indoor places.
- The combination of public spaces provides a large variety of atmospheres (figure 95).
- There are outside areas for practical work.

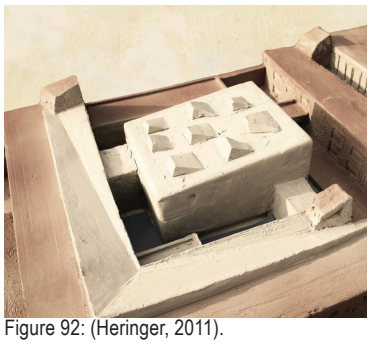


Figure 92: (Heringer, 2011).



Figure 93: (Heringer, 2011)



Figure 94: (Heringer, 2011).

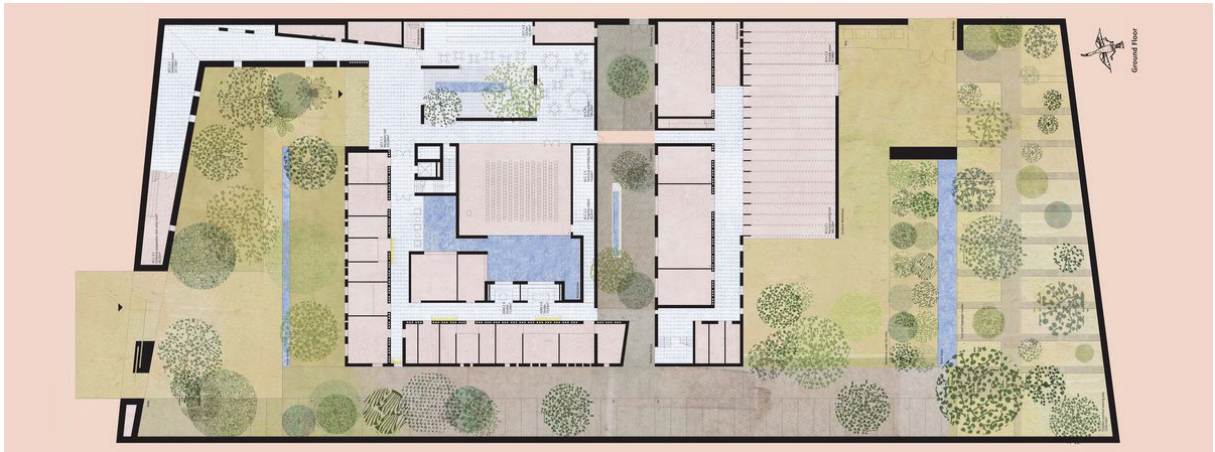


Figure 95: A plan of the teaching centre (Heringer, 2011).



Figure 96: A interior place of the teaching centre that offers spaces for social interaction (Heringer, 2011).

3.2.5 A 'MODEL LOCATION'

As stated in the previous chapter, Batho was referred to as a 'model location' after being established by the then Bloemfontein municipality. Referring to Batho as a 'model location' may sound like a compliment or recognition of the community's achievements. However, it is necessary to dive deeper into the meaning of this label. In this context, the term 'model' does not refer to the community's inherent qualities or strengths but rather to the expectation that they conform to someone else's agenda or standards.

By labelling Batho as a 'model location,' the municipality essentially imposed a set of predetermined criteria or expectations on the community. This can be seen as an attempt to mould Batho into a specific image or ideal that aligns with the interests or preferences of those in power. In doing so, the unique identity and individuality of the community would be erased or overshadowed.

A 'model' implies a standard or template that should be followed, often disregarding the diverse needs, values, and aspirations of the individuals or community to which it is applied. It suggests that there is a singular, ideal way of being or functioning that should be emulated without considering the rich tapestry of experiences and perspectives that make each community unique. However, British urban planning trends influenced Bloemfontein's city planning, influencing municipal orderliness, such as strict grids. So Batho homeowners had to "choose a design from a selection of house plans drawn up by a municipal architect" (Du Bruyn, 2021: 28) instead of designing their own homes. Even though they were restricted in terms of designing their homes, their gardens they could make their own. The residents of Batho developed a passion for gardening, and they embraced it in their daily lives.



Figure 97: Sir Ebenezer Howard founded the second Garden City in 1920, designed by Louis De Soissons and many of Bloemfonteins gardens and green spaces were inspired by British gardens like this (Garden Cities Institute, [n.d.]: online).

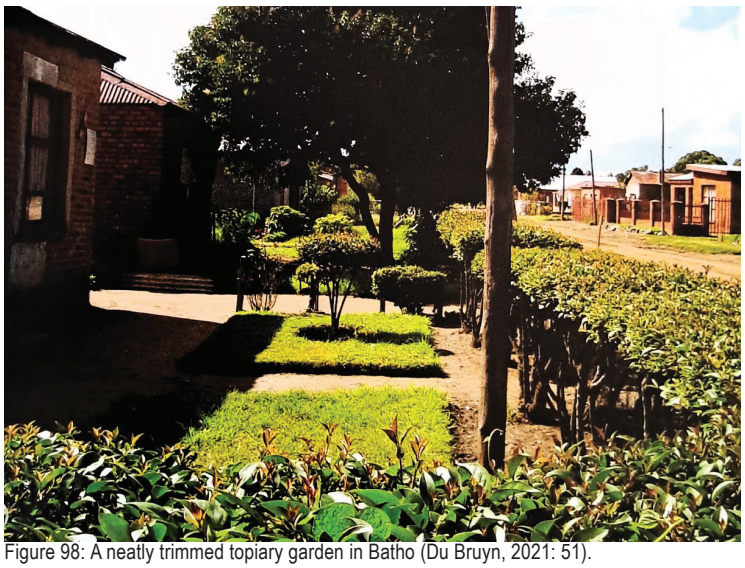


Figure 98: A neatly trimmed topiary garden in Batho (Du Bruyn, 2021: 51).



Figure 99: Emily Mogaecho (Du Bruyn, 2021: 53).

3.2.6 ADDRESSING BATHO'S CONCERNS

In Batho, gardening was a way for people to show their uniqueness by growing various plants, flowers, topiaries, fruit trees, or vegetable patches. However, Emily Mogaecho's (figure 99) garden had a unique role beyond being her beloved hobby. Her tall garden hedges hid a 'stoepkamer' (figure 100), a safe place for activists fighting against injustice to gather secretly or find shelter. The hedges created a soft edge while providing privacy and a place for self-liberation. Adding garden walls and new boundaries to create a gentler atmosphere involves integrating natural elements and physical barriers to create a serene and peaceful ambience. The proposed centre can create a tranquil environment that promotes relaxation, reflection, and a connection with nature by incorporating garden walls, green spaces, and landscaping features. New edges then go hand in hand with community-catalysed places since the ruined spaces within the Ramkraal Prison need to be rescripted to breathe life into the abandoned institution.

The Ramkraal Prison is returned to the community, and its historical significance is protected. This approach pays homage to a location's history and culture and creates a unique and visually appealing environment. The adaptive reuse of an existing prison involves transforming the order and seeks to transform these spaces into vibrant hubs catering to the locals' needs and desires. It can involve the creation of parks, community gardens, recreational facilities, and gathering spaces that encourage social interaction.

This approach can shape natural and social spaces, creating a layered approach to how people interact on the edges or from space to place. This produces different spaces, translating into a conceptual approach that will be explored in the next part and aid the design process in the next chapter.

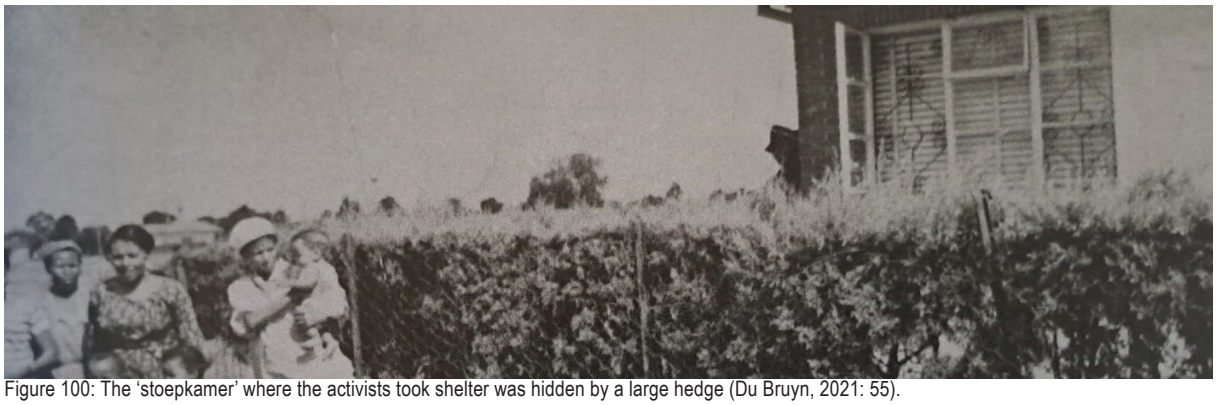


Figure 100: The 'stoepkamer' where the activists took shelter was hidden by a large hedge (Du Bruyn, 2021: 55).

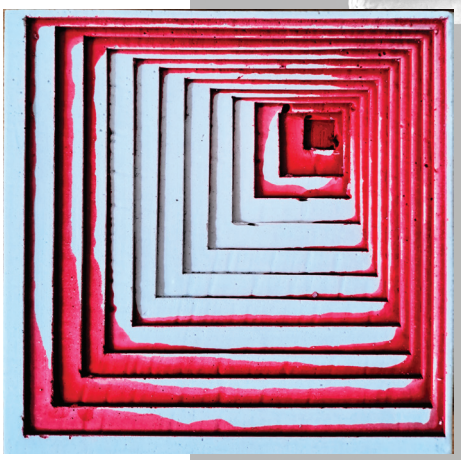
3.3 PLACE VS SPACE

3.3.1 PRODUCTION OF SPACE

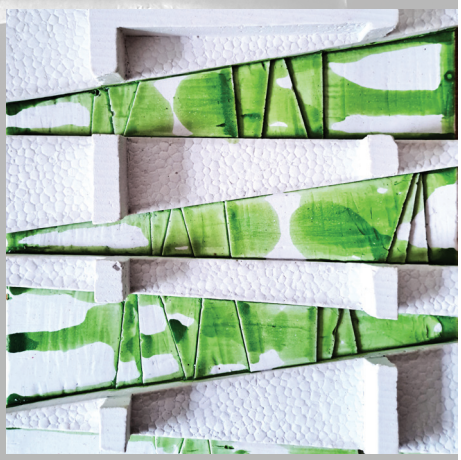
Considering space can be viewed through various lenses, some clarification is needed to understand how community-catalysed places could be created. According to the French philosopher Henri Lefebvre (1901-1991), there are different modes of production of space within the natural and social space. He refers to them as conceived, practised and lived space. These three levels of manifestations of social space can be explained as follows: “Space is simultaneously a spatial practice (an externalised, material environment), a representation of space (a conceptual model used to direct practice), and a space of representation (the lived social relation of users to the environment)” (Gottdiener, 1993: 131). Therefore, it is the space itself or physical space (conceived), the space as represented or discursive space (practised) and the space as experienced or representational space (lived).

Section 2.4.3 briefly mentioned the Inverted Panopticon, Enfilade, and Lived Matrix (figure 101) as a conceptual approach, but how is this associated with the production of space theory? Each concept can be linked to a specific aspect of the site on a Macro, Meso, and Micro level or in terms of practised, lived, and conceived space. Each of the three concepts’ meanings will be discussed, as well as their relation to the production of space theory and how it could transform ruined spaces into community-catalysed places.

INVERTED PANOPTICON



ENFILADE



LIVED MATRIX

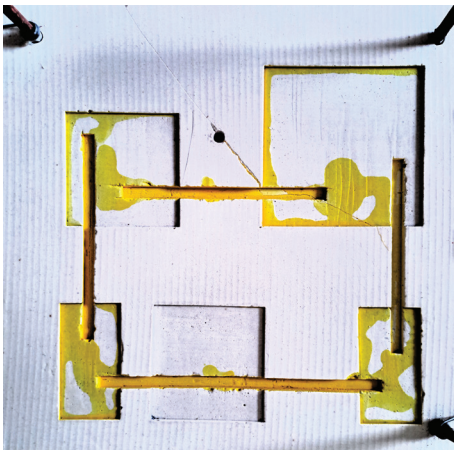


Figure 101: (Author, 2023)

3.3.2 INVERTED PANOPTICON

To fully understand an Inverted Panopticon, it is essential to understand what it means clearly. The panopticon (figure 102) idea was originated by the English philosopher Jeremy Bentham (1748-1832); a panopticon is a distinct architectural concept integrating a surveillance and regulation system within institutional structures. With a central surveillance area, prison cells encircling the centre, and powerful light, prisoners' main threat is light; it disorients their vision and makes them feel watched constantly. Therefore, their freedom lies in darkness, and visibility is a trap. Bentham proposed this architecture to control people's behaviour by making them constantly aware of being watched. It was designed to be a tool for social control and has since been adopted by many governments. The inverse of this idea would then be self-liberation instead of self-regulation.

So, regarding the production of space, the Inverted Panopticon refers to the space itself, or physical space (conceived space), which is constructed by various people, such as architects, and these spaces have a specifically designed intention. The panopticon solidified fear and order and established power. In a panopticon, humans are the object of control; therefore, space becomes the object of control when inverting the idea of a panopticon. Therefore, spaces become socially active places which can join cultural narratives between inhabitants.

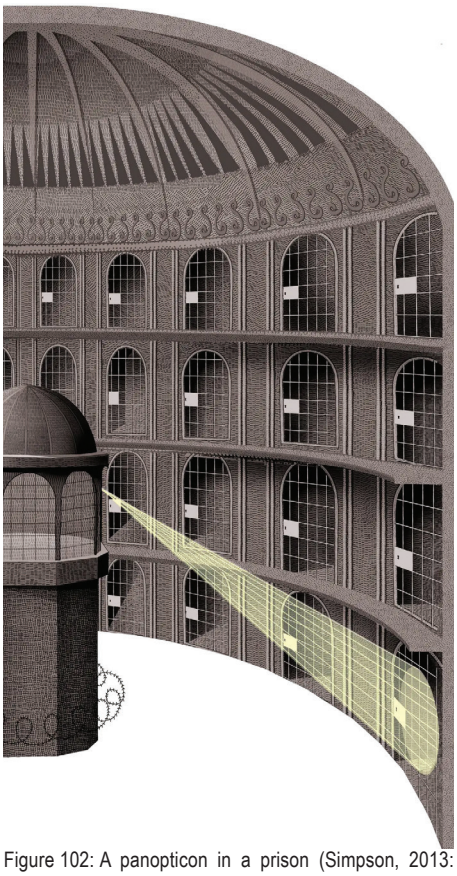
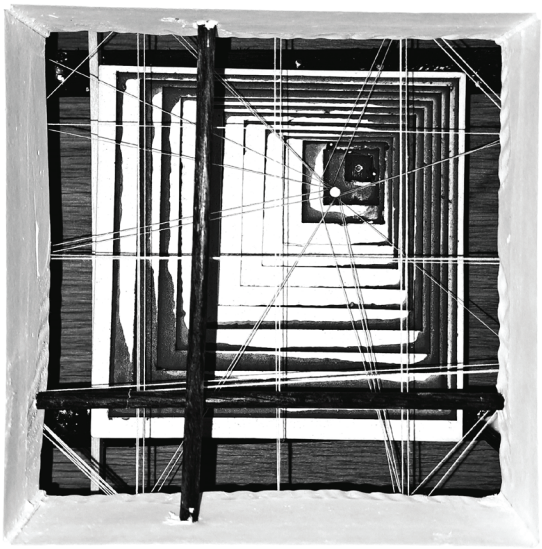


Figure 102: A panopticon in a prison (Simpson, 2013: online).



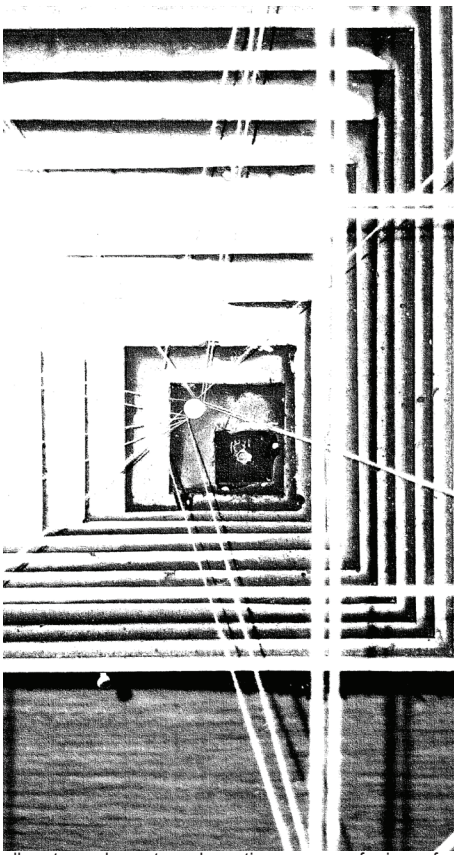


Figure 103: The model expresses the idea of altering spatial qualities by permitting viewing of all parts or elements and creating a sense of privacy for the inhabitants (Author, 2023).

3.3.3 ENFILADE

In Kim Dovey's book 'Becoming Places' (2010), he explains that the building plan can be translated into a structural diagram of how life is framed and divided into three main structures.

> "Each displays a differing level of spatial control and freedom: the line (or enfilade) controls the choice of the pathway; the fan (or branching) structure controls access to several segments from a single segment; and the net is a ringy or permeable network with multiple choices of pathways. The three may seem limited, but all spatial structures can be understood by their combinations and additions".
>
> (Dovey, 2010: 106).

Our environment's structures are crucial in shaping our experiences and interactions. Linear, looped, and fanned structures (figure 104) are the main ways Dovey expresses his idea, each with its unique impact. However, he linked the linear structure to the French term "enfilade," meaning to pierce from end to end. This piercing quality creates a sense of continuity and direction, guiding people through a string of spaces. However, the linear structure is more than just a physical pathway. It represents the discursive space, which is mentally constructed by how the space is discussed and represented. This broad representation can exist without a physical presence, highlighting the importance of context and perception in shaping our understanding of a place. There is a particular significance to the site because of its context. It acts as a boundary between Bloemfontein and the community of Batho, creating an opportunity to bridge a connection by piercing from end to end and knitting together contradicting narratives. Therefore, a new thoroughfare can be created and subvert established power structures.

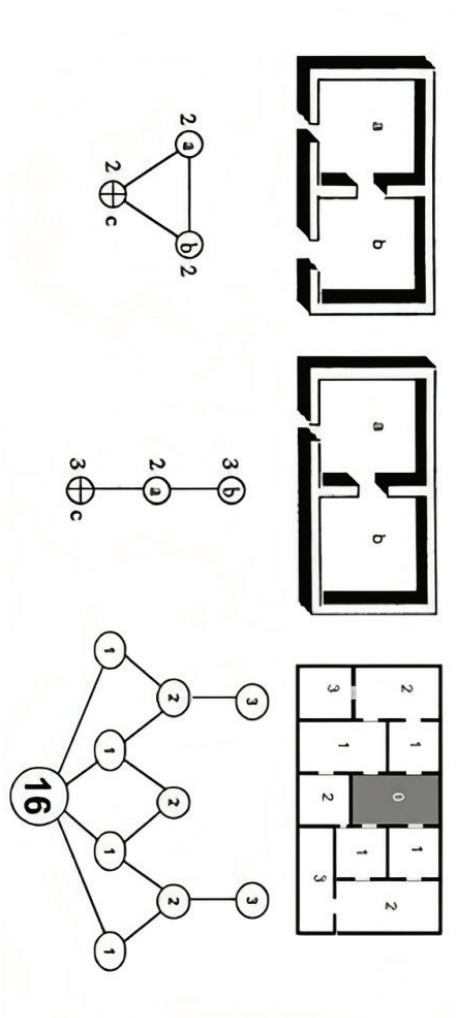
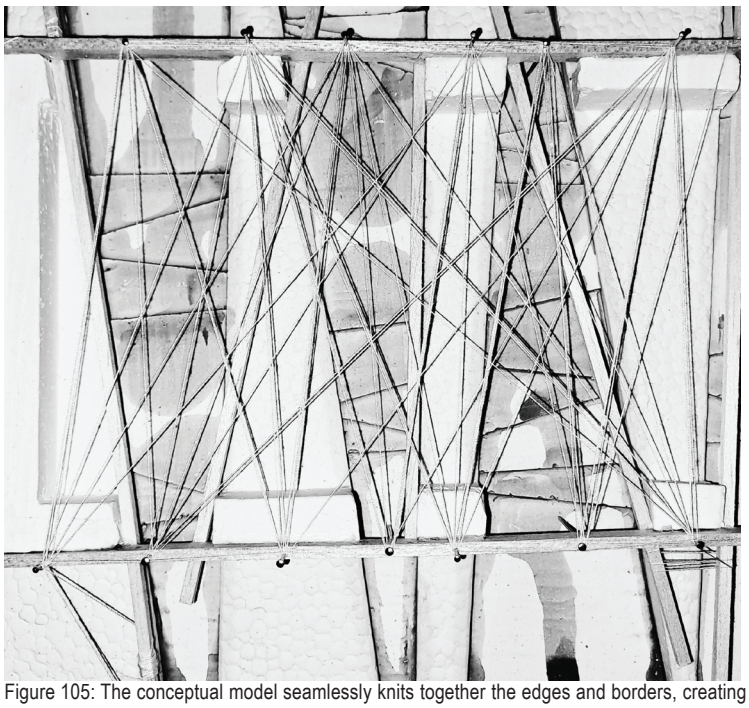


Figure 104: (Dataurbanism, 2012: online).



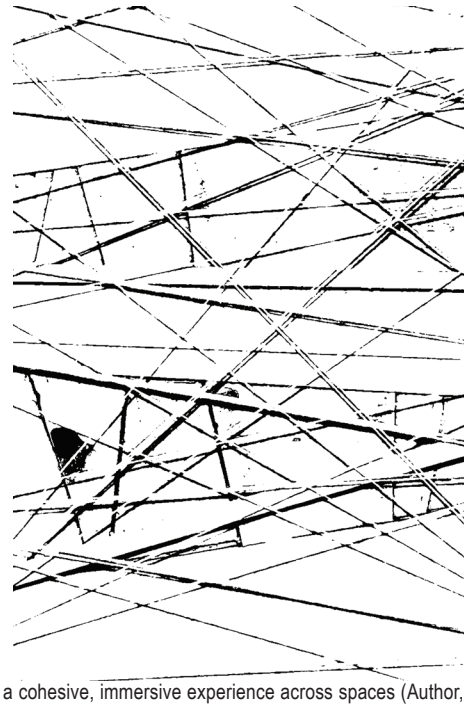


Figure 105: The conceptual model seamlessly knits together the edges and borders, creating a cohesive, immersive experience across spaces (Author, 2023).

3.3.4 LIVED MATRIX

Ramkraal Prison's no longer existing power structures are layered with history and experiences, and it is this space within which the proposed design will develop, creating a new identity. Transforming the ruined spaces will create a new space, which is the space as experienced or representational space (lived) that is socially constructed by the lived experience of the people who will use it. The skills development centre will create an environment more conducive to learning and socialising by transforming the existing spaces with new places. This transformation will create a space that transcends the current power structures and reflects the experiences of the local people.

The concept focuses on spatial narratives and piecing together new elements (figure 106) that can be lived in and experienced since it is not necessarily how the interior or architecture looks but how the users perceive the spaces. If a community associates a place with something significant, the locals will take pride and ownership of said place. Therefore, a community that wants to preserve a building is a non-negotiable part of any sustainable preservation project.

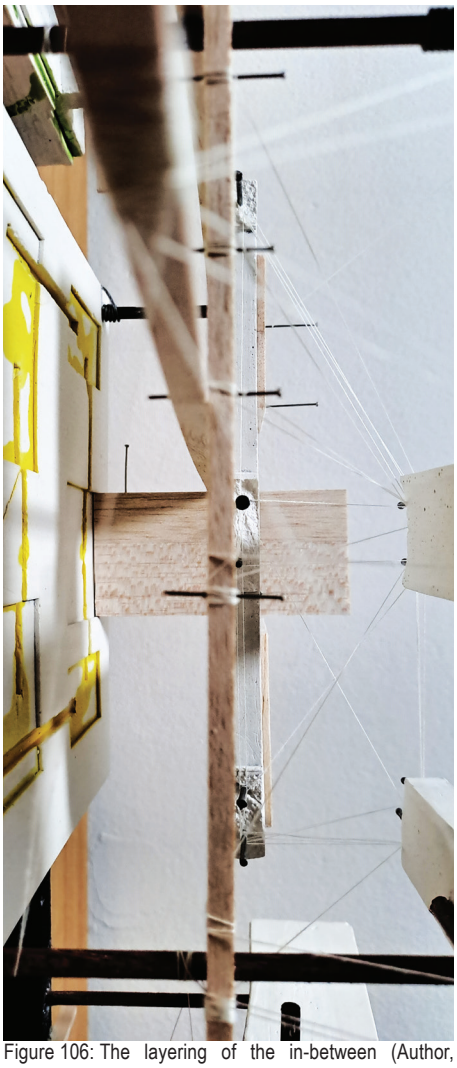
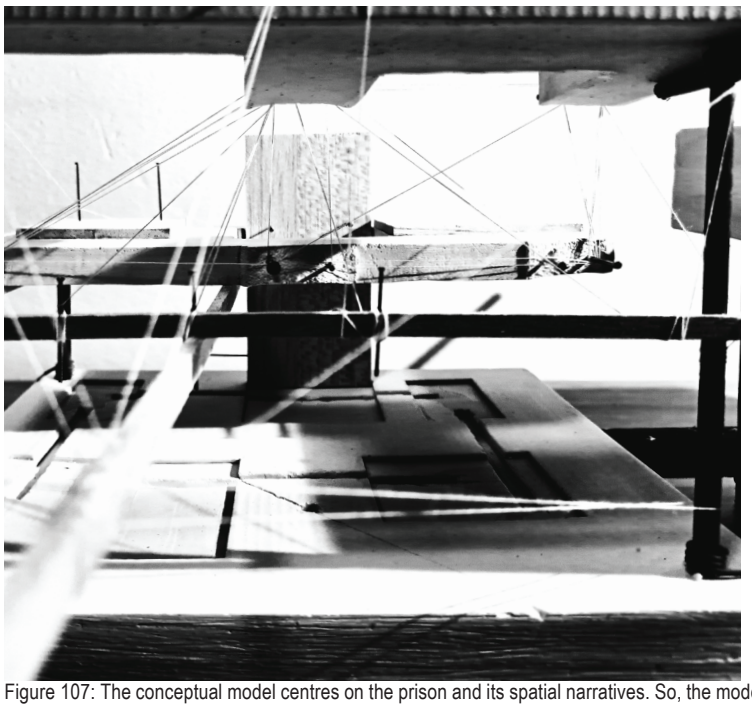


Figure 106: The layering of the in-between (Author, 2023).



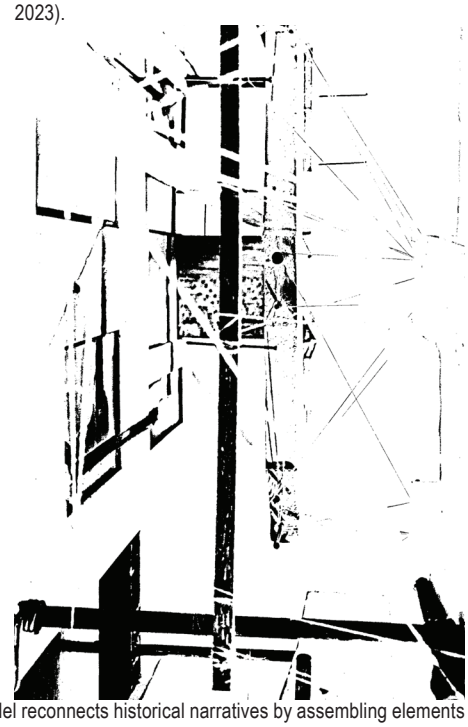


Figure 107: The conceptual model centres on the prison and its spatial narratives. So, the model reconnects historical narratives by assembling elements and crafting a new impression. This impression draws from the past and offers a fitting response that adds to the current narrative. (Author, 2023).

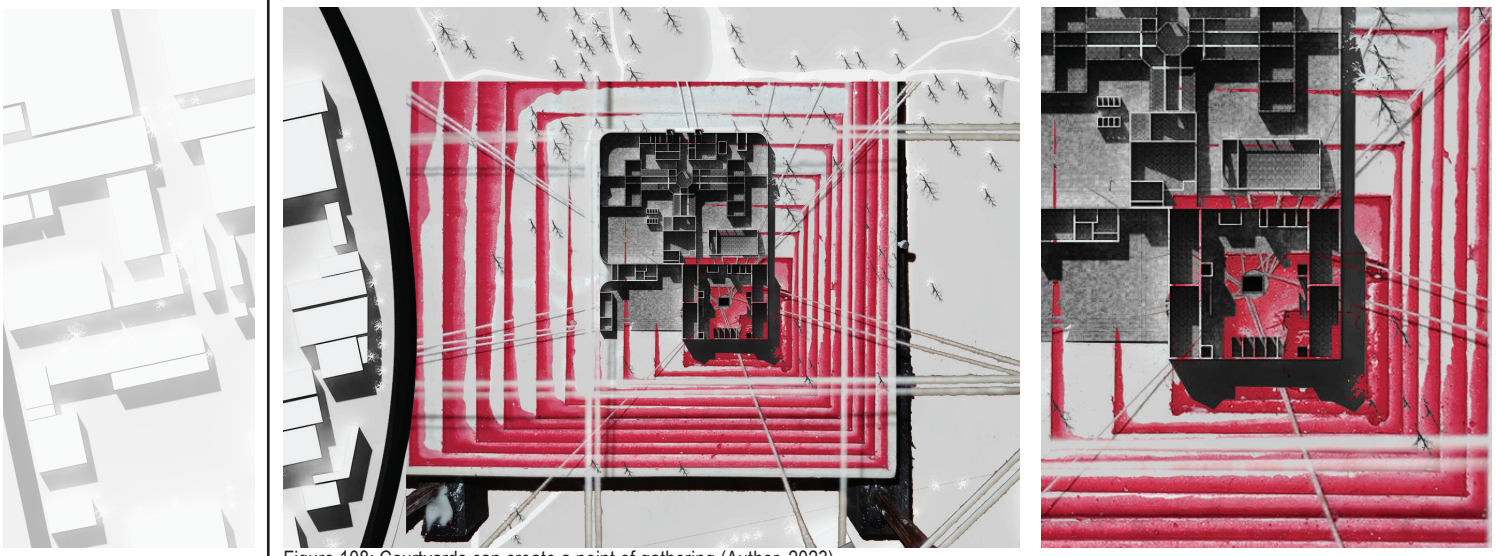


Figure 108: Courtyards can create a point of gathering (Author, 2023).

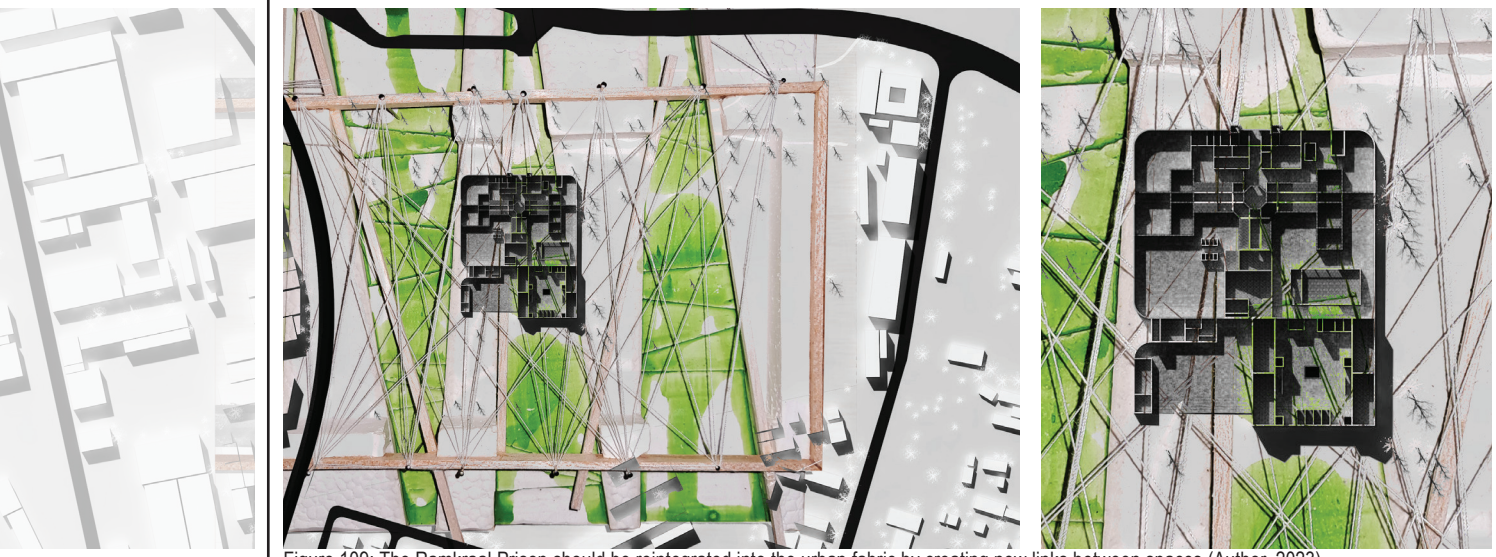


Figure 109: The Ramkraal Prison should be reintegrated into the urban fabric by creating new links between spaces (Author, 2023).

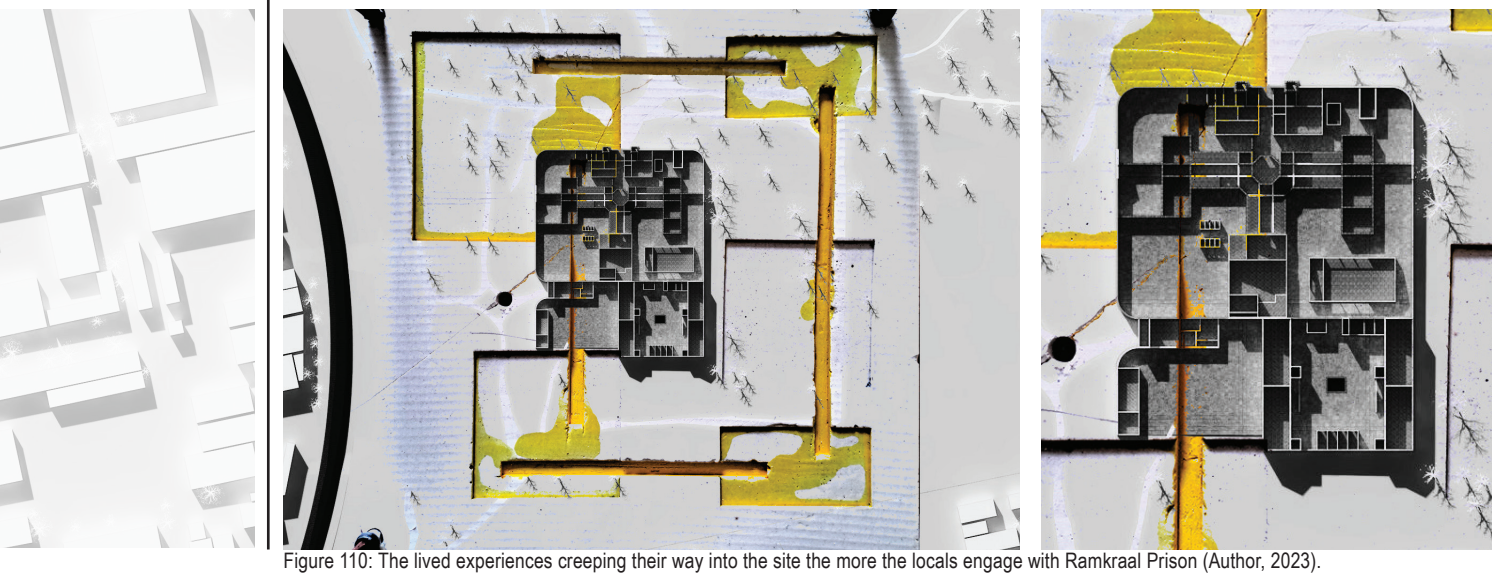


Figure 110: The lived experiences creeping their way into the site the more the locals engage with Ramkraal Prison (Author, 2023).

3.3.5 TRANSLATING CONCEPTS INTO APPROACHES

In order to turn conceptual ideas into a strategy or principles, it is essential first to understand the critical elements of community-catalysed places. The space should be accessible to all community members, regardless of age, ability, or socioeconomic status. The design should prioritise sustainability and environmental responsibility, using materials and practices that minimise environmental impact. The space should be designed to accommodate a variety of activities and uses, allowing for maximum flexibility and adaptability. The design should prioritise safety and security, creating a welcoming and comfortable space for all community members.

However, by delving deeper into specific design principles, the three concepts must be combined to work together. Therefore, layering different spaces, such as outside, liminal, interstitial, and inside, allows for comfortable movement between them. One way to achieve this layering is through courtyards and Batho garden-inspired edges. These courtyards, which were once private and extroverted, have now been transformed into public spaces and integrated with the skills development centre functions. Similarly, the landscape surrounding Ramkraal Prison becomes a thoroughfare between Batho, Bloemfontein, and the prison itself. A new order is formed by removing or demolishing specific structures within the prison complex, turning the ruined spaces into community-catalysed places. This piercing of space allows for unrestricted movement in-between spaces. With the remaining remnants of Ramkraal Prison there is an opportunity to insert new roofs that fold and connect with the courtyards, creating a thoroughfare between spaces and bridging the old and the new. However, new additions must stand independently to liberate the prison further while keeping their roots within it. This new addition aims to transcend boundaries by cantilevering over the wall and contrasting the heavy stereotomic architecture of Ramkraal Prison.

To determine if the strategies and principles will be effective, a traditional heritage analysis must be done to understand the importance of the Ramkraal Prison. Therefore, it involves studying different heritage charters and laws to analyse the different spaces within the heritage site. This approach provides insight into protecting heritage sites and determines if the proposed design approach is suitable and justifiable, even if it deviates from traditional heritage design.

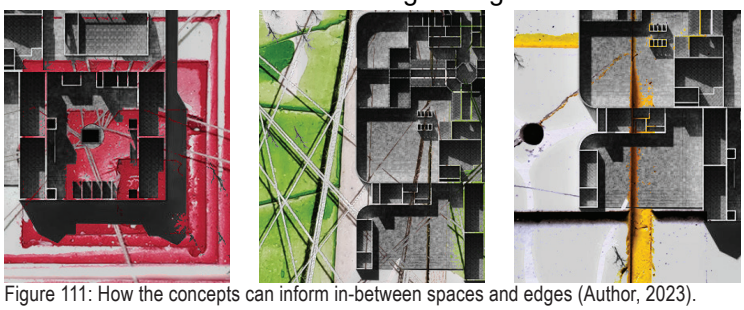


Figure 111: How the concepts can inform in-between spaces and edges (Author, 2023).



Figure 112: A prisoner's only view of the outside world (Author, 2023).

3.4 RESCRIPTING THE PERMANENCE OF RAMKRAAL PRISON

3.4.1 CONSERVATION

3.4.1.1 THE REASON FOR CONSERVATION

People protect and maintain history to learn from past mistakes.. When conserving old buildings, it is necessary to be sensitive and decide whether to adaptively reuse them or keep them as they are, depending on their historical and cultural importance. Buildings often take up a lot of space, finding new uses for them can be an excellent way to preserve them and give them a purpose. Following guidelines like South Africa's National Resources Act and The Burra Charter can better understand how to conserve these buildings and what should be done to them.

3.4.1.2 NATIONAL RESOURCES ACT OF 1999

South Africa's National Heritage Act of 1999 outlines the management, principles, identification, assessment, standards, and protection of conservation-worthy places within the Republic of South Africa (South Africa. National Resources Act 1999: 2). The Ramkraal Prison was declared a conservation-worthy immovable property in 1990 under the National Monuments Act of 1969, and its formal gazette status is "Heritage Register" (SAHRIS, 2012: online). Heritage Register is the lowest grade, grade III, meaning it is a local heritage resource, and it is subdivided into IIIA, IIIB and IIIC, where the Ramkraal Prison falls under IIIA. The grading IIIA "is applied to buildings and sites with sufficient intrinsic significance to be regarded as local heritage resources and are significant enough to warrant any alteration being regulated" (Heritage Western Cape, 2012: online). The Heritage Act states that "heritage resources can promote reconciliation, understanding and respect, and contribute to the development of a unifying South African identity" (South Africa. National Resources Act 1999: 16). This leads to the notion that if the Ramkraal Prison is to be repurposed, it should be impactful in a positive way for South Africans today. However, it is also not 'so precious' that it needs to be conserved for its own sake. A skills development centre can positively affect the people of Batho by teaching them a skill that influences the economy.

3.4.1.3 THE BURRA CHARTER

"The Burra Charter was first adopted in 1979 at the historic South Australian mining town of Burra" (Australia ICOMOS Burra Charter, 2013). The Burra Charter, in essence, is an international guideline and is 'primarily concerned with the philosophy, terminology, methodology and techniques of cultural heritage conservation" (Australia ICOMOS Burra Charter, 2013). For an adaptive reuse project, the following principles should be considered:

- "Demolition of the significant fabric of a place is generally unacceptable. However, in some cases, minor demolition may be appropriate as part of conservation" (Burra Charter, 2013: 6).
- "Adaptation is acceptable only where the adaptation has minimal impact on the cultural significance of the place" (Burra Charter, 2013: 7).
- "New work such as additions or other changes to the place may be acceptable where it respects and does not distort or obscure the cultural significance of the place, or detract from its interpretation and appreciation" (Burra Charter, 2013: 7).
- "Change may be necessary to retain cultural significance, but is undesirable where it reduces cultural significance. The amount of change to a place and its use should be guided by the cultural significance of the place and its appropriate interpretation" (Burra Charter, 2013: 6).

Figure 114: Numbers on plan corresponds to figures with the same numbers (Author, 2023).

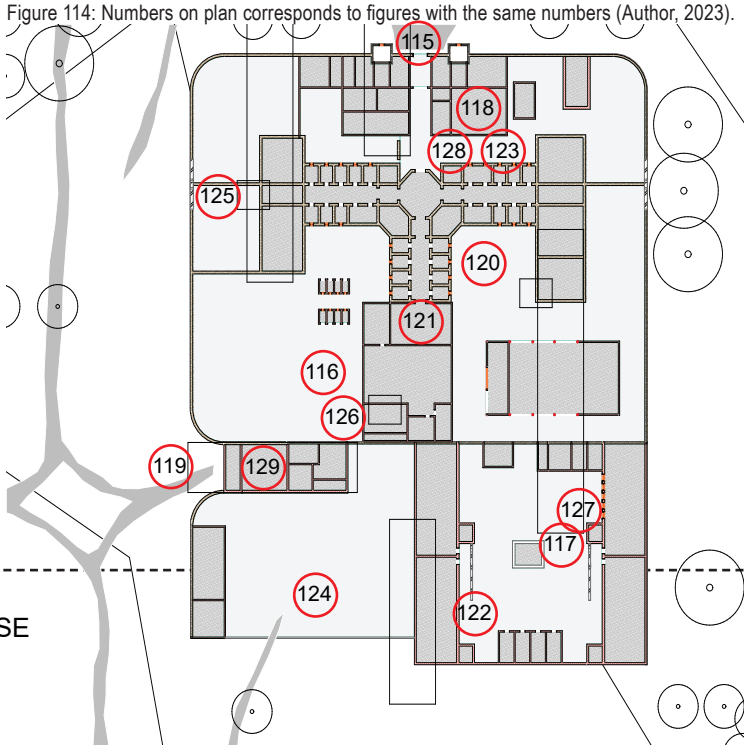




Figure 113: Ramkraal Prison octagonal centre after the prison was built in 1894, before the towers and perimeter walls were built (Botes, 2015: online).

3.4.2 CONSERVING RAMKRAAL

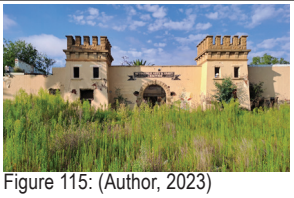
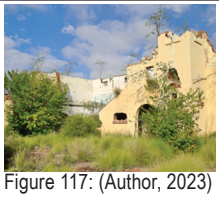
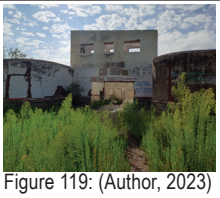
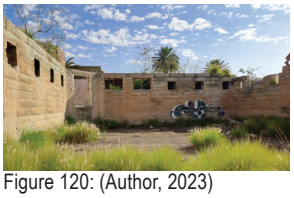
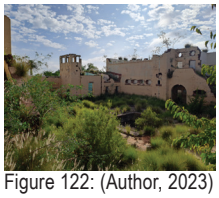
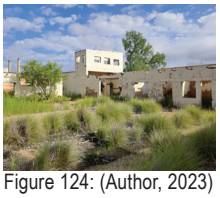
APPLICATION OF THE BURRA CHARTER TO THE RAMKRAAL PRISON

3.4.2.1 IDENTIFYING THE PLACES

THE PRISON, PERIMETER WALLS AND TOWERS.	KITCHEN AND PRISON CELLS FOR WHITE FEMALES	PRISON WING TO THE SOUTH	ADMIN BLOCK	SHATIMA FURNITURE MANUFACTURE

3.4.2.2 UNDERSTAND SIGNIFICANCE

Understand the place

1895	Pre - 1936	Pre - 1936	Post - 1936	Post - 1936
 Figure 115: (Author, 2023)	 Figure 116: (Author, 2023)	 Figure 117: (Author, 2023)	 Figure 118: (Author, 2023)	 Figure 119: (Author, 2023)
 Figure 120: (Author, 2023)	 Figure 121: (Author, 2023)	 Figure 122: (Author, 2023)	 Figure 123: (Author, 2023)	 Figure 124: (Author, 2023)
The prison with the cells and octagonal centre was the first to be built, and then two watch towers that solidified the entrance. The prison also needed tall, thick perimeter walls that sealed it off from the town, contributing to its fortress-like appearance.	The kitchen is South of the central prison and on the linear axis, with a 'stoomketel' room, a yard, store rooms and three prison cells.	The two wings added to the South double storey, with a watch tower on either side and a water feature in the courtyard's centre.	The admin buildings in the original reception yard are absent in plans or images pre-1936.	On the Southwest corner are two structures with no clarity on what they were besides signage that says Shatima Furniture.

Assess cultural significance

The prison, kitchen and southern wing are all pre-1936. The prison operated before and during Apartheid, and some political prisoners were possibly incarcerated, such as "Gen. CR de Wet (during the 1914-1915 Rebellion), as well as a number of struggle activists, such as Charlotte Maxeke and Caleb Motshabi" (Botes, 2015: online).	The admin buildings and the structures to the southwest play a minor role in The Ramkraal Prison's cultural significance and do not add anything to the core of the site's character.

 Figure 125: (Author, 2023)	 Figure 126: (Author, 2023)	 Figure 127: (Author, 2023)	 Figure 128: (Author, 2023)	 Figure 129: (Author, 2023)

3.4.2.3 DEVELOP POLICY
Identify all factors and issues

The Ramkraal Prison is a ruin. The doors, windows, roof sheeting, furniture and any movable property have been plundered and looted. The floor is overun by vegetation growing in every nook and cranny. Graffiti artists have left their mark on the walls around the site.

The original prison and cells are mostly still intact but have no roofs apart from the concrete above the cells. The cells have been occupied by the homeless since 2012.	The kitchen still has its existing walls, but the three original cells are no longer present. The kitchen seems to have been made larger to spill into the western courtyard.	The West Wing has taken the most damage, with most load-bearing walls collapsing into piles of rubble.	The admin structure is standard 220mm walls with trees and rubble that make it challenging to move around inside.	There is little information on the exact purpose of the original prison scheme. It might have been a garage for the maintenance and transporting of prisoners.

Develop policy

Once the prison was closed in 1994, it was unoccupied for some time before being turned into Setshabelo Arts and Crafts Centre, which was short-lived. In 2010, the Free State Government “initiated a project to turn this dilapidated building into a multi-million rand heritage site” and “house the Free State legislature” (Moeti, 2018: online). The R120 million set aside for the project went missing shortly after that. No other plans have been made, and the prison has just gone deeper into disrepair. The site needs to be conserved, and a new function that can benefit disadvantaged South Africans can be a positive for the community and the preservation of The Ramkraal Prison.

Prepare management plan

The octagonal centre, prison cells, and towers are considered the most significant and should be preserved in their original form as much as possible. Some changes that could be made include repainting the walls, repairing the floors, and creating openings in prison cell walls to make the space more open. Additionally, a new roof structure should be added to protect the interior. However, the perimeter wall could be slightly altered to make the prison more extroverted.	The central kitchen walls are not structurally sound due to the cracks and openings in the walls. So, it will not be able to support the new roof structure. The prison cells linked to the kitchen are also no longer present. Therefore, the kitchen walls could be broken down, and a new structure could occur since this is the centre of the prison where all the entrances would lead.	Since the southern additions are in a much worse condition than the main prison building, they can be slightly altered since they were just extensions for more prison cells. However, the two buildings create a courtyard, so working with whatever walls are left and designing a new structure around the walls can create an exciting relationship between old and new.	The admin building was just an office space without cultural significance and could be demolished. Another reason for its demolition would be so that there is more emphasis placed on the towers and the exiting prison.	The two small buildings on the southwest seem very out of place, and there is no clear indication of their original purpose besides maybe a garage. They could be demolished, and the area could be developed as the south entrance with garden spaces.

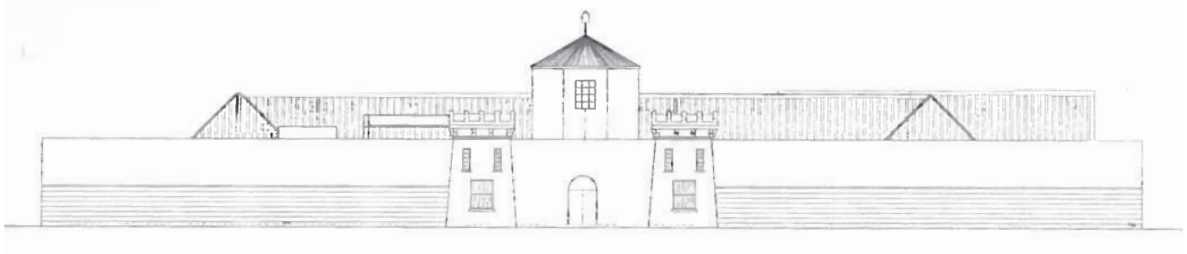


Figure 130: Original drawn north elevation of the Ramkraal Prison, but it is undated as too when it was drawn (Fourie, 2014: 94).

3.4.2.4 MANAGE IN ACCORDANCE WITH POLICY
Implement the management plan

The main prison building will be fixed to create office spaces, exhibition areas for the history of Batho, Ramkraal Prison, and local artists, a multi-functional venue, and facilities for staff. The two towers will stay, but some parts of the perimeter wall will be removed to make space for a new open and green edge.	A shop in the central area of the prison, where the kitchen is located, will sell products from the centre and provide information about available courses. A ramp is also accessible here for wheelchairs leading to the first floor.	The south wings would accommodate the centre's traditional skills (carpentry, textile workshop, beading, pottery, and culinary school) and library.	In the place of the admin walls, there will be a courtyard between the two towers and the north entrance of the prison.	This area will accommodate green spaces, a southern courtyard, a new entrance and the computer room that will cantilever over the southern perimeter wall.

The perimeter walls will be integrated with gardens and raised beds, creating a more aesthetically pleasing boundary. The courtyards will be interconnected to form a communal ground floor area, offering shade and a welcoming environment. The Ramkraal prison site will also provide recreational facilities such as a soccer field, tennis courts, netball courts, and a skate park. Furthermore, designated space will be allocated for the potential future development of community gardens. Adequate parking facilities should be implemented to accommodate the increased capacity and activities of the site.

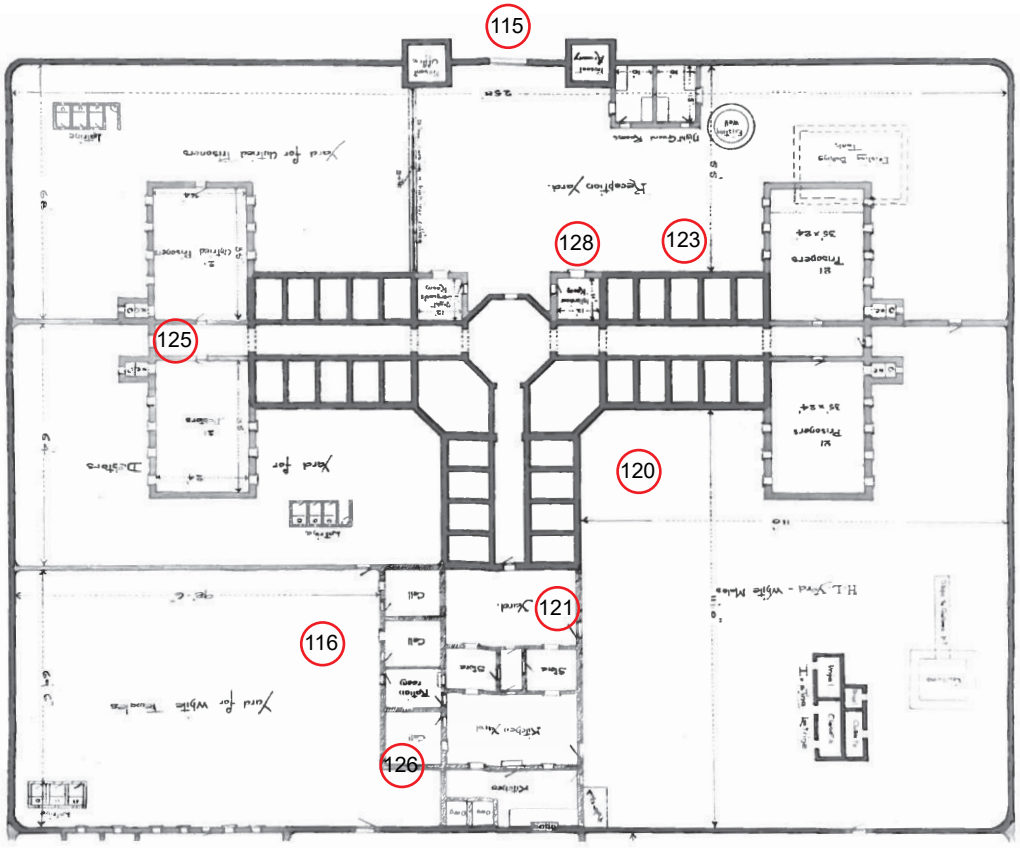


Figure 131: Original drawn plan of the Ramkraal Prison, but it is undated as too when it was drawn. Numbers on plan correlates to the figure numbers on the previous page 59 (Fourie, 2014: 94).

Adapted from the Burra Charter (Australia ICOMOS Burra Charter, 2013: 10) and applied to The Ramkraal Prison.

3.4.3 CONCEPTUAL APPROACH AND TRADITIONAL ANALYSIS

The analysis of Ramkraal Prison's heritage focused on its significance and how to adaptively reuse it. Regarding heritage, Ramkraal Prison is not as important as other sites like the House Mapikela, the Wesleyan Church Museum, or the Twin Spire Church. Therefore, the renovation of Ramkraal Prison is justified if the new design respects the existing context and contributes to the site's preservation. The towers and octagonal centre should then be kept as an urban artefact, a physical connection between the past and present. The remaining structures represent human agency in past narratives and can be used for dialogue and interactions in the present. The new structure's height, the combination of old and new, and the preservation of the site's identity are all important factors to consider.

However, the centre still needs community-catalysed places, and Hollmén Reuter Sandman Architects could offer some insight. Since they exclusively work with communities, their architecture can be classified as community-catalysed. All three projects below have something very prominent in common: courtyards. A courtyard provides shelter, protection, a place to gather, and a place to teach, learn, work, and grow. The Women's Centre (figures 133 & 134) is an example of layering, where there is a layered relationship of outside, in-between, interstitial and inside spaces. The TunaHaki Orphanage (figures 135 & 136) is an example of adjoining, where courtyards and interstitial spaces of different sizes are joined together with pathways. Lastly, the Hostels for Girls (figures 137 & 138) is an example of conserving space, and what is meant by that is that the courtyard has become an essential place for the girls; therefore, they play an important role in the preservation of the building.

Figure 133: Links to layering of space (Hollmén Reuter Sandman Architects, 1995: online).



Figure 134: Links to layering of space (Hollmén Reuter Sandman Architects, 1995: online).





Figure 135: Links to adjoining of space (Hollmén Reuter Sandman Architects, 2022: online).

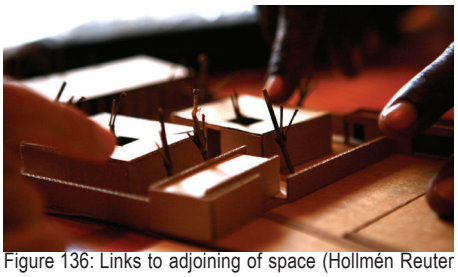


Figure 136: Links to adjoining of space (Hollmén Reuter Sandman Architects, 2022: online).

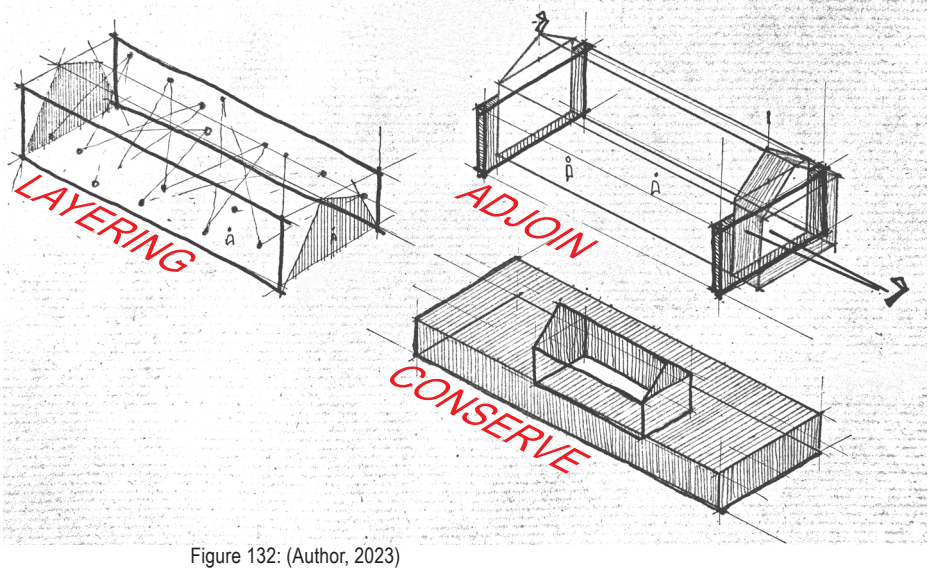


Figure 132: (Author, 2023)



Figure 137: Links to conserving space (Hollmén Reuter Sandman Architects, 2009: online).



Figure 138: Links to conserving space (Hollmén Reuter Sandman Architects, 2009: online).

3.5 DESIGN APPLICATION

There are three ways to approach the design of the skills development centre within the Ramkraal Prison:

- Designing in a sensitive place, where it would be kept as is with minimal intervention (figure 139).
- Using the existing structure and designing the new in-between elements can be altered since it is not as sensitive (figure 140).
- A new structure that stands independently but links back to the prison using the courtyards and existing perimeter walls (figure 141).

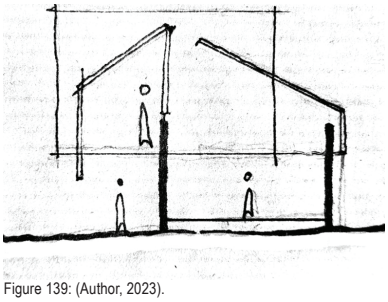


Figure 139: (Author, 2023).

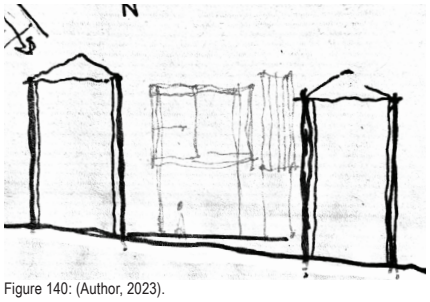


Figure 140: (Author, 2023).

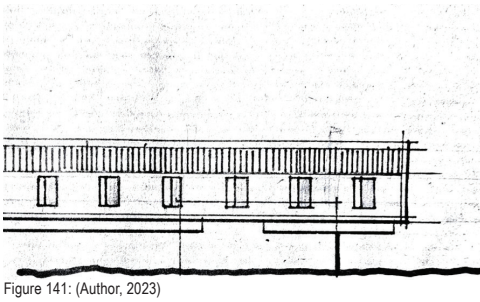
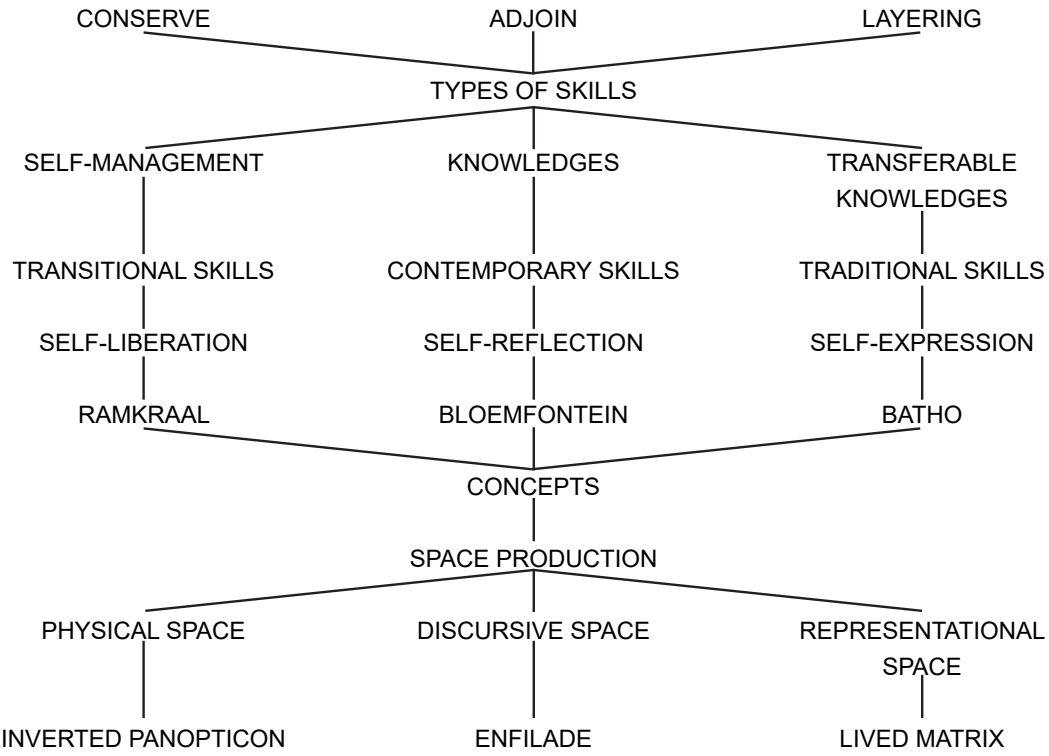


Figure 141: (Author, 2023)



Each idea (conserve) relates to a type of skill (self-management) that forms a skillset (transitional skills) which has a specific goal (self-liberation) that links back to an area (Ramkraal), which aided in the conceptual approach of how the space (physical space) would be designed conceptually (inverted panopticon).

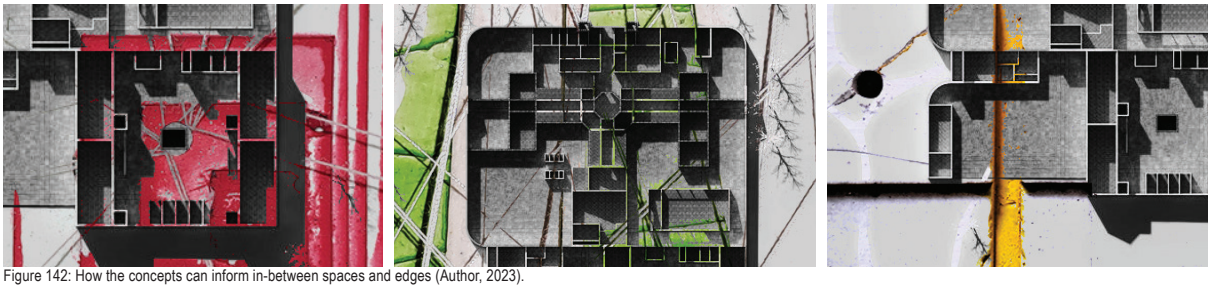
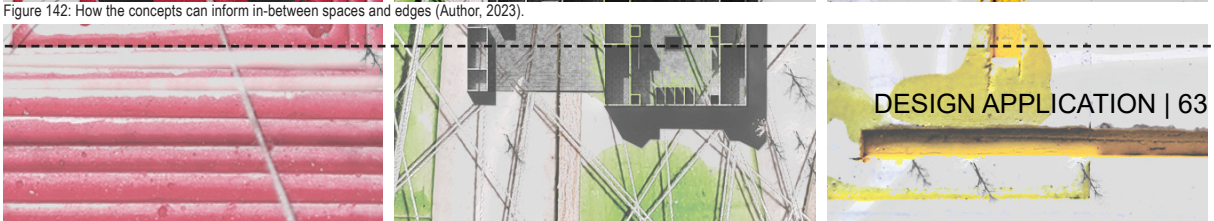


Figure 142: How the concepts can inform in-between spaces and edges (Author, 2023).



3.6 CONCLUSION

In conclusion, the research question – How can a community-catalysed skills development centre in-between Batho and the Bloemfontein CBD be sensitively integrated and rescripted within a ruin – the Historic Ramkraal Prison in Bloemfontein – thereby inverting the established power structure by activating learning settings aimed at self-liberation? – has been examined through the case study of the teaching centre in Morocco. The study has delved into the various concerns linked to Batho and has shed light on the importance of distinguishing between place and space. It has also explored the production of space through concepts such as the inverted panopticon, enfilade, and lived matrix. The study has further delved into the conservation of Ramkraal prison, emphasising the need to identify and understand the significance of places and the different heritage charters that could affect how much can be altered.

The study has provided a comprehensive understanding of transforming ruined spaces into community-catalysed places by applying a conceptual approach and traditional analysis to design. Overall, this research has provided valuable insights into revitalising spaces and creating meaningful places for communities. It has emphasised the importance of considering a place's historical and cultural context, as well as the needs and desires of the community. By addressing concerns linked to Batho and exploring various concepts and approaches, this research has contributed to the body of knowledge on transforming ruined spaces into vibrant community spaces, aiding the design process and outcome in the next chapter.

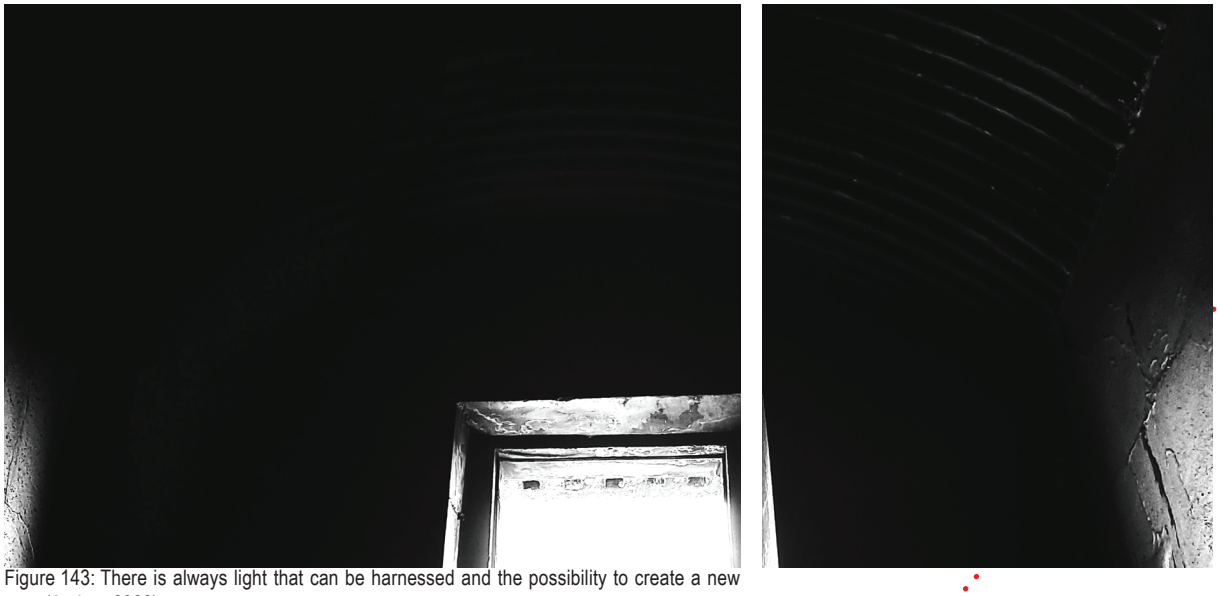


Figure 143: There is always light that can be harnessed and the possibility to create a new start (Author, 2023).

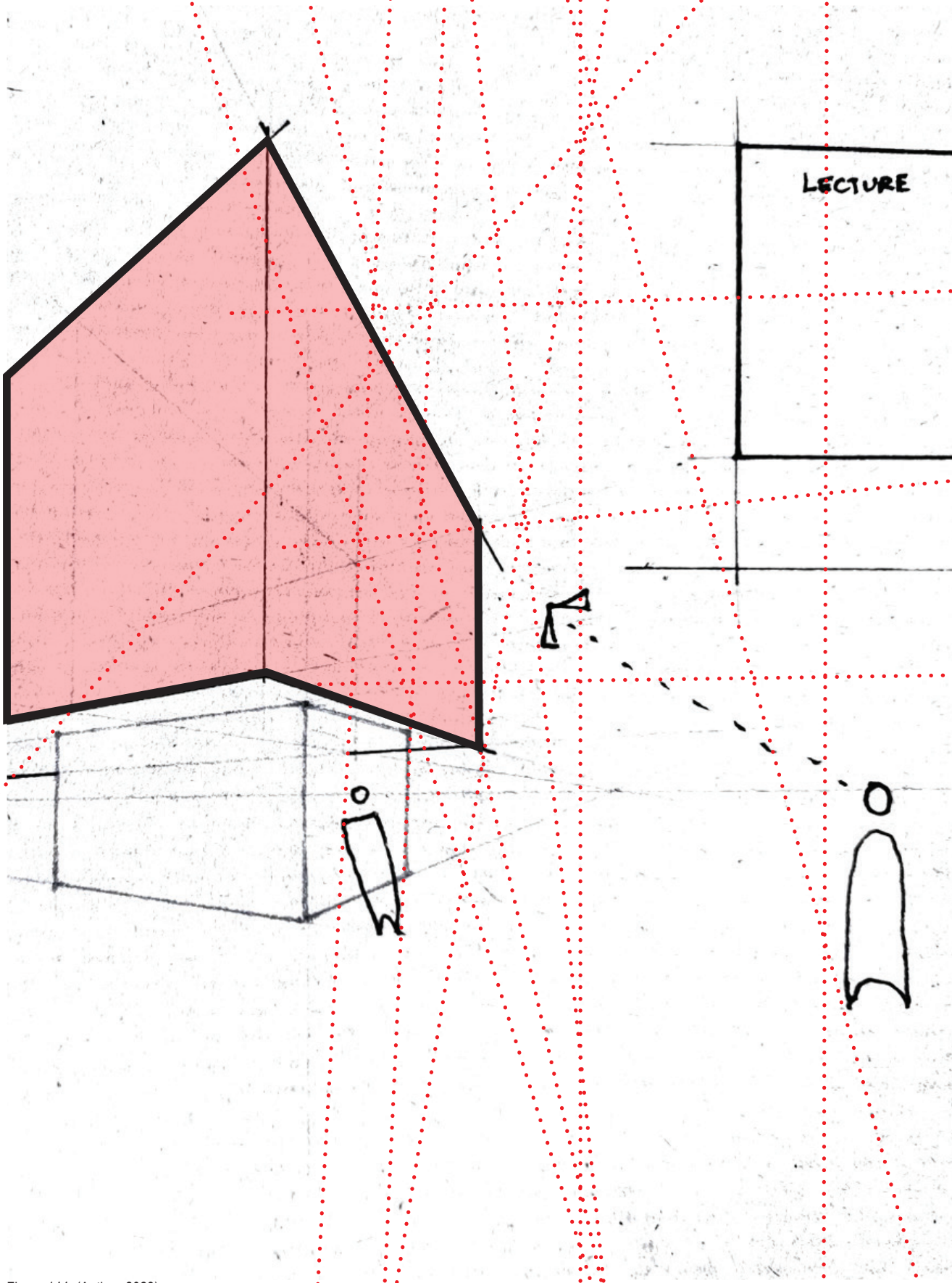


Figure 144: (Author, 2023)

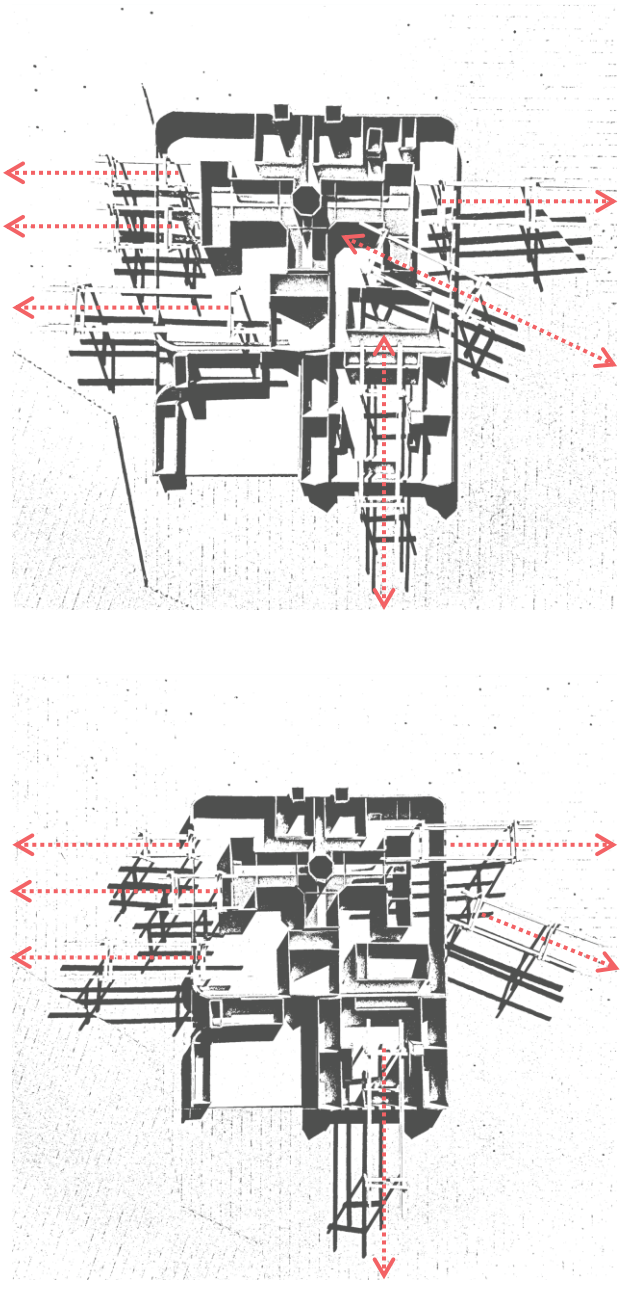
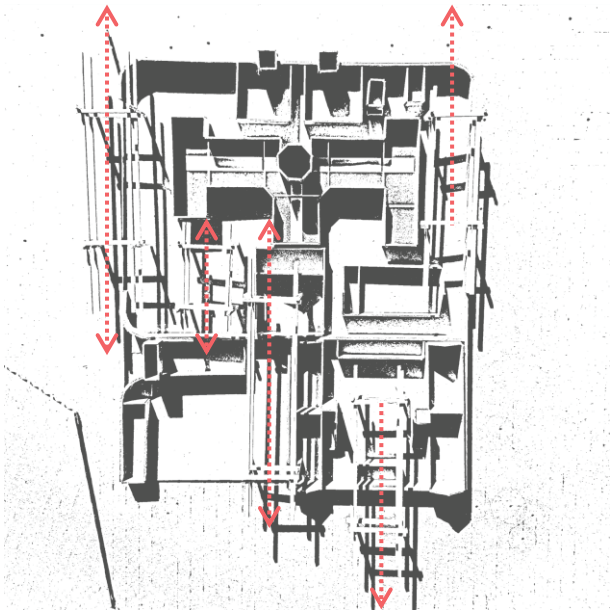
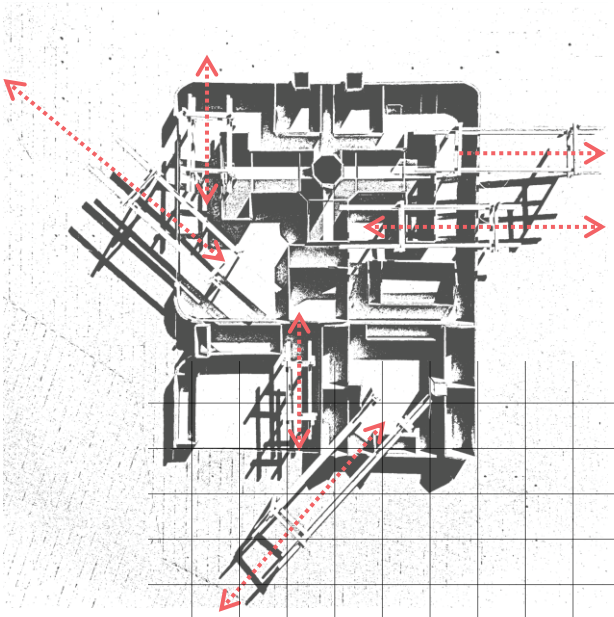
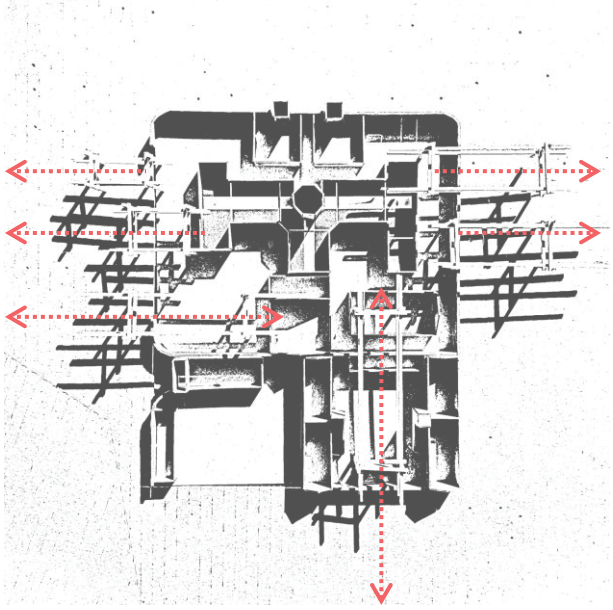
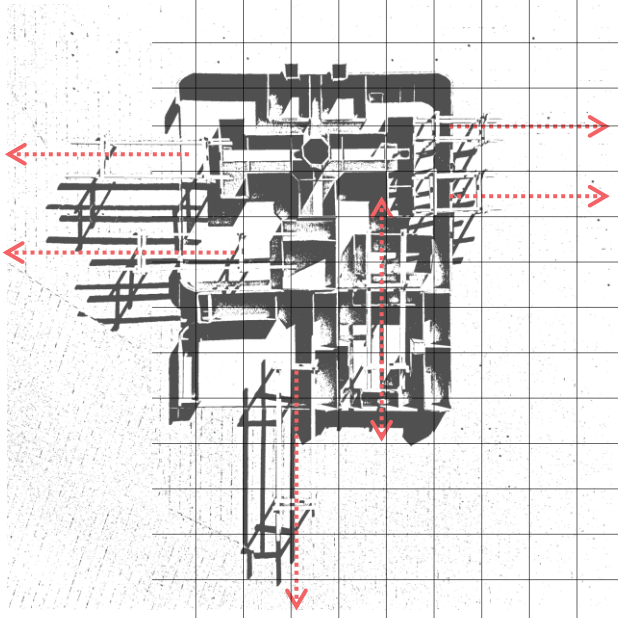


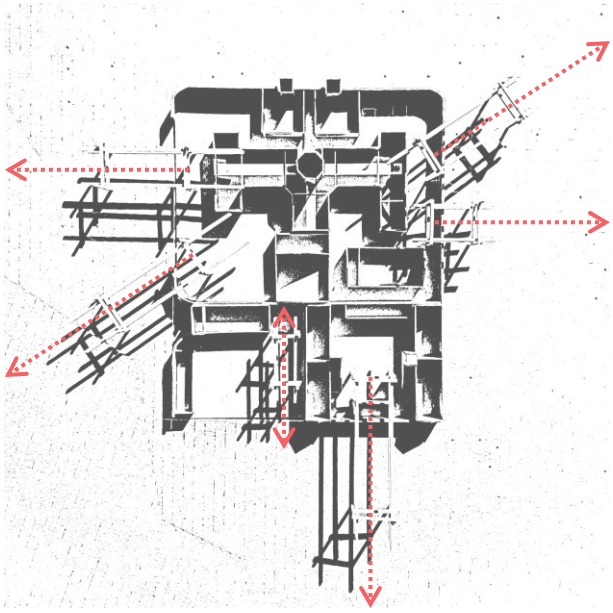
Figure 145: A spatial exploration trying to understand the existing order and a new order that will be integrated into the Ramkraal Prison (Author, 2023).

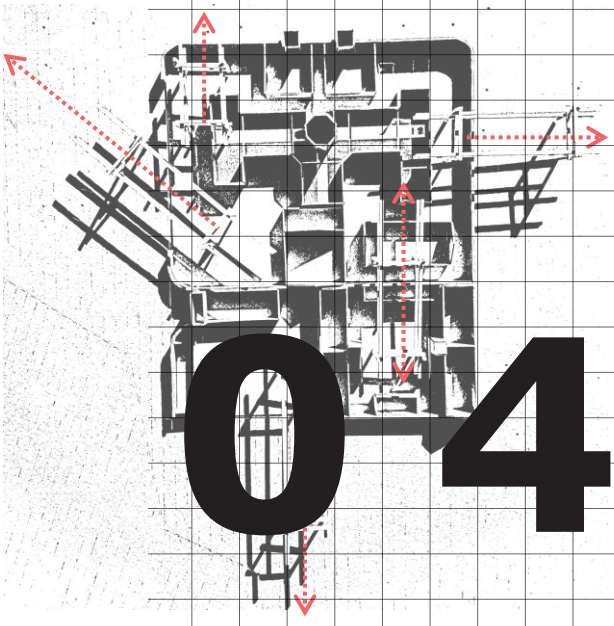












04

DESIGN

4.1 INTRODUCTION

4.2 DESIGN DEVELOPMENT

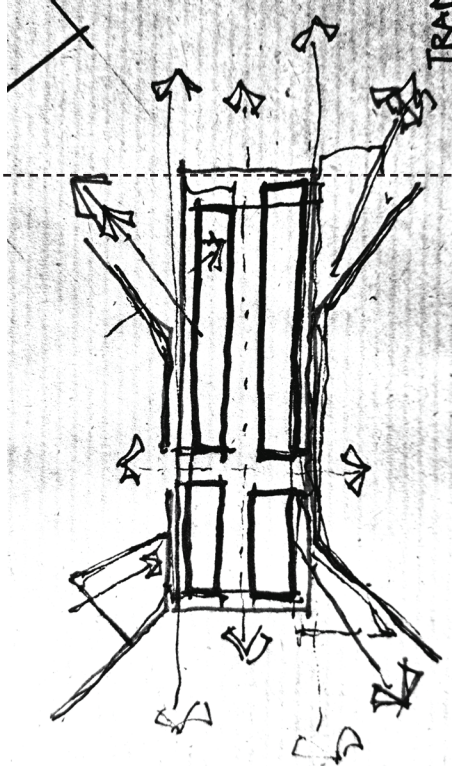
4.2.1 INTRODUCTION
4.2.2 UNDERSTANDING THE ORDER
4.2.3 AIMING TO TRANSCEND BOUNDARIES
4.2.4 ALTERNATIVE DESIGN EXPLORATION
4.2.5 A SEARCH FOR RAMKRAAL PRISON'S CORE

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4.4.2 CONSTRUCTION TOUCHSTONE
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4.4.5 SERVICES
4.4.6 CONSERVING ARCHITECTURAL CHARACTER
4.4.7 CANTILEVERING STRUCTURE
4.4.8 SOUTHERN ADDITION OF THE ABANDONED PRISON COMPLEX DOCUMENTATION

4.1 INTRODUCTION



This chapter is about the design process that leads to a proposal. It also includes a technical section that explains the structural elements of the design. The design development section shows the design process before each external review and briefly discusses an alternative approach between the second and third reviews. The design proposal is then shown through plans, elevations, renders, sections, and models. Finally, the technical section presents solutions for services, connecting new structures to old ones and technical resolutions. An existing structure model (figure 146) was created as a first step.

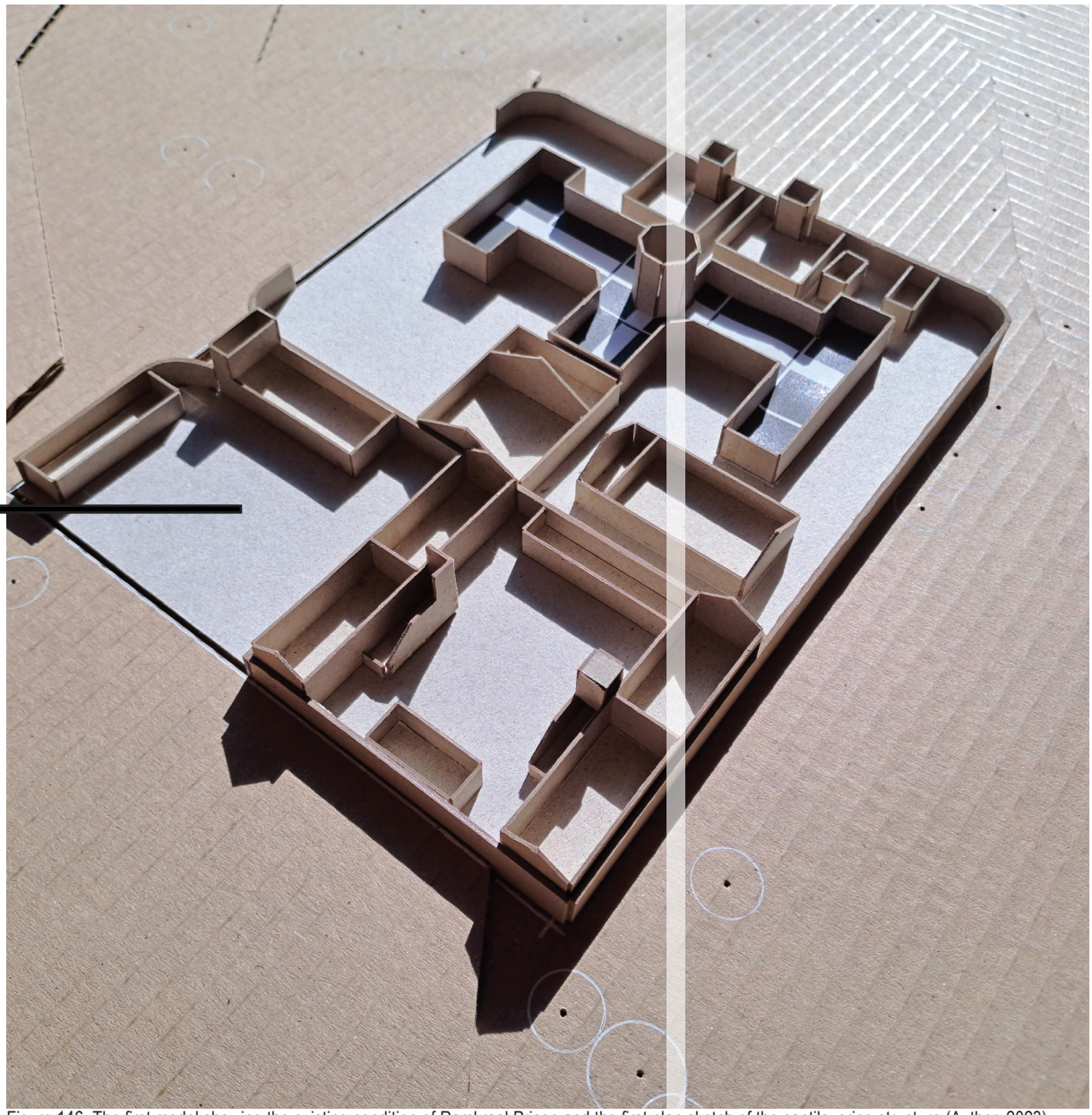


Figure 146: The first model showing the existing condition of Ramkraal Prison and the first plan sketch of the cantilevering structure (Author, 2023).

4.2 DESIGN DEVELOPMENT

4.2.1 INTRODUCTION

The design development section follows the process of getting to a design proposal. This section reflects on observations, mistakes, resolutions, opinions, and suggestions that aided in designing a skills development centre within the Ramkraal Prison. Reflecting on the process creates a better understanding of how the project unfolded through process work, sketches, diagrams, renders and models.

4.2.2 UNDERSTANDING THE ORDER

At the start of the design process, one of the first decisions was determining the new centre's spatial order (figure 148 & 152). The question was whether the new centre should follow a different order that opposes the existing one or stick to the existing order. Therefore, all the existing structures were included in the design at this stage. Additionally, since Ramkraal has three different beacons - the two towers and the central octagon - the idea was to introduce a new beacon that would contrast the existing ones. However, what to do with the existing entrance still needed to be figured out. So, the site still needed to be explored, but the main goal was to go beyond the established power structure (figure 150) of the prison. One way to achieve this was to design public areas encouraging social interactions (figure 149).

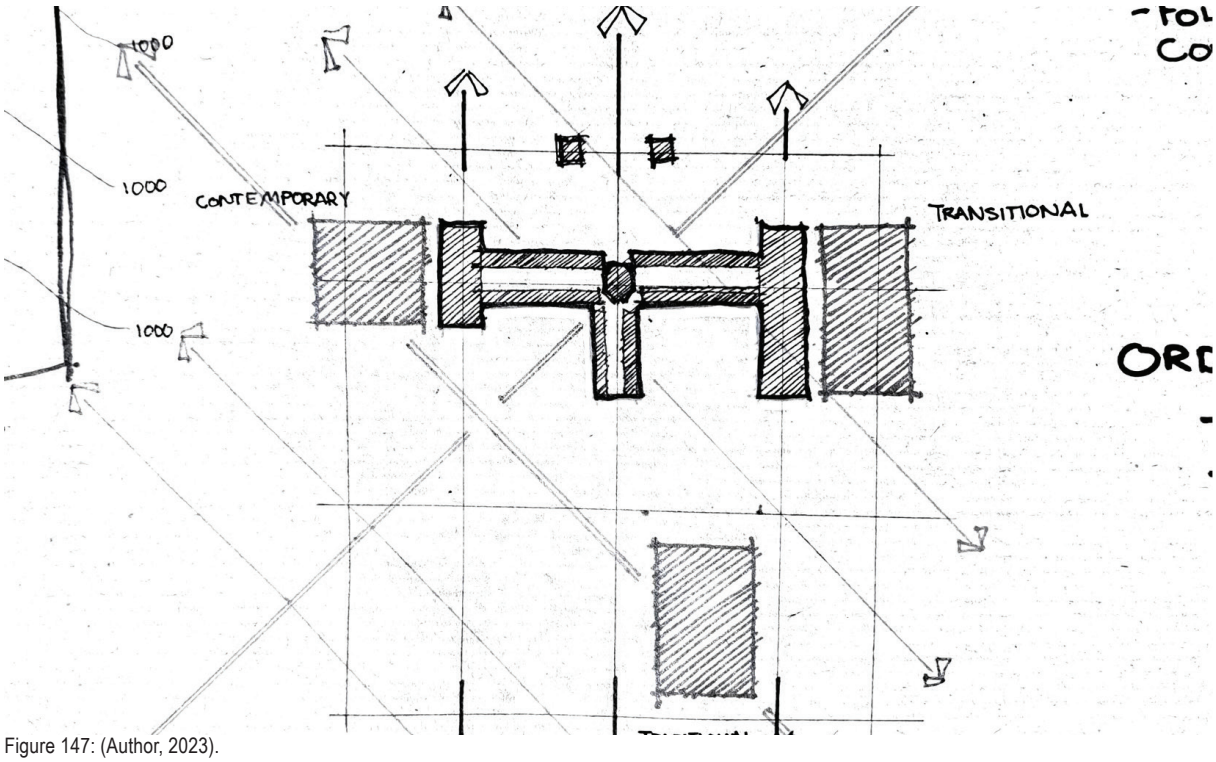


Figure 147: (Author, 2023).

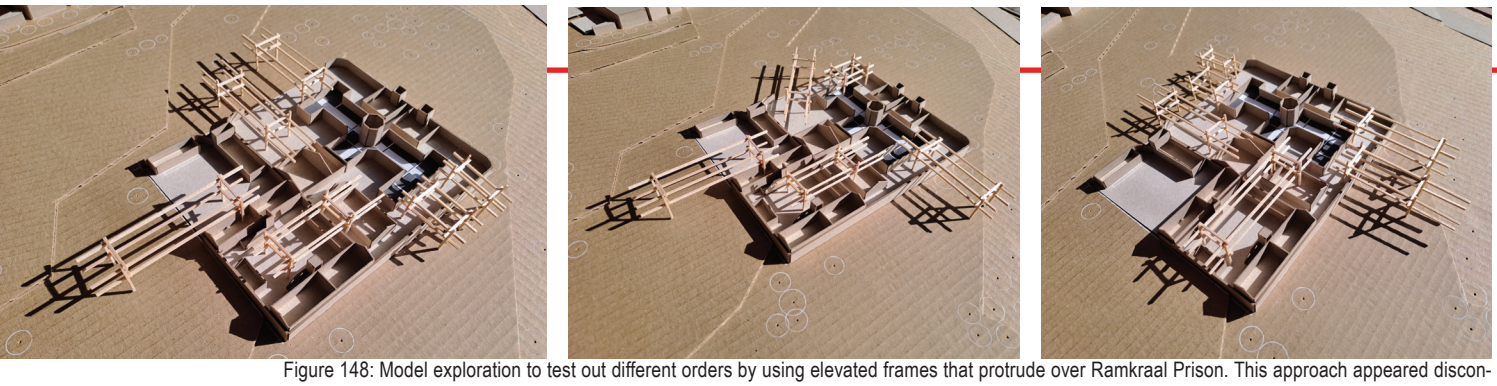


Figure 148: Model exploration to test out different orders by using elevated frames that protrude over Ramkraal Prison. This approach appeared disconnected from the existing prison and was insensitive (Author, 2023).

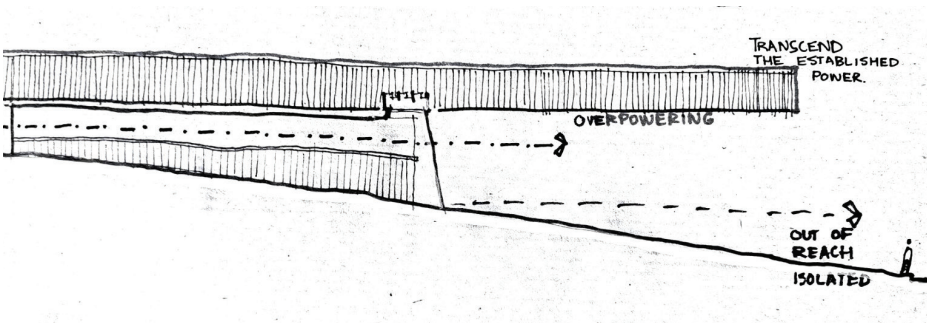


Figure 150: (Author, 2023)

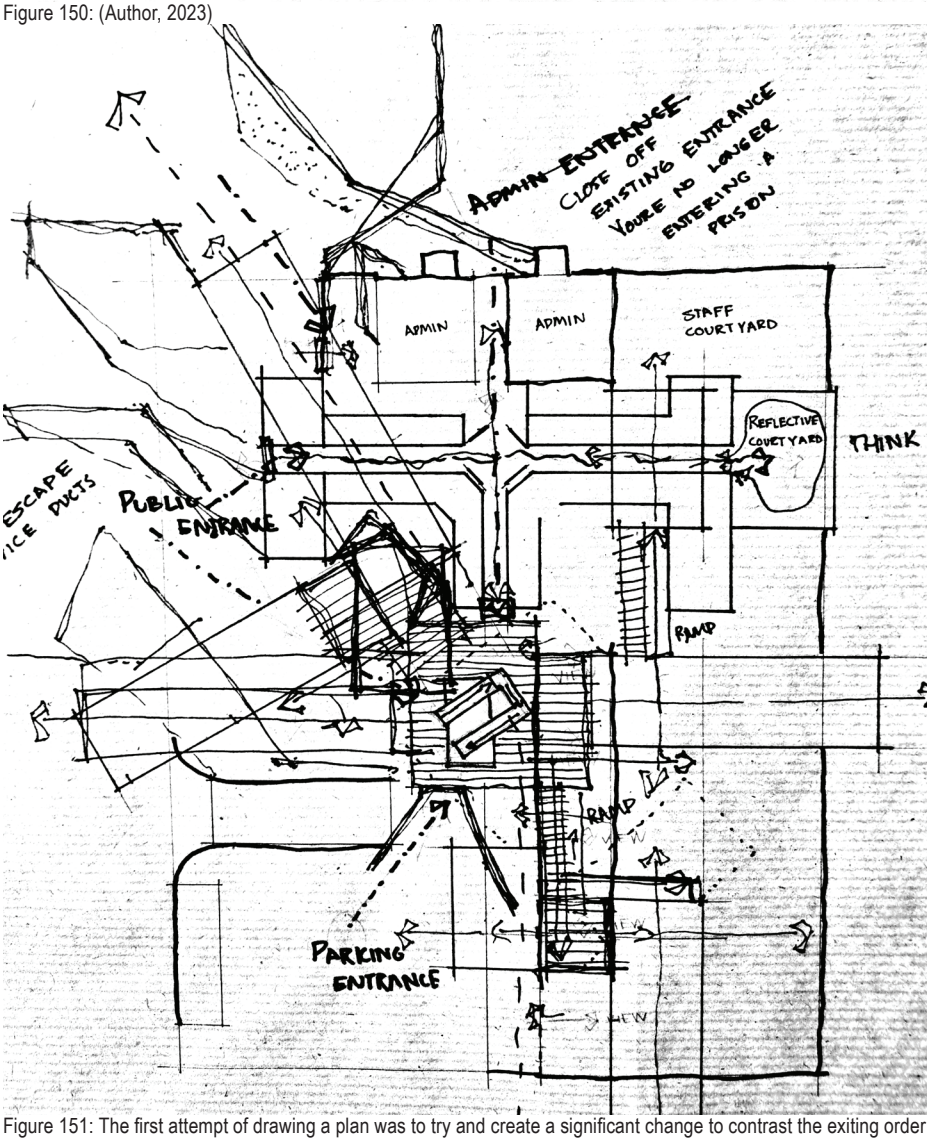


Figure 151: The first attempt of drawing a plan was to try and create a significant change to contrast the exiting order (Author, 2023).

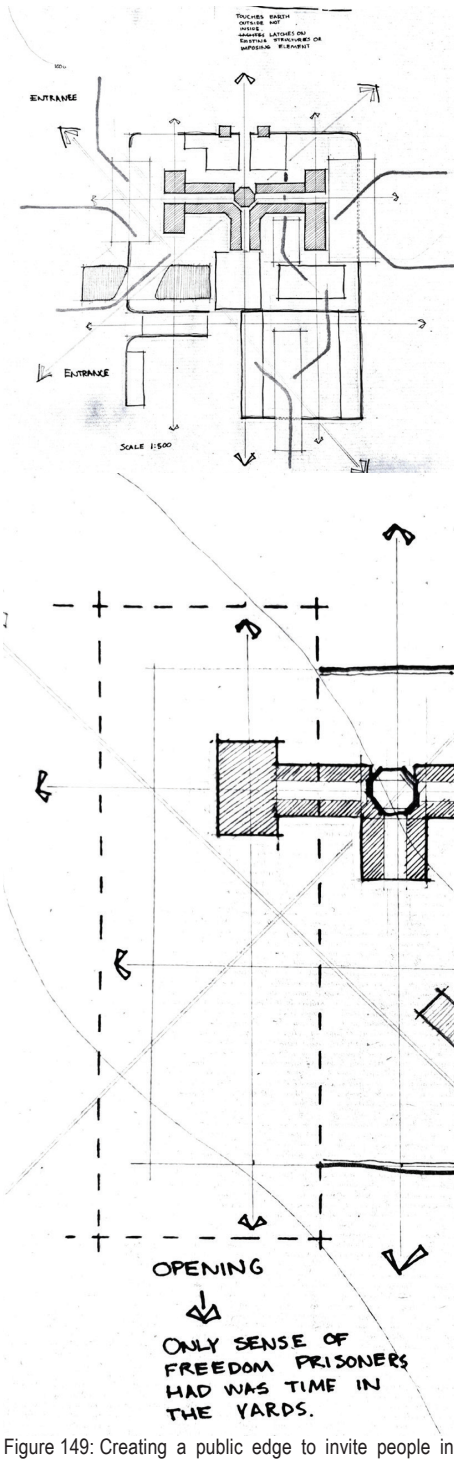


Figure 149: Creating a public edge to invite people in (Author, 2023).

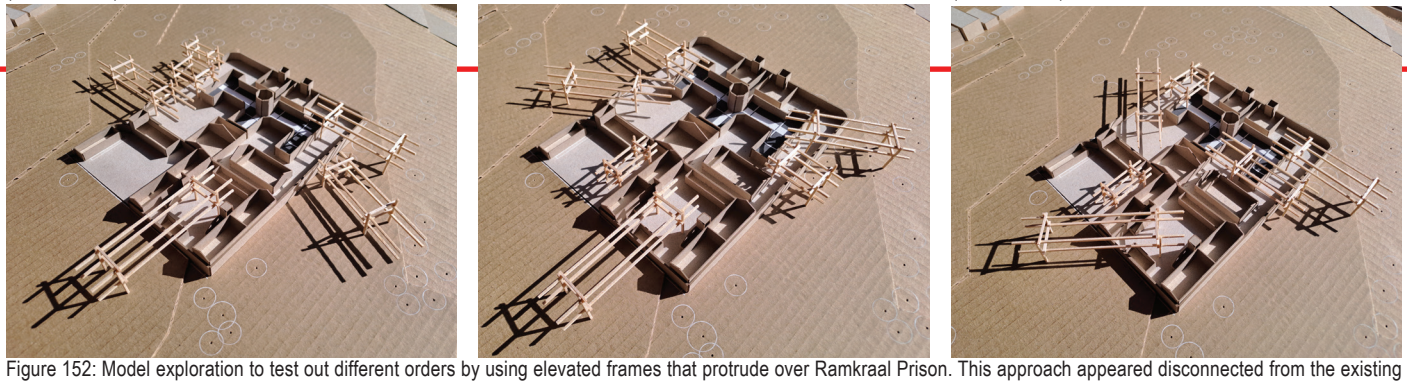


Figure 152: Model exploration to test out different orders by using elevated frames that protrude over Ramkraal Prison. This approach appeared disconnected from the existing prison and was insensitive (Author, 2023).

At this point, the design seemed to have a formal and institutional (figures 153 & 163) look. It had certain features in common, such as the chosen pitched roofs (figure 163), but there were still some unresolved spaces between the buildings. These unresolved spaces, structural choices and materiality created a disconnect between the buildings in the centre, making it challenging to comprehend the connection between the old and new elements. The suggestion was to add more lively and dynamic spaces and roofs to these in-between areas.

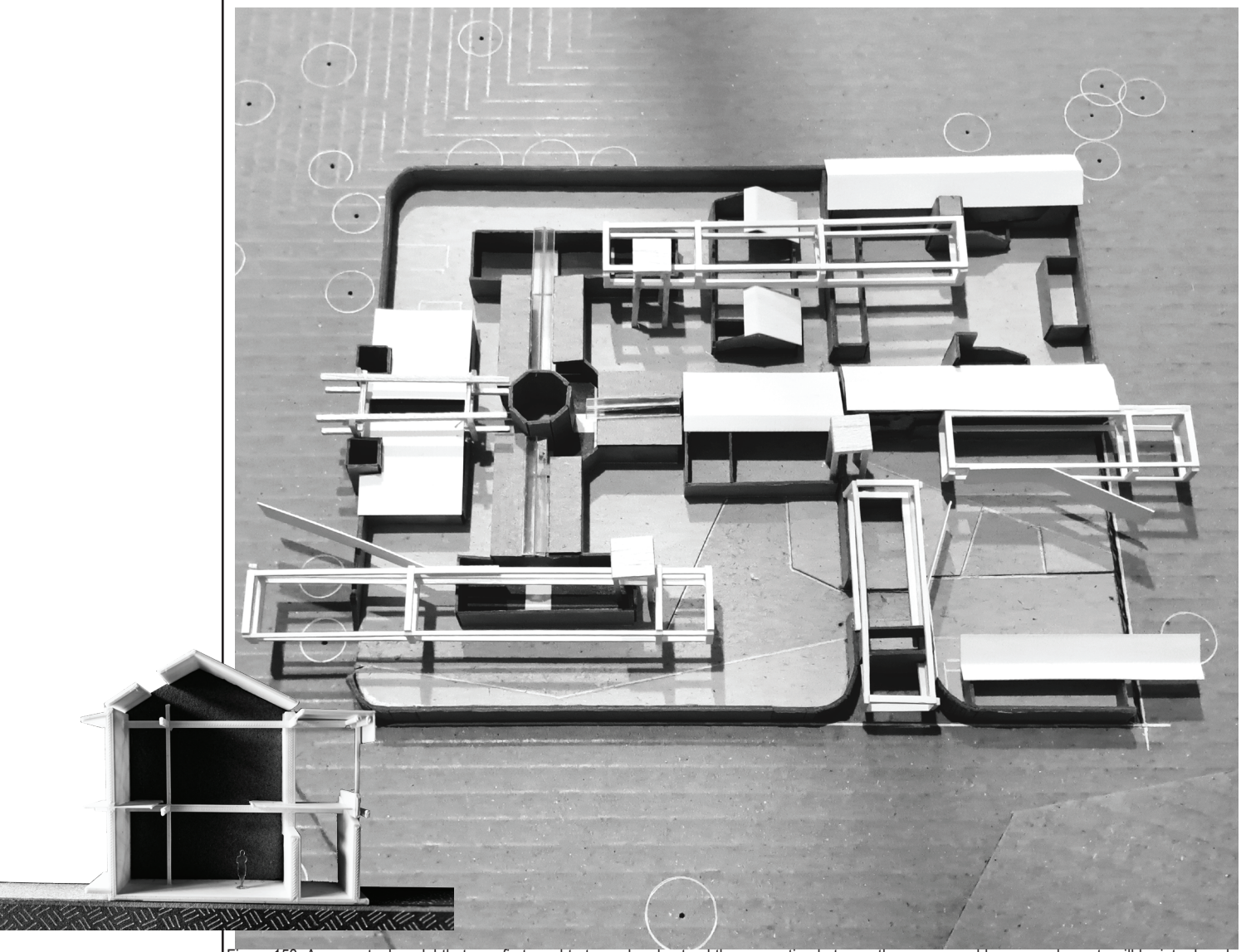


Figure 153: A conceptual model that was first used to try and understand the connection between the spaces and how new elements will be introduced (Author, 2023).





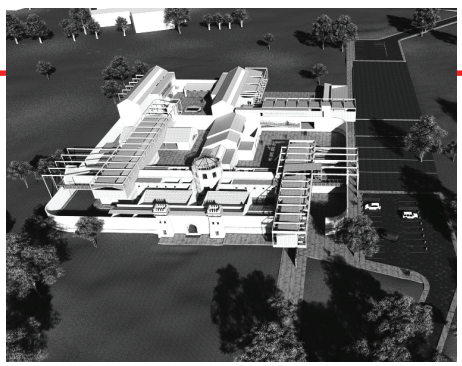


Figure 154: Renders from Internal Review 01 (Author, 2023).



Figure 155: Renders from Internal Review 01 (Author, 2023).

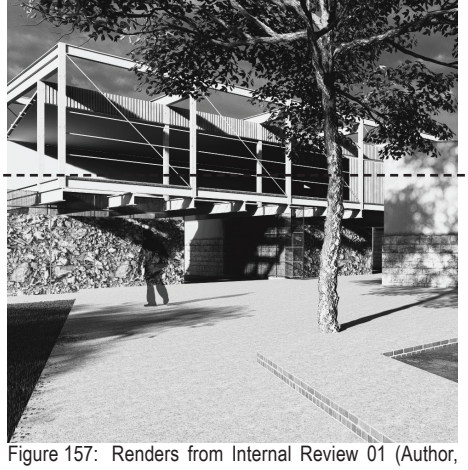


Figure 157: Renders from Internal Review 01 (Author, 2023)

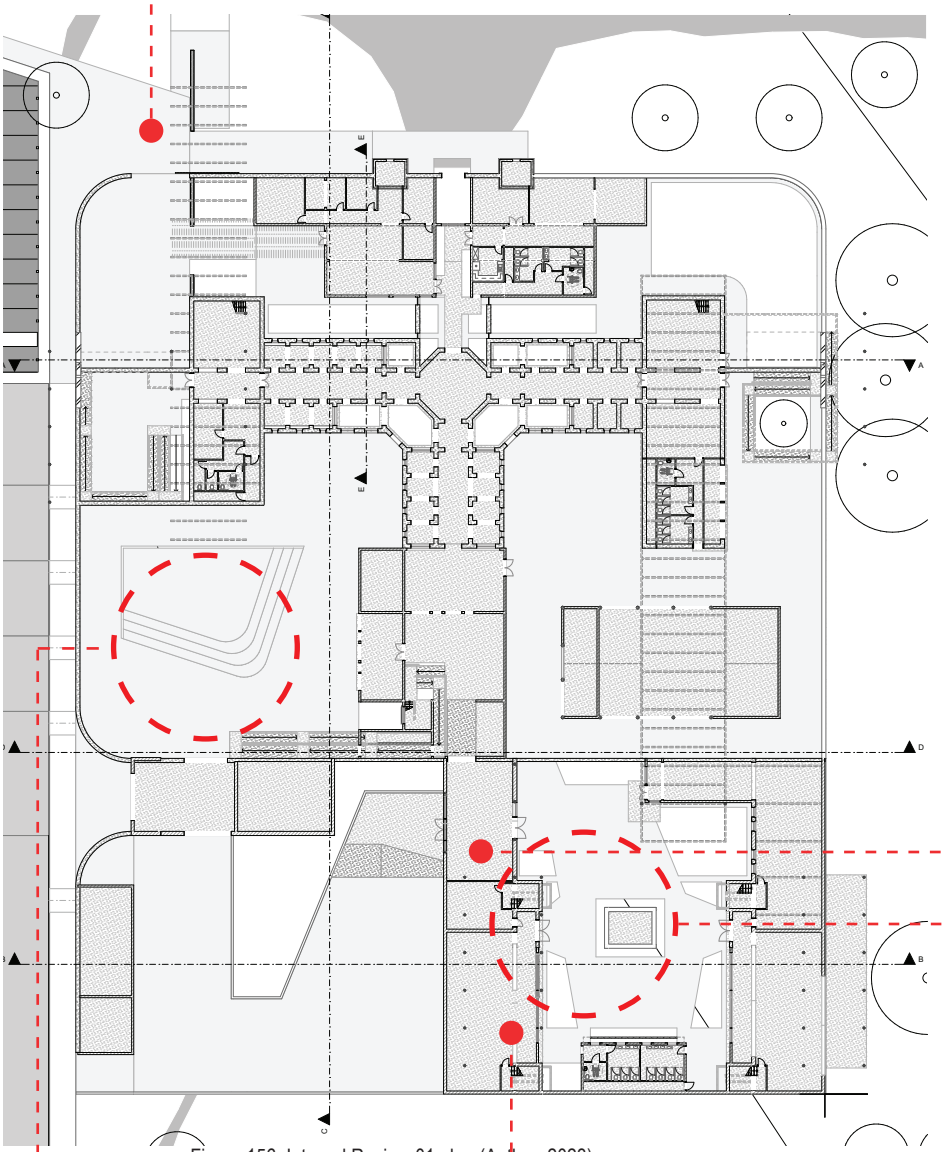


Figure 156: Internal Review 01 plan (Author, 2023).

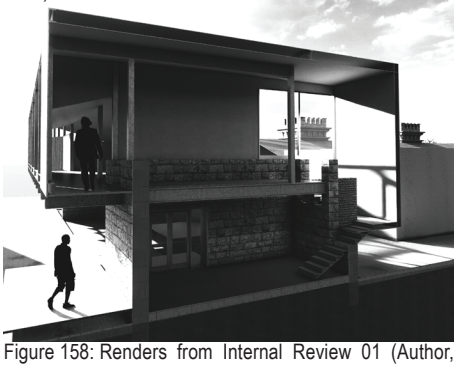


Figure 158: Renders from Internal Review 01 (Author, 2023).



Figure 159: Renders from Internal Review 01 (Author, 2023).



Figure 160: Renders from Internal Review 01 (Author, 2023).



Figure 161: Renders from Internal Review 01 (Author, 2023).



Figure 162: Renders from Internal Review 01 (Author, 2023).

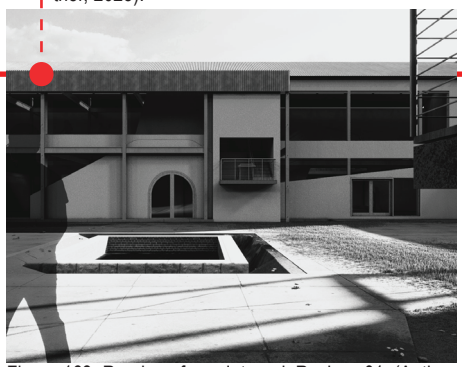


Figure 163: Renders from Internal Review 01 (Author, 2023).

4.2.3 AIMING TO TRANSCEND BOUNDARIES

After the first External Review and Internal Review, the process continued, and the first change was the roofs. Since most of the building's orientations were north-south, butterfly roofs (figures 167 &171) were used to bring in northern light and create a floating roof. The landscape was also developed to create pathways and parking and introduce recreational spaces. The planning also developed, but there was much space to cover, so much still needed to be solved.

The main feedback from the second External Review was to demolish structures that do not contribute to the design or cultural significance of Ramkraal Prison. The prison should be stripped to its bare essence by removing structures built later. There also needs to be a clear understanding of the relationships between old and new elements. Then, services and circulation need to be centralised since having more than one ramp (figure 169) can cause confusion among users. Therefore, shorten and simplify the ramps and improve the placement of ablutions. The design of the butterfly roof (figures 167 & 171) structures should be reconsidered, and consider using skins that wrap around the existing walls. Make the planning more dynamic and less restrictive. Determine a centralised entrance point so the foyer should be located centrally. Explore possibilities of interacting with the existing walls, such as piercing through walls, cutting walls, or creating a dynamic wall. Increase the size of the in-between spaces and create open public areas on the ground floor.

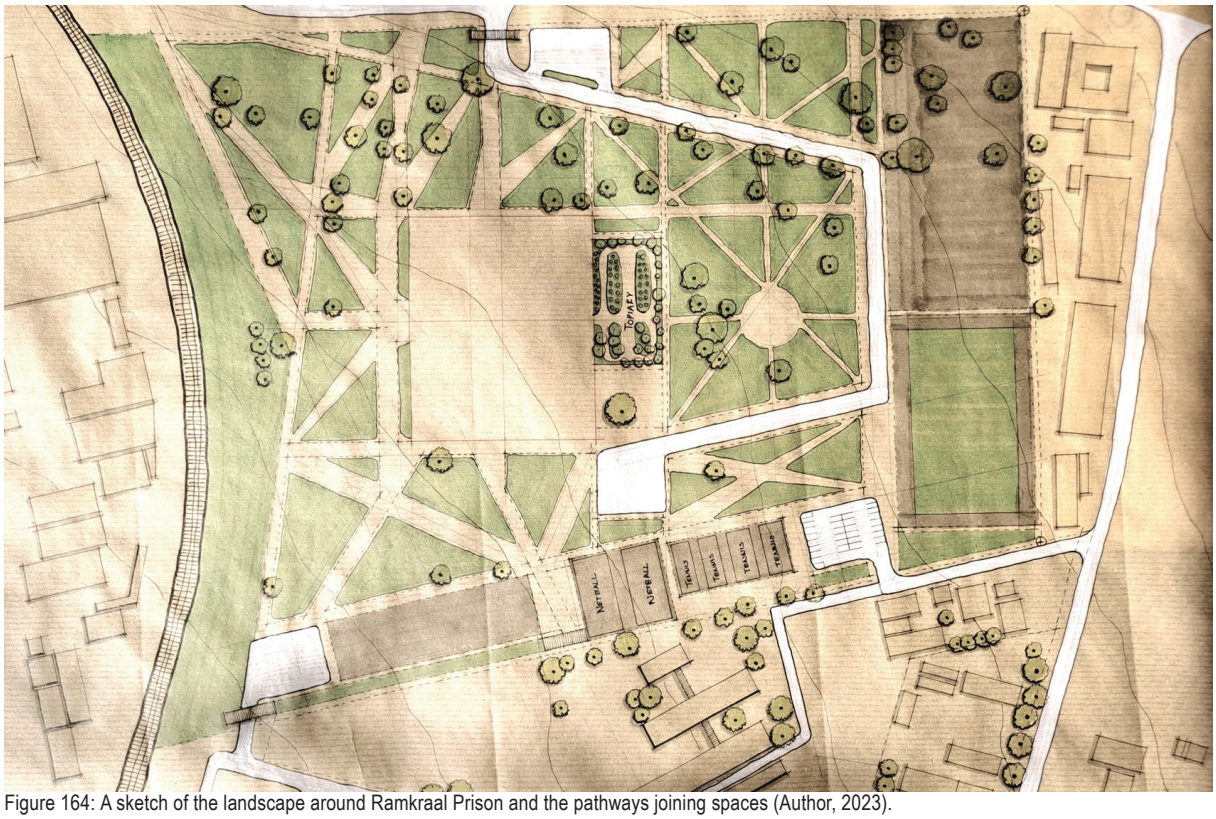


Figure 164: A sketch of the landscape around Ramkraal Prison and the pathways joining spaces (Author, 2023).

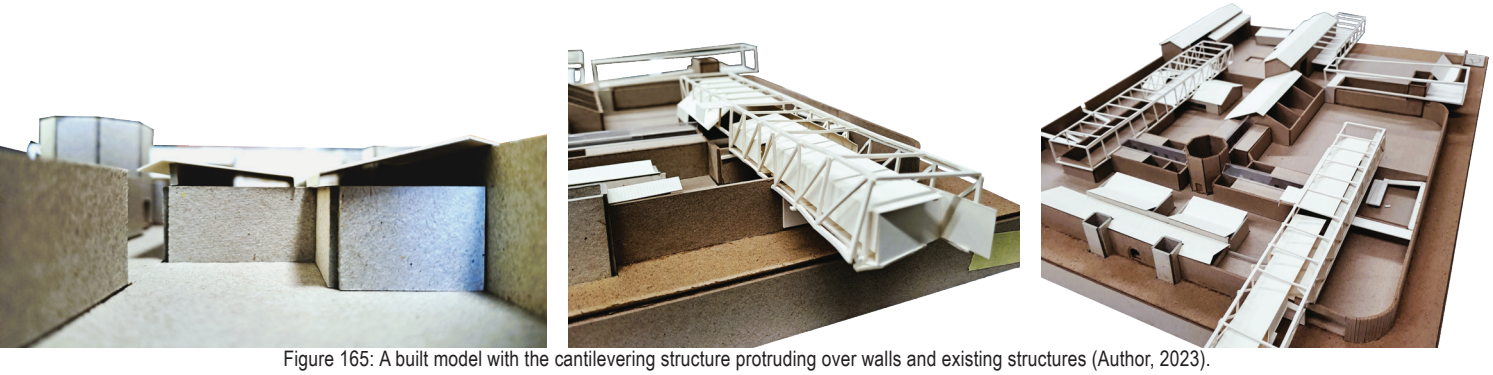


Figure 165: A built model with the cantilevering structure protruding over walls and existing structures (Author, 2023).

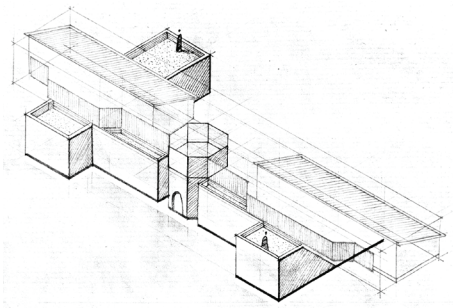


Figure 166: (Author, 2023).

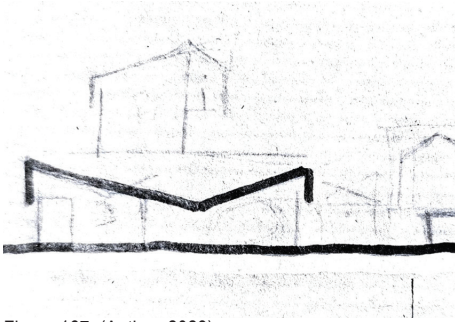


Figure 167: (Author, 2023).

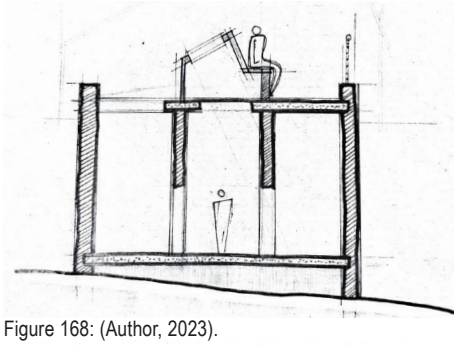


Figure 168: (Author, 2023).

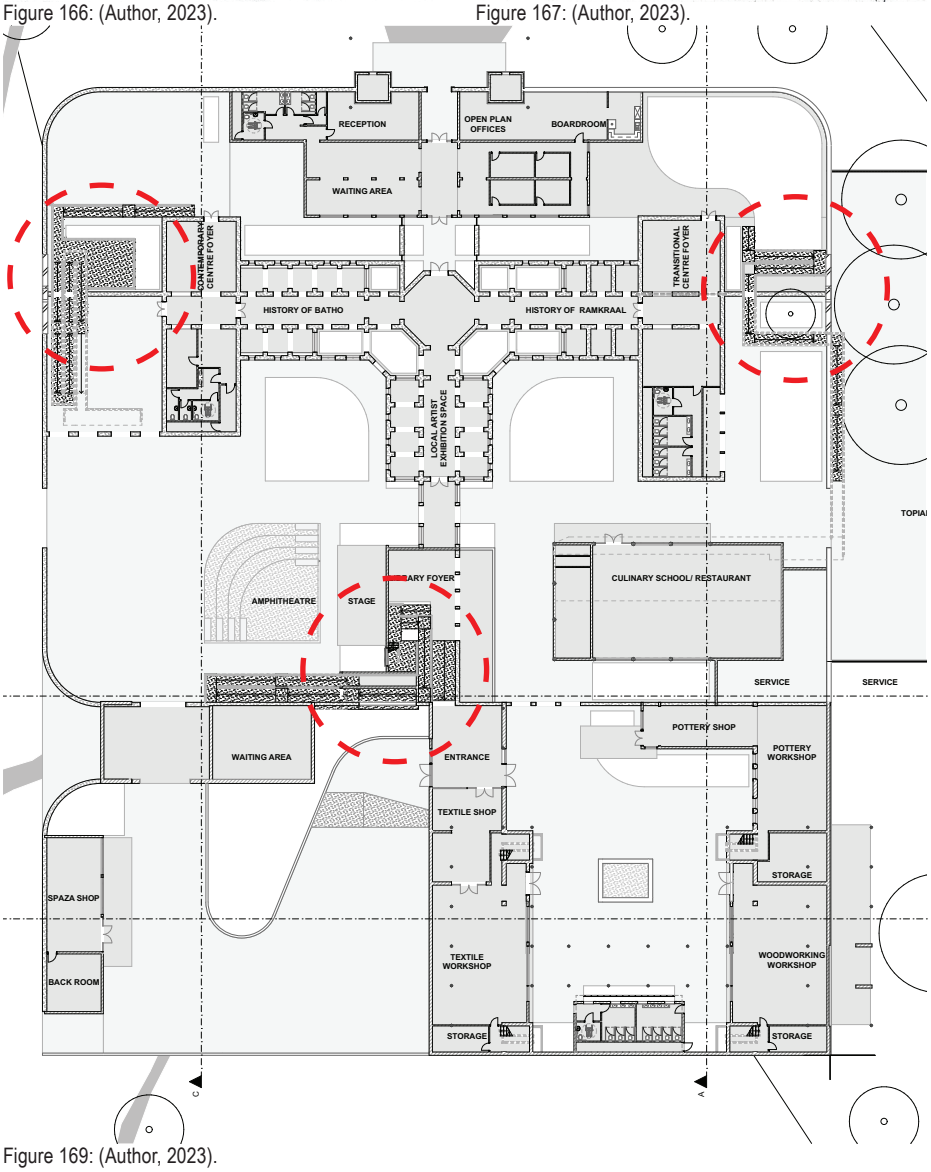


Figure 169: (Author, 2023).

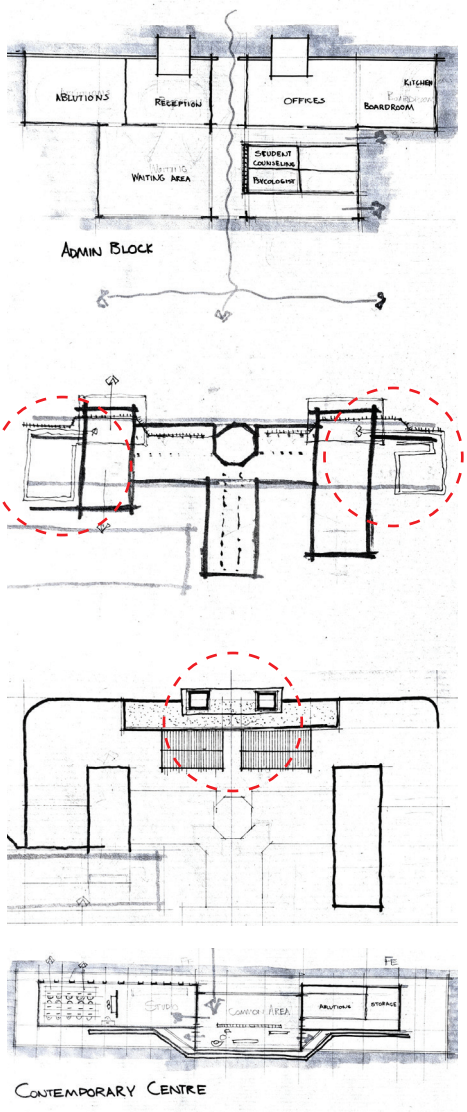


Figure 170: (Author, 2023).

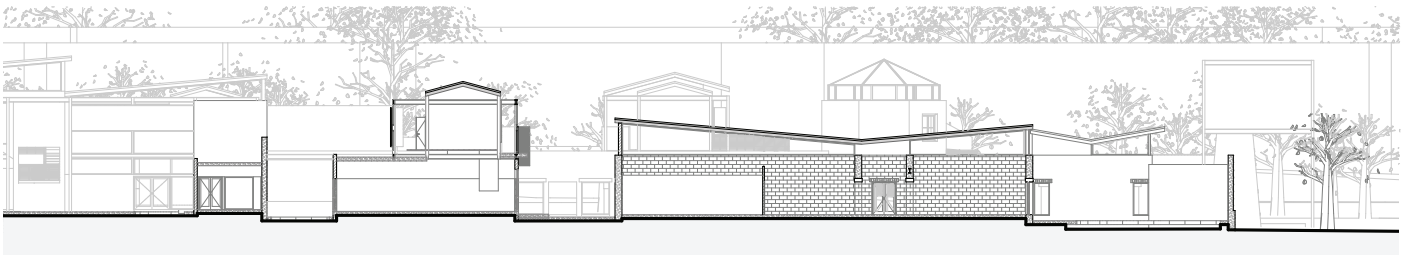


Figure 171: (Author, 2023).

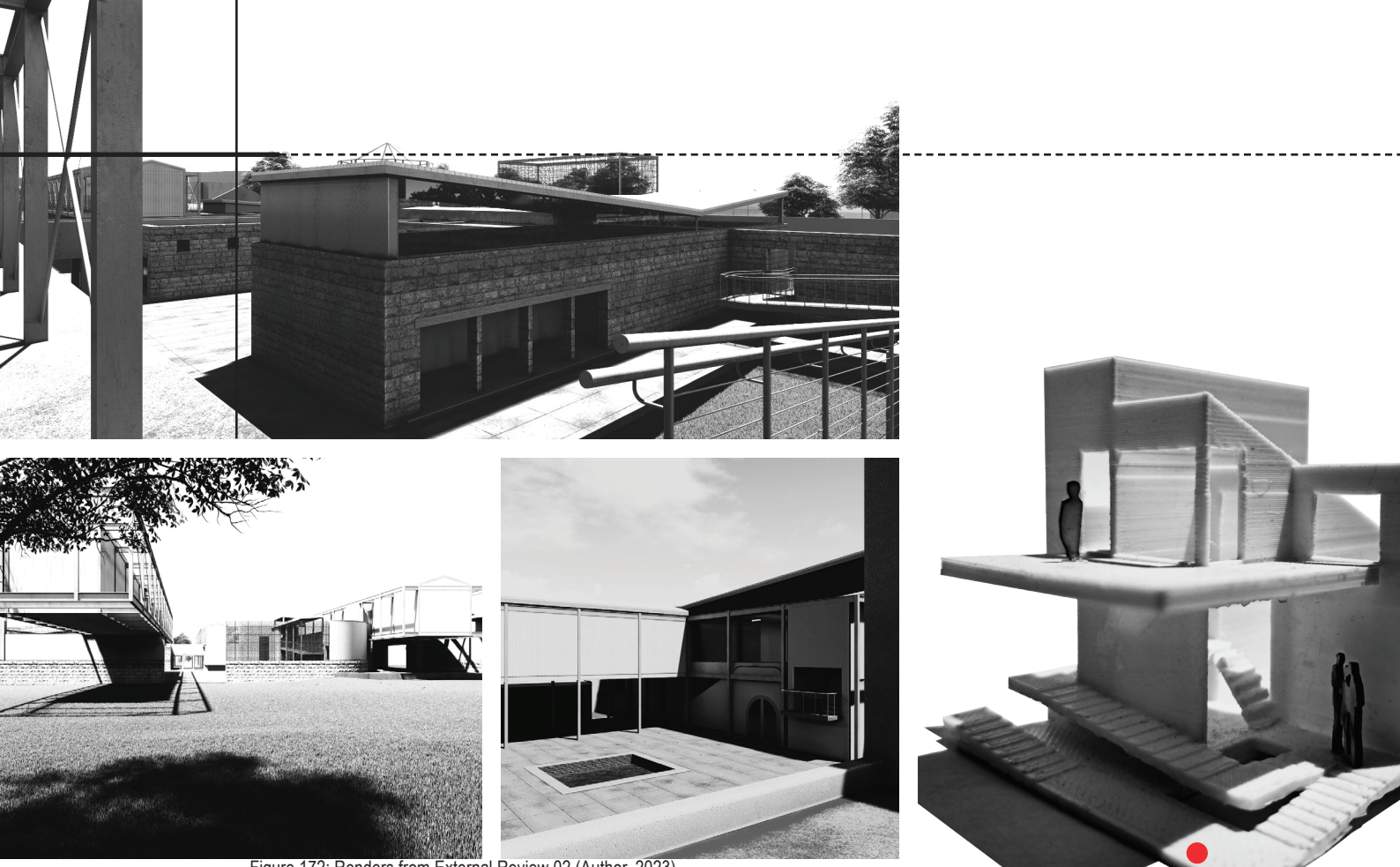


Figure 172: Renders from External Review 02 (Author, 2023).



Figure 173: An axonometric of the design from External Review 02 (Author, 2023).

4.2.4 ALTERNATIVE DESIGN EXPLORATION

After the feedback from the second External Review, an alternative approach was explored to try and resolve the issues mentioned in section 4.2.3. Instead, the idea was to design a dynamic roof that would fold across the site (figure 177) and then be punctured to create courtyards below and bring light in. This new design created a dynamic design that would solve the roof issues, create a shelter for the spaces below, attempt to tie Ramkraal Prison together so it can be one centre and aid in creating an exciting and engaging place that could become a new landmark for growth.

The issue with this approach lies in its need for more sensitivity towards design, as it tends to overpower the Ramkraal Prison rather than harmoniously integrate with it. This approach fails to blend into the existing context and appears to disregard the significance of preserving history by overshadowing it with a new structure. Therefore, even if this approach successfully addresses all the necessary criteria to resolve the problems, it fails to address the challenge of creating community-catalysed places within a historic landmark while acknowledging and respecting its historical value.

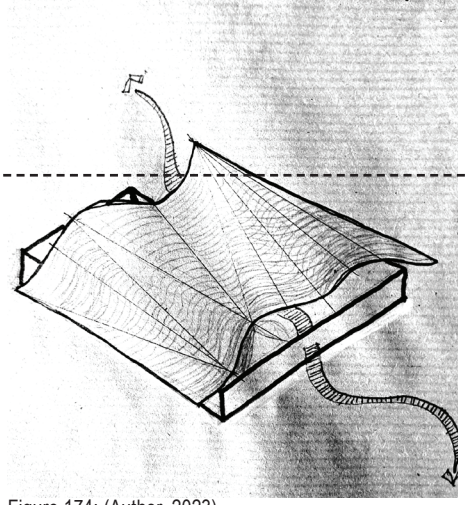


Figure 174: (Author, 2023).

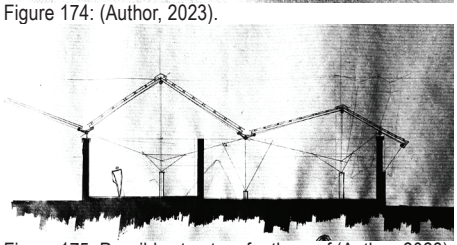


Figure 175: Possible structure for the roof (Author, 2023).

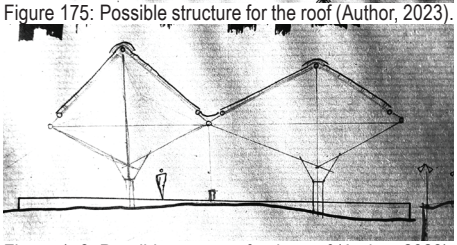


Figure 176: Possible structure for the roof (Author, 2023).

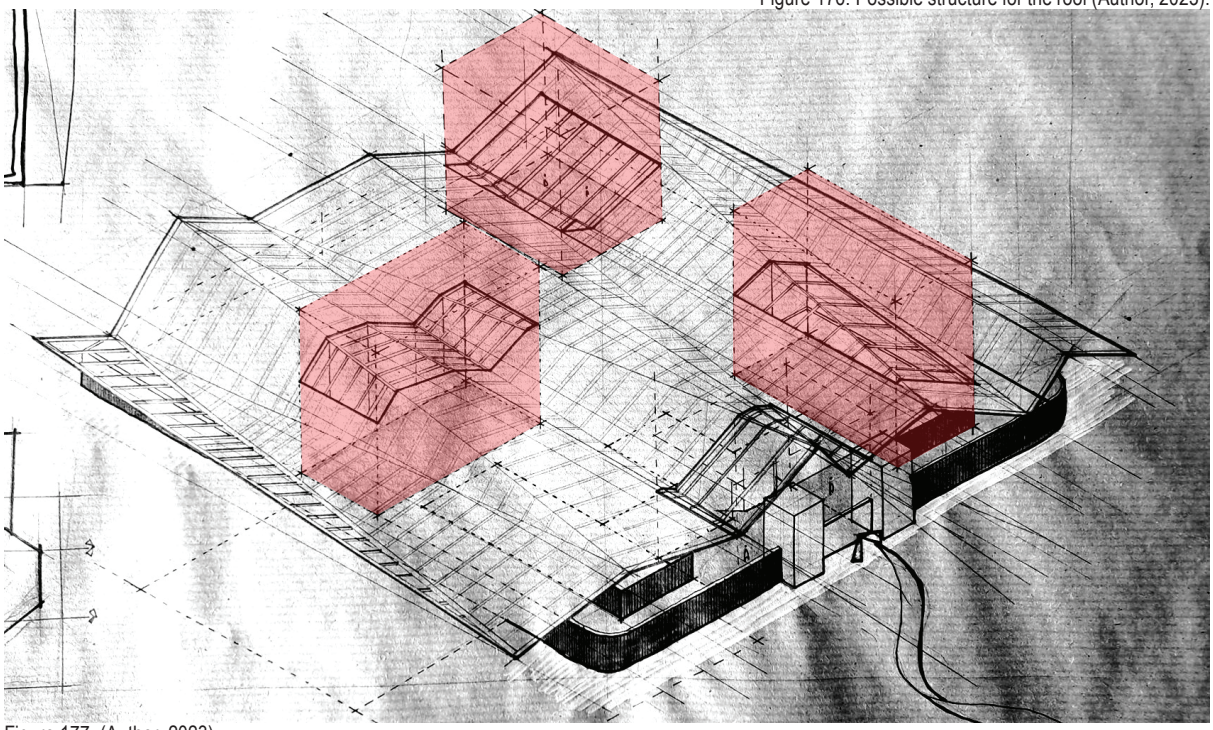


Figure 177: (Author, 2023).

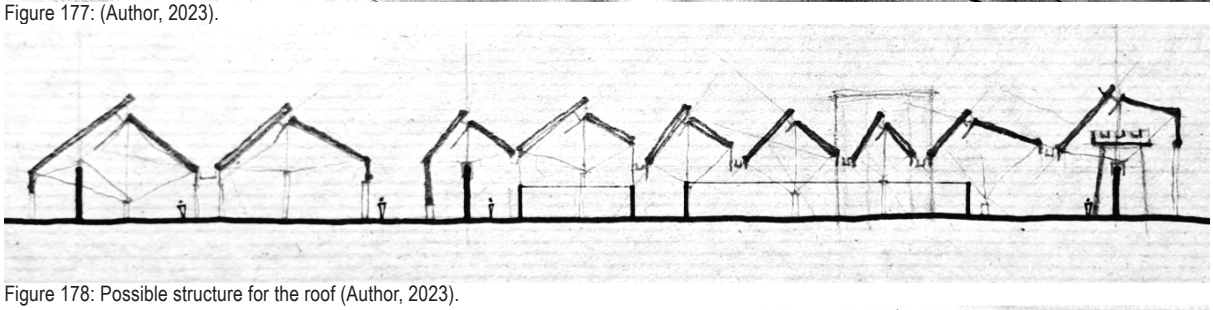
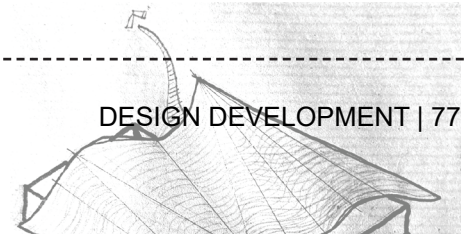


Figure 178: Possible structure for the roof (Author, 2023).



4.2.5 A SEARCH FOR RAMKRAAL PRISON'S CORE

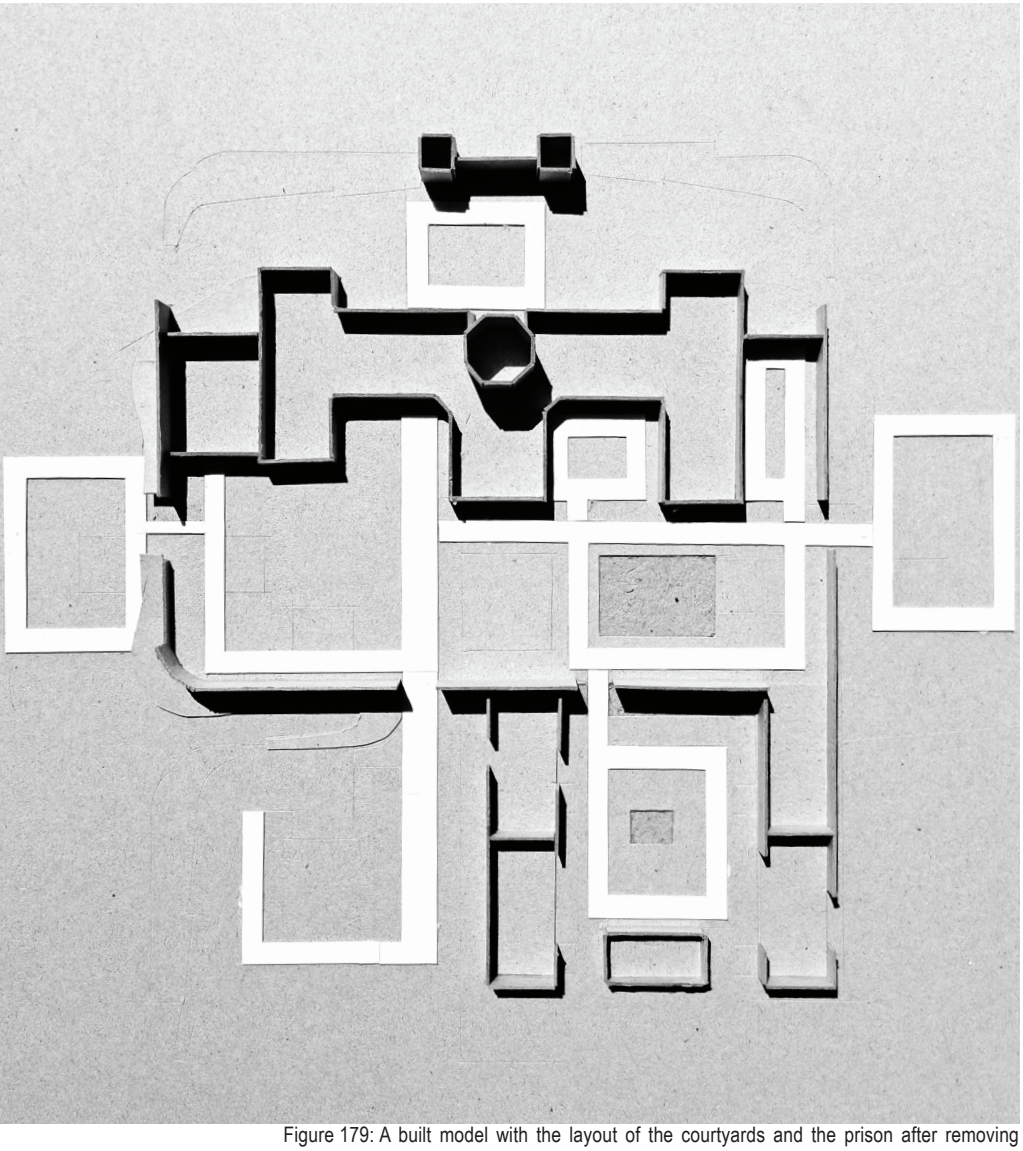
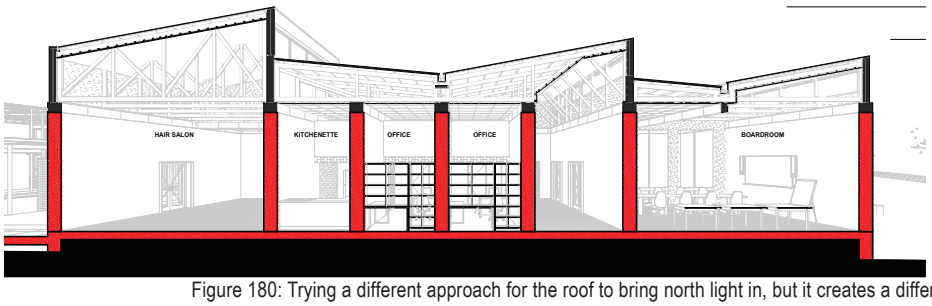


Figure 179: A built model with the layout of the courtyards and the prison after removing structures that were not needed (Author, 2023).

So, from the second External Review and the alternative approach, the main idea was to return to the original design and remove structures and walls that hindered the design from moving forward. The removal of the structures will be explored further in the technical report section. Then, a series of courtyards and pathways were introduced to link the spaces together. This choice aided in joining the ground and first floor while creating a network of liminal, interstitial, and in-between spaces that could transform ruined spaces into community-catalysed places. Then, the garden walls and green spaces are introduced to soften the edges, ultimately rescripting the perimeter and linking to Batho's garden culture mentioned in Chapter Three. Then, the cantilevering structures were shortened and moved to the edges to articulate the new entrances while protruding over the wall.

The final design outcome is displayed in the next section, representing the culmination of the design process. A culmination of all the work and progress made throughout the design process. The result of careful planning.

N THROUGH TEXTILE WORKSHOP



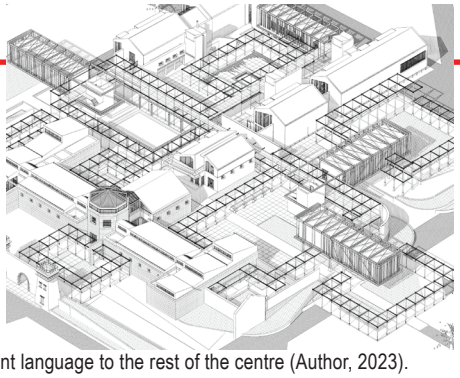


Figure 180: Trying a different approach for the roof to bring north light in, but it creates a different language to the rest of the centre (Author, 2023).

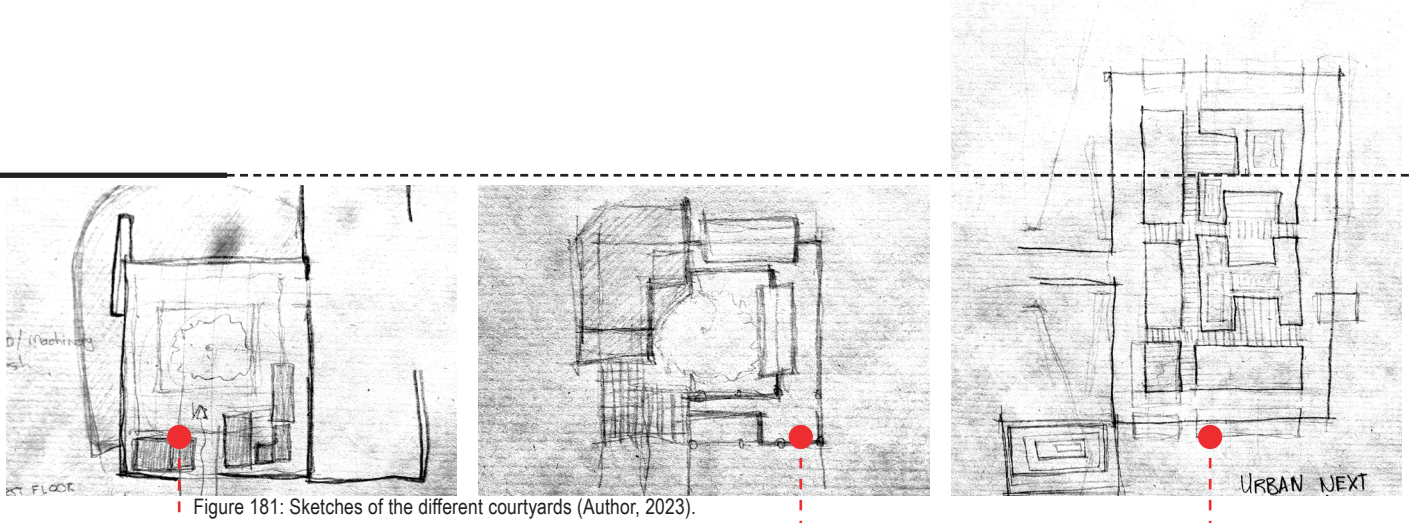


Figure 181: Sketches of the different courtyards (Author, 2023).

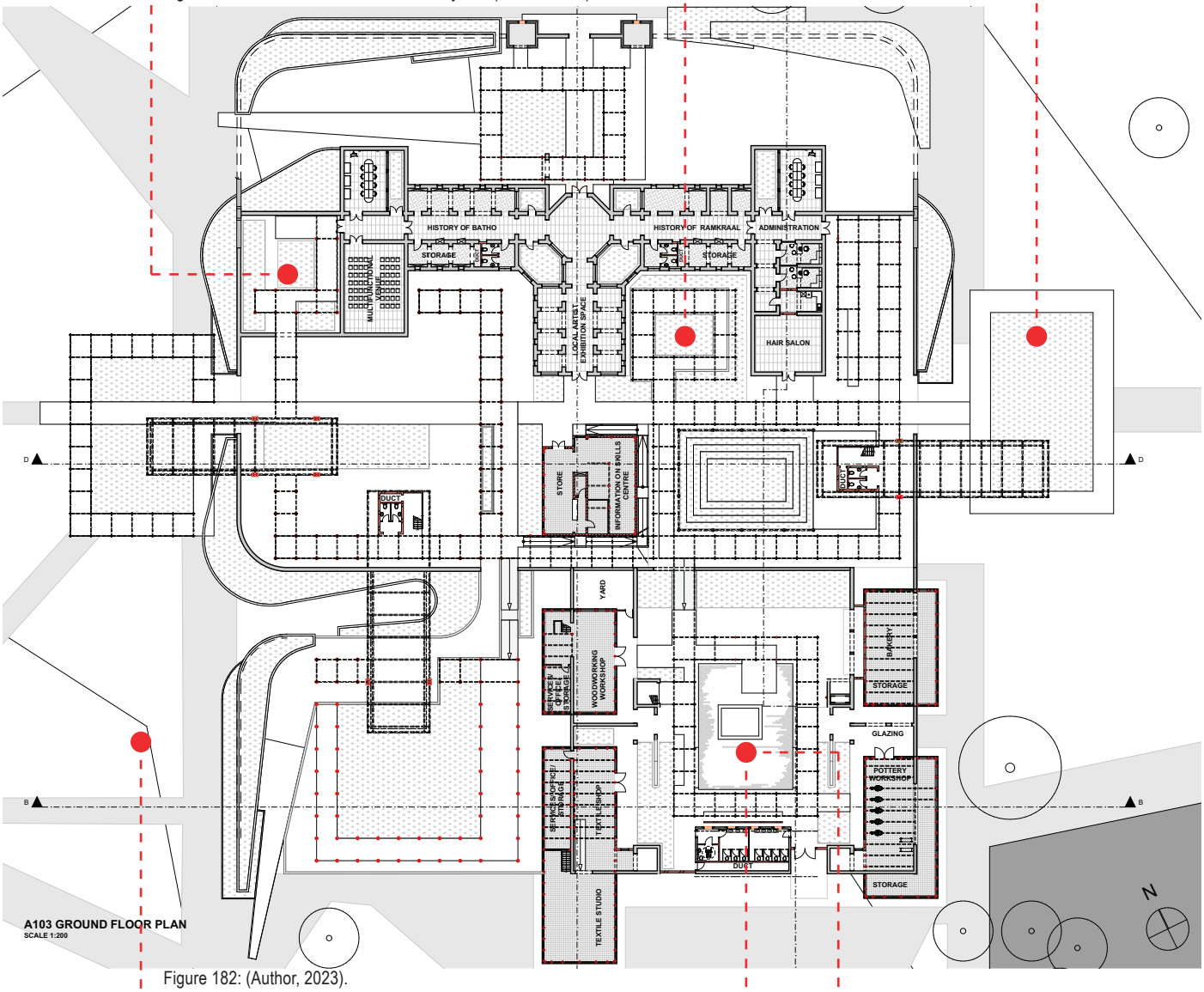


Figure 182: (Author, 2023).

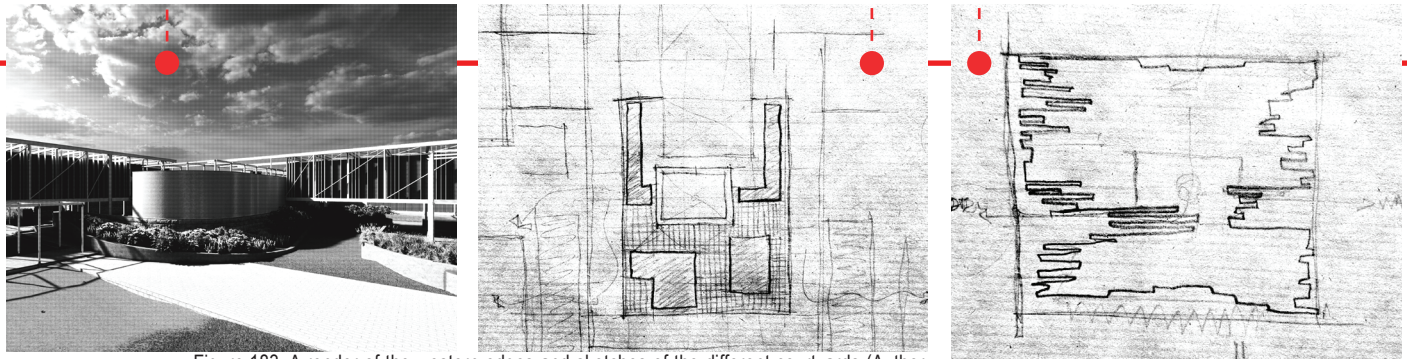


Figure 183: A render of the western edges and sketches of the different courtyards (Author, 2023).

4.3 DESIGN OUTCOME



AERIAL PERSPECTIVE

Figure 184: (Google Earth, 2023: online).



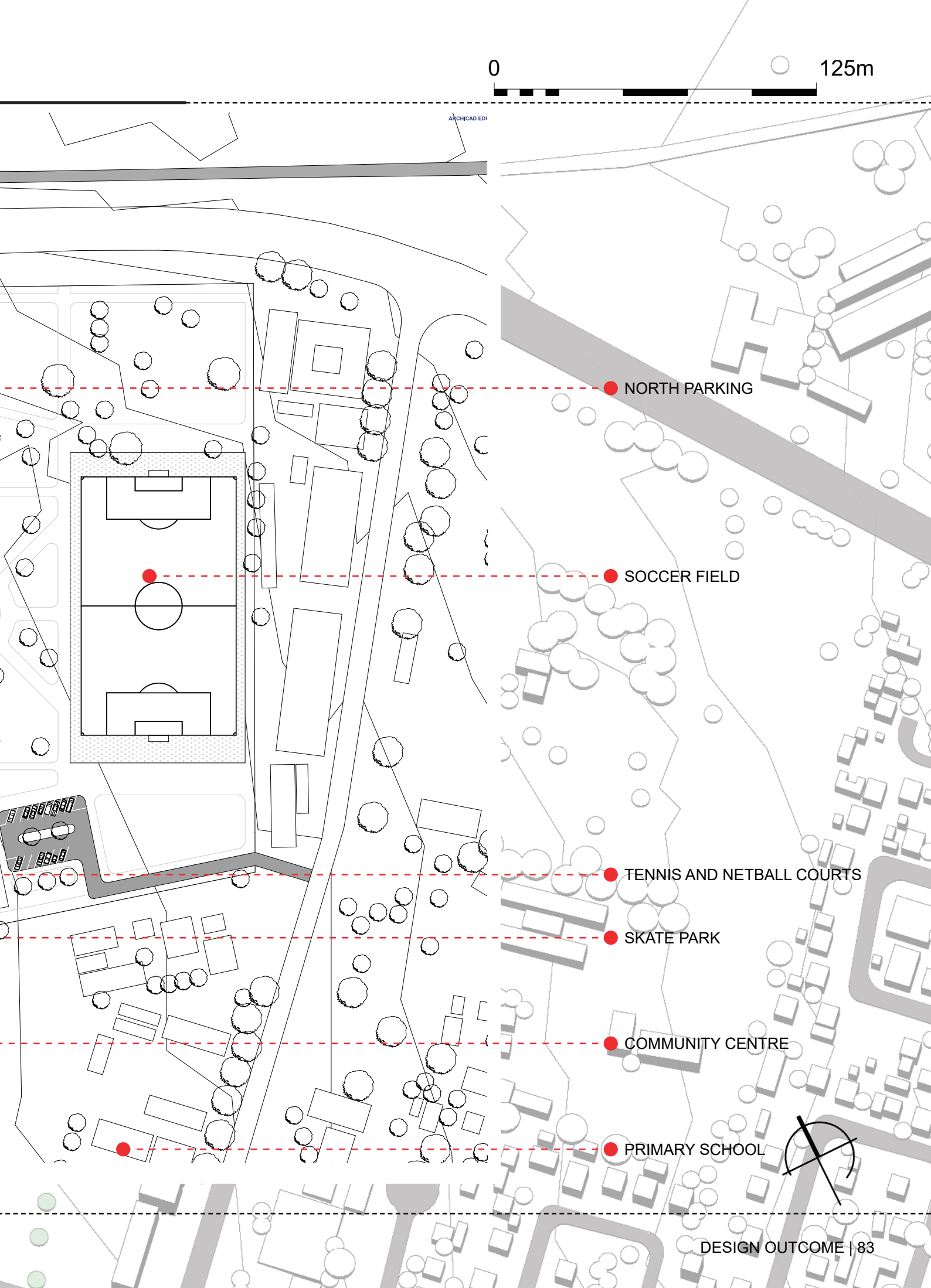






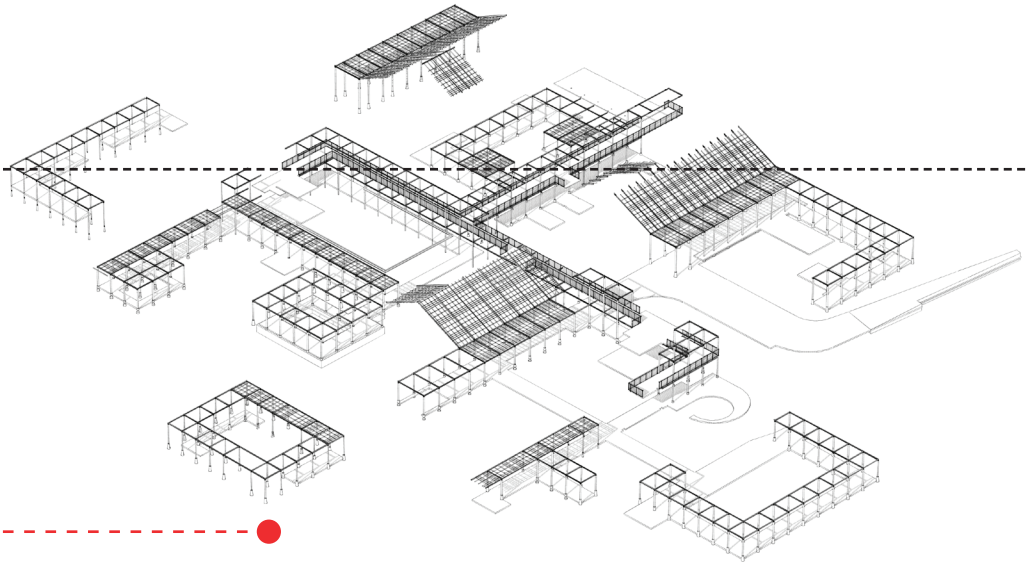


SITE PLAN

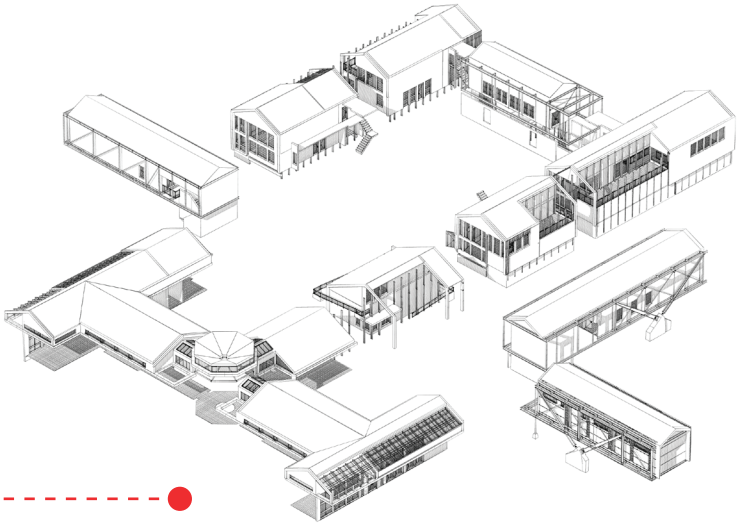

0
125m
NORTH PARKING
SOCCER FIELD
TENNIS AND NETBALL COURTS
SKATE PARK
COMMUNITY CENTRE
PRIMARY SCHOOL

ACCOMMODATION LIST

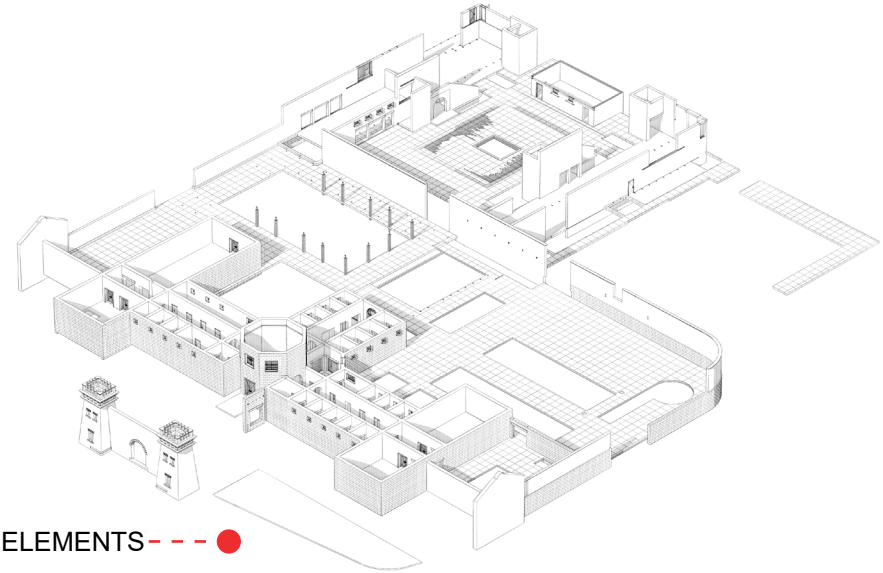
	Program	Size	Description
ADMINISTRATION (Main abandoned Prison)	Information on centre & local artist exhibition space	100	On the South wing of the main abandoned prison.
	History of Ramkraal Prison and Batho exhibition	115	On the West wing of the main abandoned prison.
	Security room	12	
	Storage/ Ablutions/ Kitchenette for staff	65	On the East wing of the main abandoned prison.
	3x Offices	36	
	Open plan offices	34	
	Boardroom	32	
	Waiting room	40	For people who want to enrol or seeking guidance.
	Multifunctional venue	46	
	Central shop	51	The shop that sells good made by the artisans such as clothes, pottery, baskets, 3d printer items or quilts.
	Office & storage for shop	25	
	TOTAL	556	
TRADITIONAL CENTRE (SOUTHERN ADDITION OF THE ABANDONED PRISON)	Woodworking workshop	75	
	Yard	31	For working with wood outside and easier cleanup.
	Office & storage	20	
	Thrift shop	68	The thrift shop sells secondhand clothes donated to the centre and repaired by the students.
	Office & storage	37	
	Textile Studio	85	
	Storage & scullery	47	
	Culinary class	63	Four workstations
	Office & emergency room	30	The emergency room is for minor injuries that could happen in the centre.
	Refuse	13	
	Pottery Workshop	100	
	Dry storage & storage	33	
	Glazing	25	Glazing on the second floor is where students can paint or decorate their ceramics or pottery.
	Office	22	
	Ablutions	50	
	Library	67	
	Toolshed & refuse	20	
	TOTAL	786	
CONTEMPORARY AND TRANSITIONAL (CANTILEVERING STRUCTURES)	Ablutions	24	
	Server room	6	
	Computer room	70	12 computers
	Makerspace studio	60	3D printing - Laser cutting
	Video & audio recording room	30	Rooms to record knowledge, stories or events from people
	2x Lecture rooms	86	
	Ablutions	24	
	TOTAL	300	
		1642	



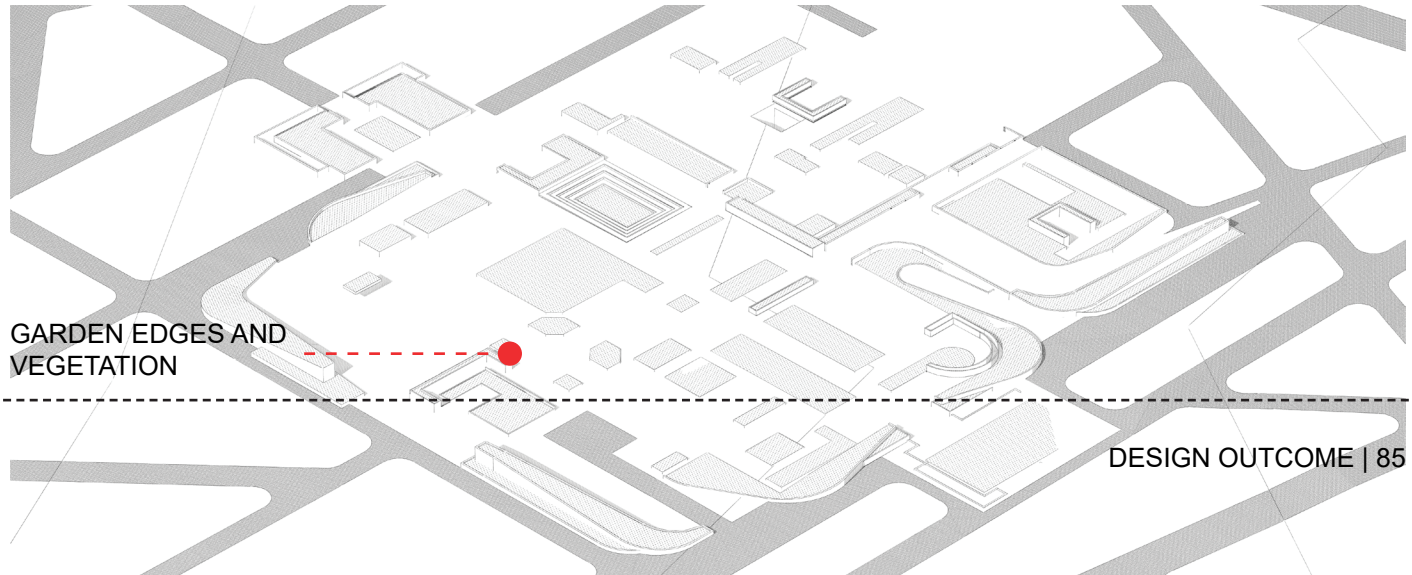
COURTYARDS



NEW ADDITIONS



RETAINED EXISTING ELEMENTS



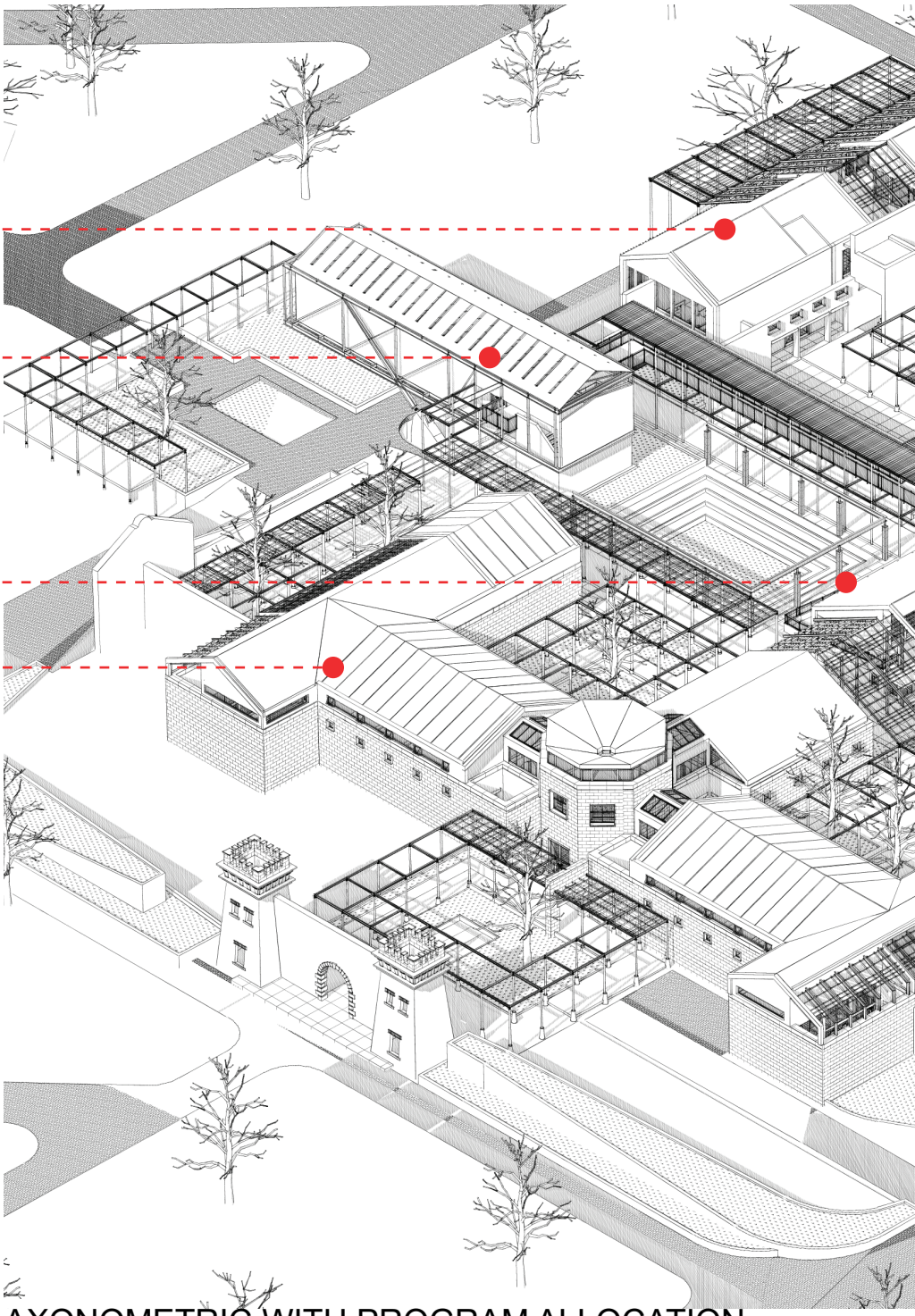
GARDEN EDGES AND VEGETATION

CULINARY CLASS

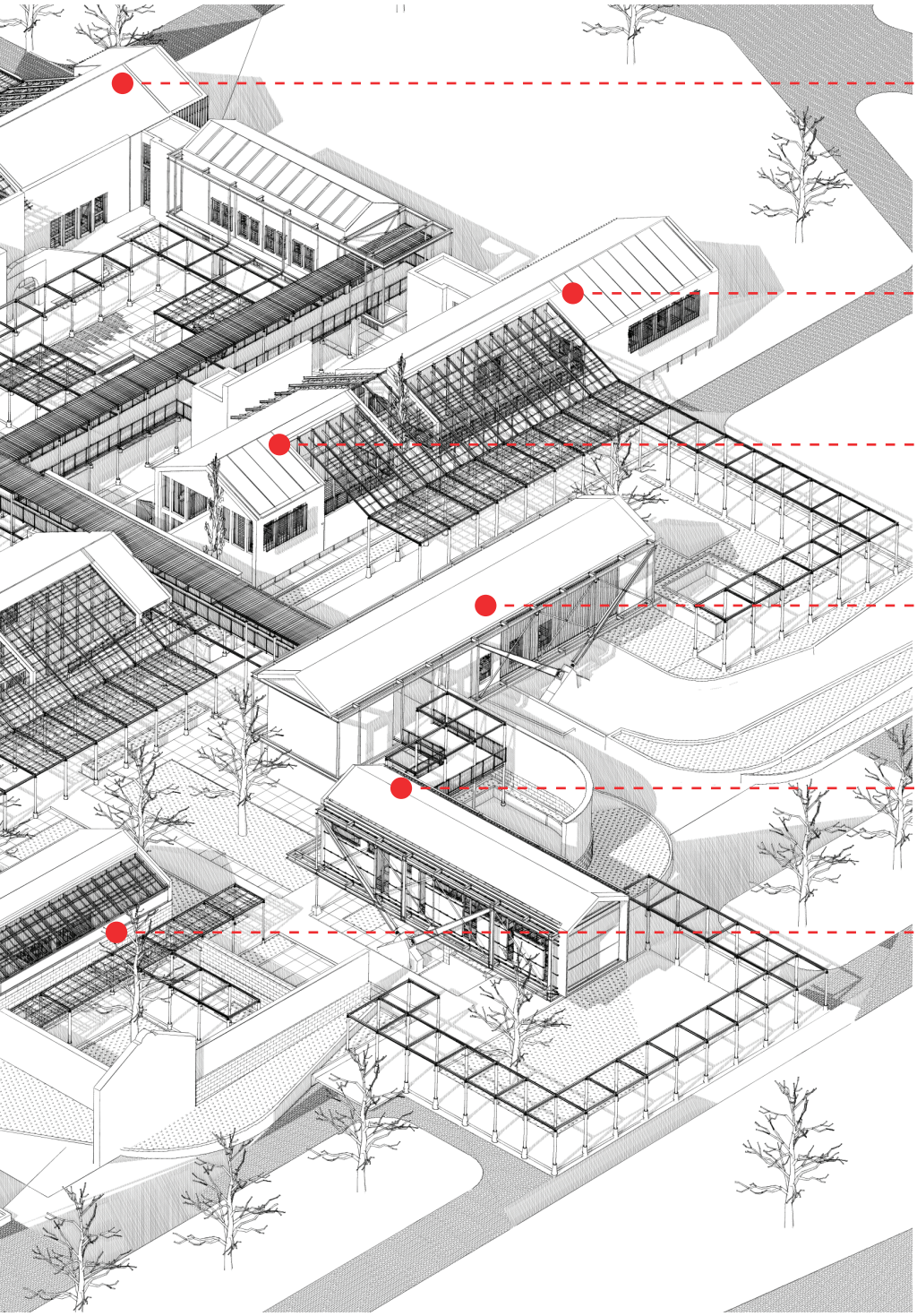
LECTURE ROOMS

CENTRAL SHOP

ADMINISTRATION
- Offices
- Boardroom
- Student enrollment
- Kitchenette
- Security Room



AXONOMETRIC WITH PROGRAM ALLOCATION



POTTERY

TEXTILE STUDIO

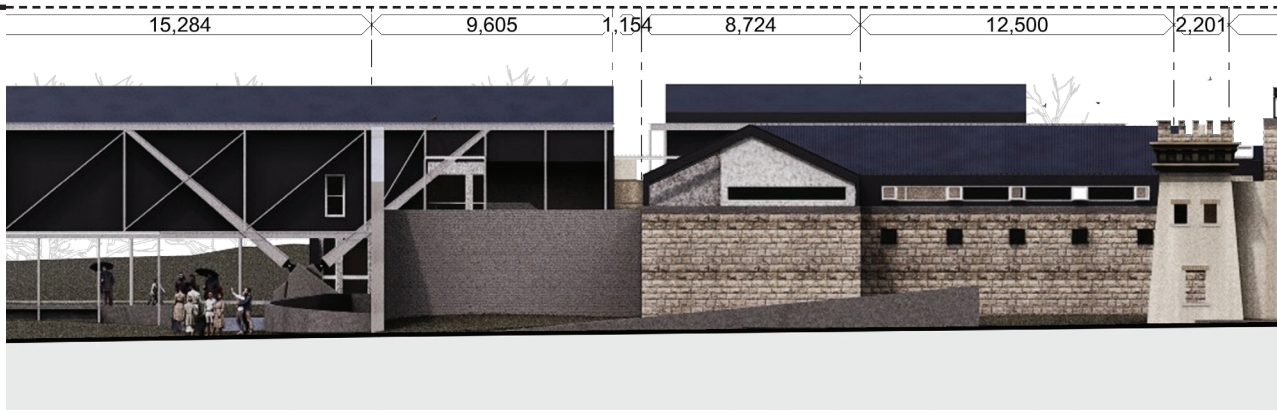
WOODWORKING WORKSHOP

COMPUTER ROOM AND RECORDING SPACE

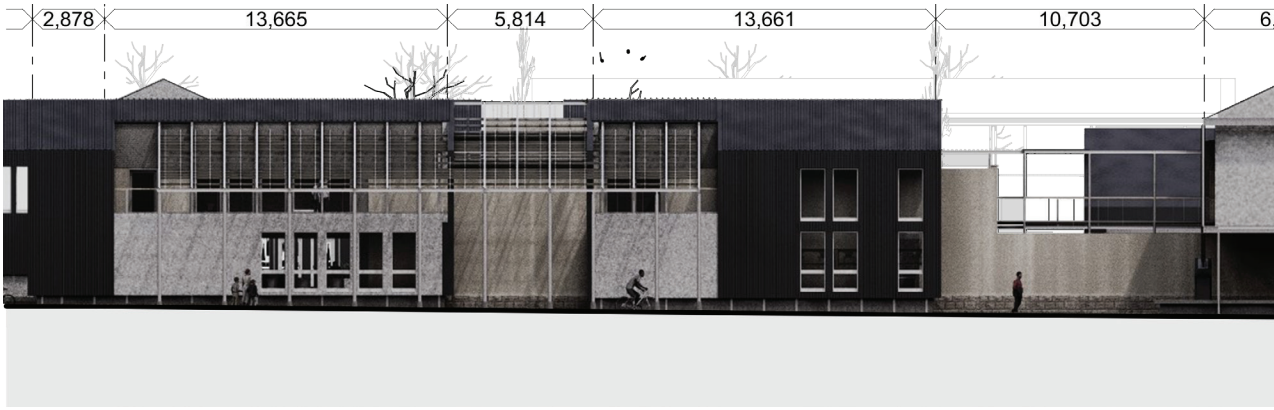
MAKER SPACE
- 3D printing
- Lasercutting
- Microbotics

ADMINISTRATION
- Boardroom
- Multi-functional Venue
- History of Batho Exhibition
- History of Ramkraal Prison Exhibition

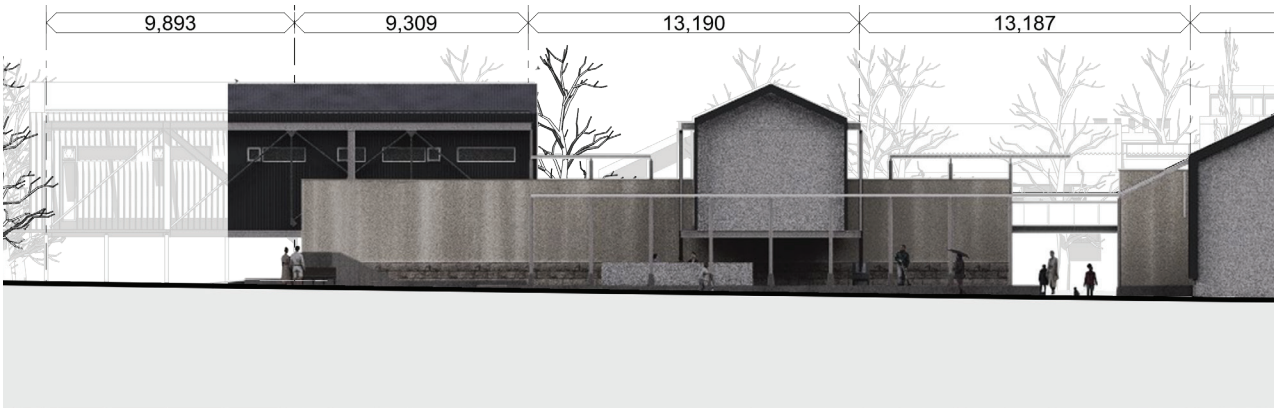
NORTH ELEVATION



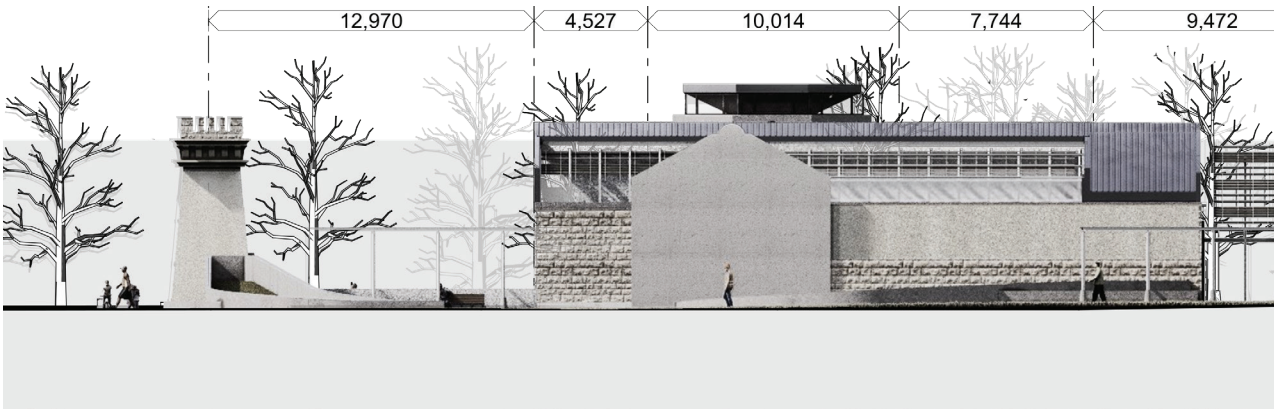
EAST ELEVATION

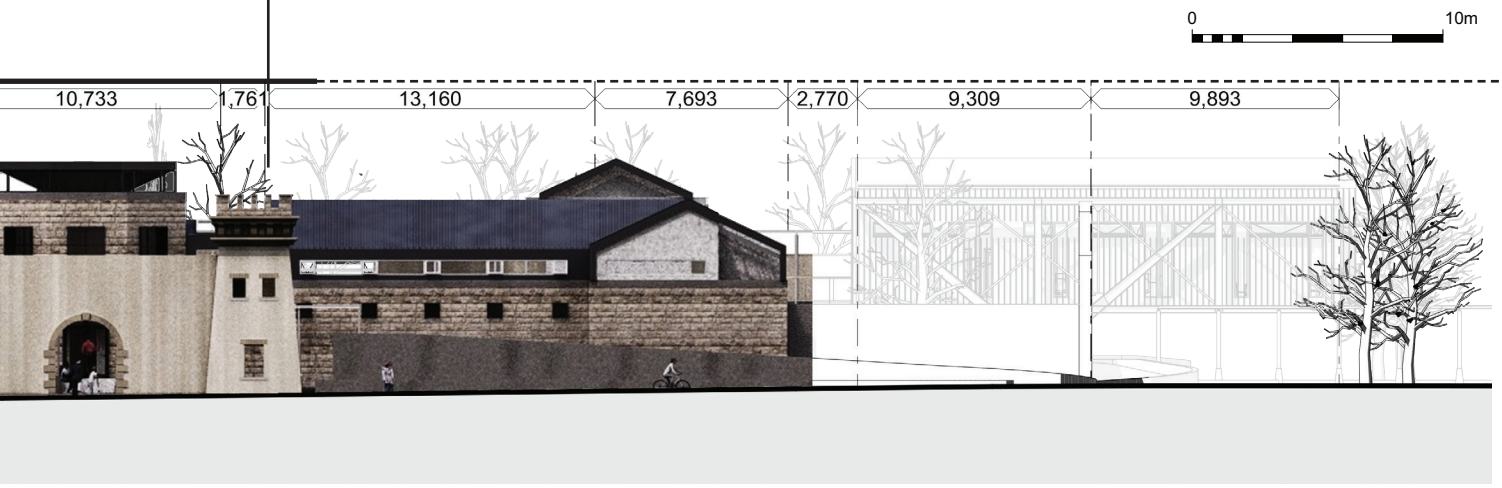


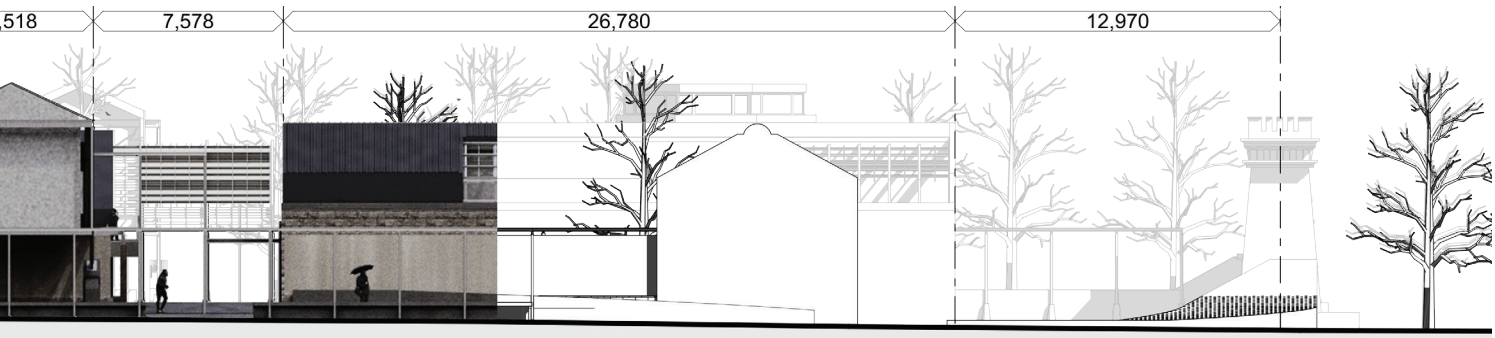
SOUTH ELEVATION

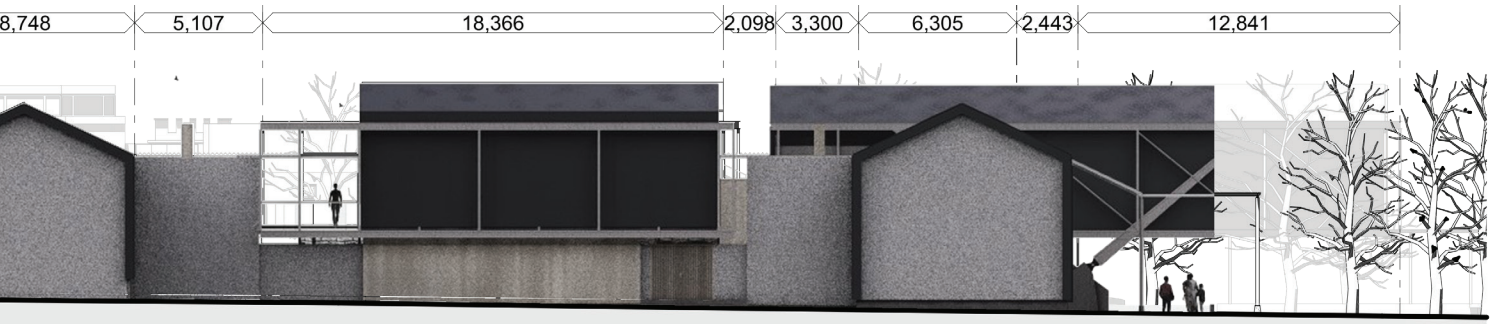


WEST ELEVATION




0
10m
10,733
1,761
13,160
7,693
2,770
9,309
9,893


,518
7,578
26,780
12,970


8,748
5,107
18,366
2,098
3,300
6,305
2,443
12,841

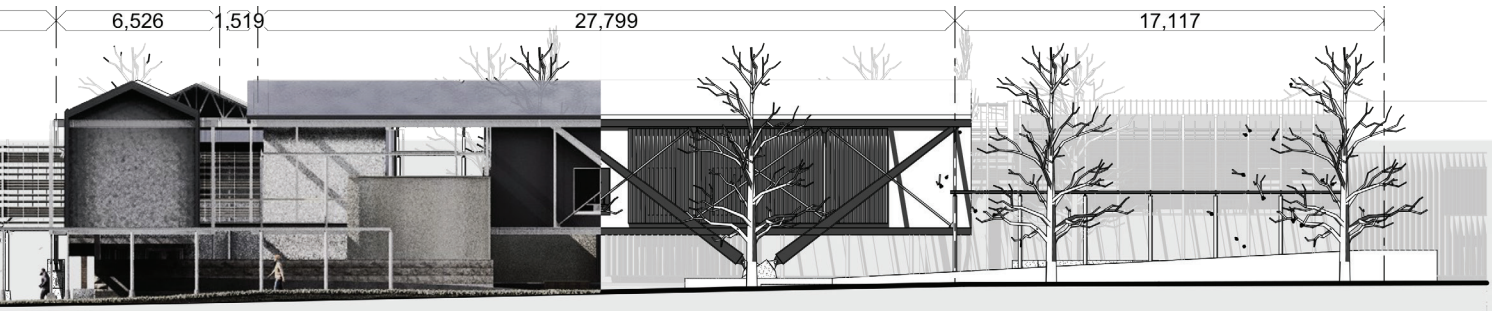
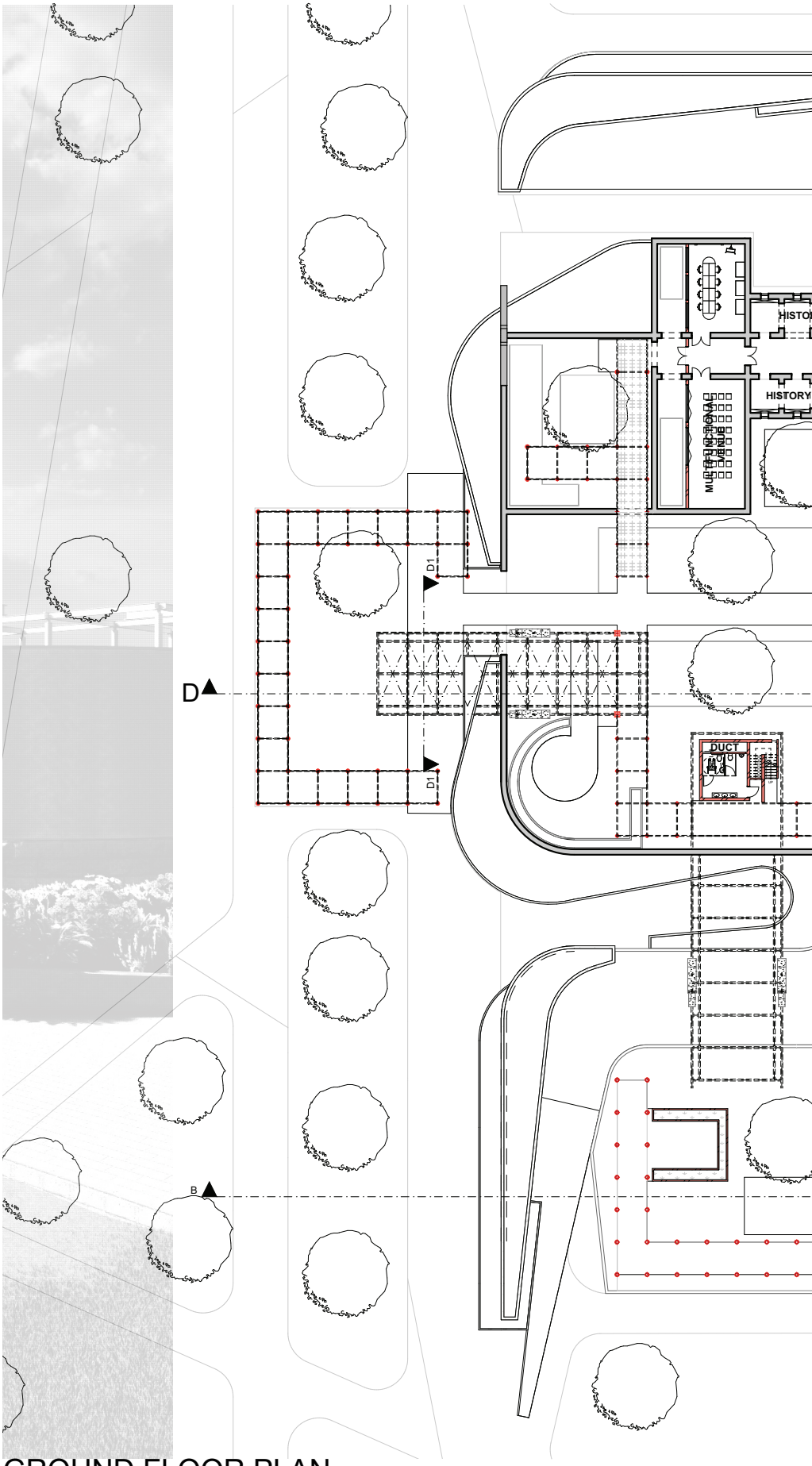

6,526
1,519
27,799
17,117



Figure 185: (Author, 2023).



GROUND FLOOR PLAN

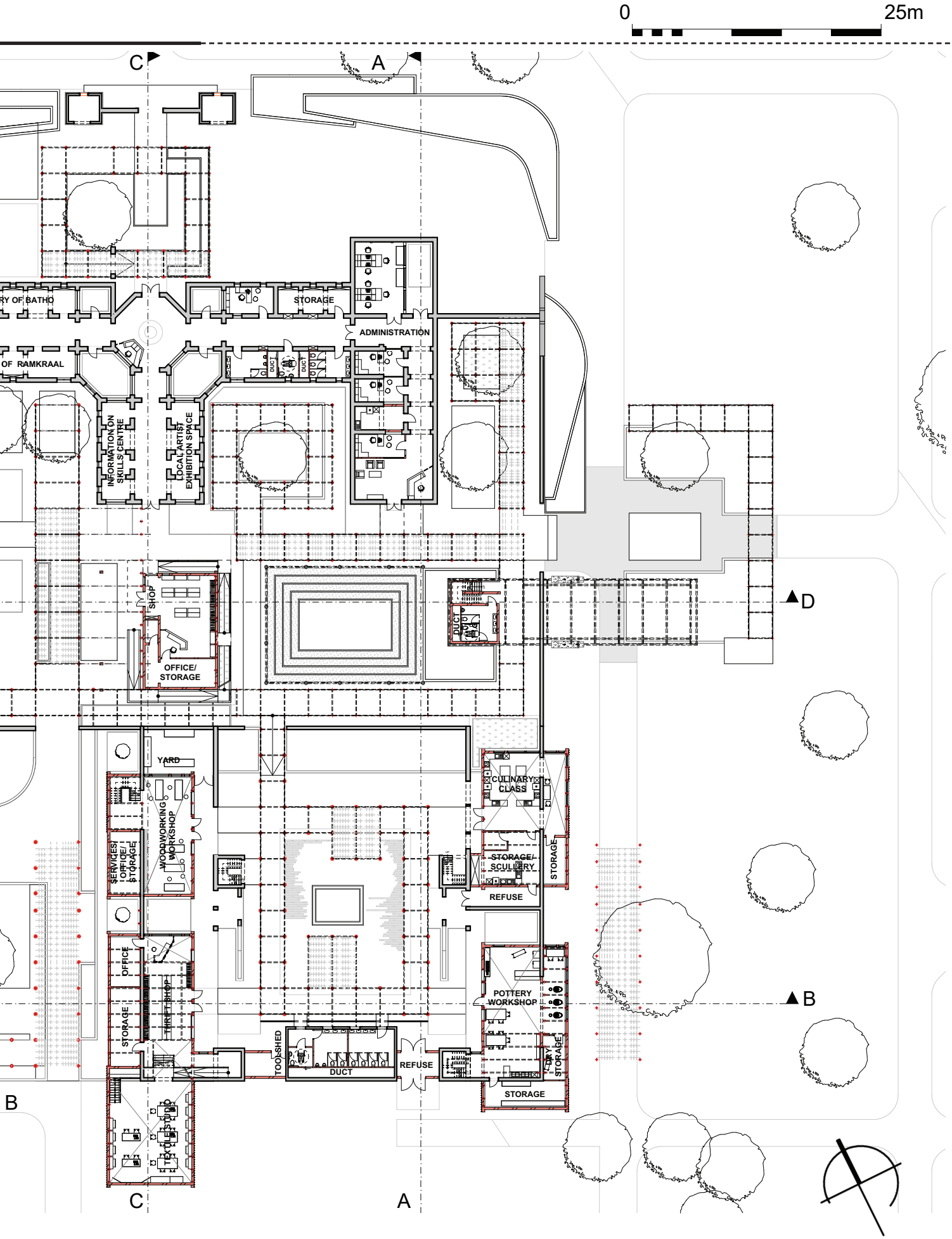

0
25m
C
A
D
B
STORAGE
ADMINISTRATION
INFORMATION ON SKILLS CENTRE
LOCAL ARTIST EXHIBITION SPACE
SHOP
OFFICE/ STORAGE
DUCT
YARD
WOODWORKING WORKSHOP
SERVICES/ OFFICE/ STORAGE
CULINARY CLASS
STORAGE/ SCULLERY
STORAGE
REFUSE
OFFICE
THRIFT SHOP
STORAGE
TOOL SHED
DUCT
REFUSE
POTTERY WORKSHOP
DRY STORAGE
STORAGE
TEXTILES STUDIO



Figure 186: Exiting corridor to the offices (Author, 2023).

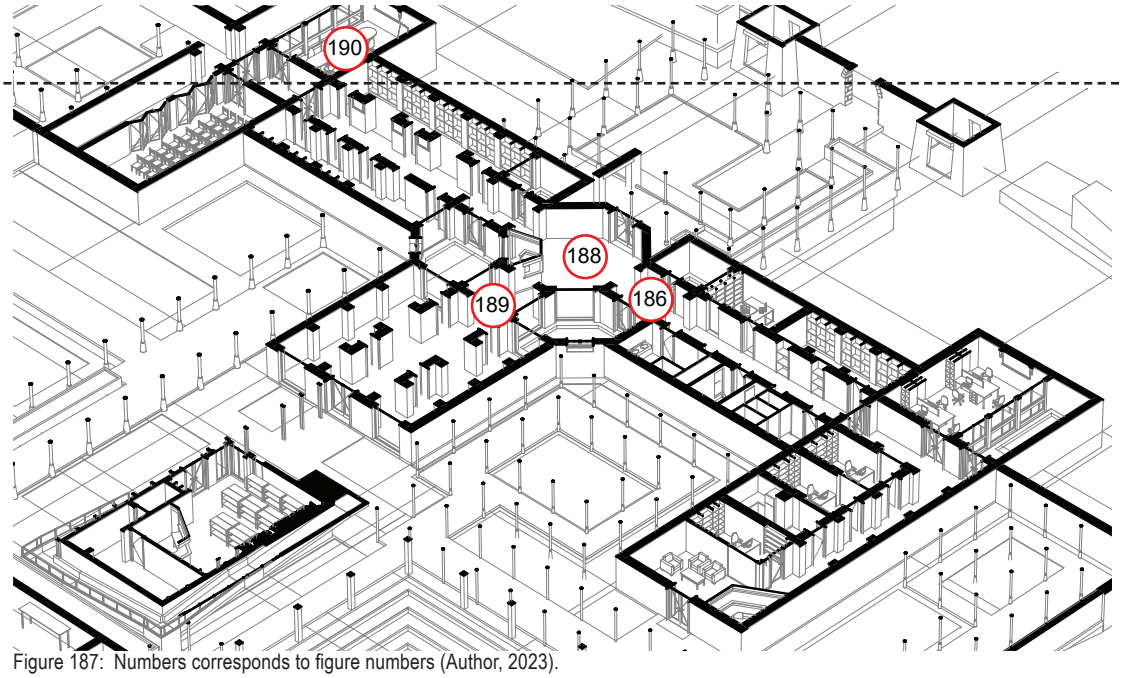
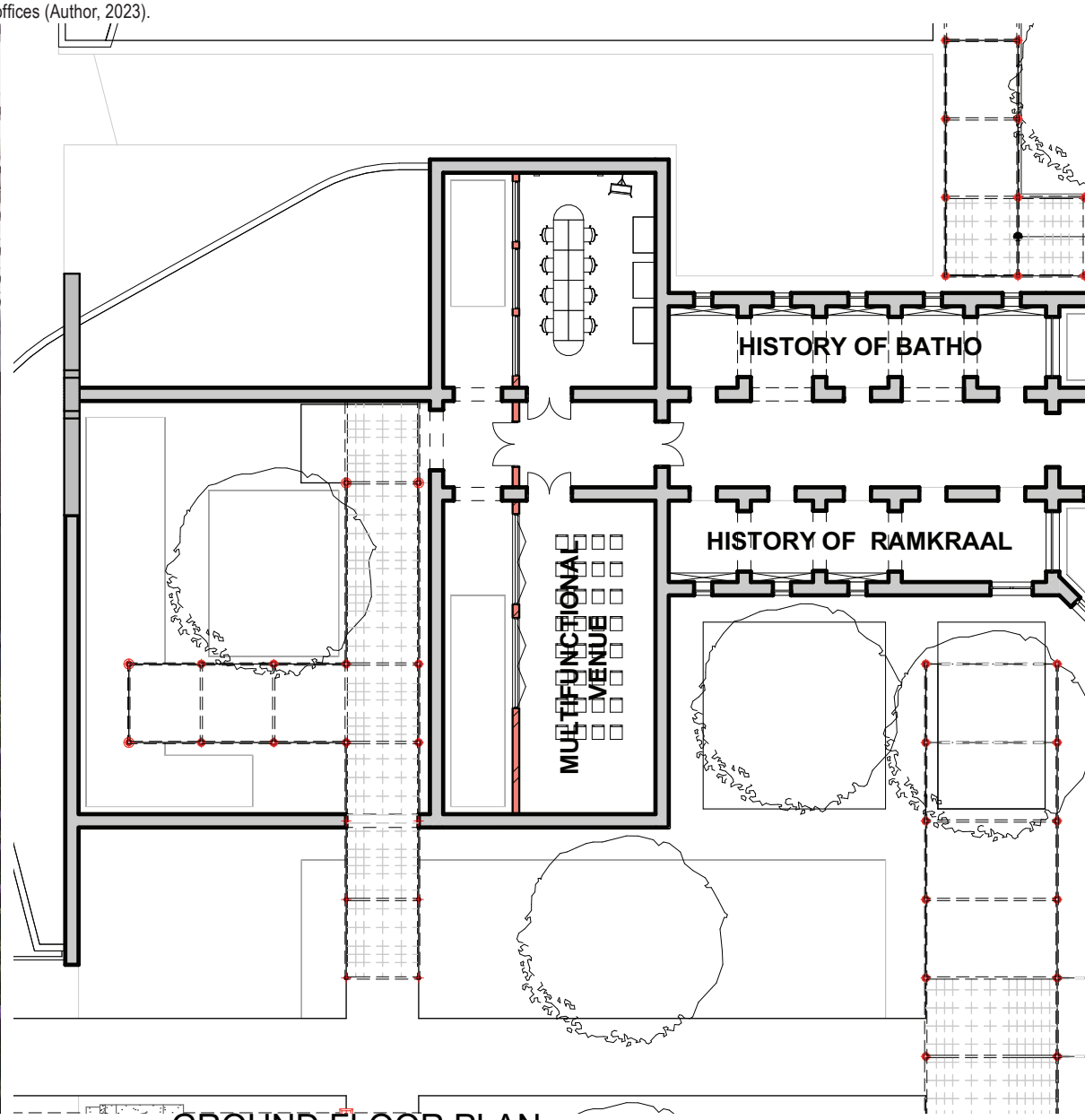


Figure 187: Numbers corresponds to figure numbers (Author, 2023).





GROUND FLOOR PLAN



Figure 188: The octagonal centre of the prison lobby (Author, 2023).

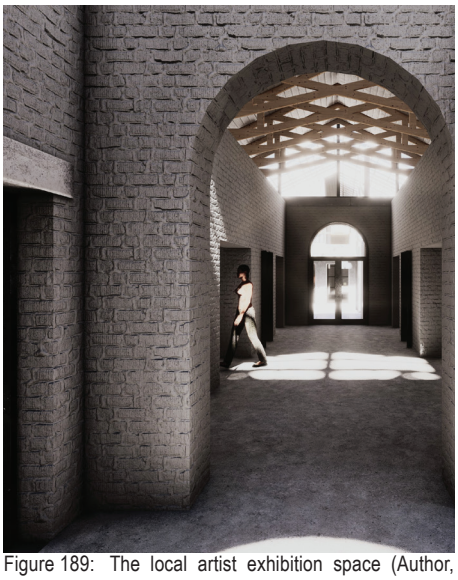
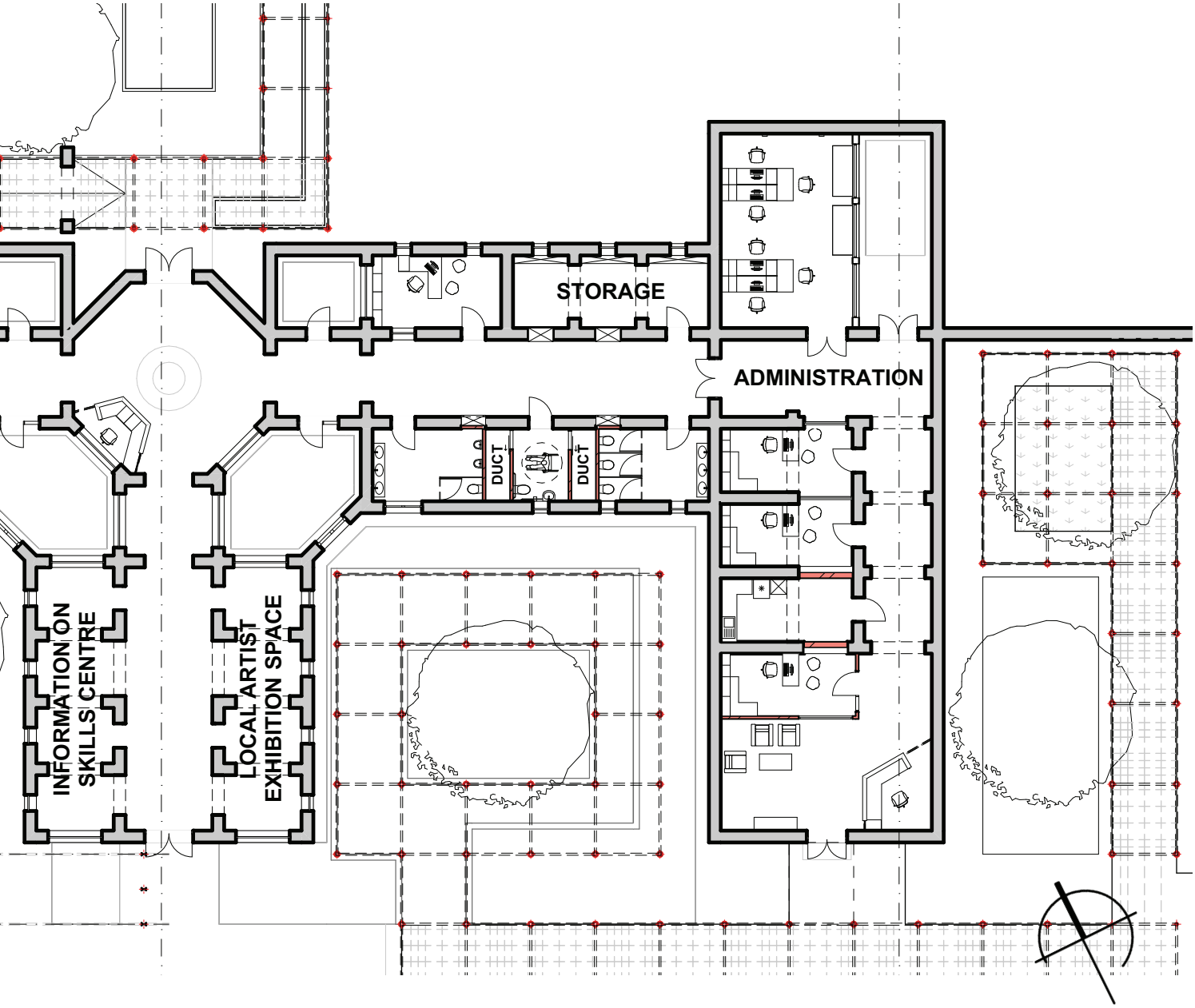
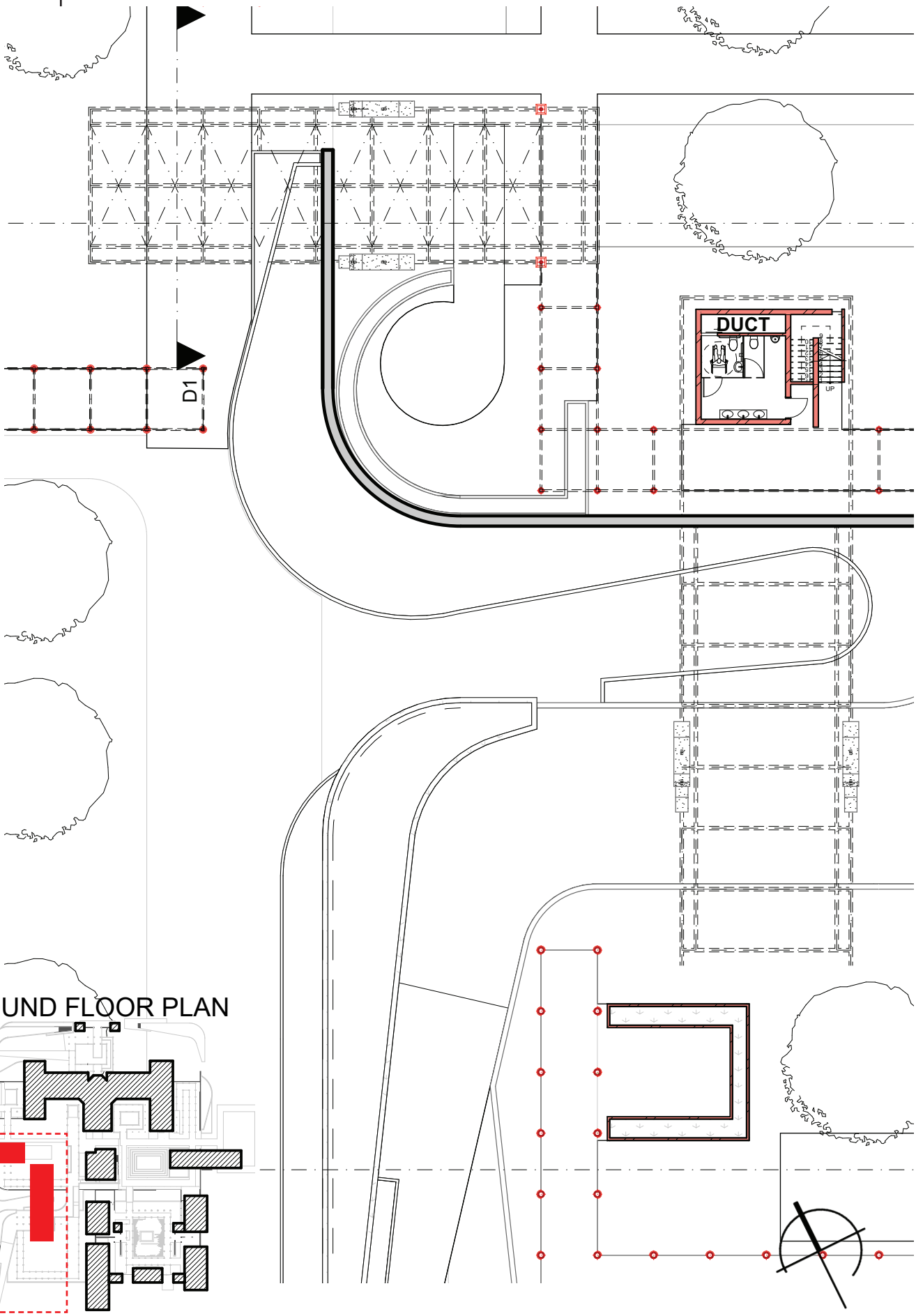


Figure 189: The local artist exhibition space (Author, 2023).

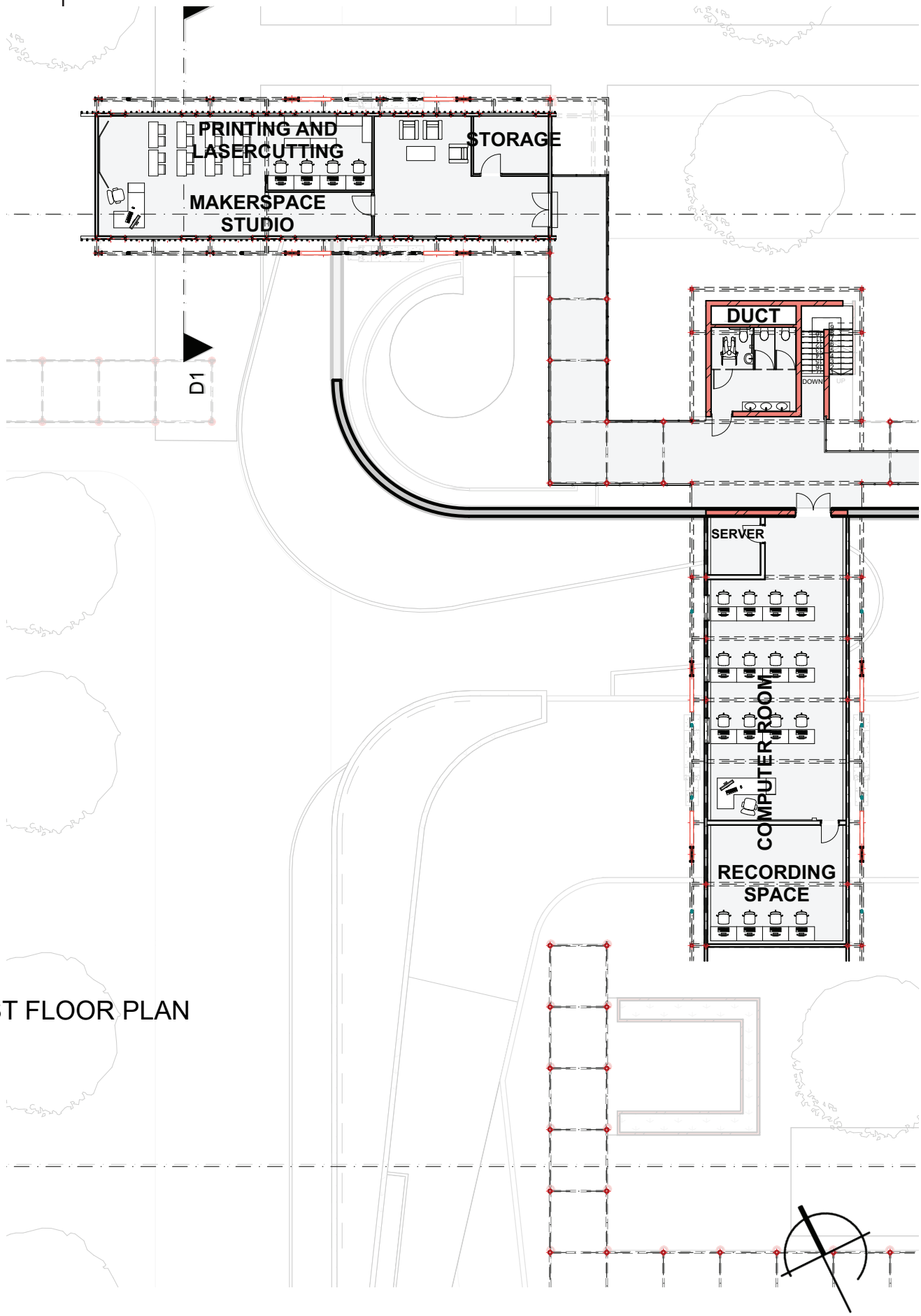


Figure 190: The boardroom (Author, 2023).

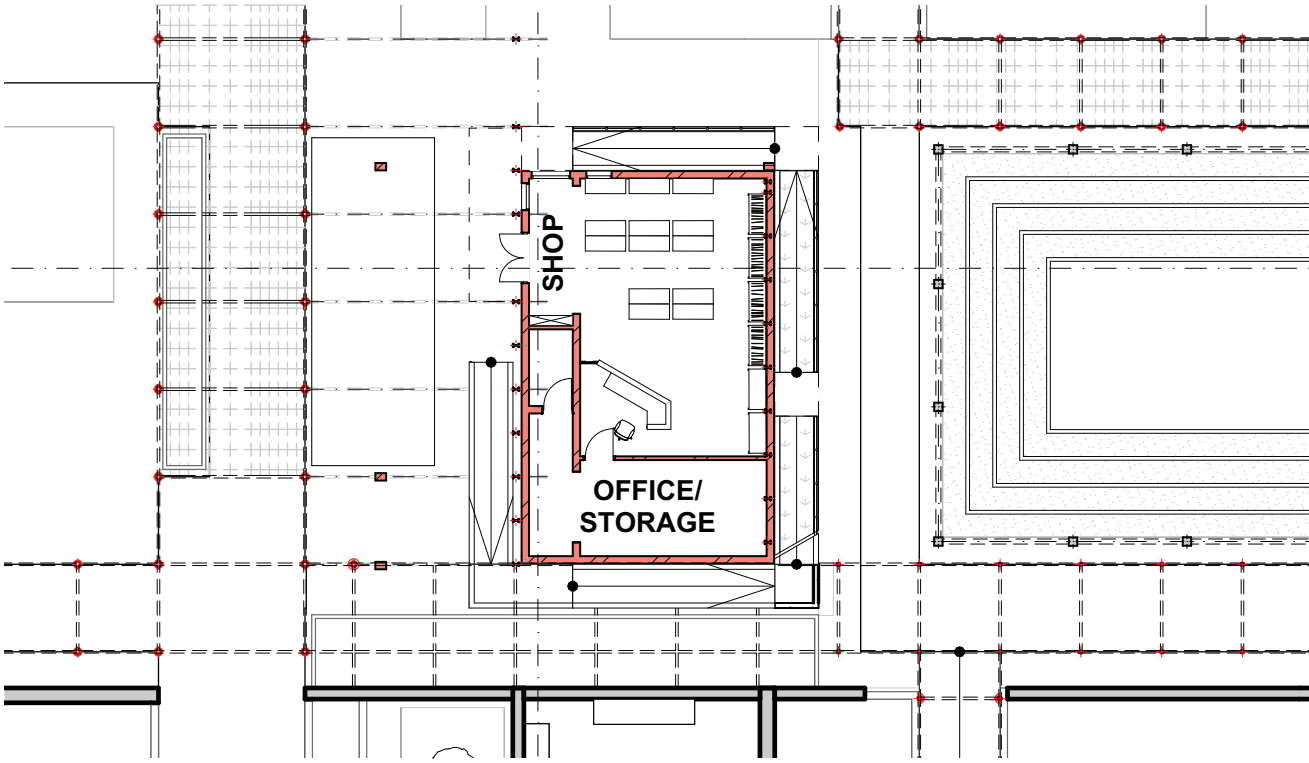




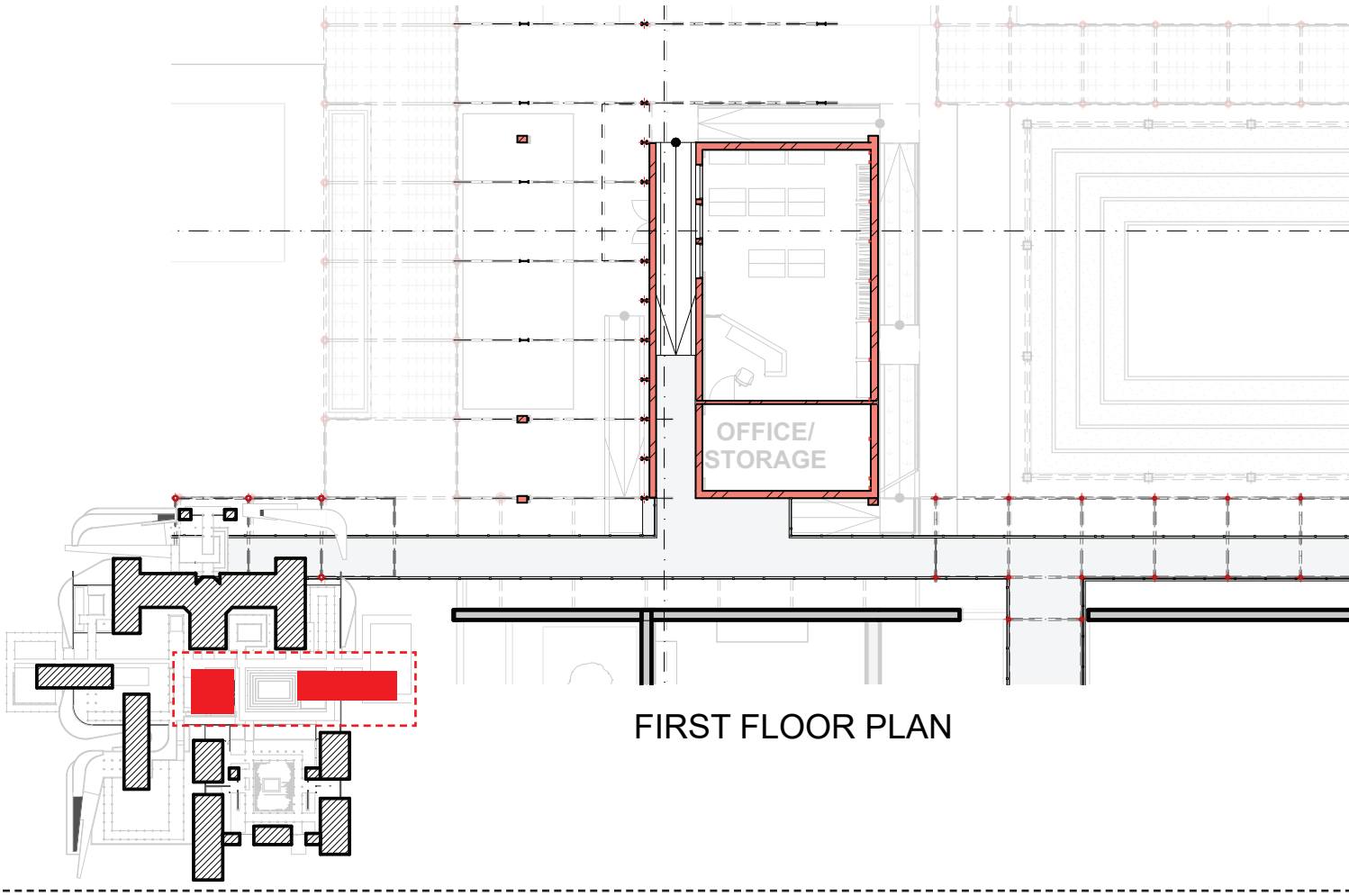
GROUND FLOOR PLAN



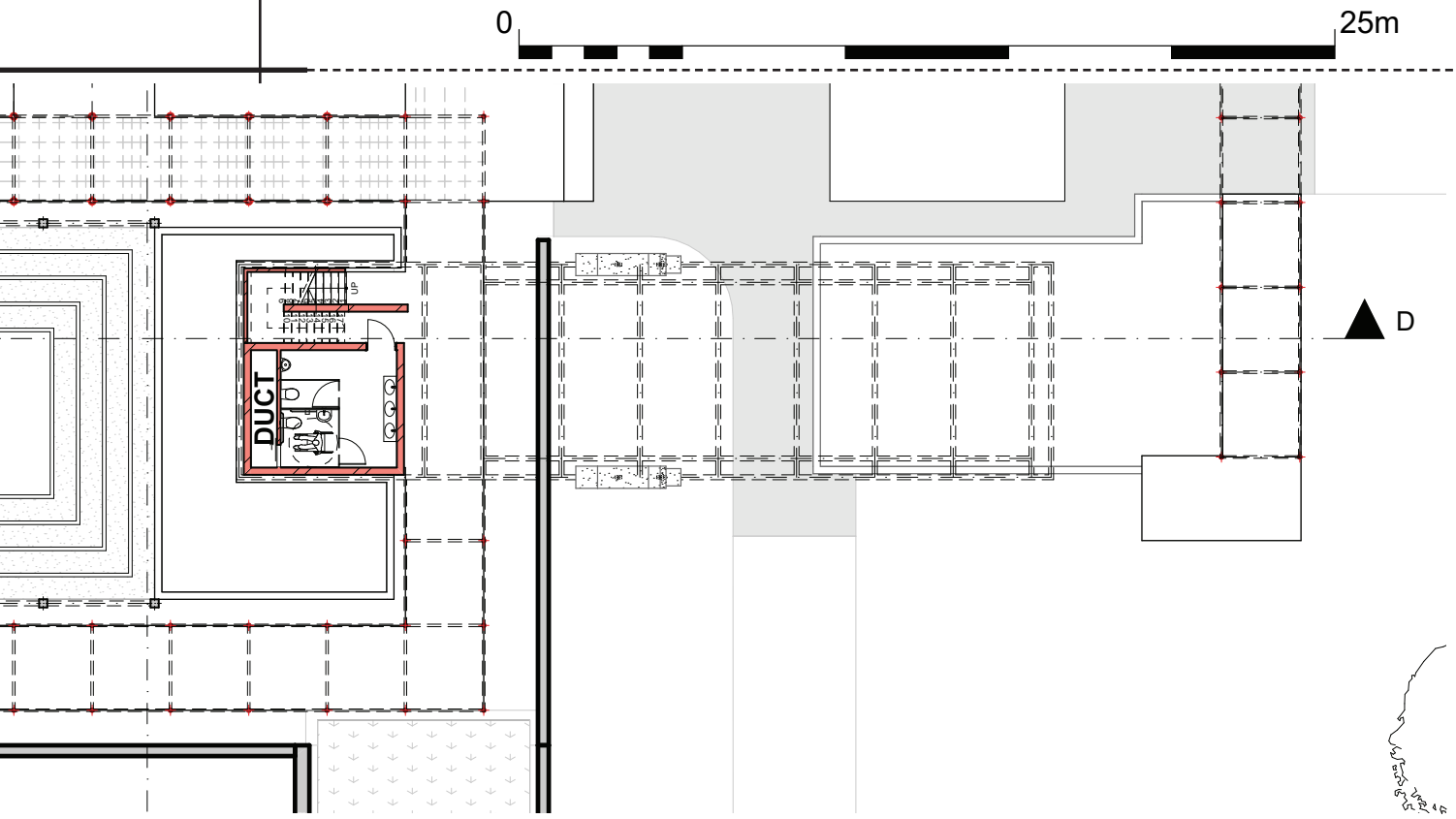
FIRST FLOOR PLAN



GROUND FLOOR PLAN



FIRST FLOOR PLAN


0
25m
DUCT
D

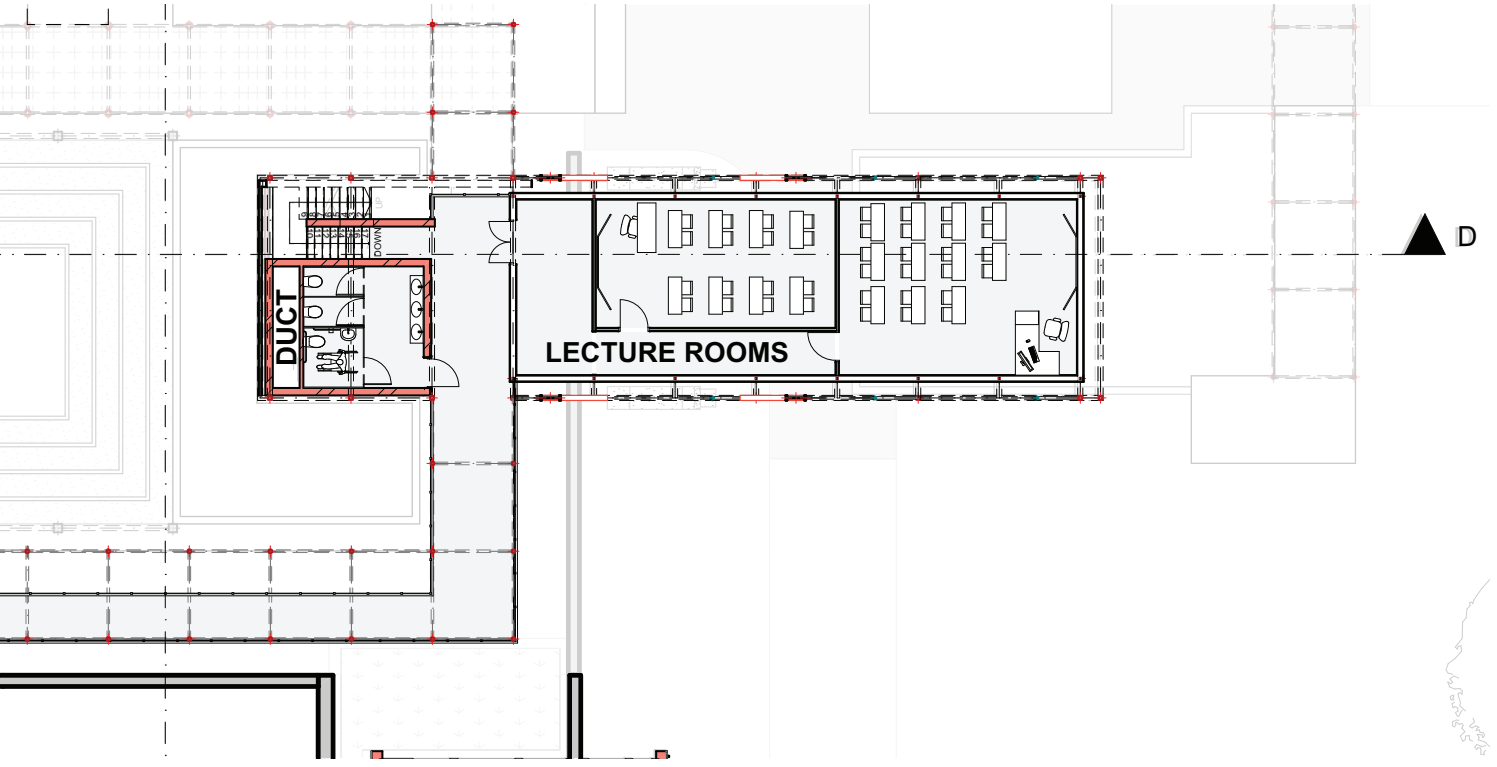

DUCT
LECTURE ROOMS
D



Figure 192: Southern courtyard that goes to the south entrance. Looking at he computer room cantilevering over the wall (Author, 2023).



Figure 193: The computer room (Author, 2023).



Figure 194: The southeastern corner with both the makerspace and computer room cantilevring over the perimenter wall (Author, 2023).



Figure 195: Looking at the southern entrance with the textile studio and woodworking workshop on the right (Author, 2023).

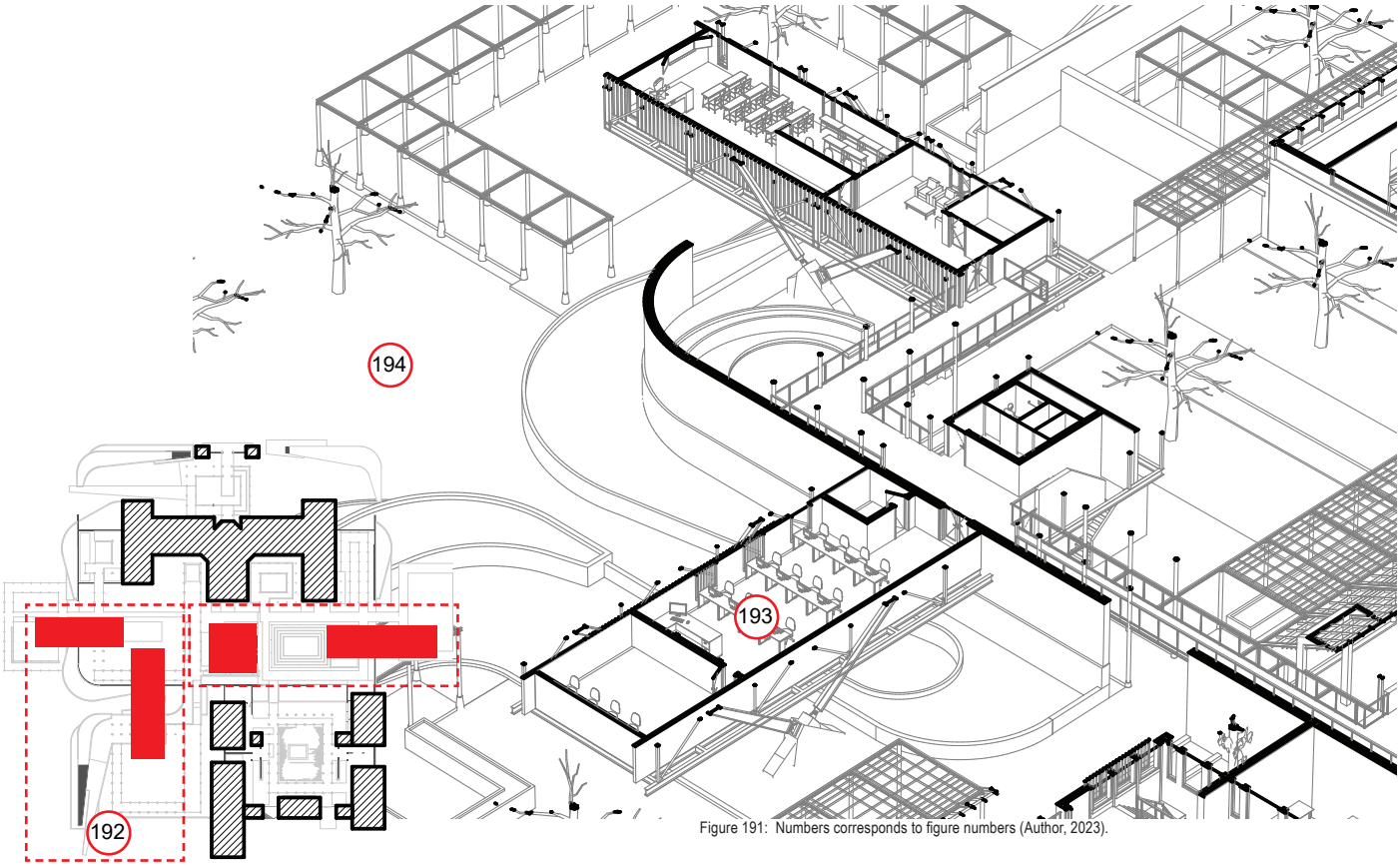


Figure 191: Numbers corresponds to figure numbers (Author, 2023).



Figure 197: The central shop that sells all the items made by people in the centre like clothes, 3d printed things, pottery, wood items or lasercut gifts. (Author, 2023).



Figure 198: Looking at the ramp, the southern entrance and the entrance to the central shop to the left (Author, 2023).



Figure 199: The lecture rooms cantilevering over the wall (Author, 2023).

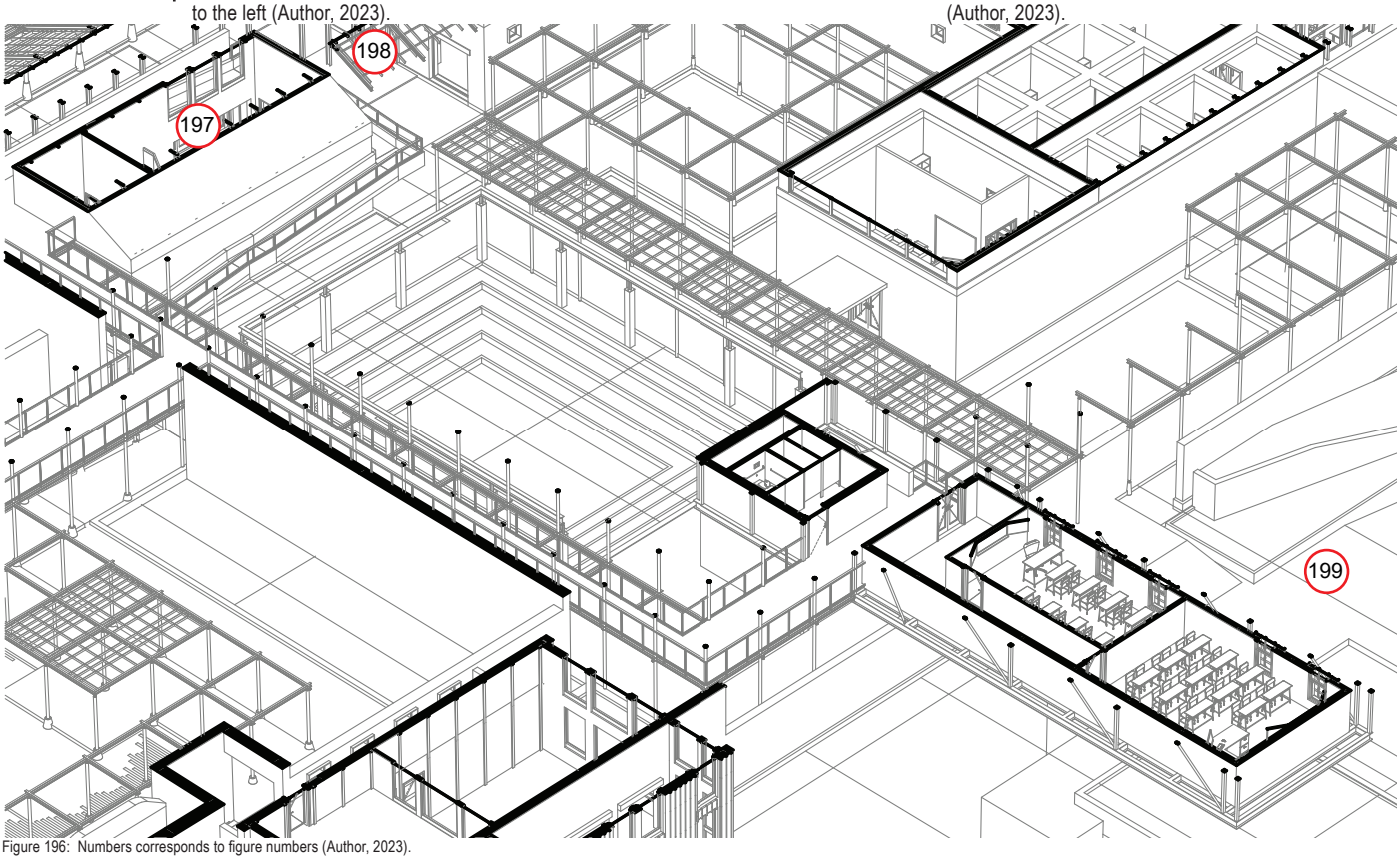
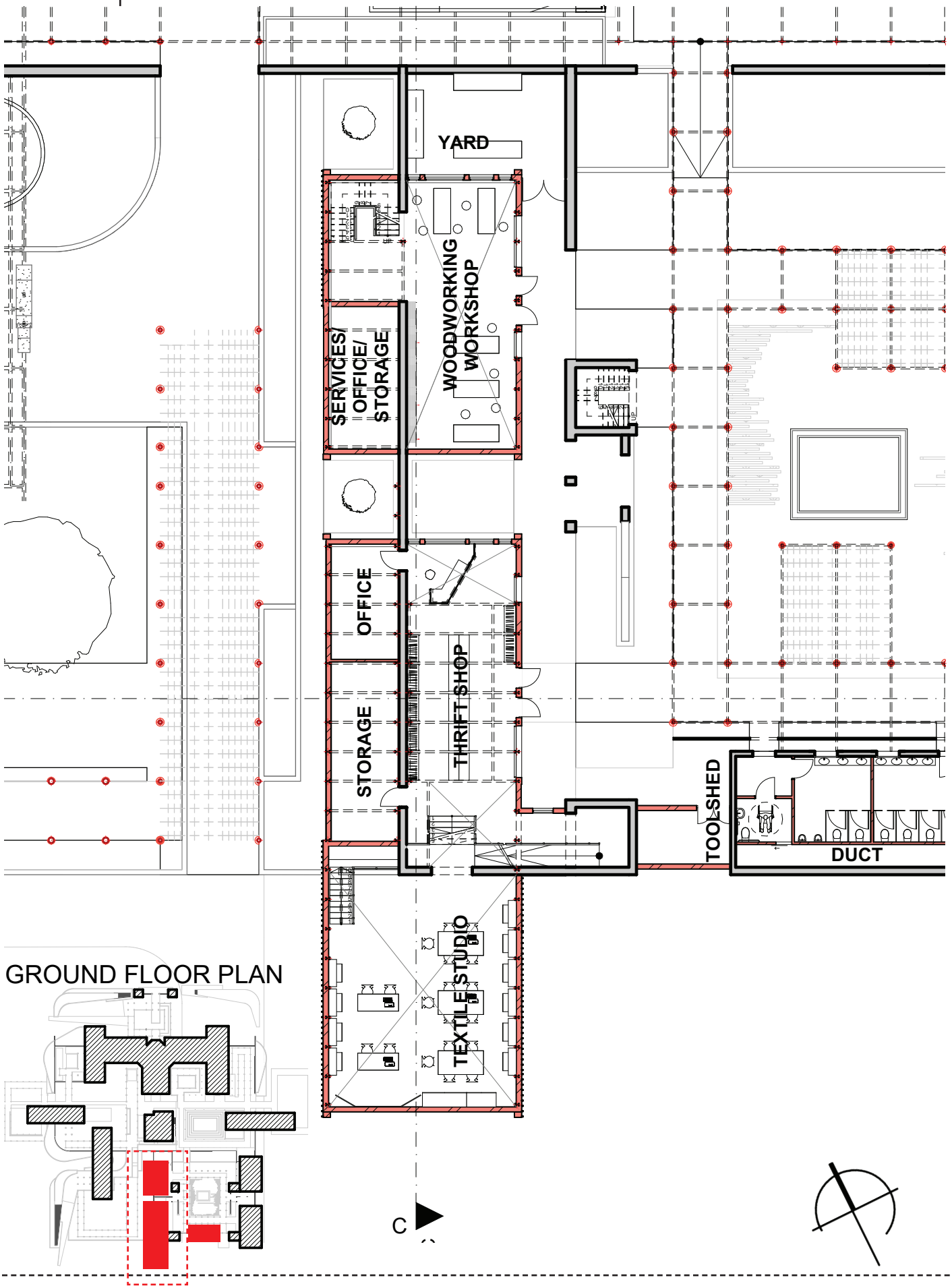
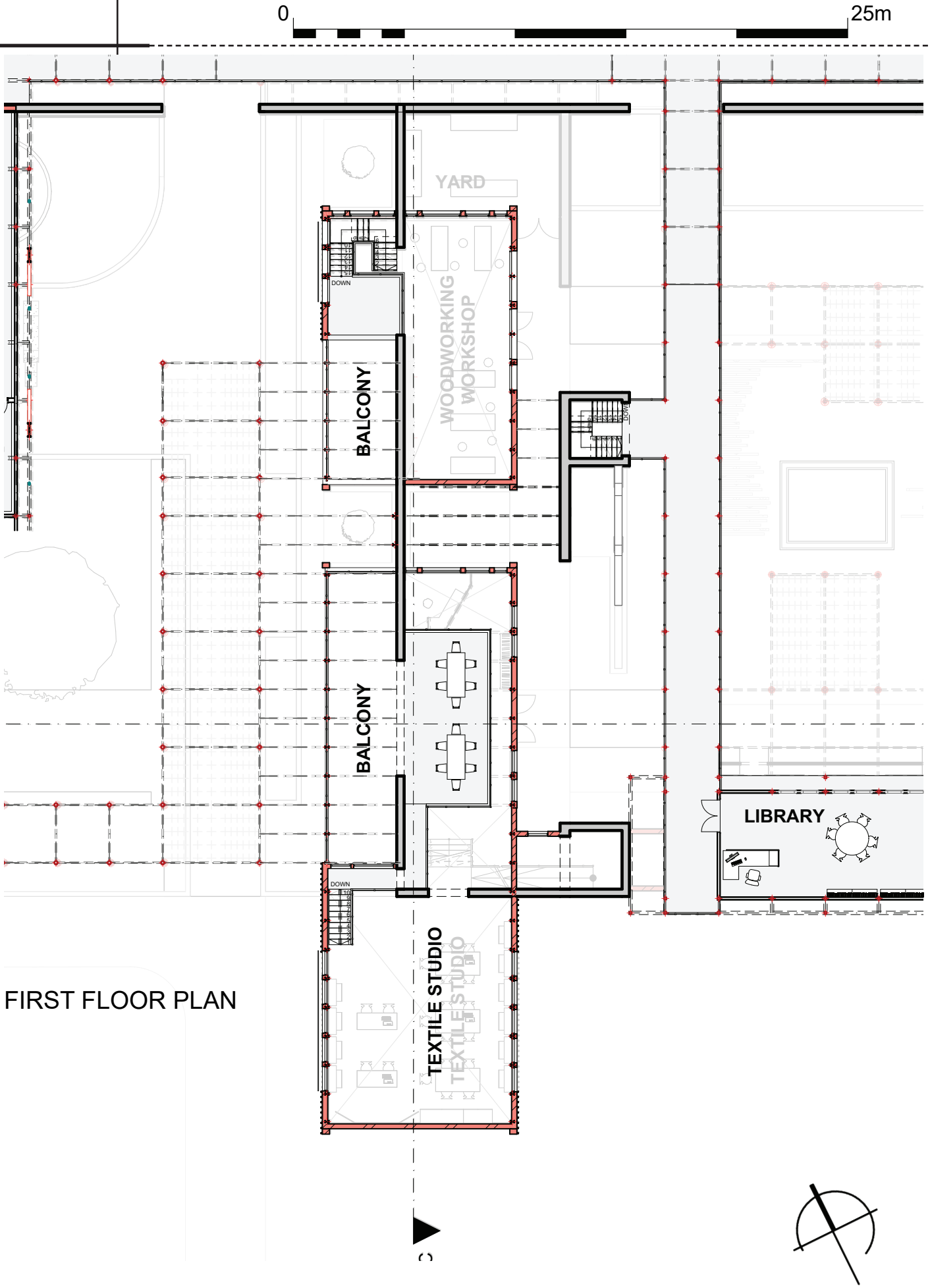


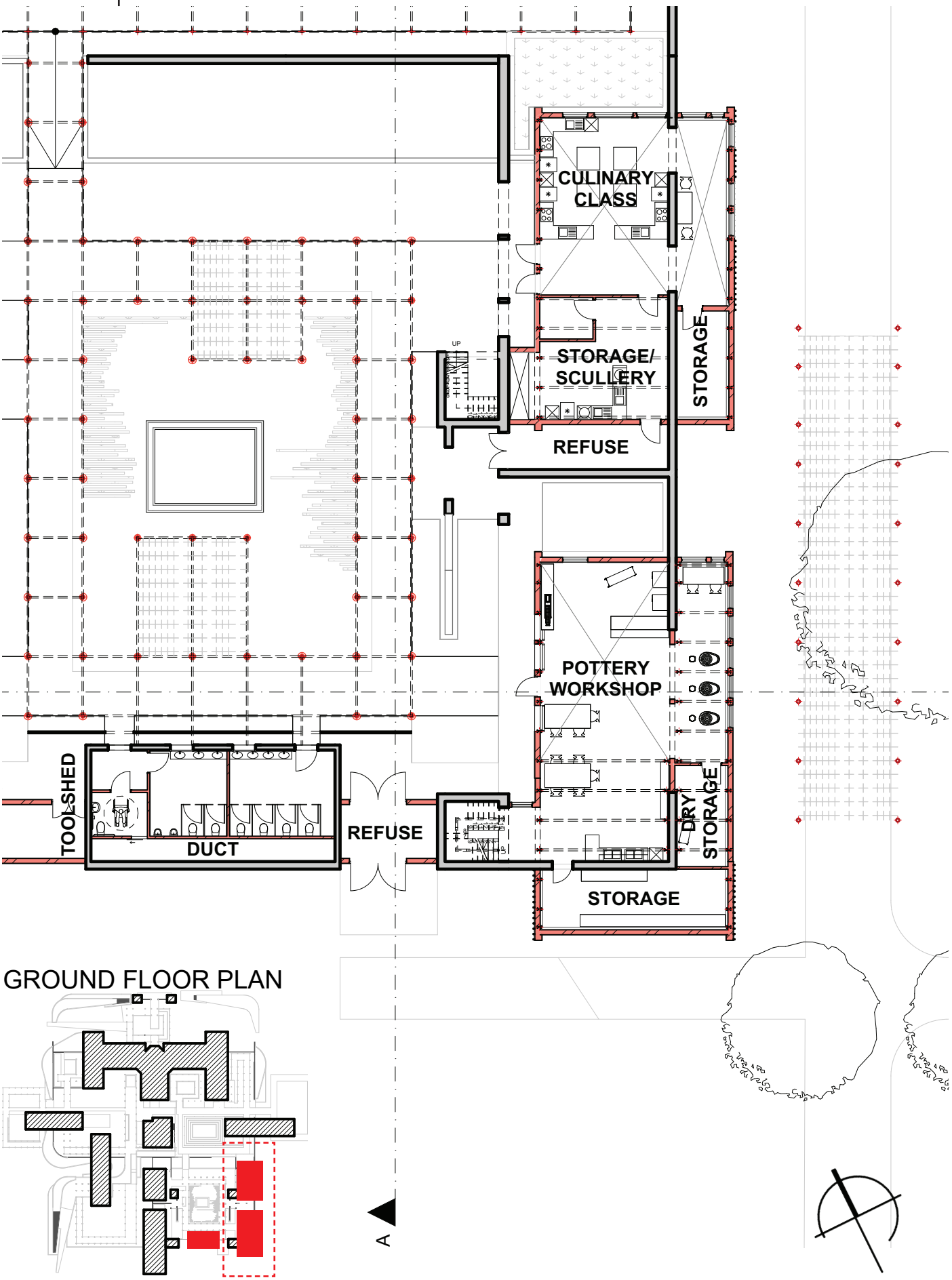
Figure 196: Numbers corresponds to figure numbers (Author, 2023).



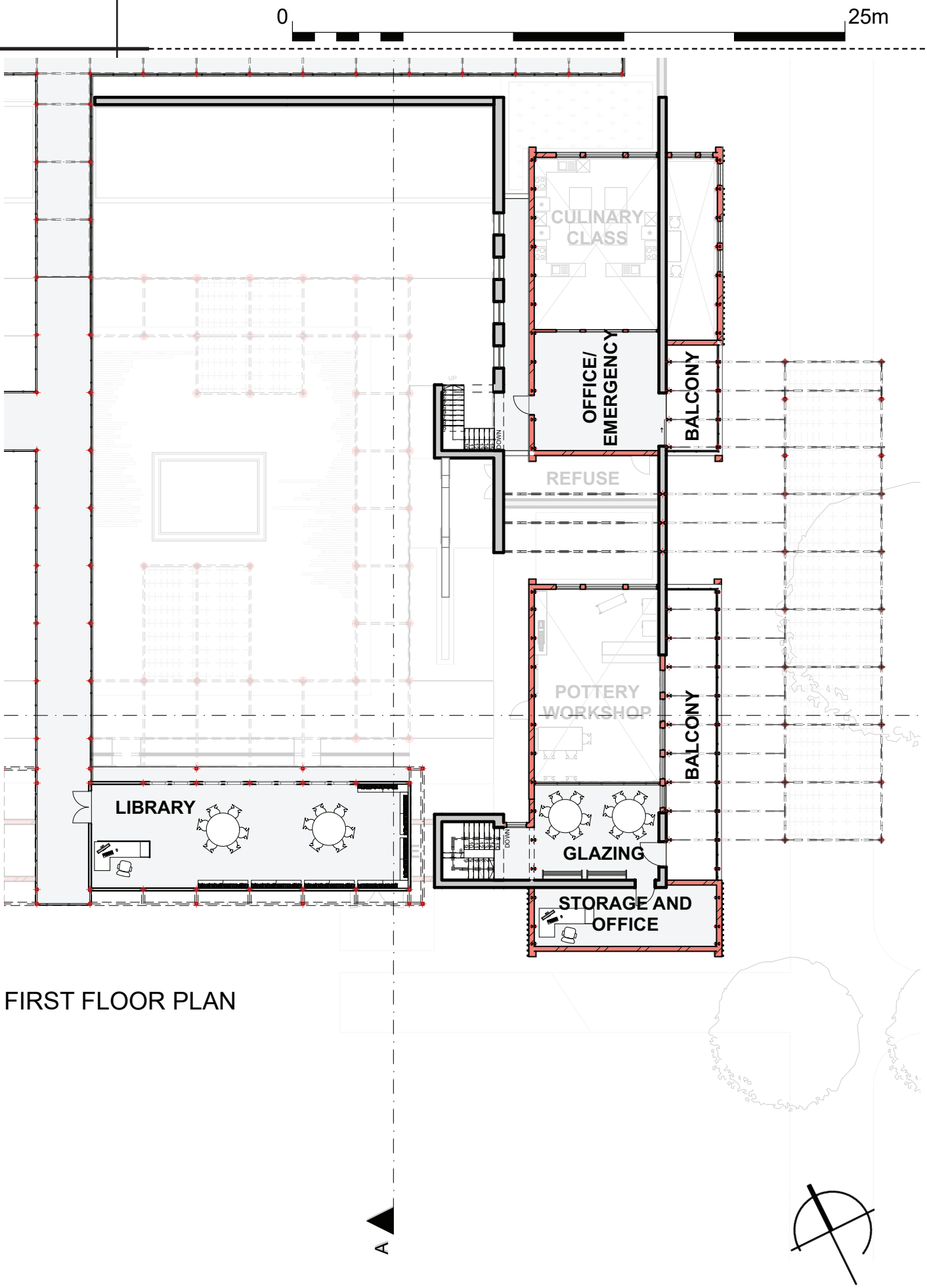
GROUND FLOOR PLAN



FIRST FLOOR PLAN



GROUND FLOOR PLAN



FIRST FLOOR PLAN



Figure 200: The textile studio where people can partake in beading, weaving, sewing or wirework (Author, 2023).



Figure 201: The thrift shop that sells donated clothes that is repaired in the textile studio (Author, 2023).



Figure 202: Woodworking workshop. (Author, 2023).



Figure 203: Pottery workshop (Author, 2023).

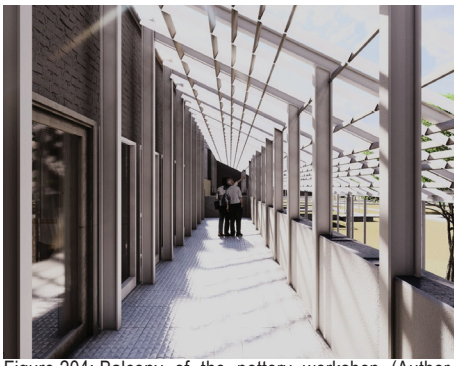


Figure 204: Balcony of the pottery workshop (Author, 2023).

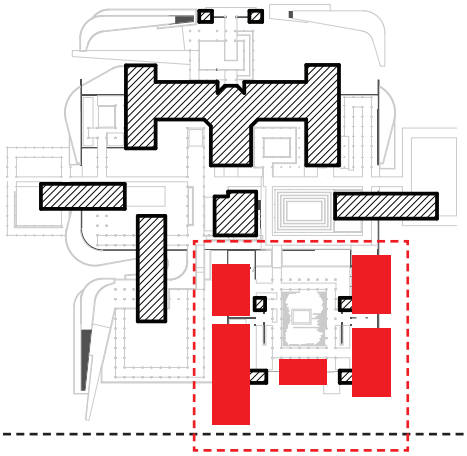




Figure 205: The library (Author, 2023).



Figure 206: Outside the entrance of the libray (Author, 2023).



Figure 207: The courtyard that surrounds the traditional centre with the existing water feature in the centre (Author, 2023).



Figure 208: Looking at one of the existing towers in the southern courtyard (Author, 2023).

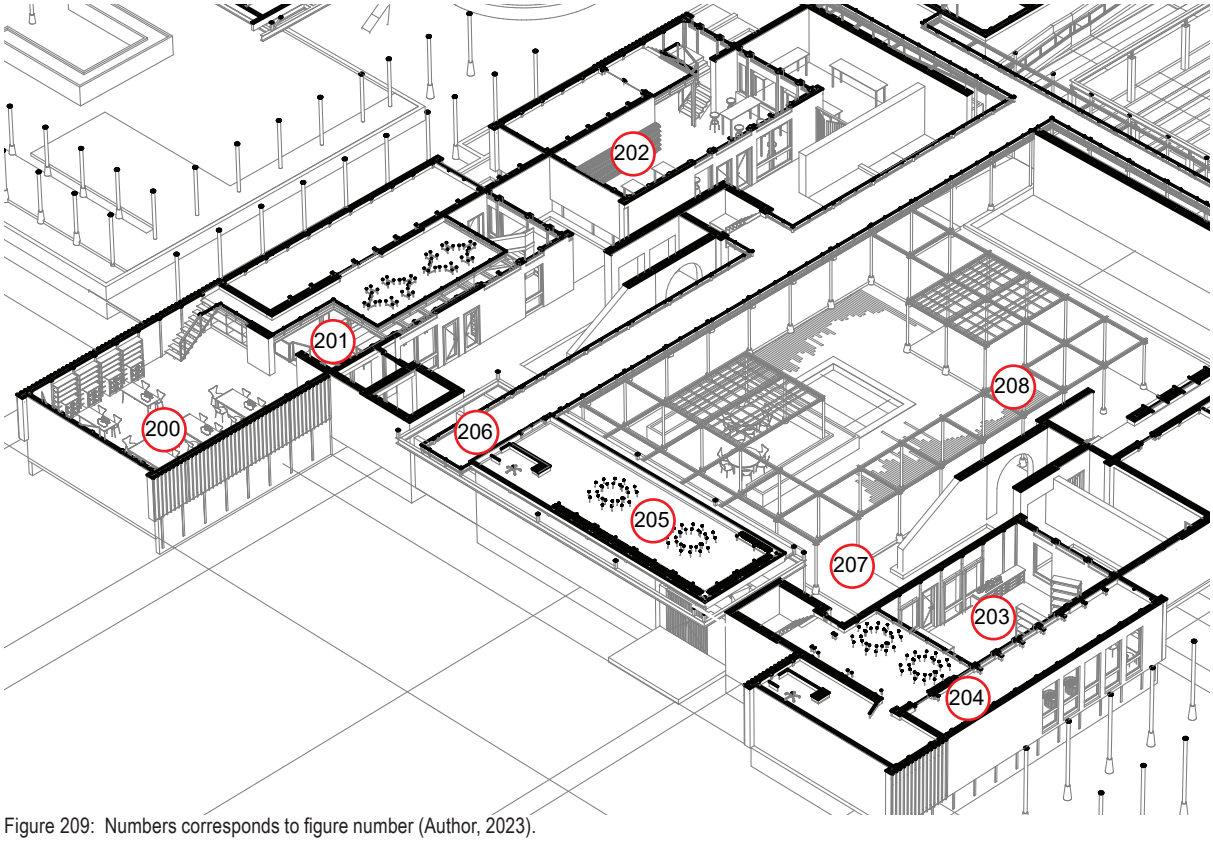
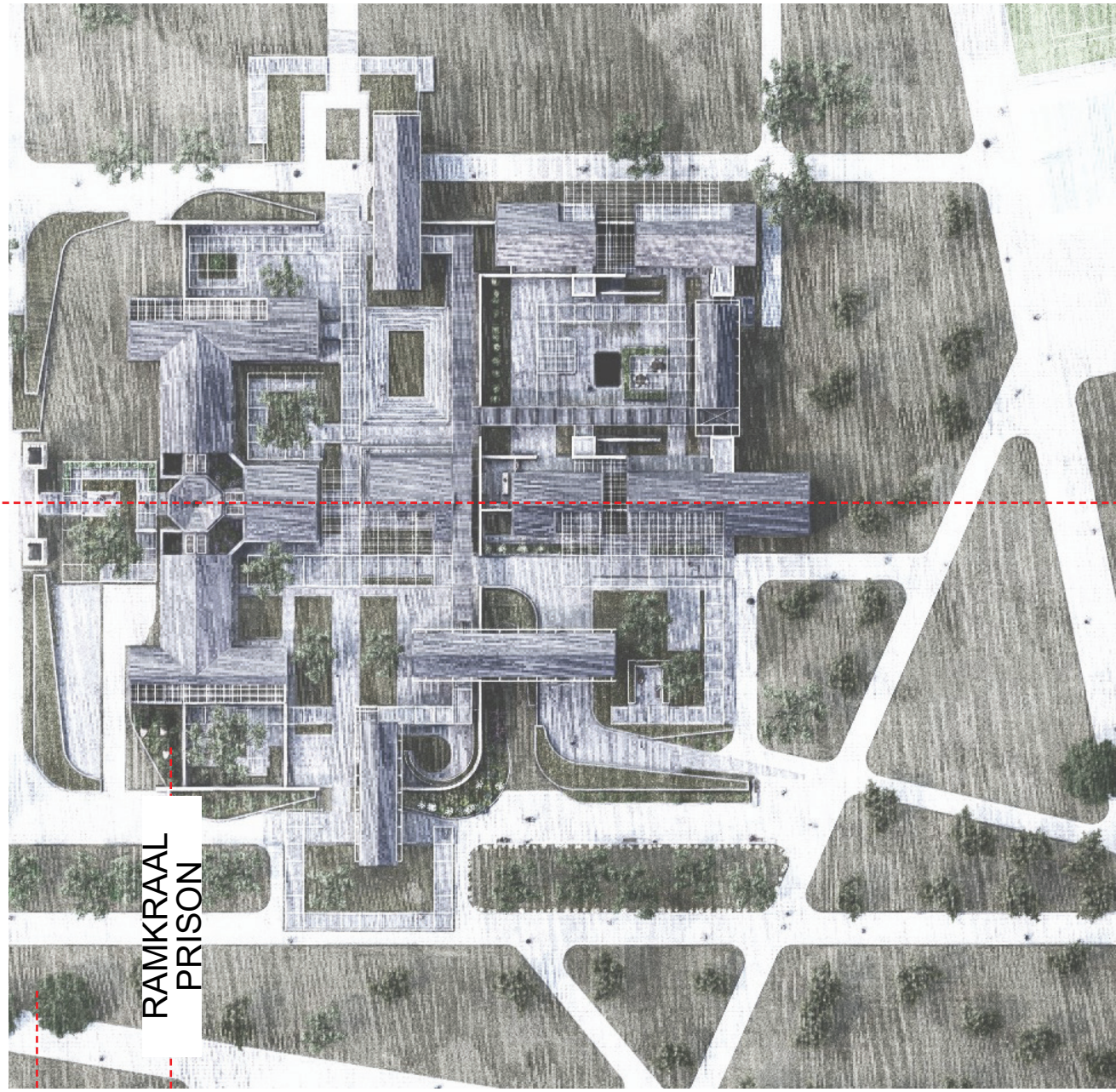
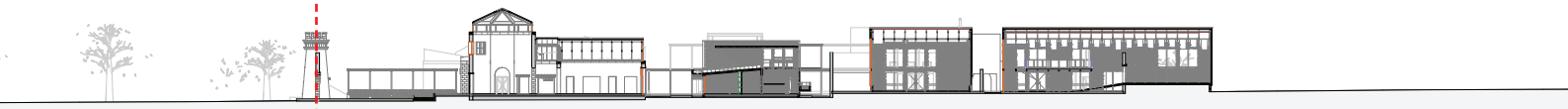
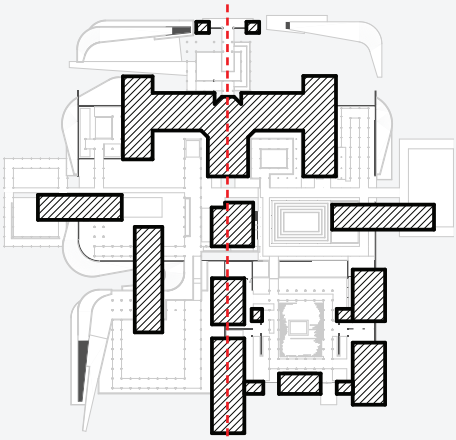


Figure 209: Numbers corresponds to figure number (Author, 2023).

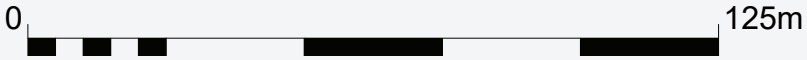


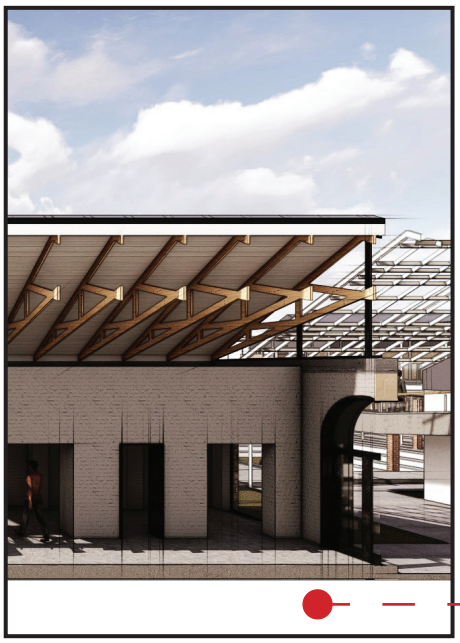


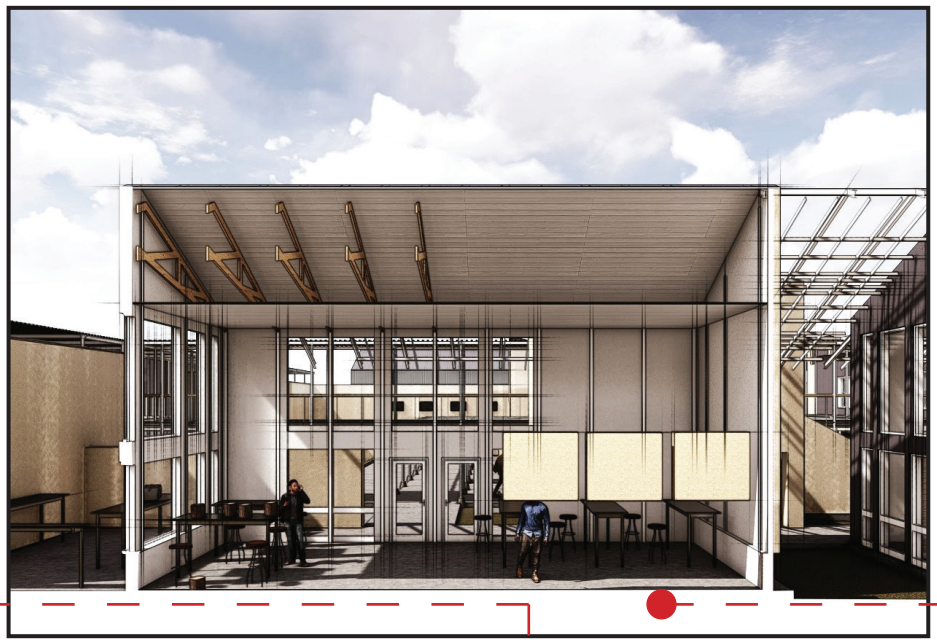


SECTION C-C


BATHO


0
125m

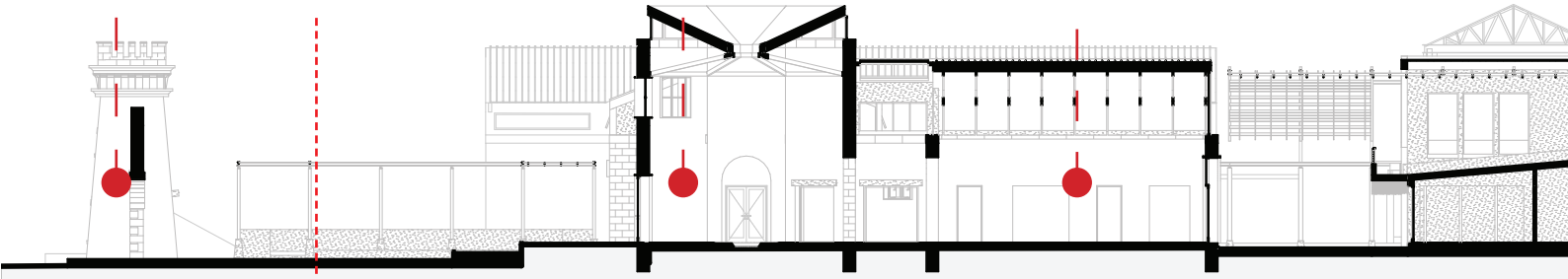


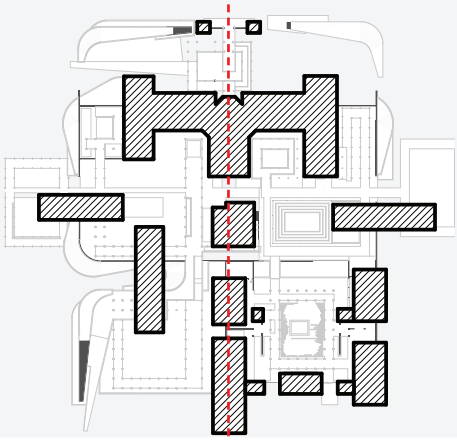


EXISTING TOWER THAT IS USED AS AN URBAN ARTEFACT FOR THE AREA, OR A RECOGNISABLE ELEMENT.

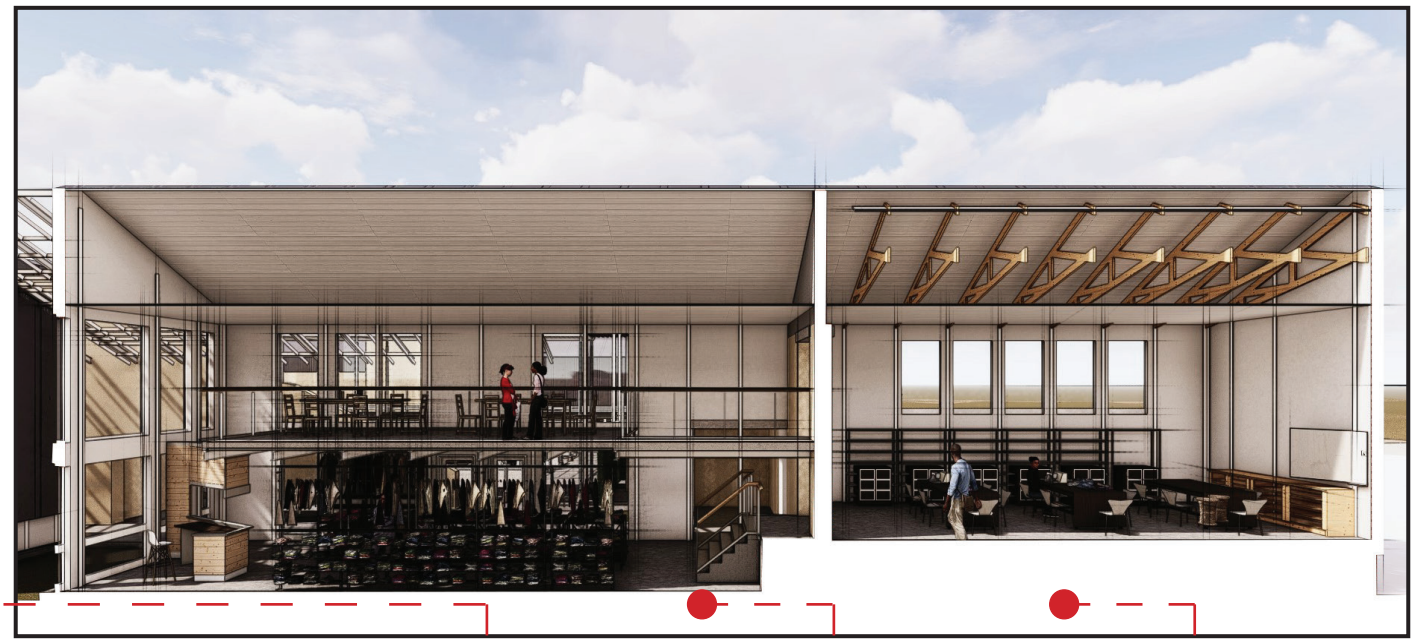
ADMINISTRATION
- Offices
- Boardroom
- Student enrollment
- Kitchenette
- Security Room

EXHIBITION SPACE FOR LOCAL ARTIST





SECTION C-C

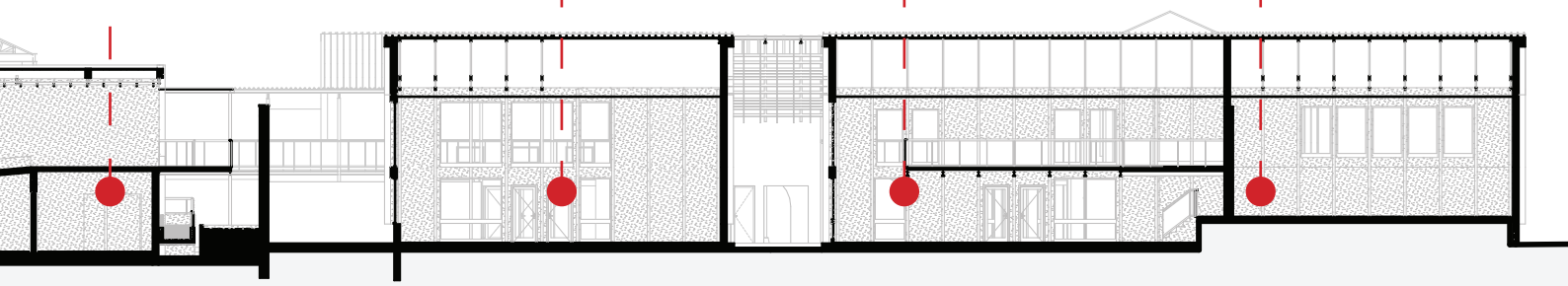


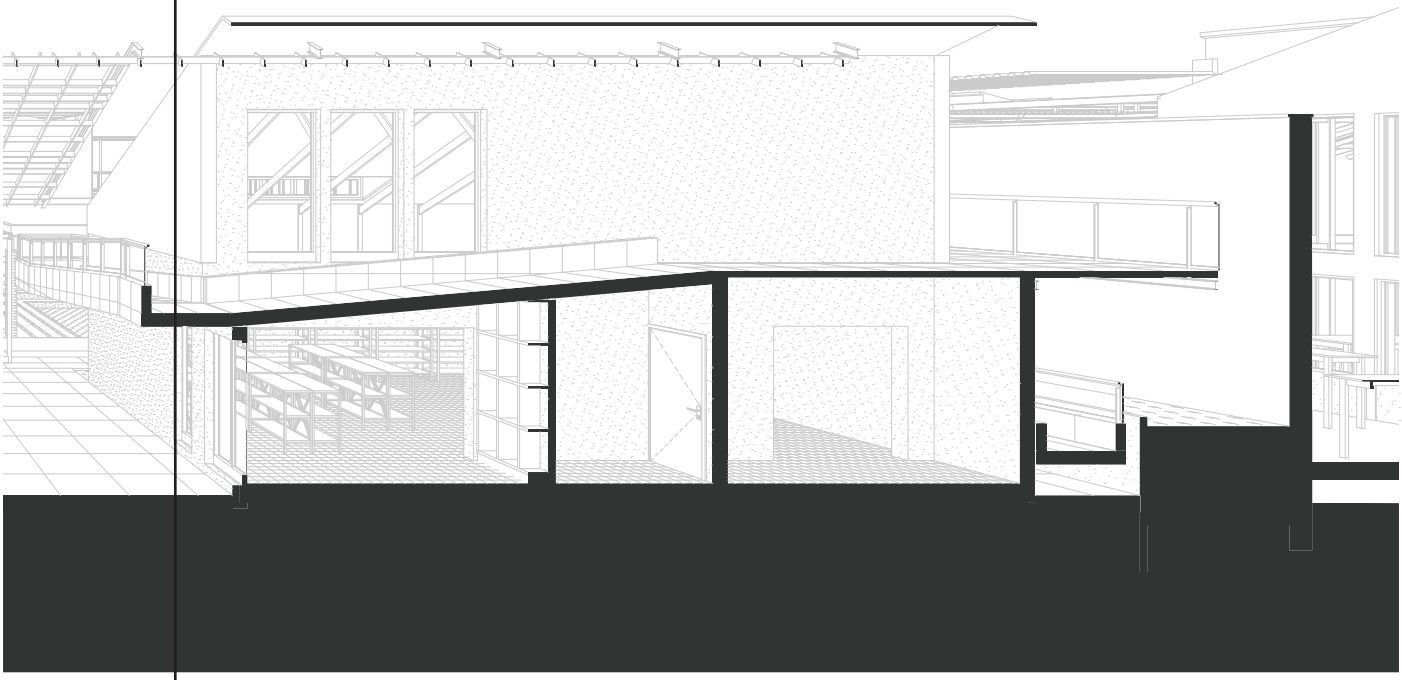
CENTRAL SHOP
The shop would sell goods produced by the centre.

WOODWORKING WORKSHOP

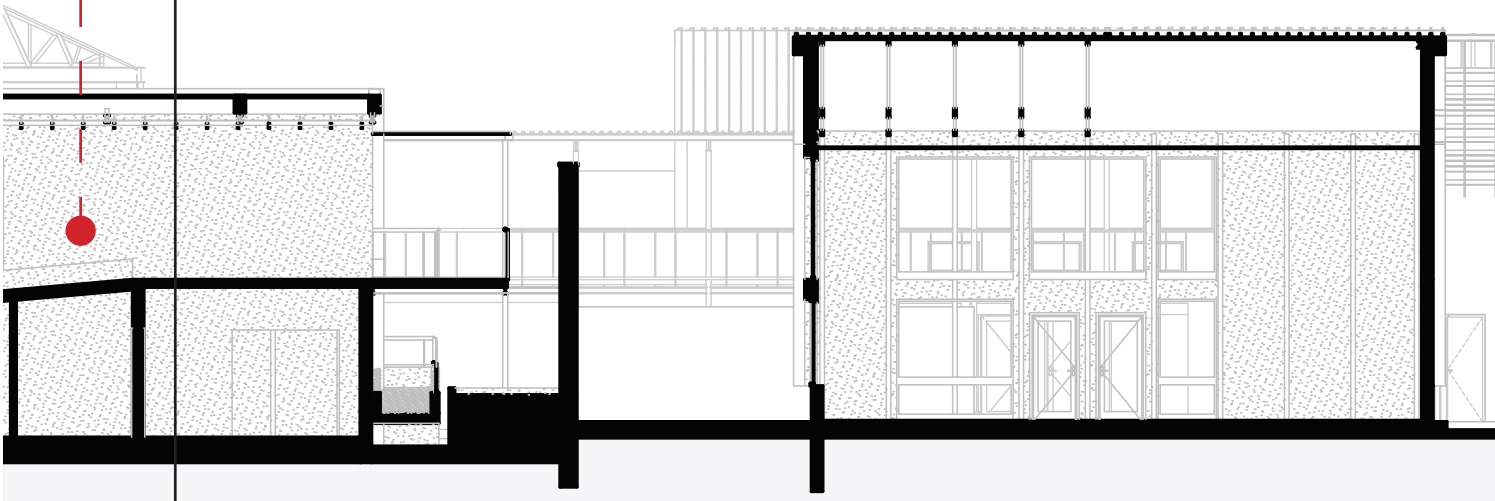
THRIFT SHOP

TEXTILE STUDIO





RAMP TO FIRST FLOOR



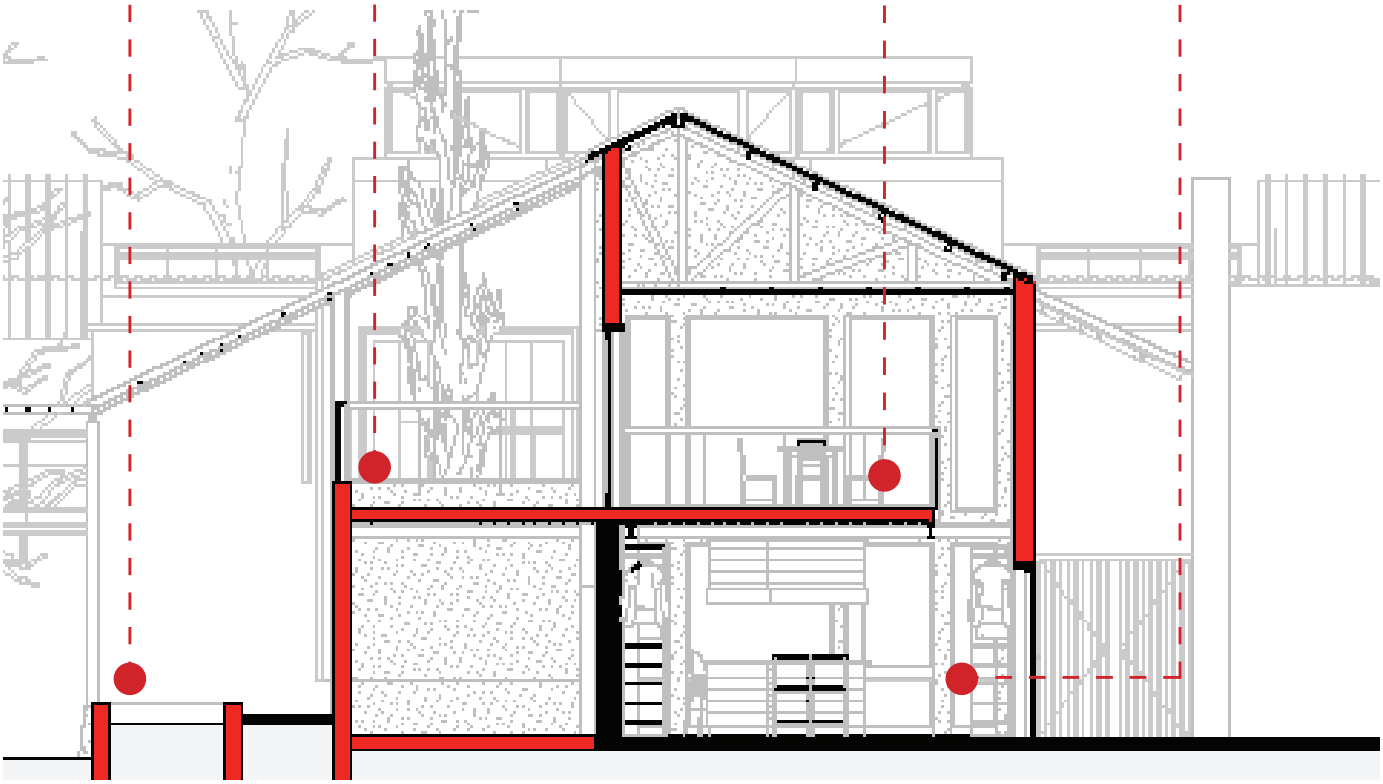
SECTION C-C

A softer and greener edge where people can gather within the edge.

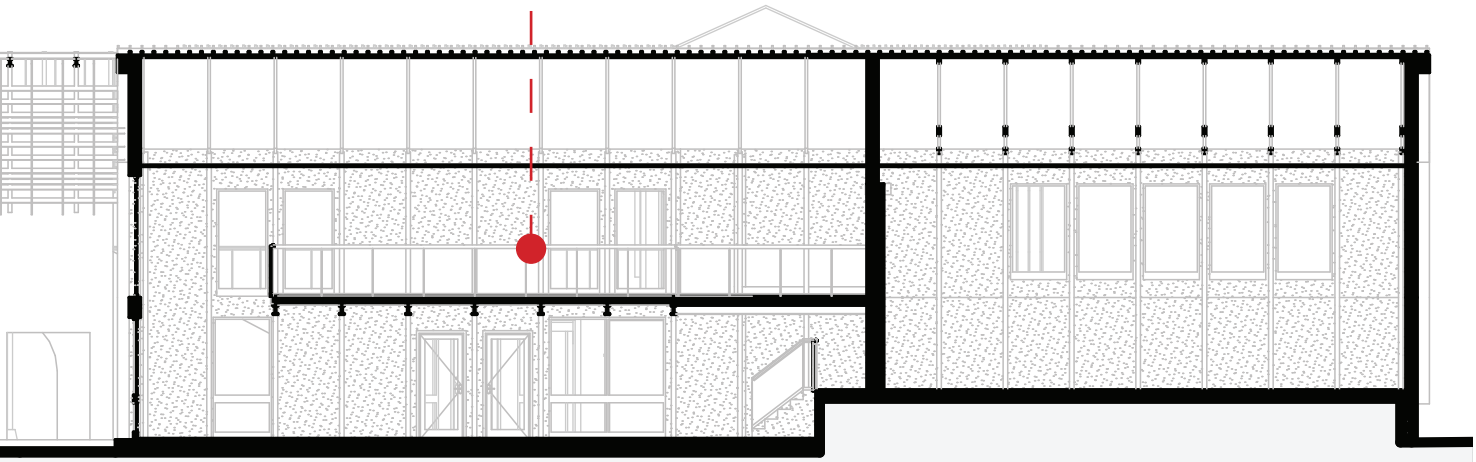
Balcony that crosses through an existing, therefore going from inside to outside. People pass through the edge that was previously extroverted.

Mezzanine floor that creates a visual link with the floor below, as well as the people.

A shop that sells repaired clothes that was donated to the centre.

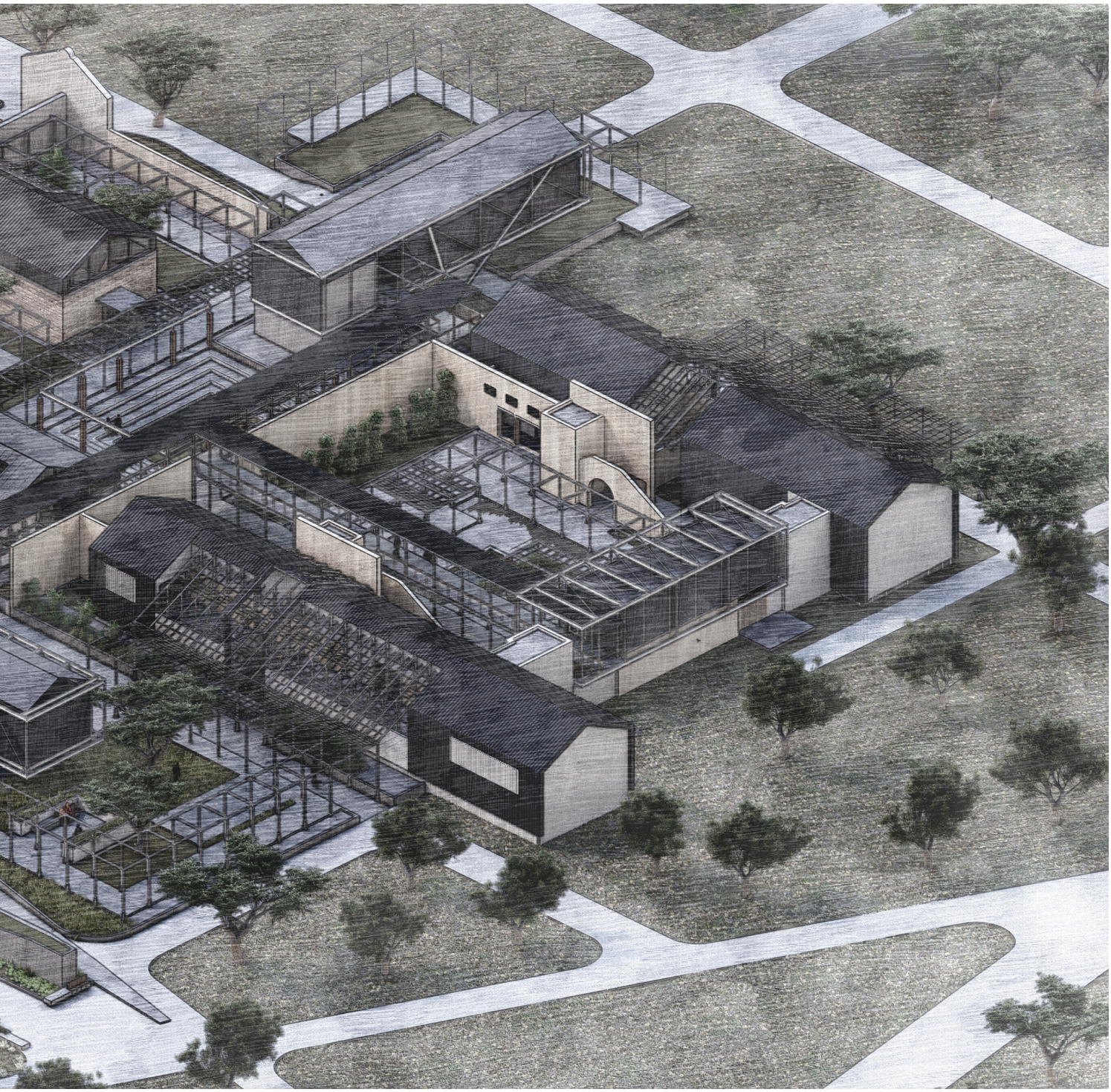


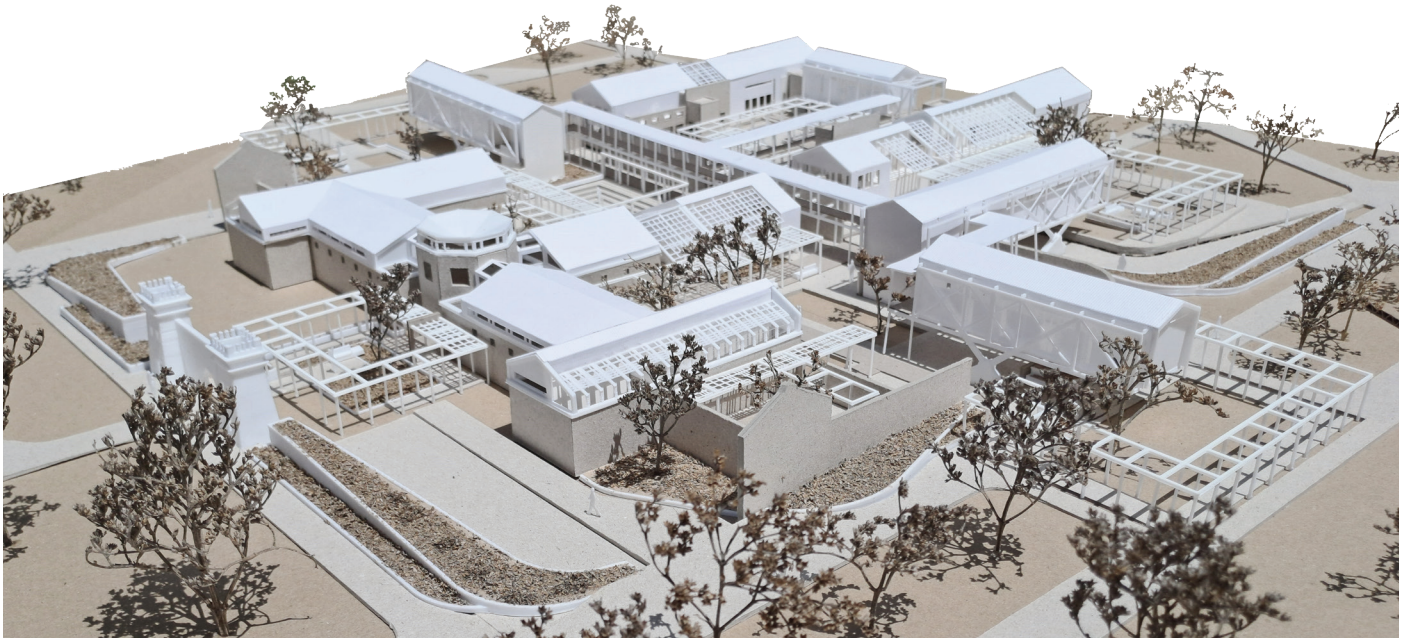
SECTION B-B

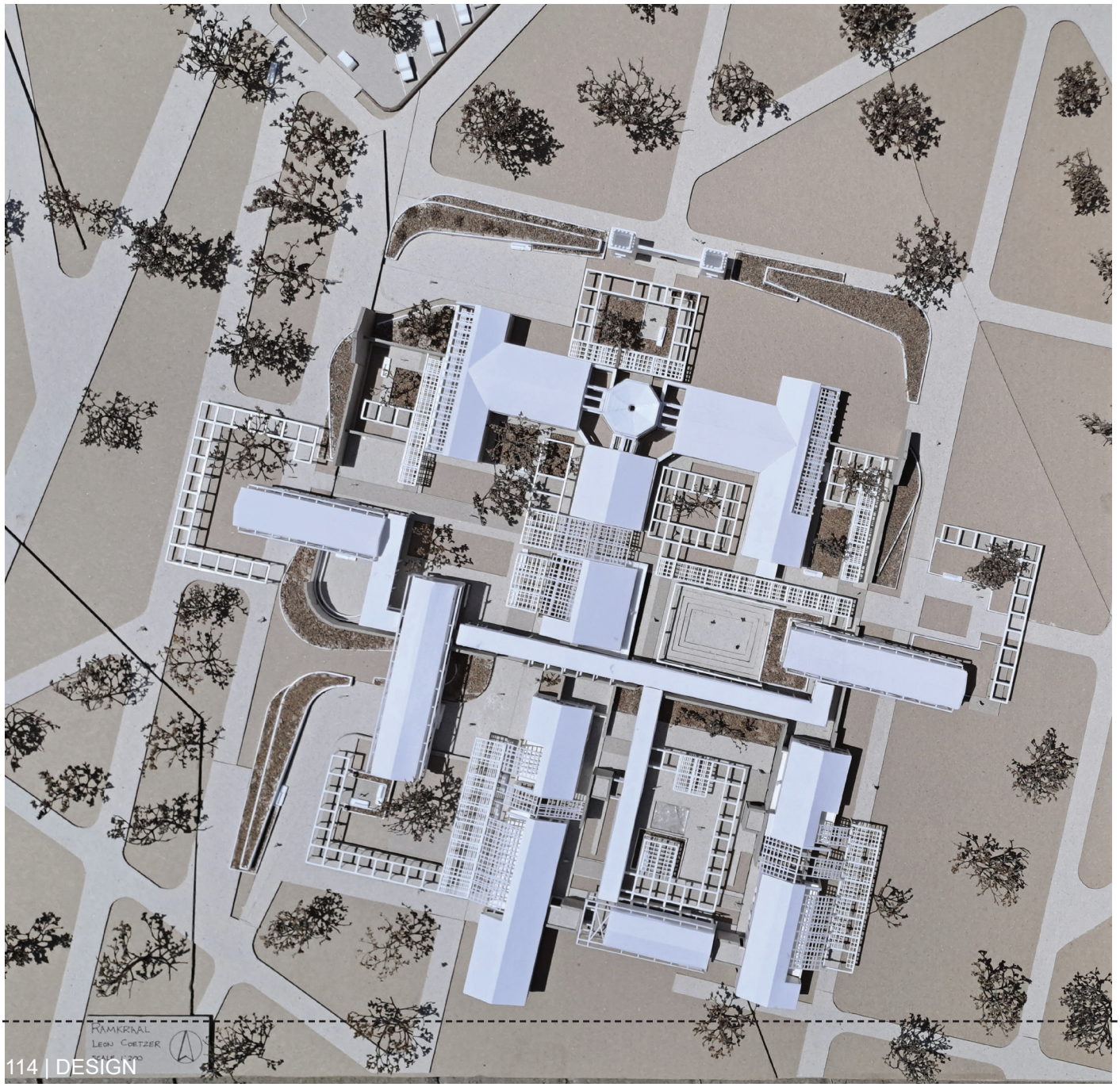




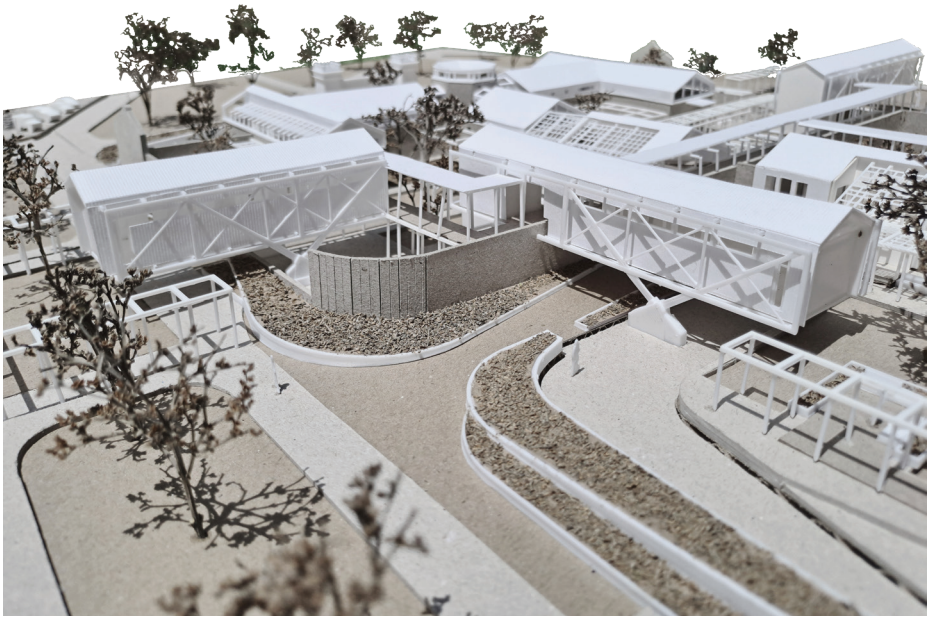
RENDERED AXONOMETRIC



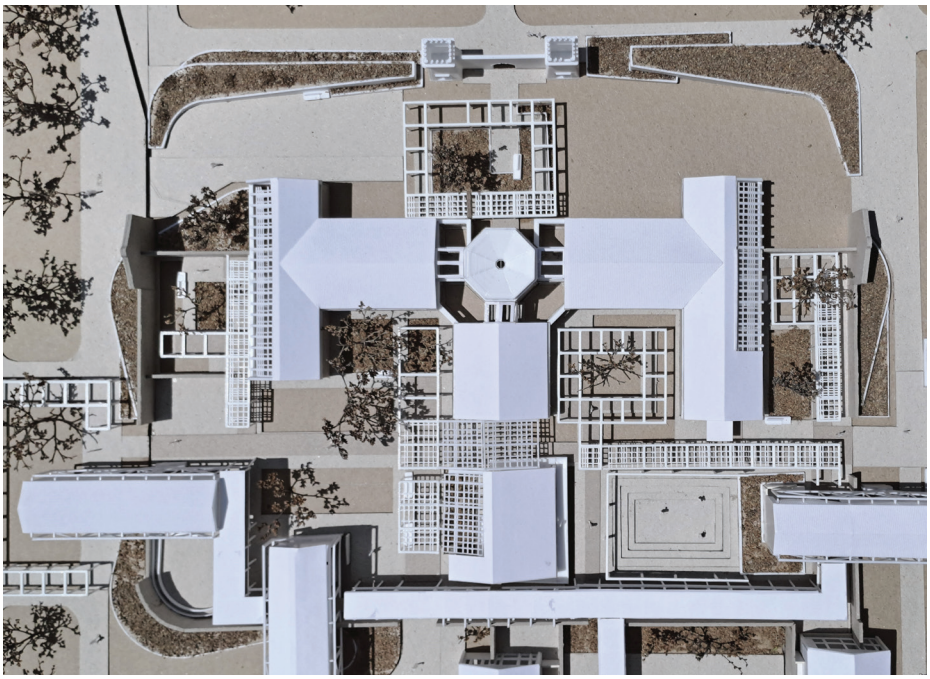


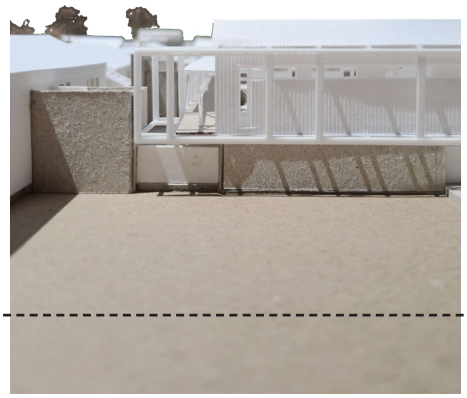

RAMKRAAL
LEON COETZER

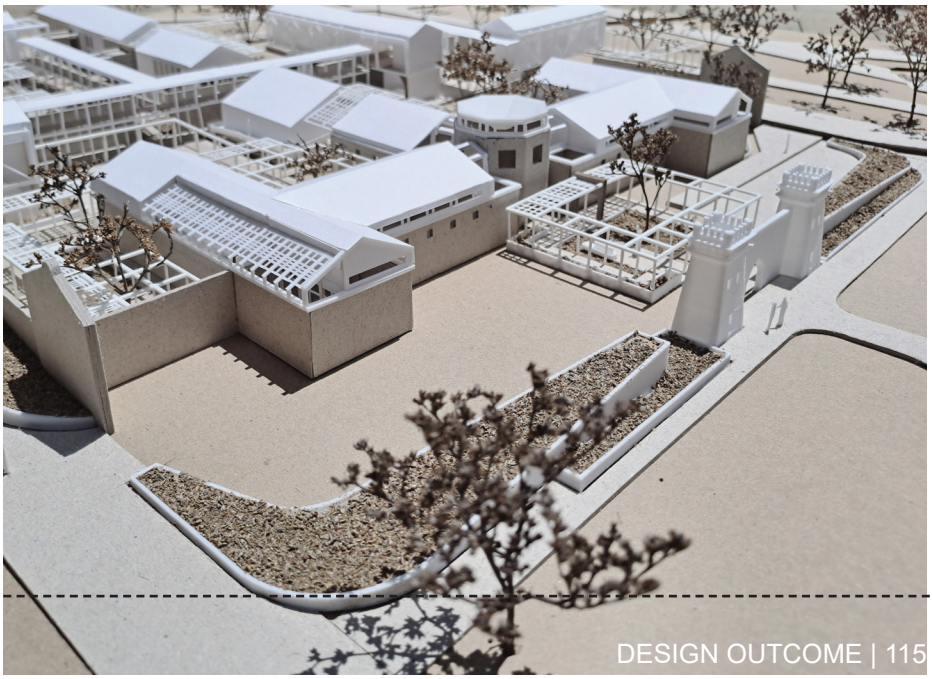


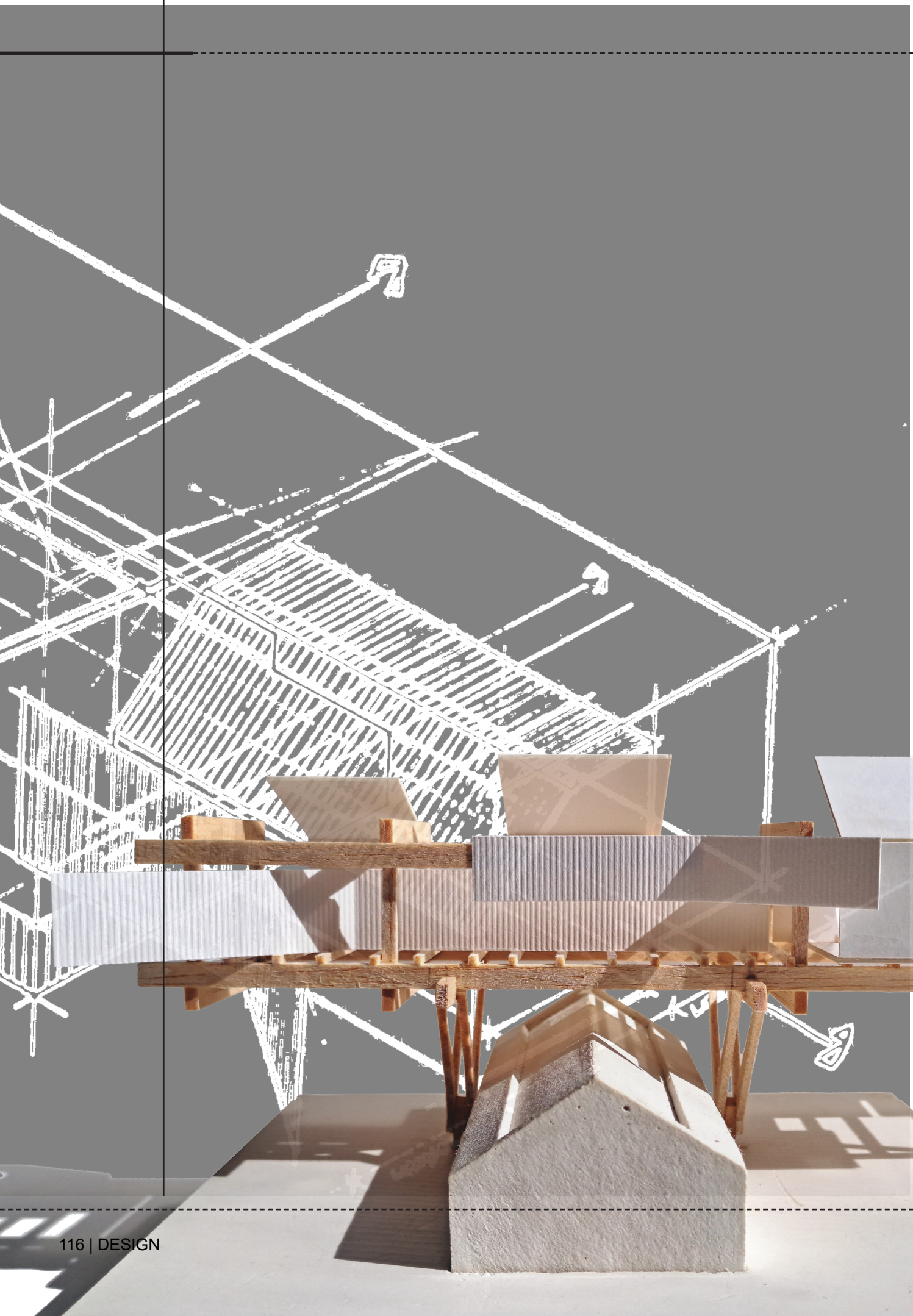












4.4 TECHNICAL REPORT

4.4.1 INTRODUCTION

The technical report focuses on the structural qualities of the proposals. The construction touchstone serves as the initial step, but the primary emphasis lies on the existing structures and the incorporation of new elements. While the core of Ramkraal Prison remains unchanged, other parts of the abandoned prison complex are removed to create open spaces and new facilities are introduced to accommodate additional functions. The cantilevering structures and new additions are designed to house these functions; thus, this technical report provides insight into the functioning of these structural systems.

4.4.2 CONSTRUCTION TOUCHSTONE

The construction touchstone (figure 210) represents the layering of space within a lived matrix. The lived experience of the interacting people socially constructs this experienced space. The tectonic cantilevering structure is positioned above the existing prison, touching lightly and reaching beyond the established boundaries. It plays with the contrast of exposure and concealment while moving through spaces. However, the touchstone does not accurately depict the project's essence at the end; it is instead a realisation that being as sensitive as possible is not always an appropriate approach. The floating structure is still integrated into the proposal, but instead, it cantilevers over the existing perimeter wall.

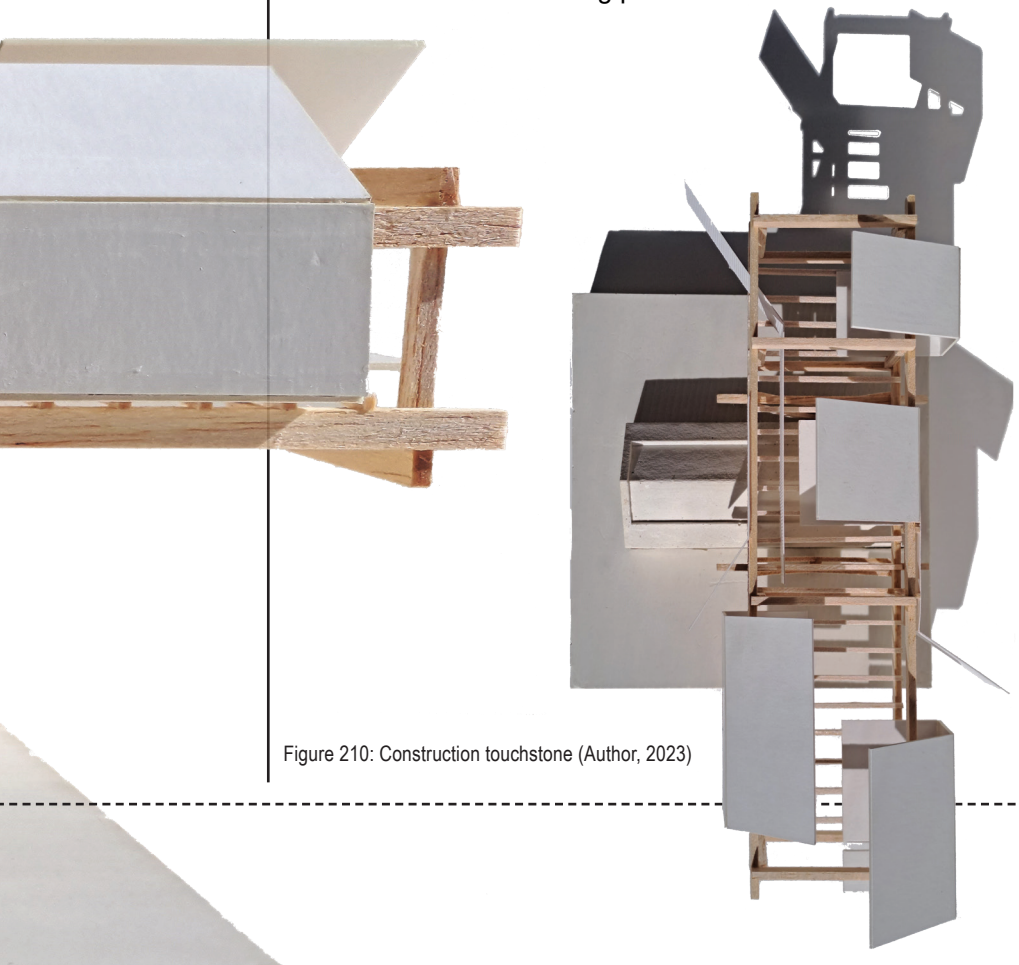


Figure 210: Construction touchstone (Author, 2023)

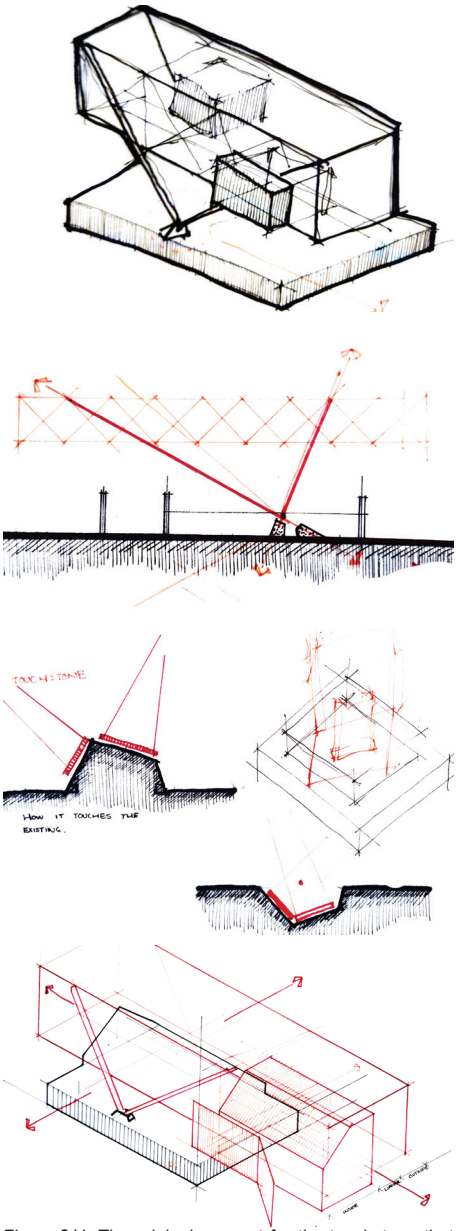


Figure 211: The original concept for the touchstone that inspired the cantilevering structures (Author, 2023)

4.4.3 EXTRACTING AND RETAINING THE CORE OF RAMKRAAL PRISON

Of the existing structure, later additions such as the admin block (figure 215), service house (figure 216) and garage (figure 217) are removed to accommodate a new function and create more open and community-catalysed spaces. The demolition plan (figure 212) and before and after axonometric drawings (figure 218) illustrate what walls are removed or punctured.



Figure 213: (van Tonder, 2023).



Figure 214: (Author, 2023).

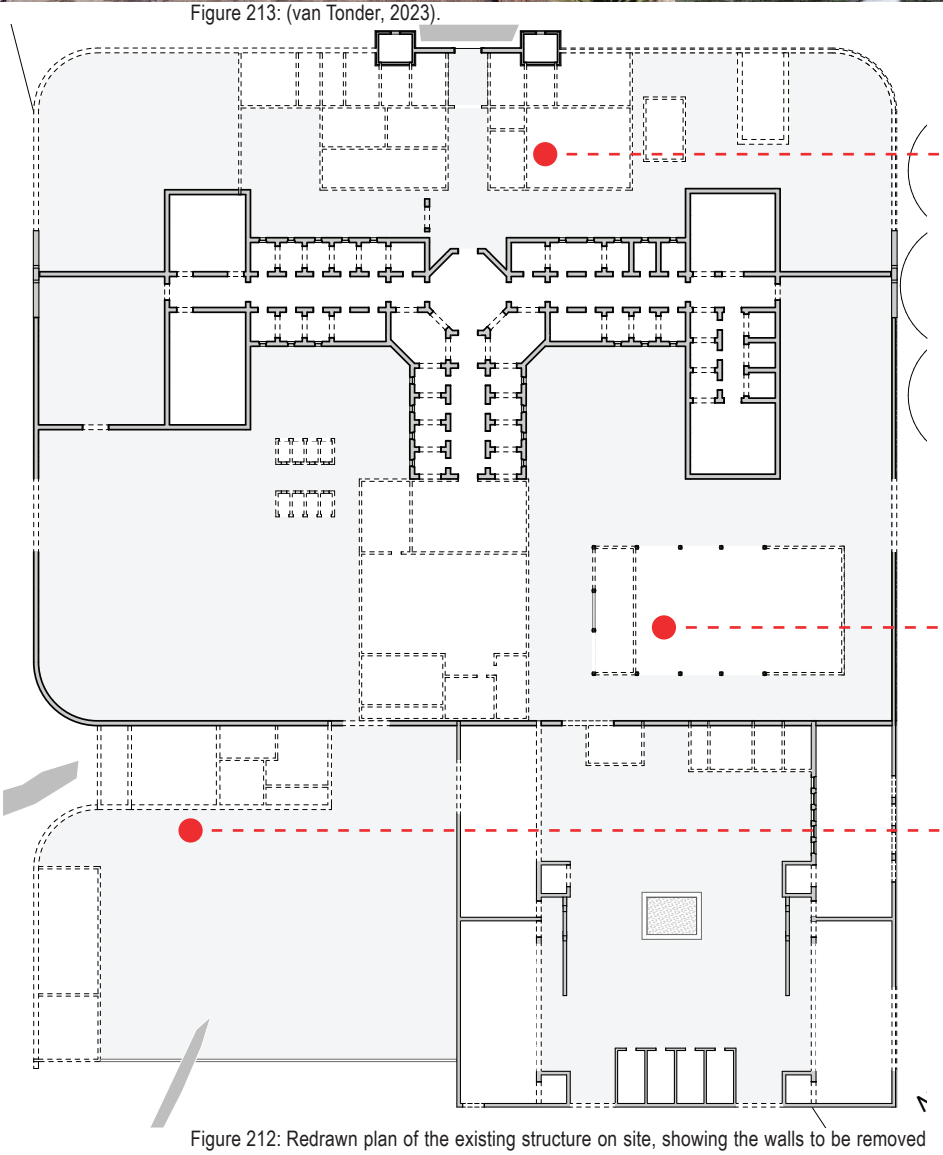


Figure 212: Redrawn plan of the existing structure on site, showing the walls to be removed in dashed lines (Author, 2023).



Figure 215: Author, 2023)



Figure 216: Author, 2023)



Figure 217: Author, 2023)

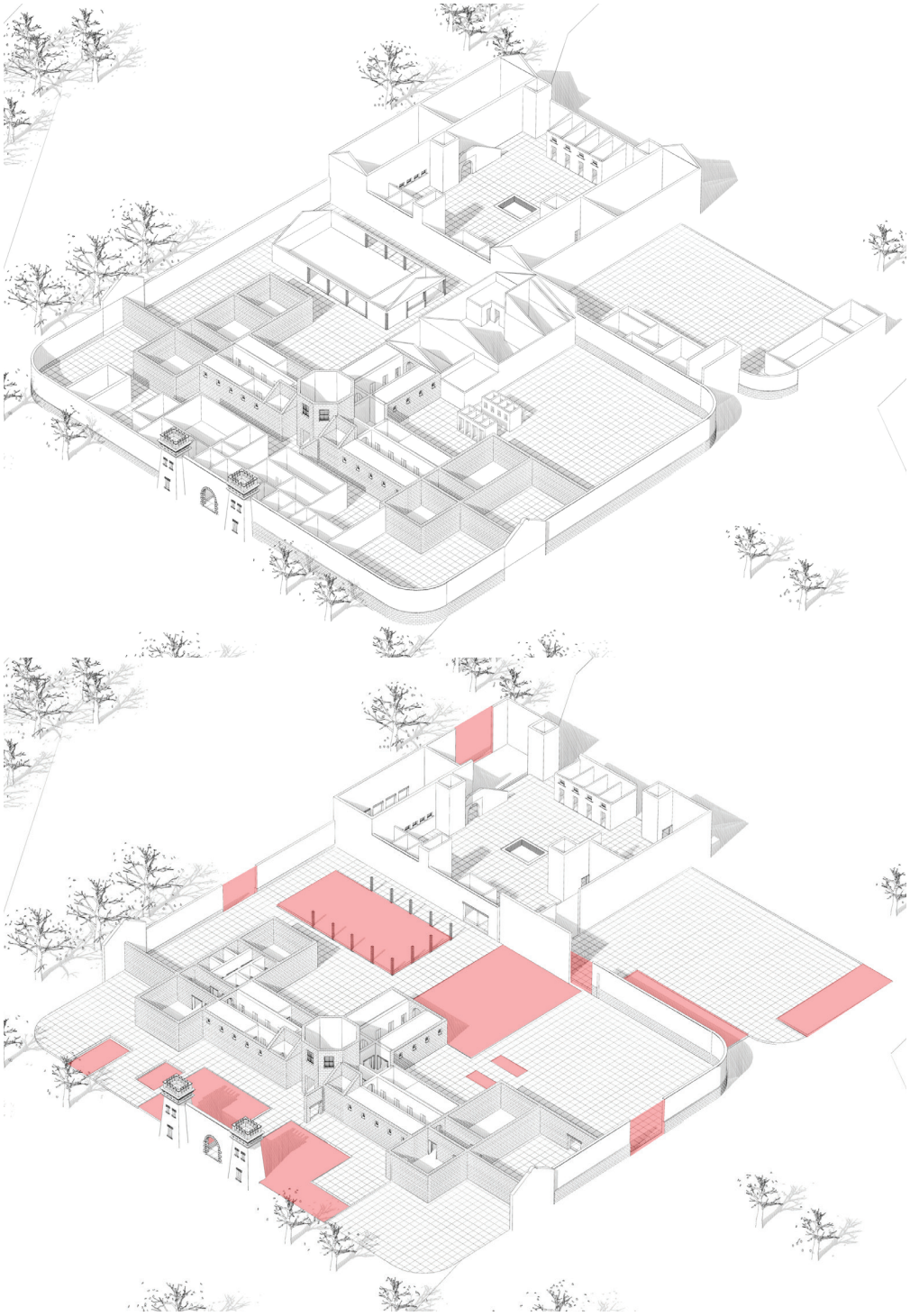


Figure 218: Before (top) and after (bottom) axonometric showing what was removed and how spaces are opened as a result (Author, 2023).



Figure 219: Retaining the towers as an urban artefact and removing the walls creates a open edge rather than an introverted edge (Author, 2023).

4.4.4 IN-BETWEEN AND INTERSTITIAL SPACE

The design of the courtyards and walkways (figure 221) has been thought out to ensure that all the different areas within the new skills development centre are connected. Using courtyards and walkways creates interstitial and in-between places that establish a cohesive relationship within a previously disjointed site. The steel beams and columns used in the walkway construction help mark spaces and provide cover.

The grid system used for the newly constructed courtyards draws inspiration from the dimensions of the original prison cells, measuring 2.6m by 2.4m. This grid system creates a sense of order and uniformity throughout the site while providing a sense of scale and proportion. In addition to the courtyards and walkways, a new concrete slab has been introduced to create a consistent level across the site. A new floor surface addresses uneven floor surfaces and numerous elevation changes, creating a more accessible environment for all users. This enhanced walkway configuration is particularly beneficial for individuals with disabilities or those reliant on wheelchairs. Therefore, the courtyards and walkways, with the aid of ramps, create a cohesive and accessible environment that facilitates circulation and connectivity among all functions within the site. For these functions to operate, essential services must be introduced to the site.

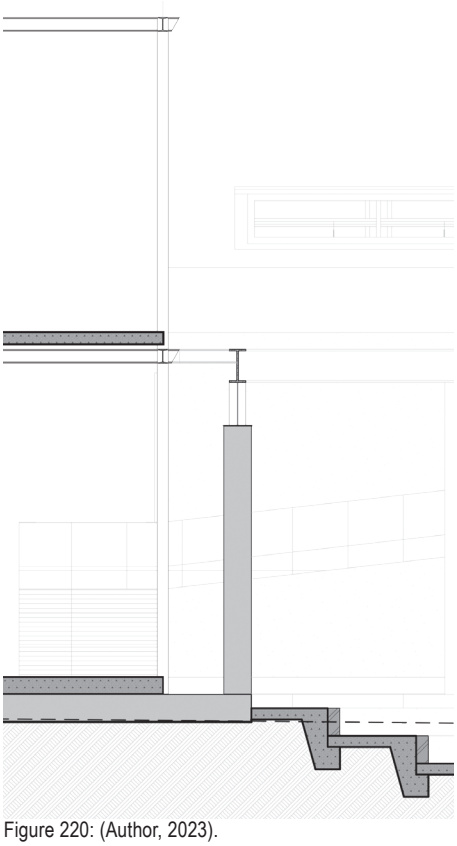


Figure 220: (Author, 2023).

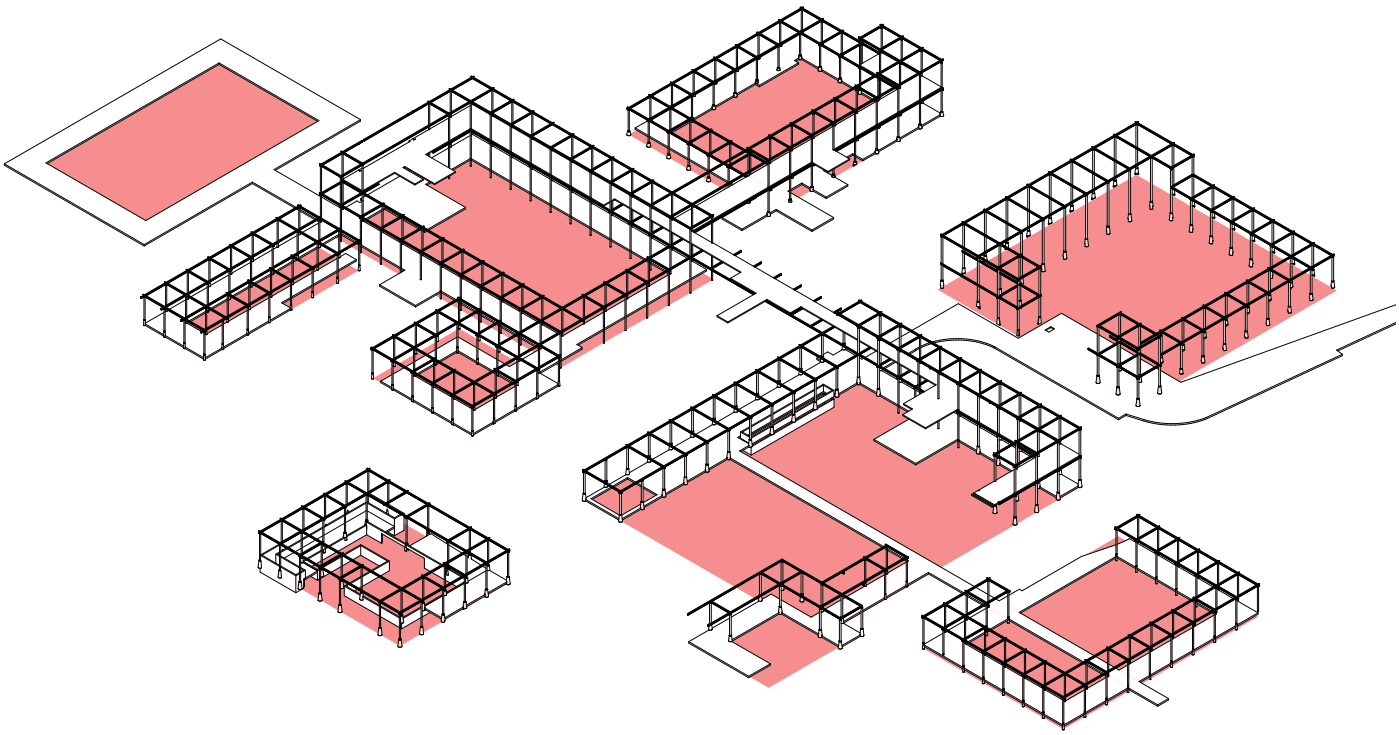


Figure 221: The proposals northern edge has been opened and raised garden bed create a softer and more welcoming edge (Author, 2023).

4.4.5 SERVICES

Some aspects that must be addressed and explained include soil conditions, electricity, drainage, stormwater, and parking. Following a discussion with the engineer, it was noted that the prison site has a mixture of soil conditions, with the possibility of clay in certain areas. As a result, raft foundations will be utilised to construct new walls instead of strip foundations. It is worth mentioning that the original prison foundation, particularly the sandstone walls, may have been built on a bedrock foundation back in 1893. Bedrock foundation requires deep excavation to reach solid rock below the surface material. It is unknown as to how deep the foundation is, therefore, it is not advisable to excavate near the main prison walls or else the existing sandstone could crumble or weaken the existing walls.

Electricity, drainage and water need to be installed since the abandoned prison complex does not have these facilities. The municipality will provide the primary electricity source, except for some solar panels that will be installed for the computer room and maker space to combat load-shedding, as 3D printers and laser cutters cannot function with an inverter or UPS (Uninterruptible power supplies). The solar panels would just be used for lighting and the charging of laptops, since most 3d printers can be paused while there is loadshedding and be resumed once the power is back on. The pottery studio will also utilise a gas kiln, while the culinary class will have access to gas stoves and ovens.

The municipality will supply water, and the drainage, including stormwater, will be directed towards the main sewerage lines in Fort Street due to the downward slope of the site towards the northeastern corner. Additionally, the site will feature three new parking lots (figure 222), with one located to the north (consisting of 19 parking bays), another to the southwest (also comprising of 19 parking bays), and the third to the southeast (comprising of 16 parking bays).

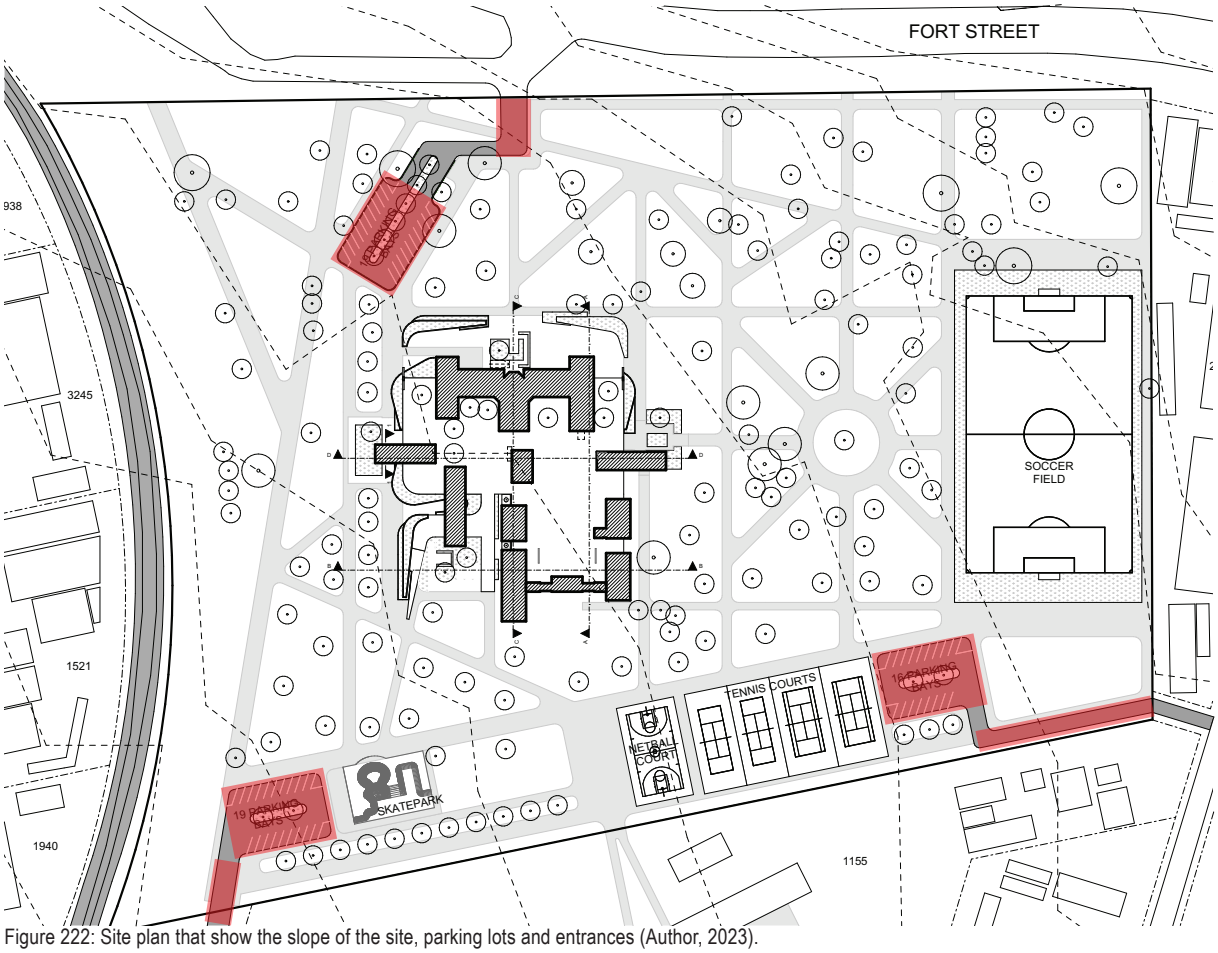


Figure 222: Site plan that show the slope of the site, parking lots and entrances (Author, 2023).

4.4.6 CONSERVING ARCHITECTURAL CHARACTER



The most conservation worthy part of the Ramkraal Prison consists of thick, 440mm walls that are still in good condition for the most part. Since the main prison walls are still intact, the spaces can be kept with slight alterations, such as puncturing the walls between prison cells to open the place, replastering, and painting. The top of the wall has crumbled slightly; therefore, to accommodate a new roof system consisting of masonry, steel and wood, a concrete ring beam must be constructed to support the roof to create a level surface for the new materials, as suggested by the engineer. The roof consists of Klip-Lok and plastic translucent sheets to bring light in. The exterior of the Old Granary Museum (figures 224-226) by GAPP Architects & Urban Designers was kept the same, while the interior space was changed. One of the design choices they made was to frame openings by using protruding steel black casing. Some existing places are kept open to create gardens within the prison wall.



Figure 226: The Old Granary Museum (Abdel, 2017: online).

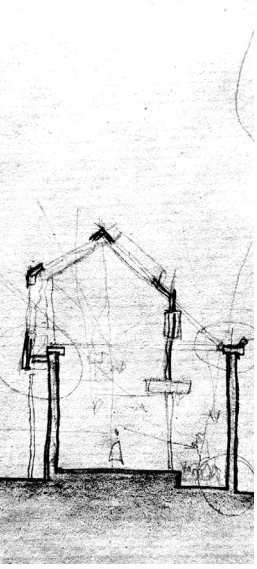


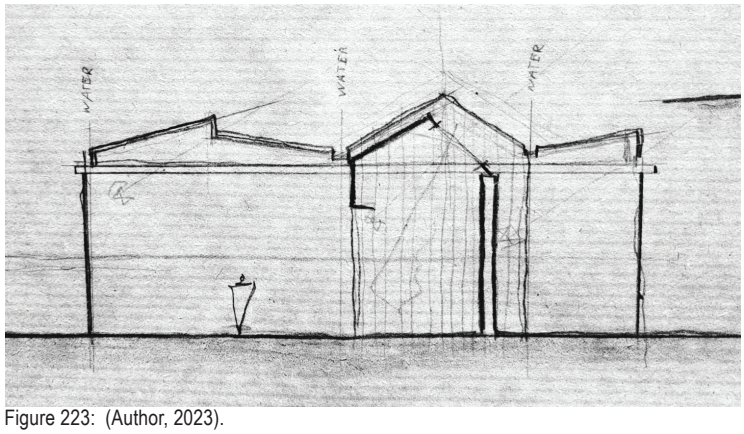
Figure 224: The Old Granary Museum by GAPP Architects & Urban Designers in South Africa, 2017 (Abdel, 2017: online).



Figure 225: The Old Granary Museum (Abdel, 2017: online).

From the beginning, the idea was to maintain the integrity of the prison walls while creating a new roof to cover the interior. Various roof designs were explored to achieve this, including butterfly roofs for north-facing light and mono-pitch and gable roofs extending beyond the walls (figure 223). There was some advice, however, to not overcomplicate the structure.





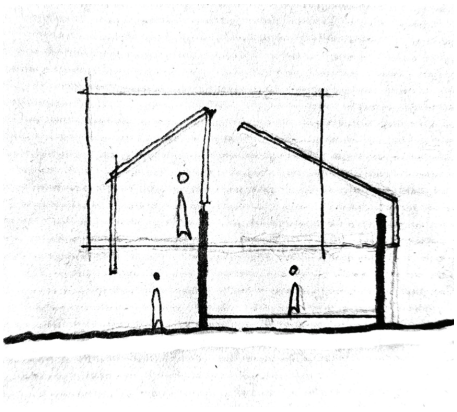


Figure 223: (Author, 2023).



Figure 228: The translucent plastic roof sheetings that create an intimate, inbetween courtyard (Author, 2023).

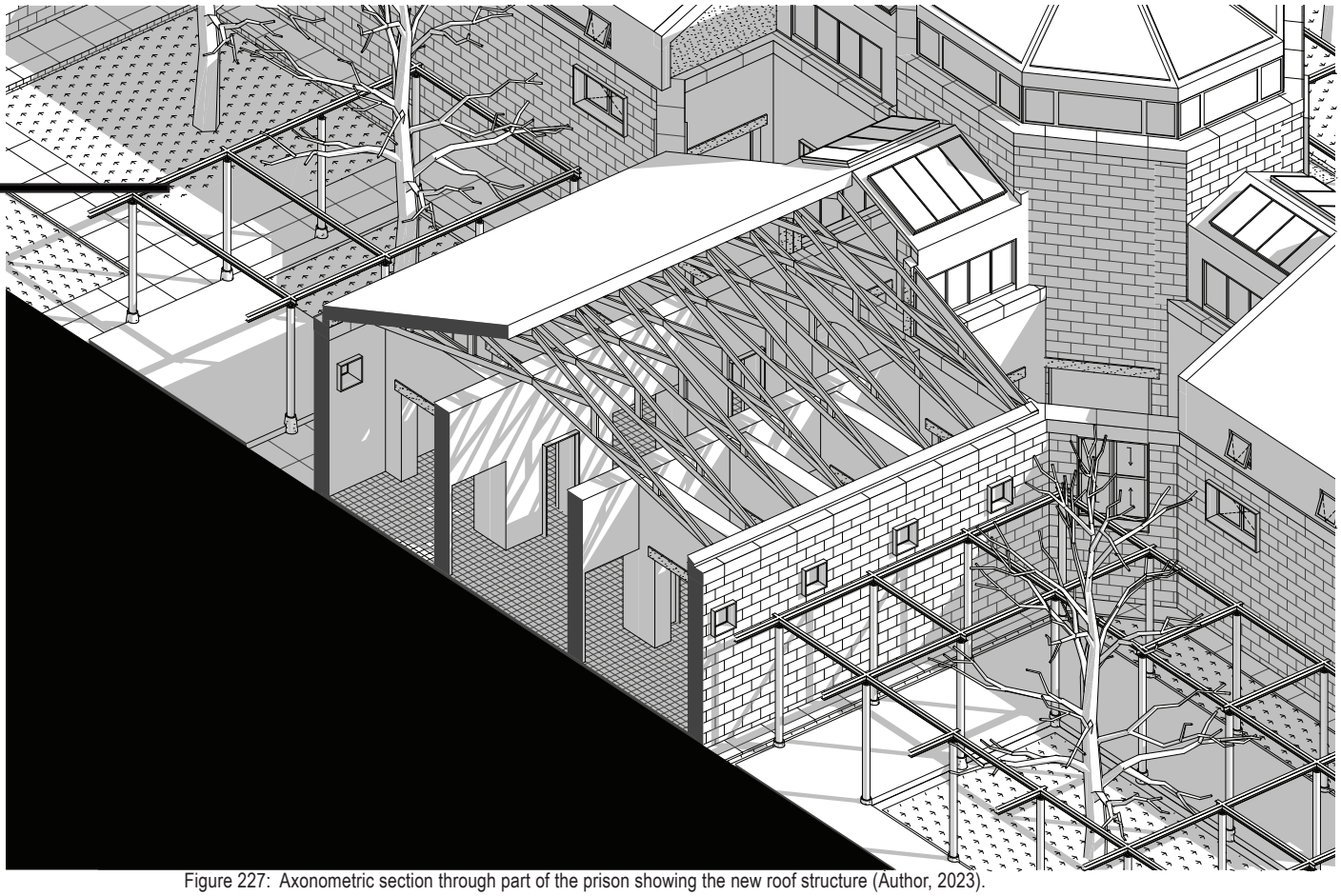
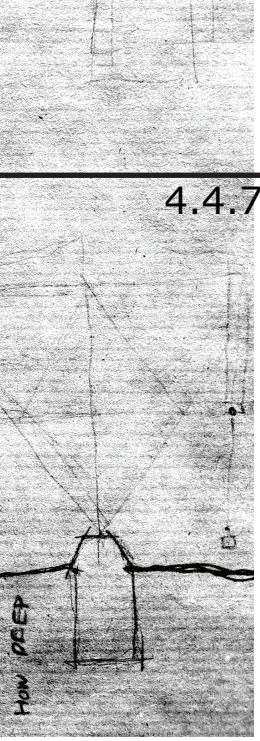


Figure 227: Axonometric section through part of the prison showing the new roof structure (Author, 2023).



4.4.7 CANTILEVERING STRUCTURE

The structure draws inspiration from Richard Rogers' Drawing Gallery in France (figures 229-231), which cantilevers over a hillside and consists of three main components: the anchor, the truss, and the foundation system. To make the structure viable, it must remain as light as possible. Therefore, it will be assembled using light steel flooring and walls instead of concrete and bricks. The cantilevering structure cantilevers 12m and has beams at every 2.4m that will be welded rather than bolted. The flooring system will be a lightweight composite of laminated flooring, plywood, lipped channels, insulation, and fibre cement board. The wall system will be similar but cladded on the exterior with Klip-Lok.



Figure 231: The Richard Rogers' Drawing Gallery (Pintos, 2021: online).

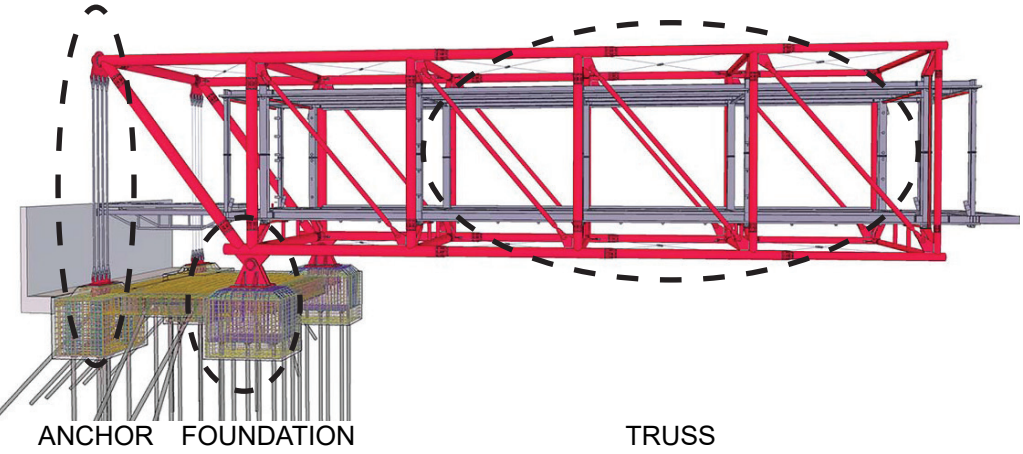
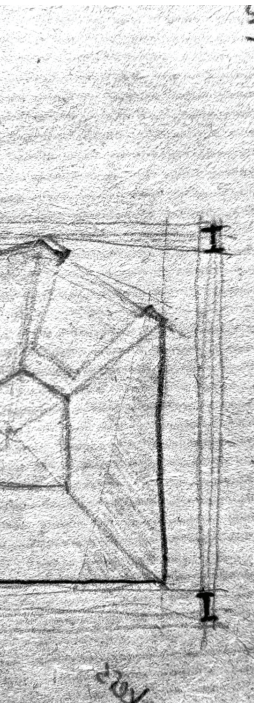


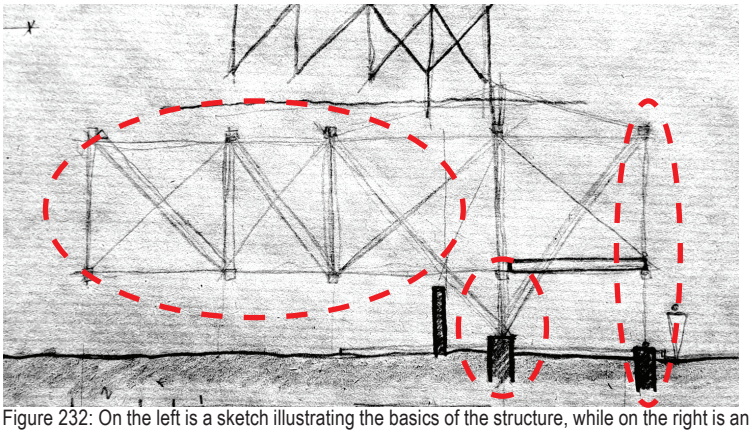
Figure 229: The Richard Rogers' Drawing Gallery by Rogers Stirk Harbour + Partners in France, 2020 (Pintos, 2021: online).



Figure 230: The Richard Rogers' Drawing Gallery (Pintos, 2021: online).



Since the beginning of the design process, the idea of floating structures was present to contrast the existing hierarchal order. It was much longer and stretched over several areas (figure 232) within the site. However, at this stage, it was less dynamic; therefore, the structure was shortened (figures 232 & 236) and placed on different edges rather than restricting it to one long linear element.



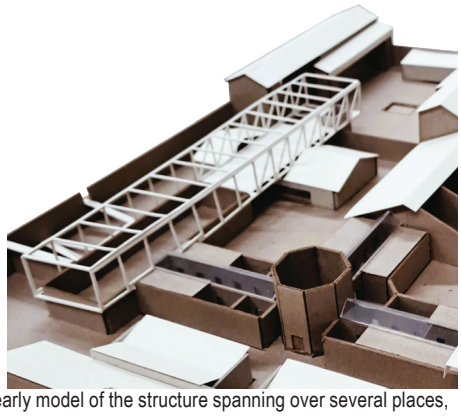


Figure 232: On the left is a sketch illustrating the basics of the structure, while on the right is an early model of the structure spanning over several places, therefore becoming rigid (Author, 2023).

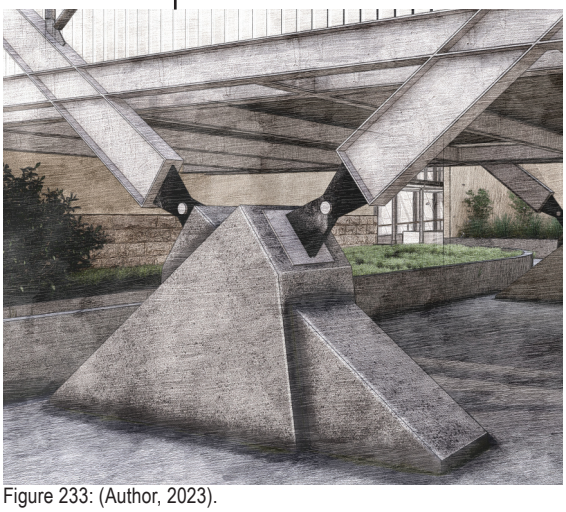


Figure 233: (Author, 2023).

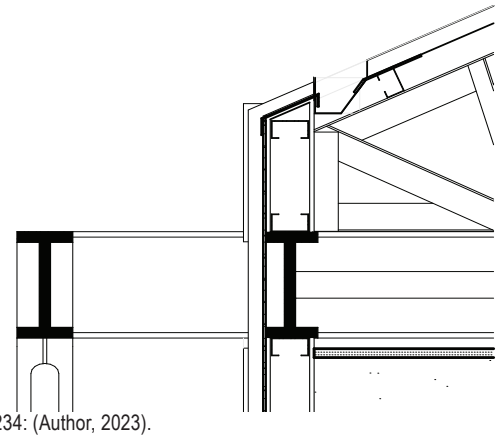


Figure 234: (Author, 2023).

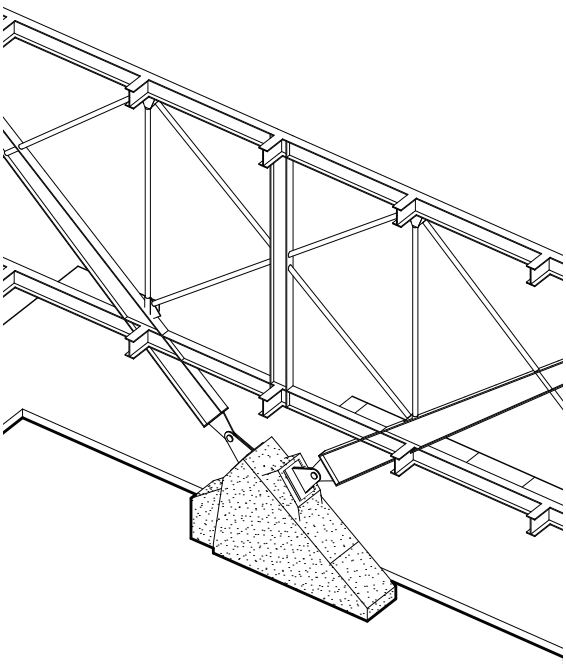


Figure 235: (Author, 2023).

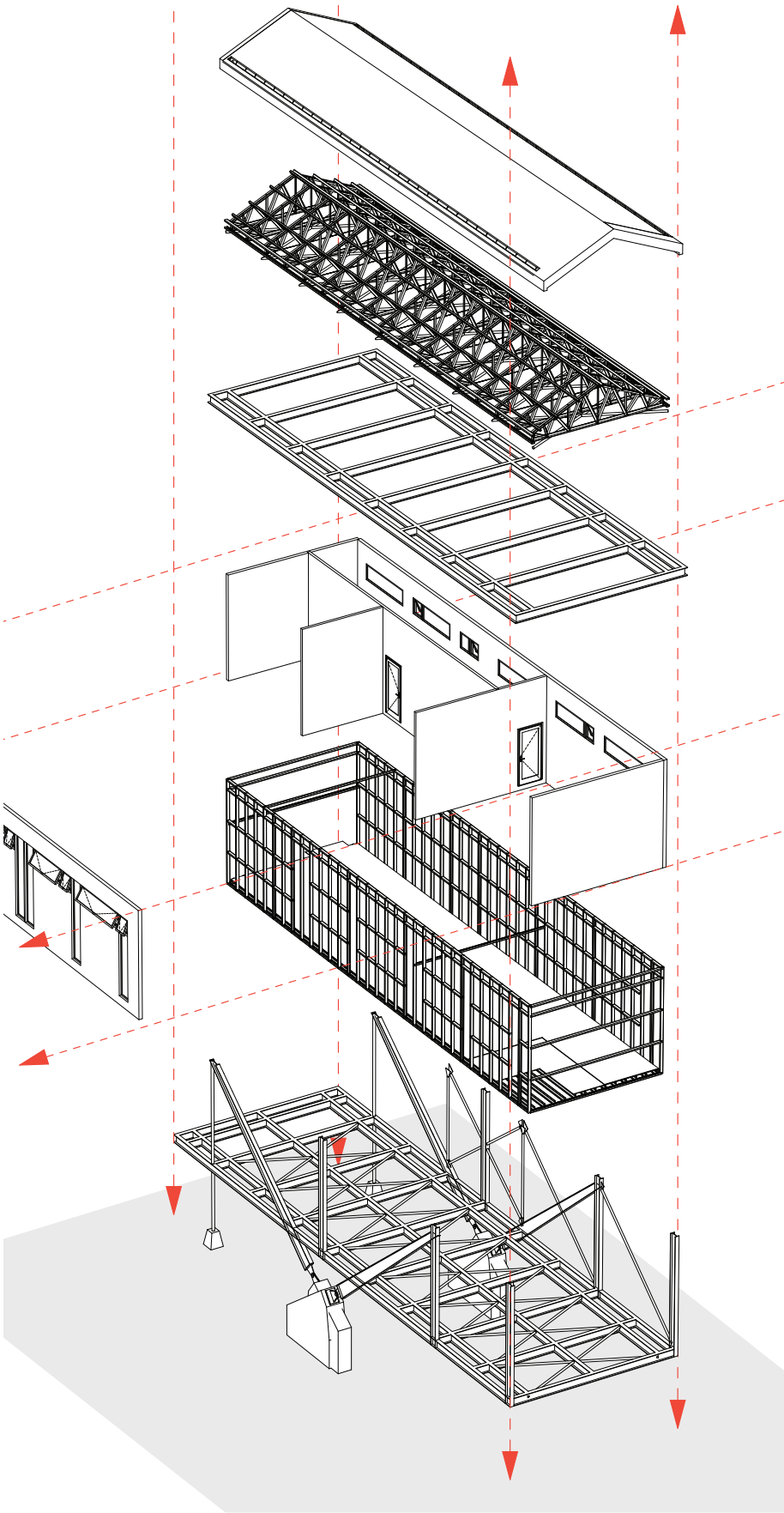


Figure 236: (Author, 2023).

4.4.8 SOUTHERN ADDITION OF THE ABANDONED PRISON COMPLEX

The southern additions (figure 242) incorporate the existing perimeter walls. However, since the walls are in a worse condition and less significant than the main prison, there is room for alteration and demolition. The new walls on raft foundations, will be cladded with Klip-Lok to contrast the old walls. The roof structure will use steel trusses with Klip-Lok sheets and have balcony spaces on the other side of the existing wall with steel shading above that links to the courtyard spaces. The first floor consists of mezzanines that create double-volume spaces that create a relationship between the ground and the first floor. The Civic Centre (figures 238 & 239) by Lleiatat Santsenca Harquitectes is an adaptive reuse project that retains the exposed and scarred brick walls. The in uses steel elements for the new floor levels, as well as a large atrium space that brings in light from the above with translucent plastic sheets.



Figure 238: Civic Centre by Lleiatat Santsenca Harquitectes in Barcelona, Spain, 2017 (Santibañez, 2021: online).

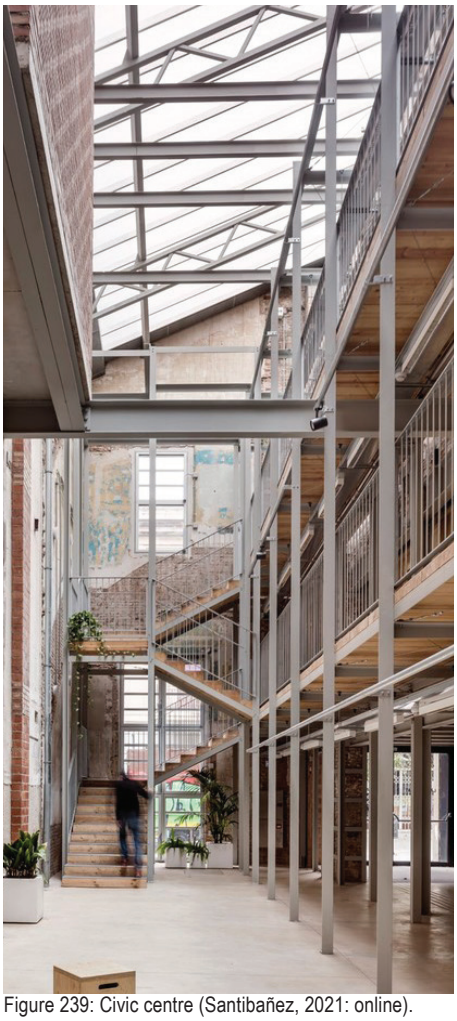
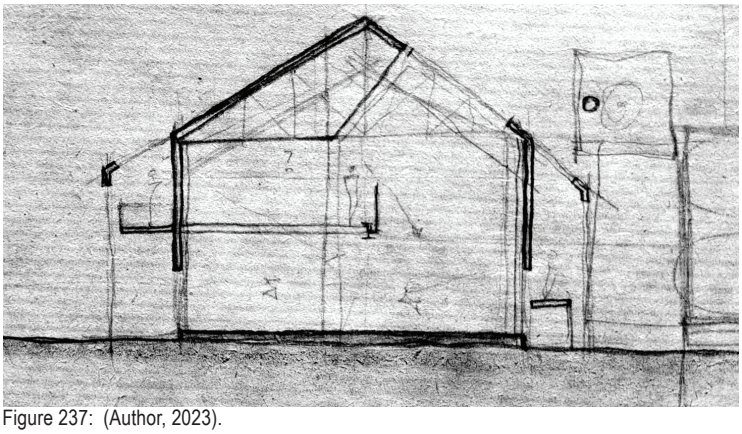


Figure 239: Civic centre (Santibañez, 2021: online).

The main problem with the southern additions (figure 237) was to allow sunlight to enter. Since it faces north-south, the longer side is positioned towards the west and east. Therefore, to bring light in, the form is divided and cut to create walls facing north. Additionally, vertical louvres on the west facade help maximise the amount of light.



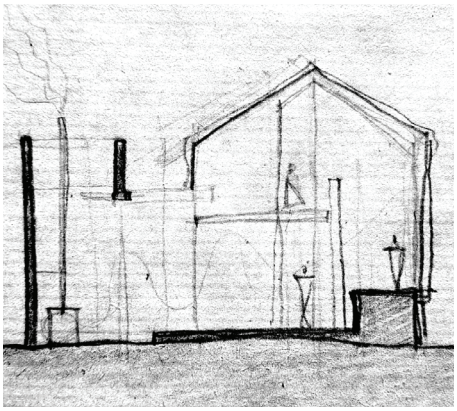


Figure 237: (Author, 2023).

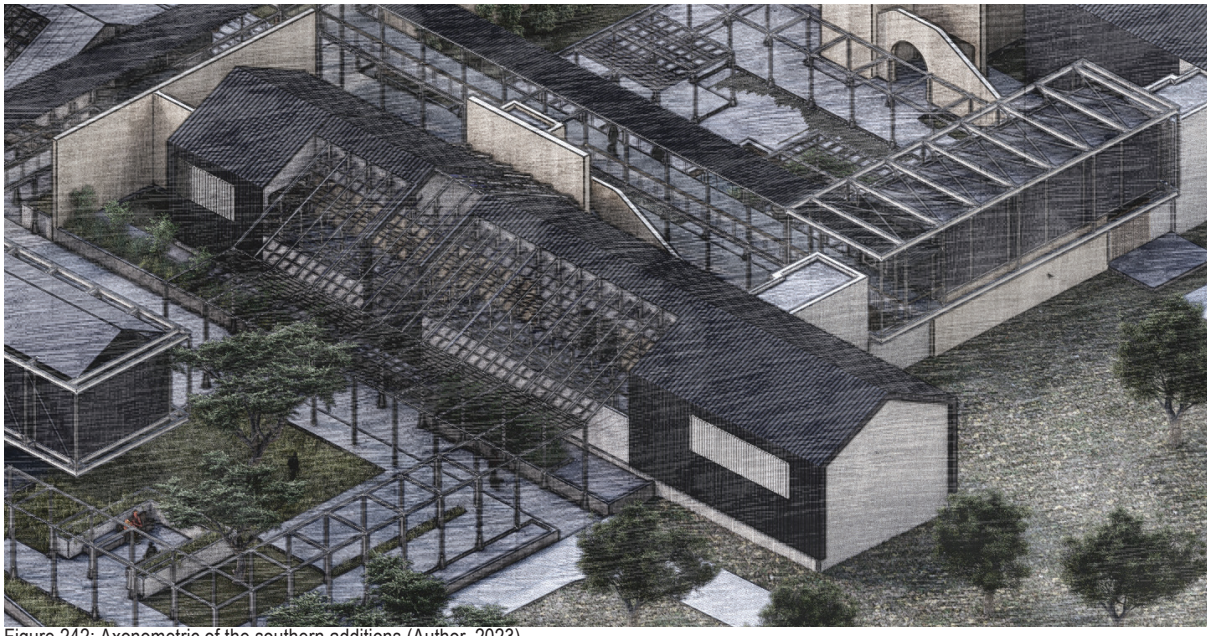


Figure 242: Axonometric of the southern additions (Author, 2023).

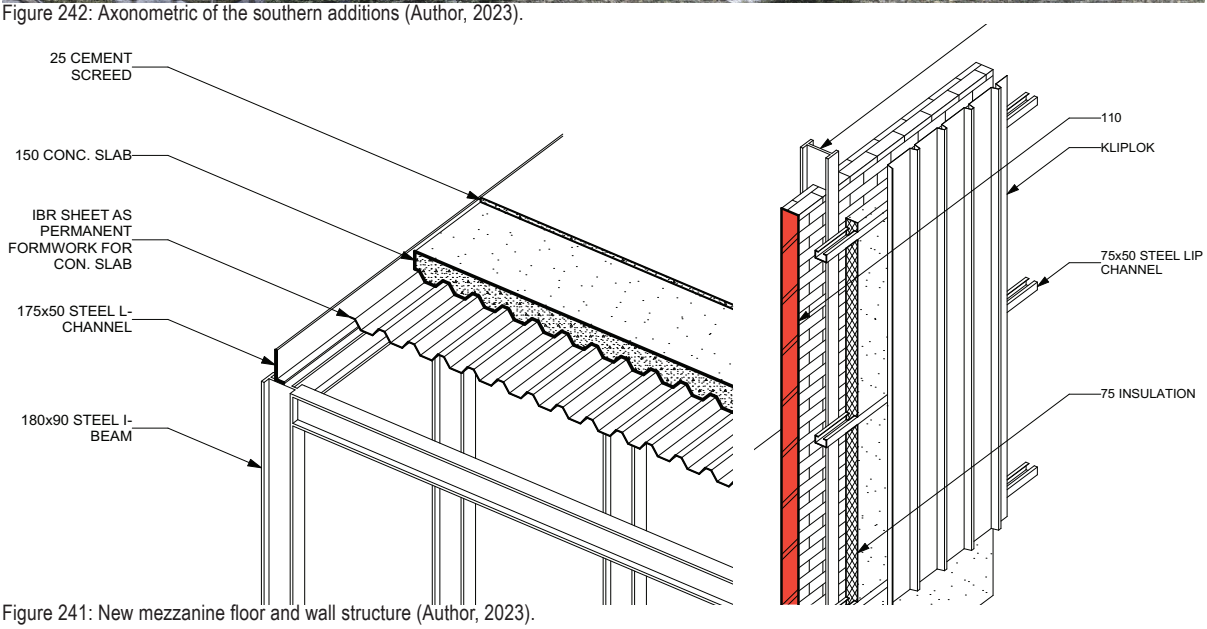


Figure 241: New mezzanine floor and wall structure (Author, 2023).

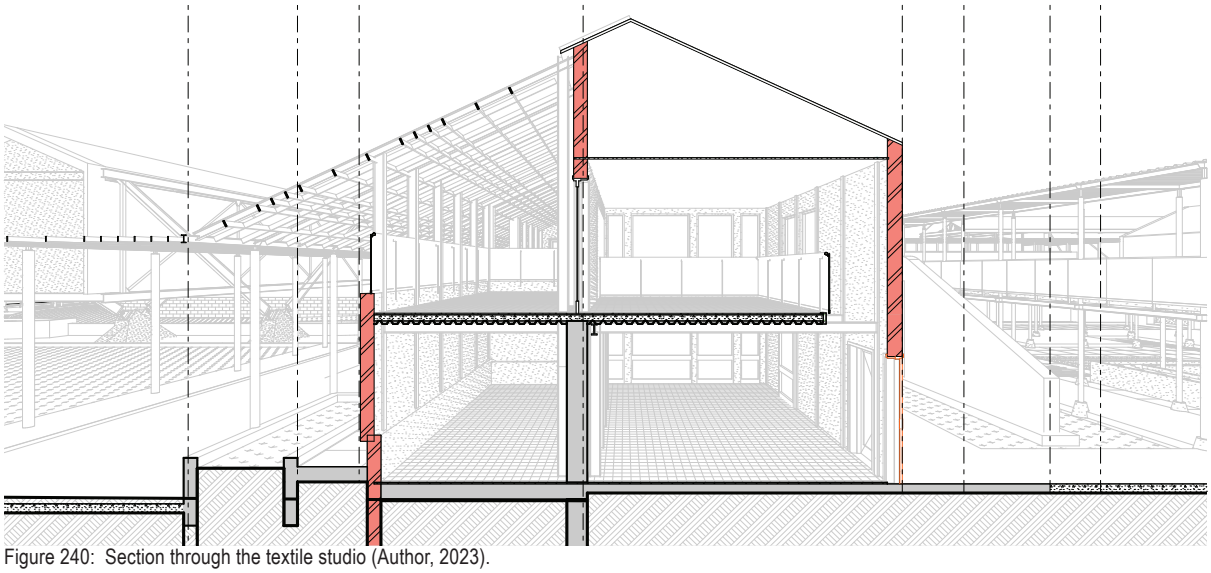
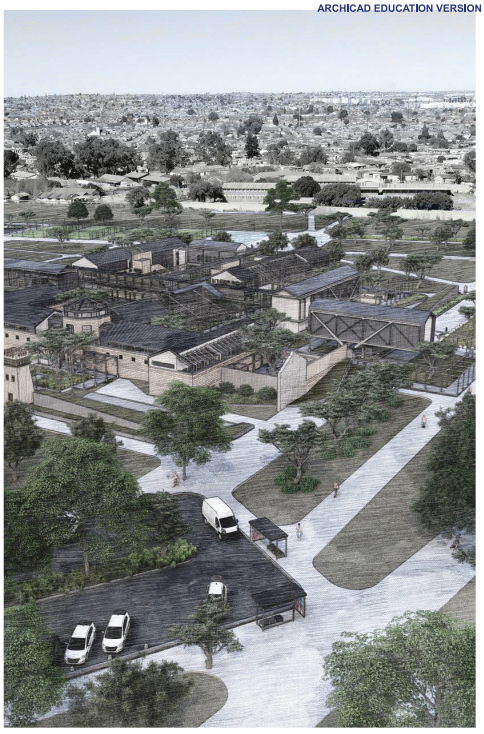


Figure 240: Section through the textile studio (Author, 2023).

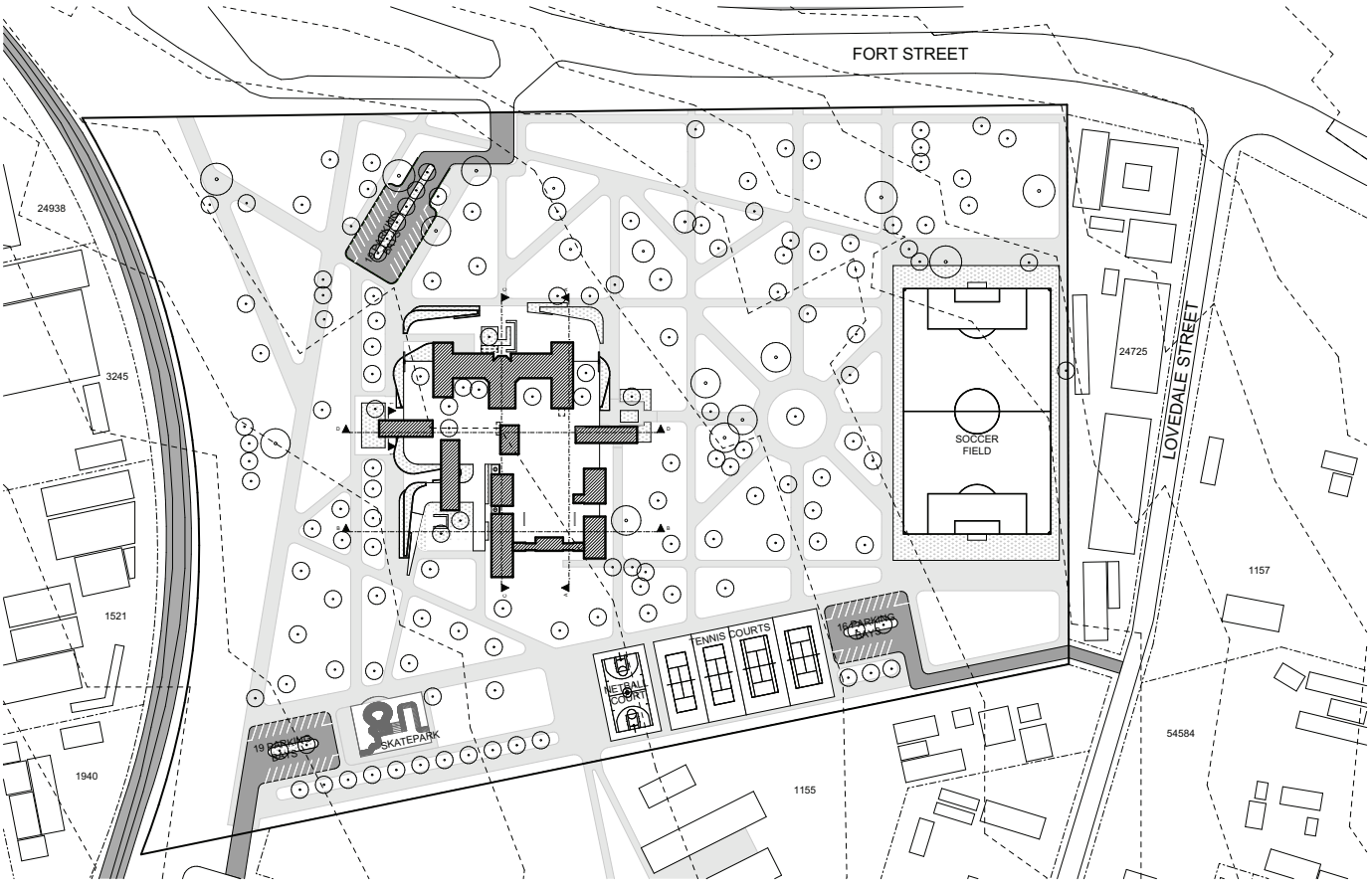
ARCHICAD EDUCATION VERSION



A100 AREA PLAN
SCALE 1:2000



PERSPECTIVE LOOKING SOUTH WITH BATHO IN THE BACKGROUND



A101 SITE PLAN
SCALE 1:1000

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Location:
BLOEMFONTEIN

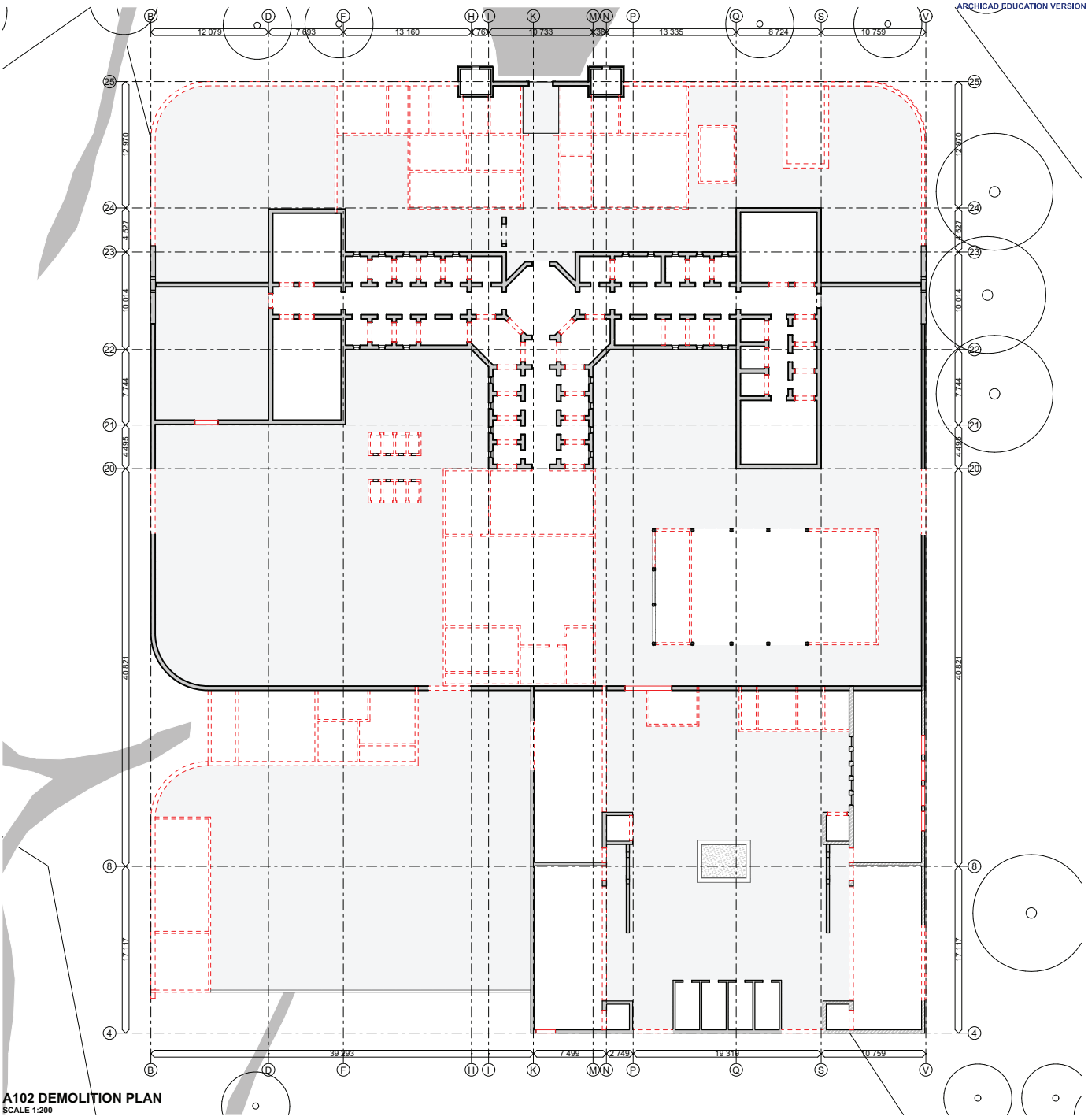
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Scale:
1:2000, 1:1000
Drawing Nr:
A100 A101
Date:
2023/10/26

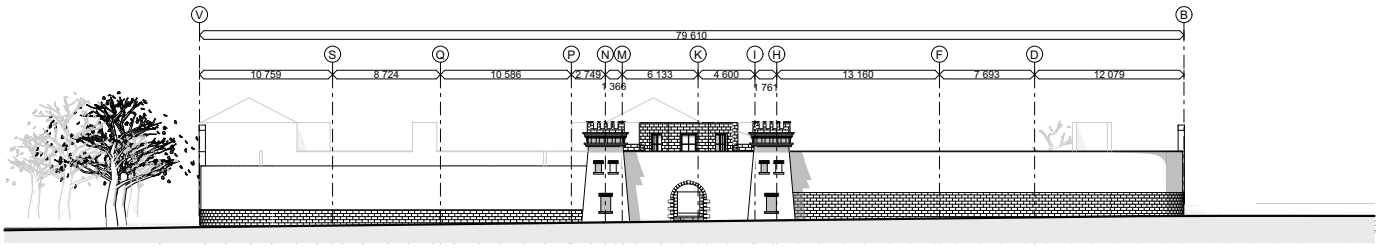
RESCRIPTING THE PERMANENCE OF RAMKRAAL
A SKILLS DEVELOPMENT CENTRE WITHIN THE HISTORIC RUINS OF THE RAMKRAAL PRISON FOR THE COMMUNITY OF BATHO.

N

ARCHICAD EDUCATION VERSION



A102 DEMOLITION PLAN
SCALE 1:200



A200 PRE-DEMOLITION NORTH ELEVATION
SCALE 1:200

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DEMOLITION PLAN, PRE-DEMOLITION NORTH ELEVATION

Scale:
1:200

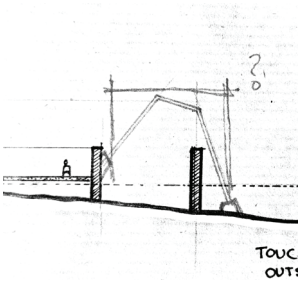
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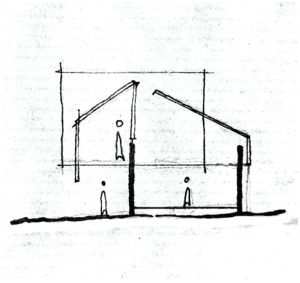
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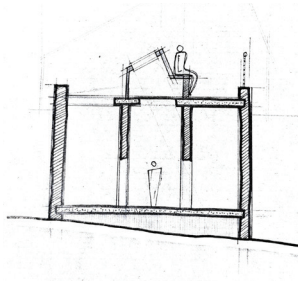
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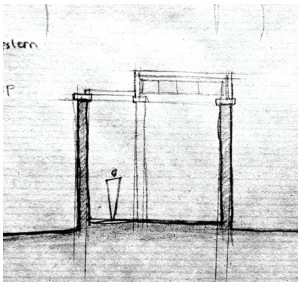
A SKILLS DEVELOPMENT CENTRE WITHIN THE HISTORIC RUINS OF THE RAMKRAAL PRISON FOR THE COMMUNITY OF BATHO.

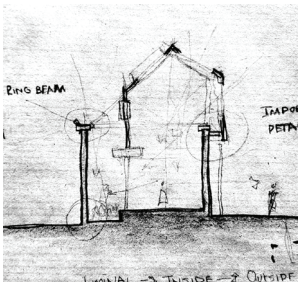
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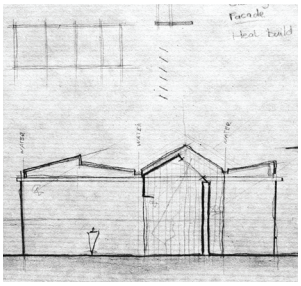


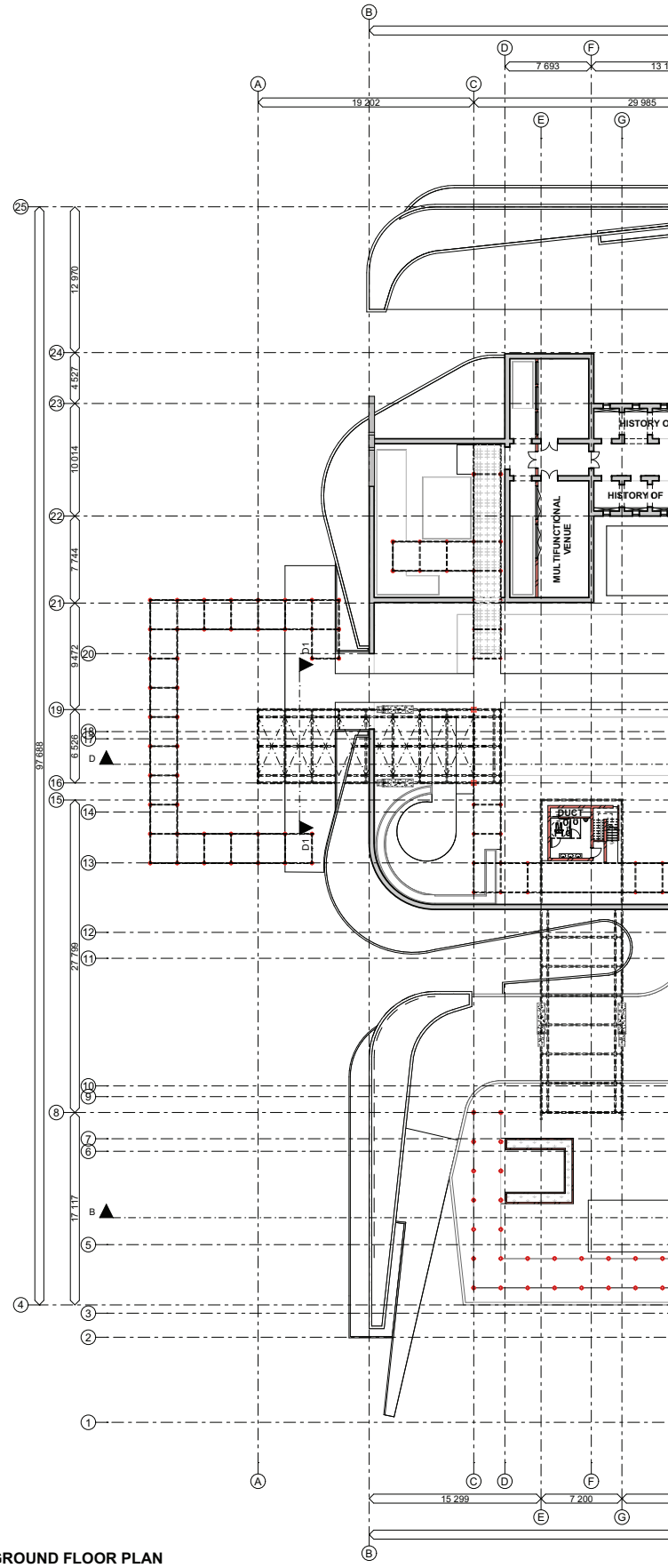




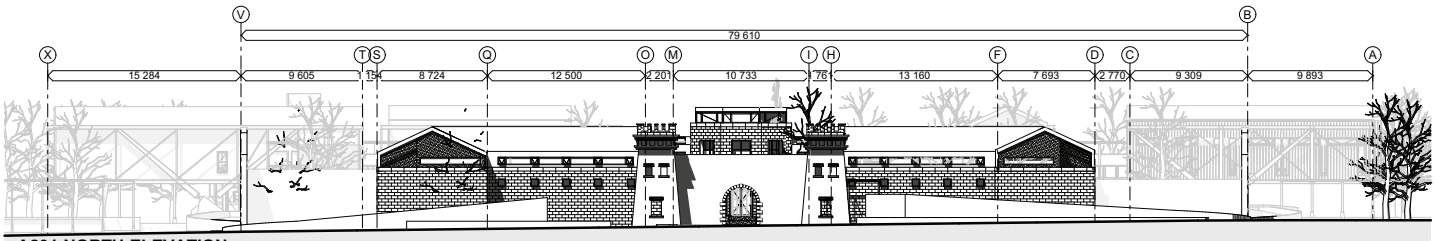




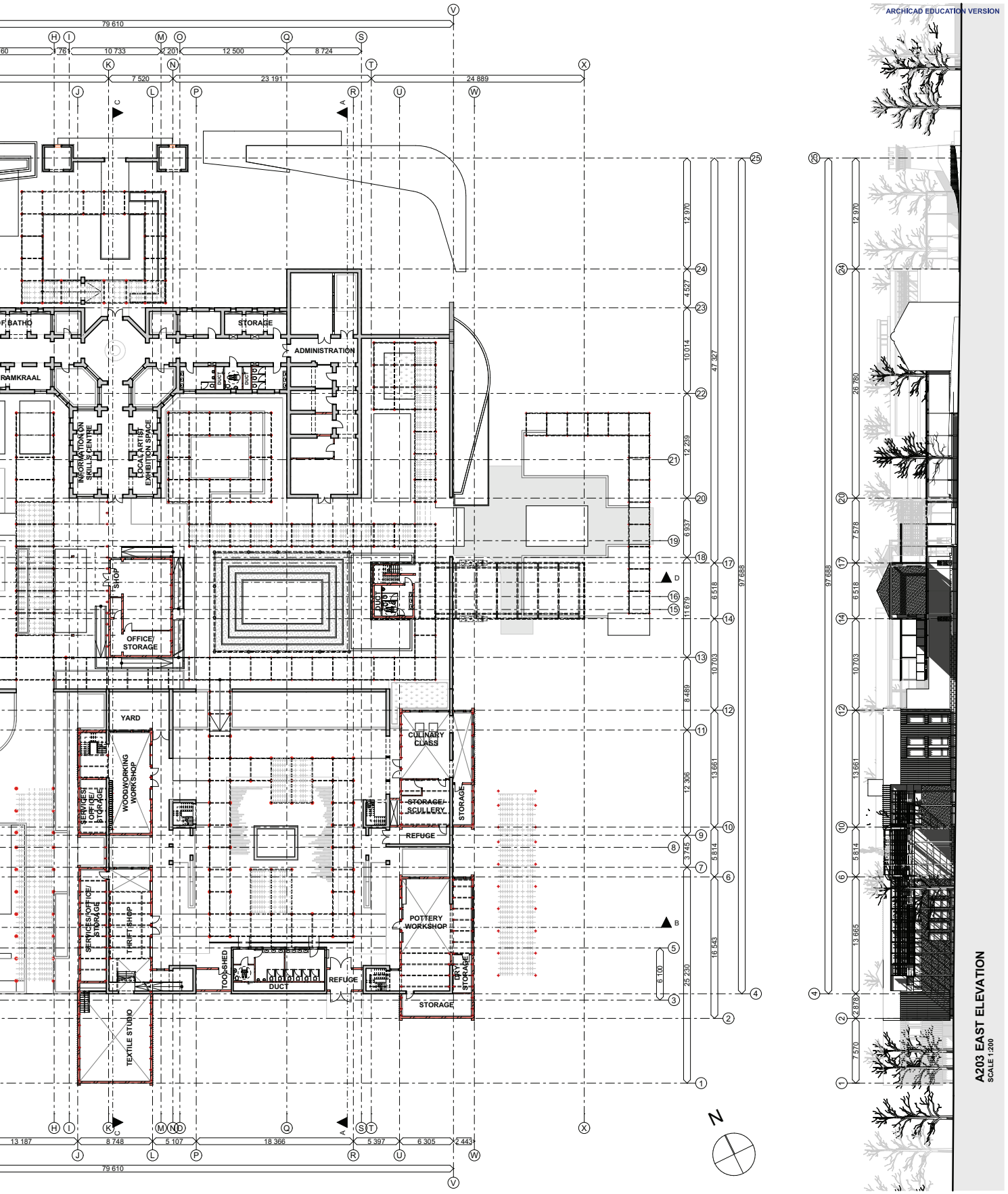




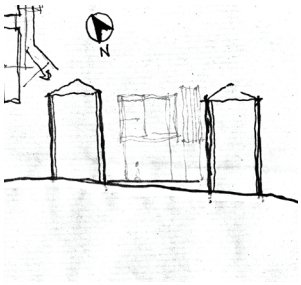
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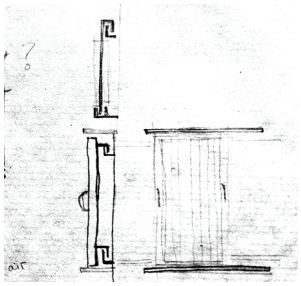


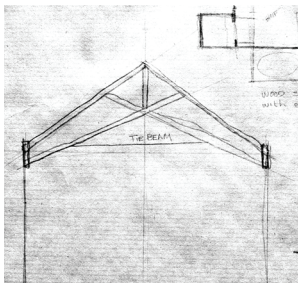
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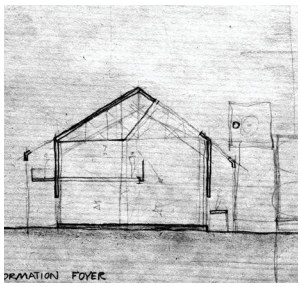


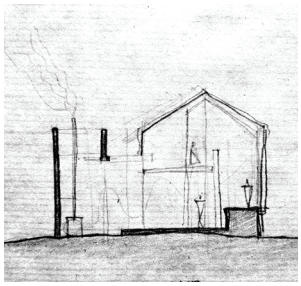
MR LEON COETZER E-mail: leoncoetzer10@gmail.com Student no: 2018119749 Location: **BLOEMFONTEIN**	Drawing Title: **FIRST FLOOR, EAST ELEVATION, NORTH ELEVATION**	Scale: **1:200** Drawing Nr: **A103 A201 A203** Date: **2023/11/20**	**RESCRIPTING THE PERMANENCE OF RAMKRAAL** A SKILLS DEVELOPMENT CENTRE WITHIN THE HISTORIC RUINS OF THE RAMKRAAL PRISON FOR THE COMMUNITY OF BATHO.

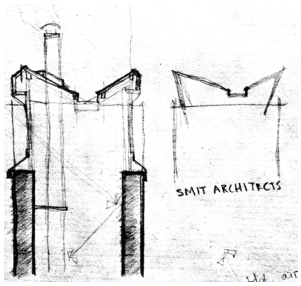


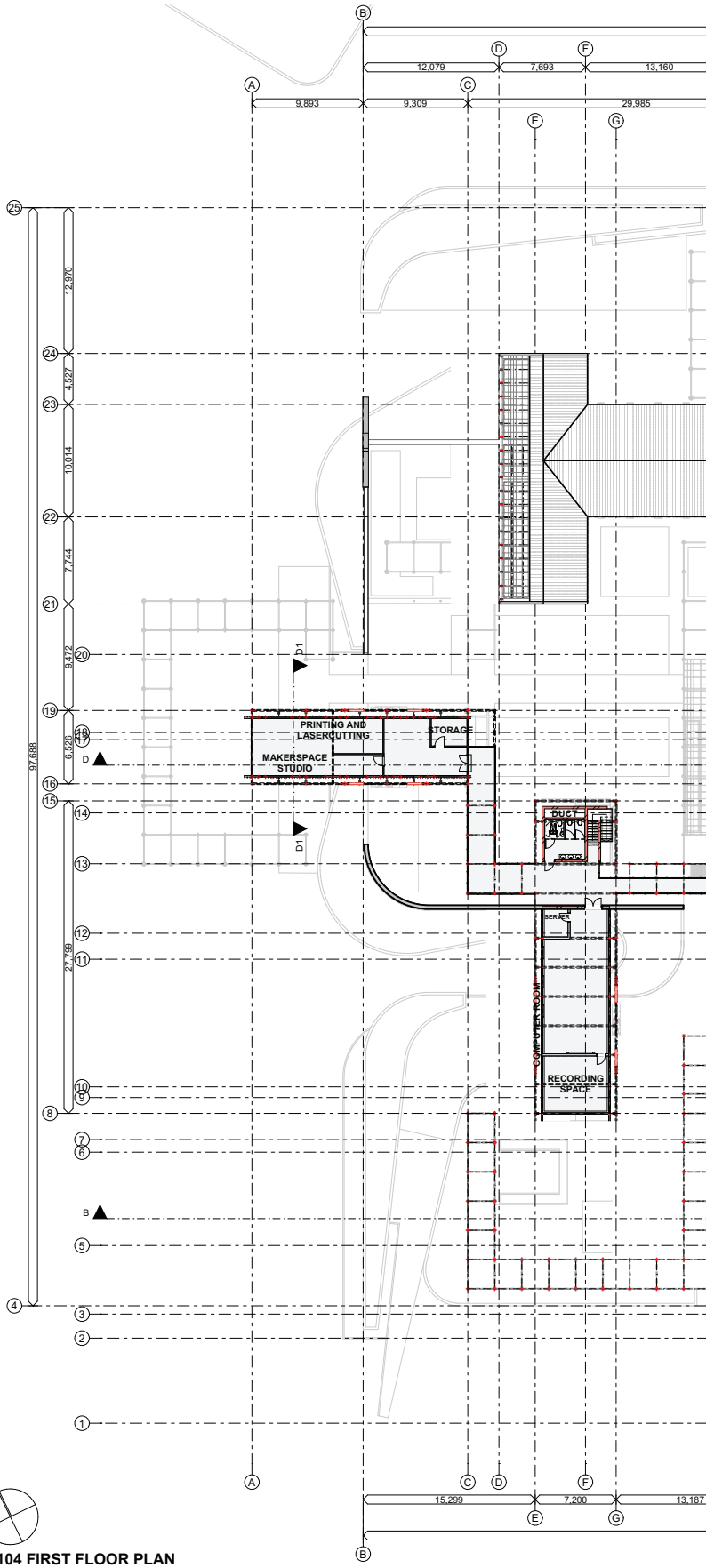




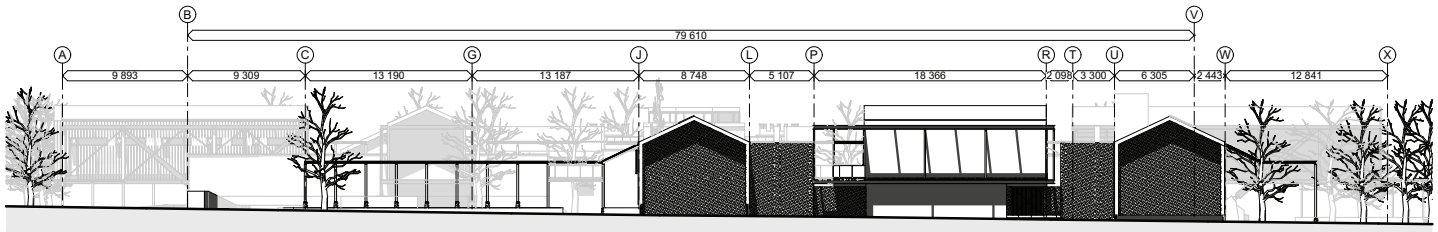




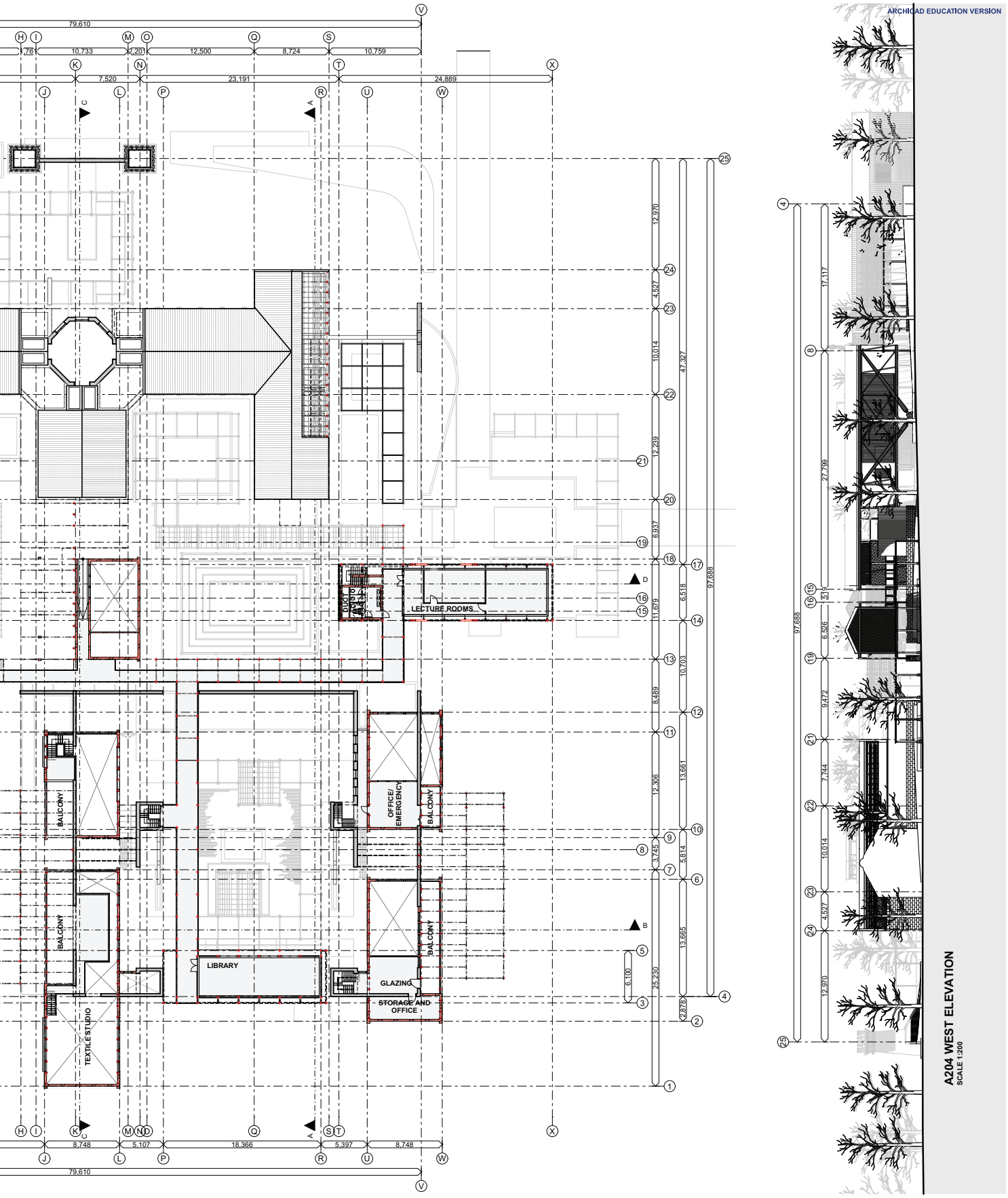




A104 FIRST FLOOR PLAN
SCALE 1:200



A202 SOUTH ELEVATION
SCALE 1:200



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Drawing Title:
FIRST FLOOR PLAN, SOUTH ELEVATION, WEST ELEVATION

Scale:
1:200

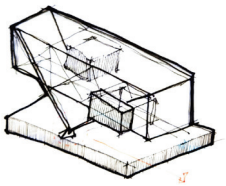
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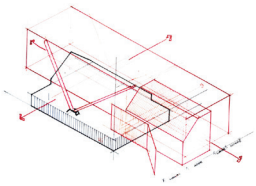
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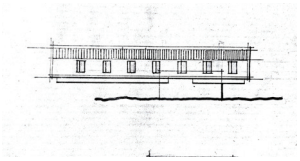
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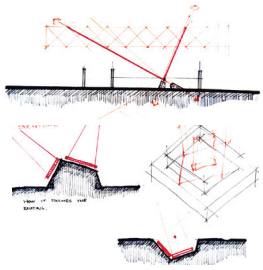
A SKILLS DEVELOPMENT CENTRE WITHIN THE HISTORIC RUINS OF THE RAMKRAAL PRISON FOR THE COMMUNITY OF BATHO.

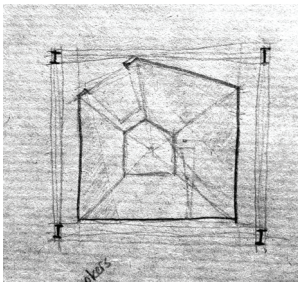
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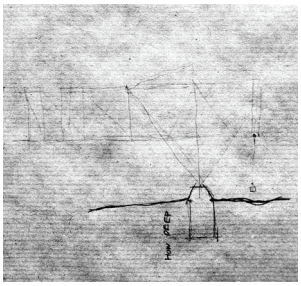


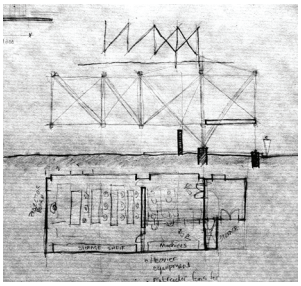


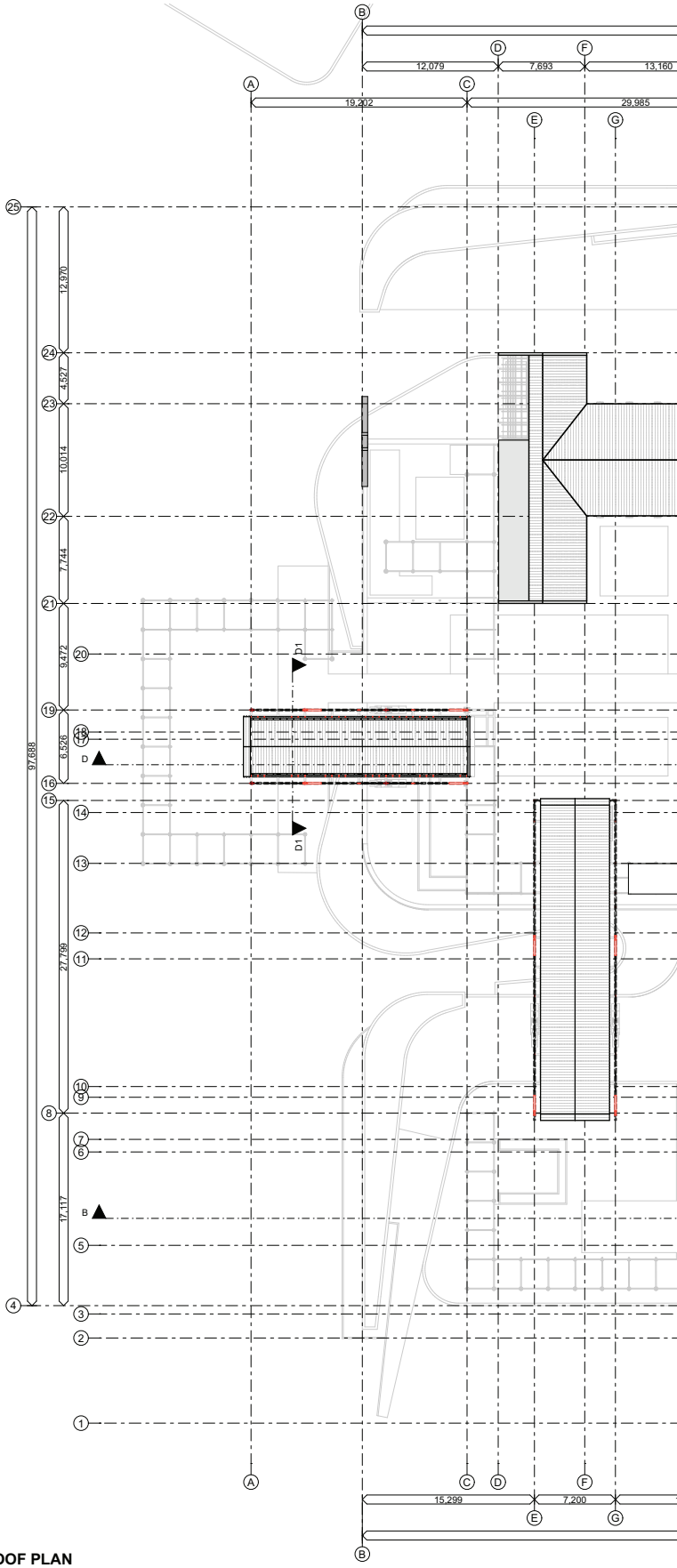




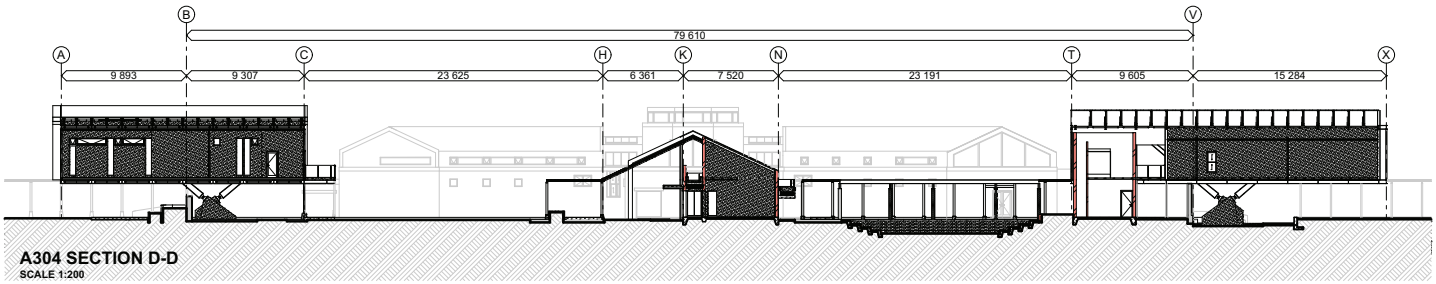




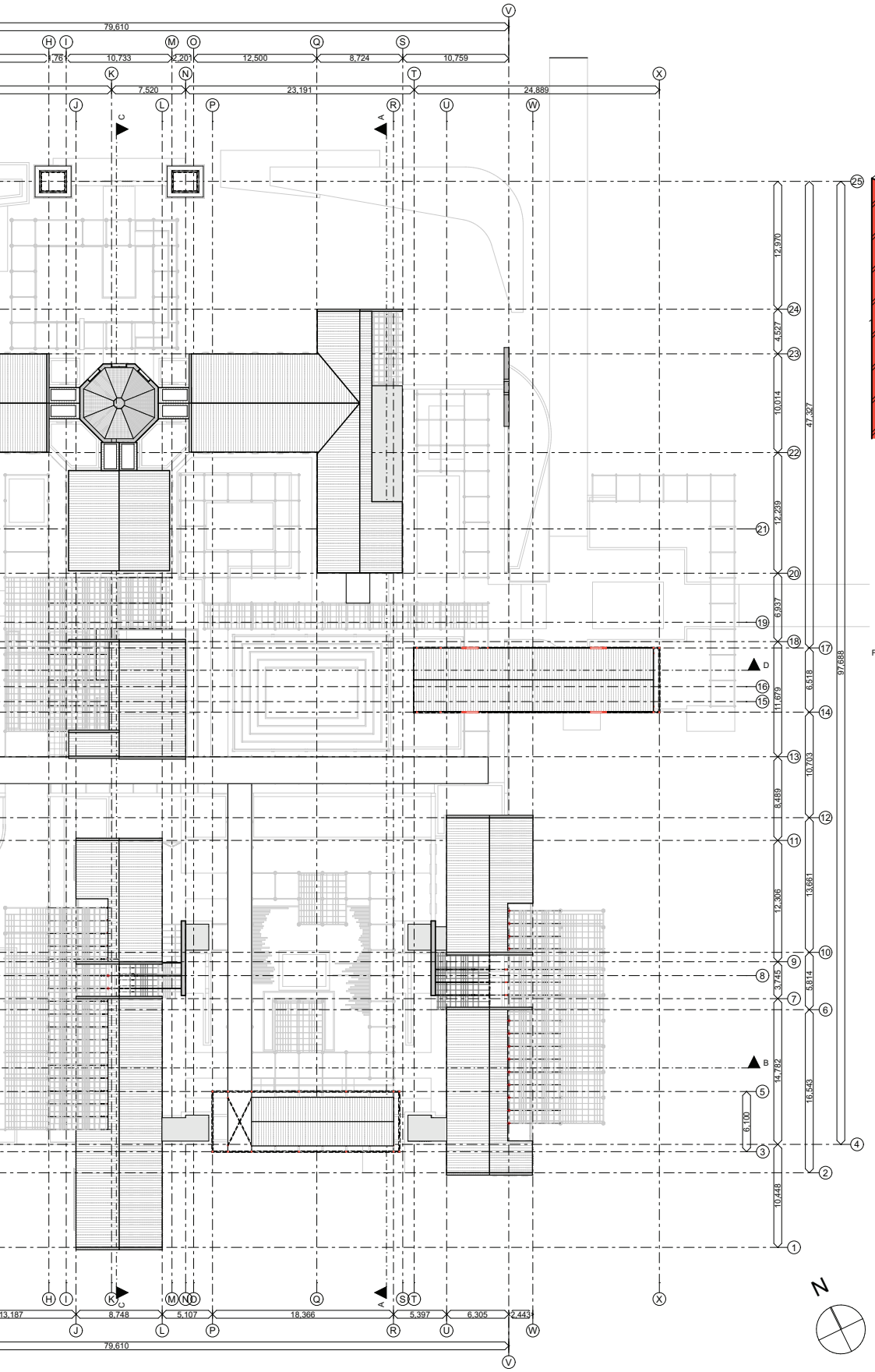


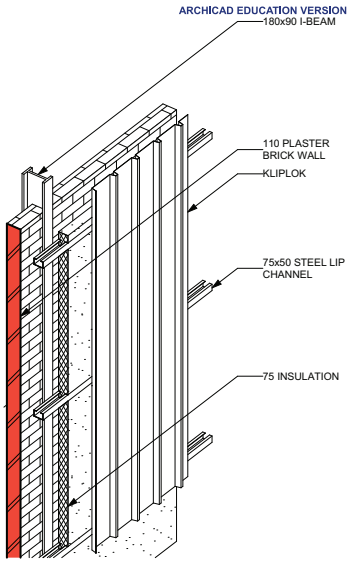


A105 ROOF PLAN
SCALE 1:200

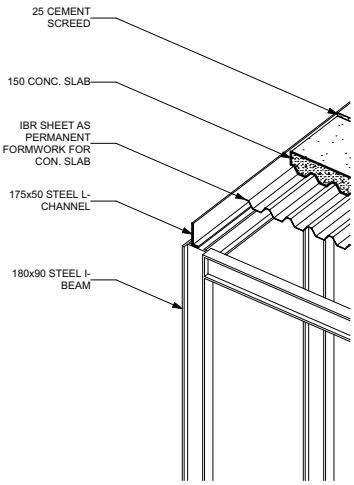


A304 SECTION D-D
SCALE 1:200





SOUTHERN ADDITION WALL DETAIL
SCALE 1:20



WALKWAY DETAIL
SCALE 1:20

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Location:
BLOEMFONTEIN

Drawing Title:
ROOF PLAN, WEST ELEVATION, SECTION D-D, DETAIL SECTION

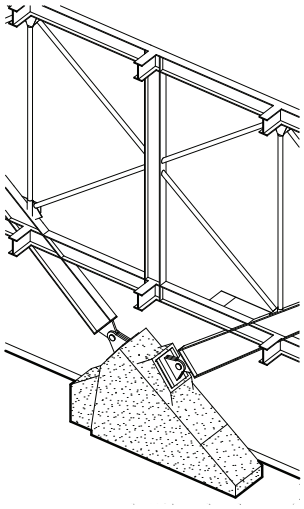
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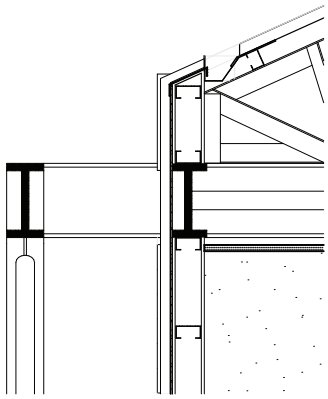
Date:
2023/11/20

RESCRIPTING THE PERMANENCE OF RAMKRAAL

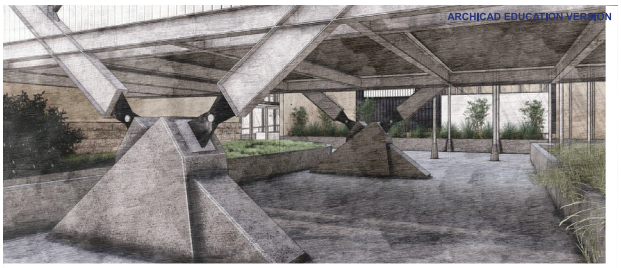
A SKILLS DEVELOPMENT CENTRE WITHIN THE HISTORIC RUINS OF THE RAMKRAAL PRISON FOR THE COMMUNITY OF BATHO.



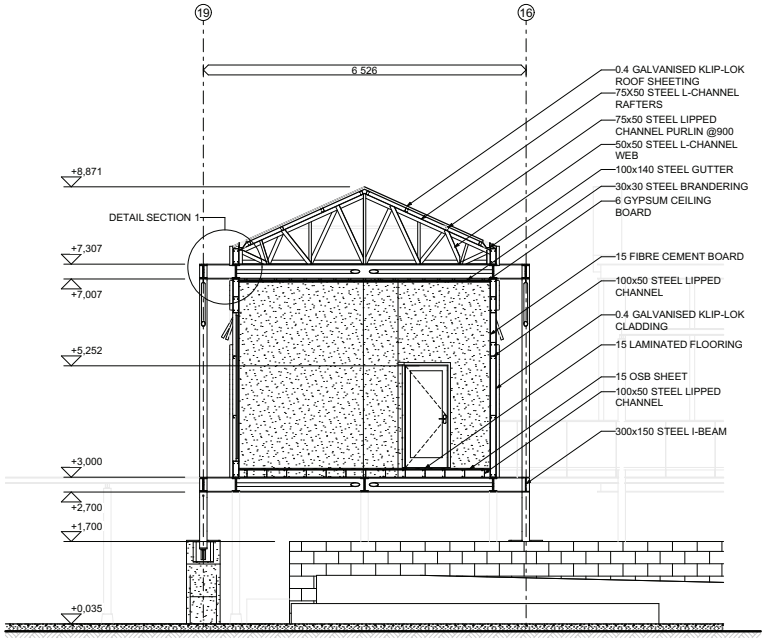
CANTILEVER STRUCTURE
SCALE 1:50



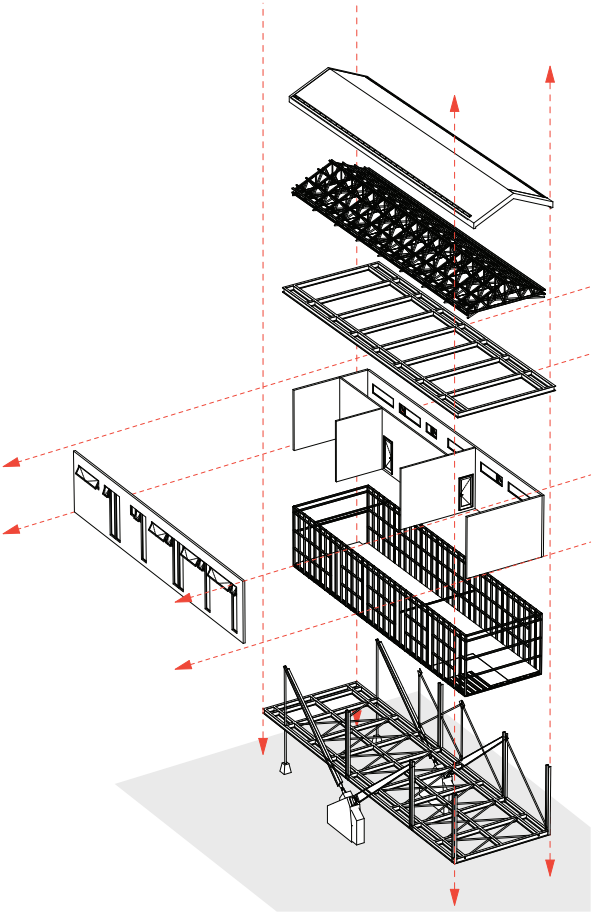
A304 DETAIL SECTION 1
SCALE 1:50



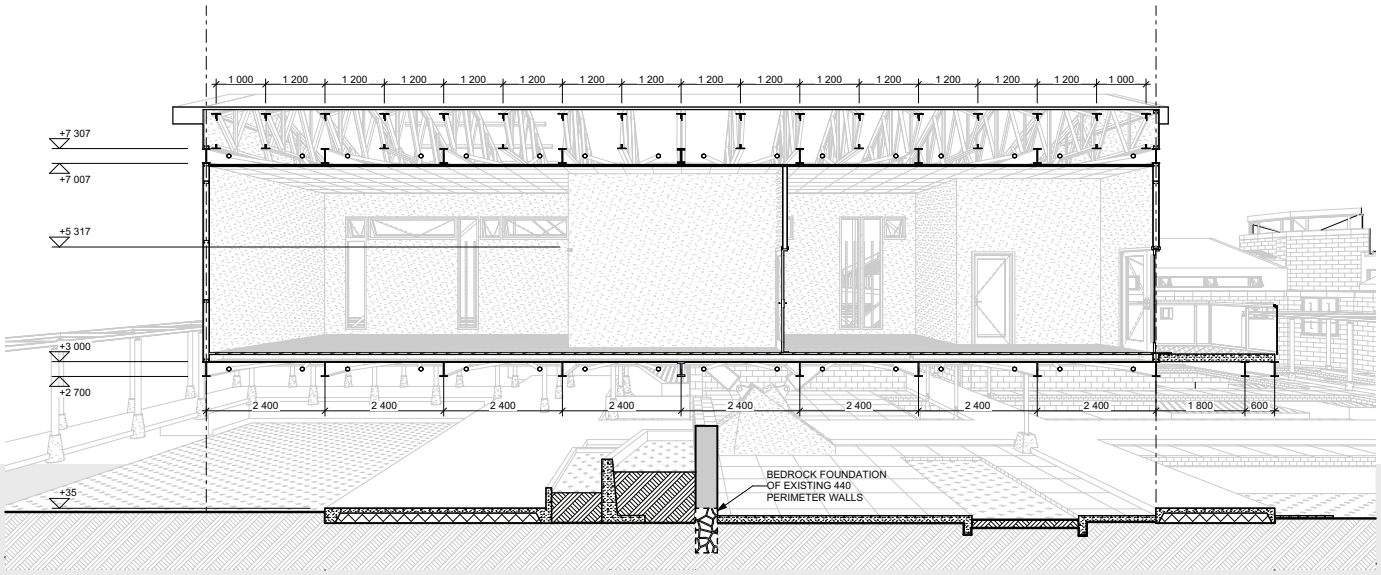
STEEL AND CONCRETE CONNECTION SUPPORT



A304 CROSS SECTION D1-D1
SCALE 1:50



EXPLODED AXONOMETRIC



A304 SECTION D-D
SCALE 1:50

MR LEON COETZER
E-mail: leoncoetzer10@gmail.com
Student no: 2018119749
Location:
BLOEMFONTEIN

Drawing Title:
SECTION D-D, DETAIL SECTION

Scale:
1:10, 1:50

Drawing Nr:
A300

Date:
2023/11/20

RESCRIPTING THE PERMANENCE OF RAMKRAAL

A SKILLS DEVELOPMENT CENTRE WITHIN THE HISTORIC RUINS OF THE RAMKRAAL PRISON FOR THE COMMUNITY OF BATHO.

N



CONCLUSION

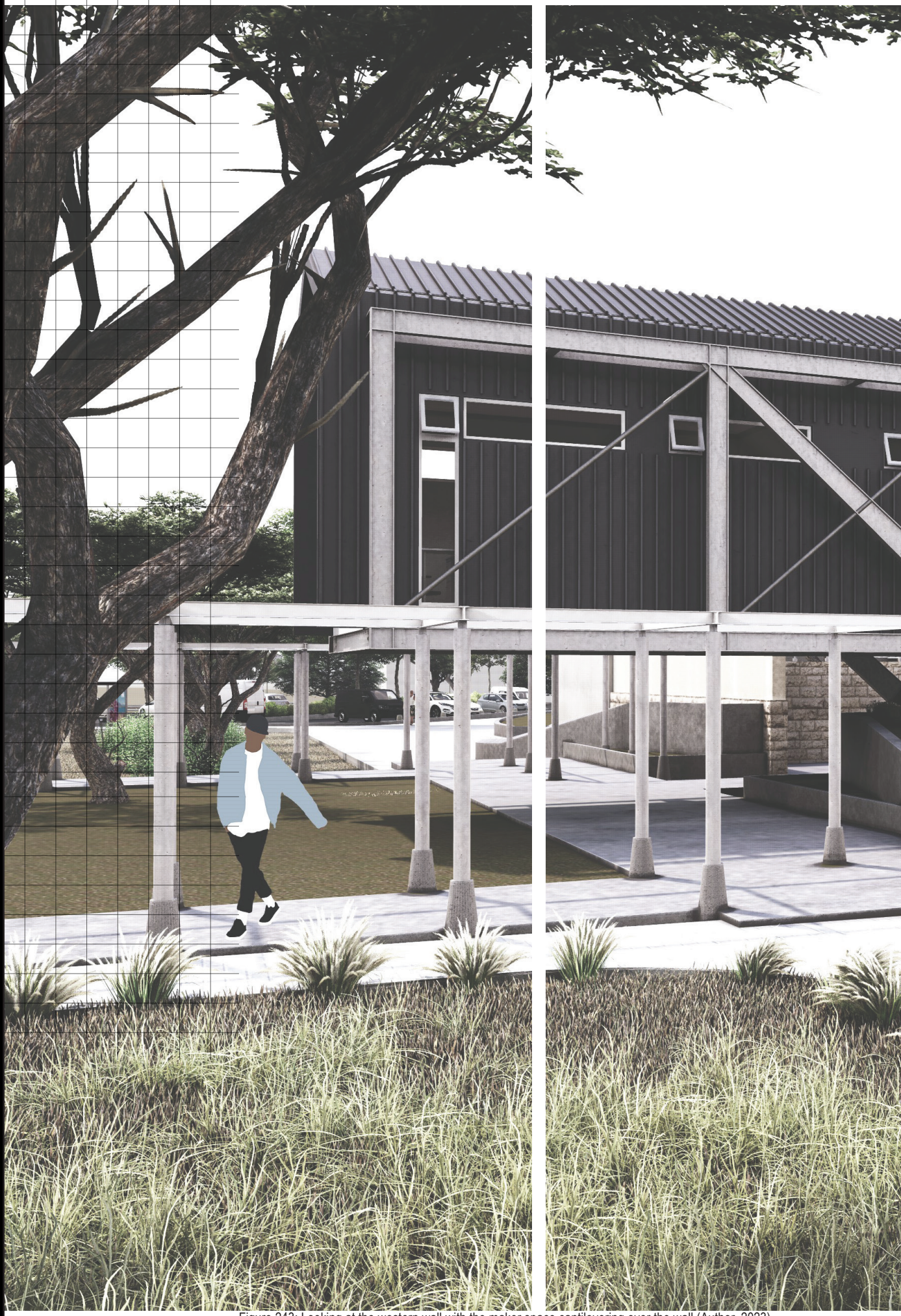


Figure 243: Looking at the western wall with the maker space cantilevering over the wall (Author, 2023).



05

5.1 CONCLUSION

As stated in the beginning, sites of historical significance will most likely be turned into a museum. However, it should instead be given back to the community so it can contribute much more than a museum would. By integrating a skills development centre within the existing complex, the site's historical significance can be conserved, and the surrounding community can benefit. This approach promotes community sustainability and fosters a sense of pride and ownership among residents. Revitalizing neglected areas and transforming them into vibrant and inclusive spaces creates a sense of place and belonging, which is essential for the well-being and prosperity of any community.

The success of this project extends beyond the physical transformation of the space. It has an impact on the social and cultural fabric of the community. A sense of community pride and unity can be fostered by providing a platform for local artists, entrepreneurs, and organizations to showcase their talents and contribute to the development of the space. This project has demonstrated the power of architecture and design to create meaningful and lasting change. Although there is room for improvement, it highlights the importance of preserving our shared history, including architecture that has fallen into disrepair, so we can learn from it and build upon it.

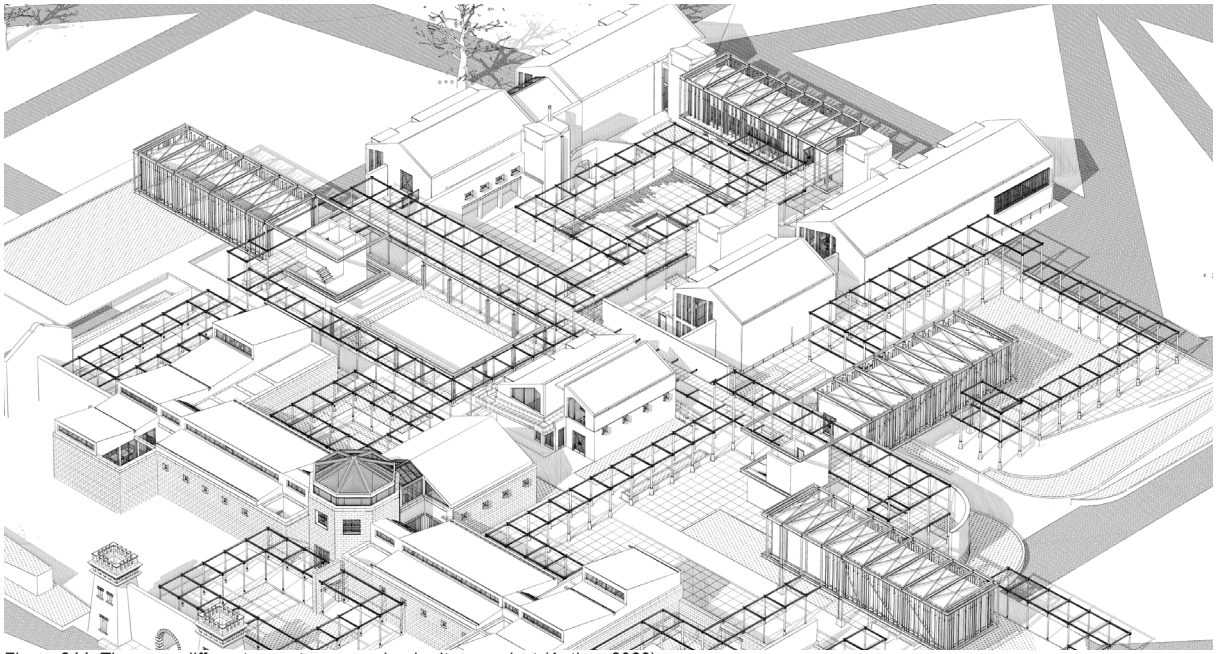


Figure 244: There are different ways to approach a heritage project (Author, 2023).

5.2 REFLECTION

This reflection is about analyzing the project's challenges, mistakes, and theoretical discoveries from a personal perspective.

Challenges

The main challenge of this project was figuring out how to incorporate the new accommodation into the existing structure. It was essential to balance preserving the original design and allowing the new program to thrive. This project turned out to be much larger than I anticipated, making it difficult to bring everything together seamlessly. The design could have been improved by integrating the landscape and creating a complex of spaces, but that would have required more time.

Thinking errors

One mistake I made was not building more physical models of the design. I usually use models to solve spatial issues, but due to the size of the site, it would have taken too long to design each space meticulously. Another mistake was treating the site as sacred and working around every existing element. It would have been better to remove some structures from the beginning.

Theoretical discoveries

I realized that I needed help with the theoretical aspects of the project. It took me a while to come up with a solid theoretical idea. The concept of using the community as a catalyst for adaptive reuse has been explored before, particularly in communities with strong bonds, like the work done by architect Francis Kere. Although I had conceptual ideas from the start, I developed them later in the year.

Final thoughts

Projects like a skills development centre can significantly benefit any community, as people are always eager to learn. However, the commitment from governing bodies can be a hindrance. Proposing the centre within a historic site elevates its importance, and two goals can be achieved simultaneously.

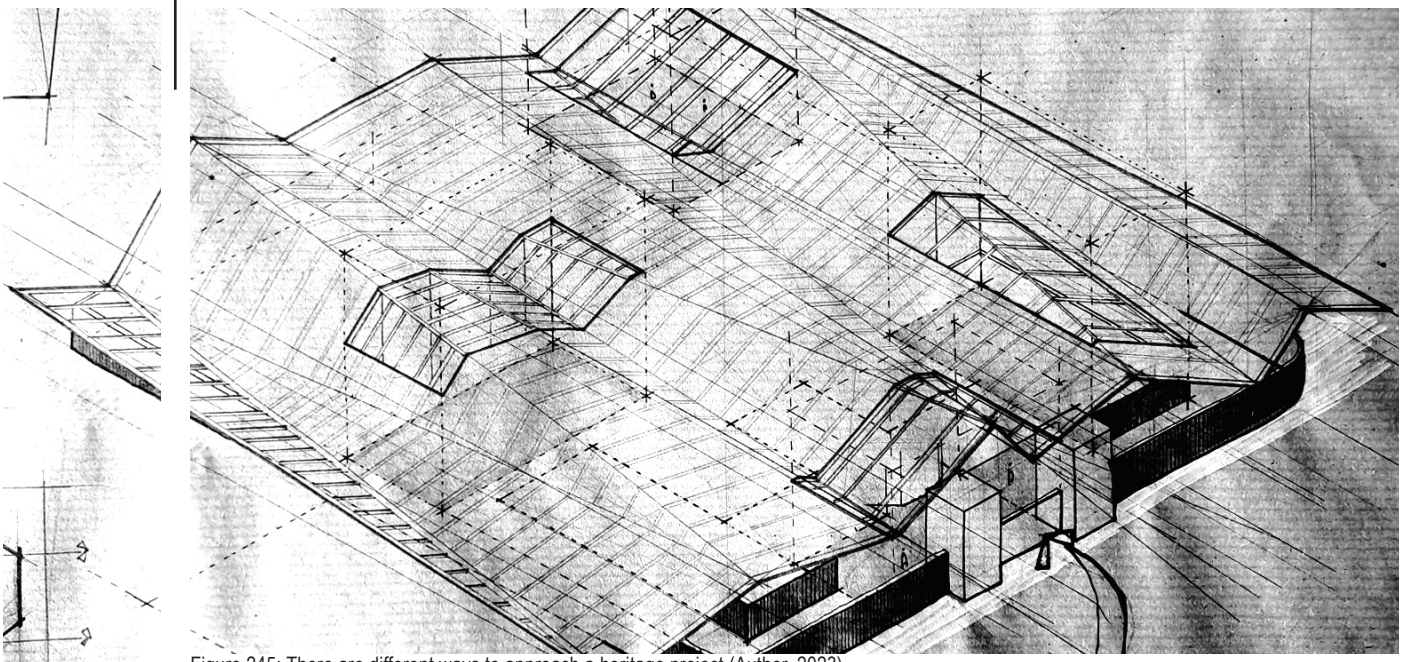


Figure 245: There are different ways to approach a heritage project (Author, 2023).

5.3 REFERENCES

Abdel, H., 2017. *The Old Granary Museum / GAPP Architects & Urban Designers*. [online]. Available from: <https://www.archdaily.com/946831/the-old-granary-museum-gapp-architects-and-urban-designers?ad_source=myad_bookmarks&ad_medium=bookmark-open> [Accessed: 08 July 2023].

Anchor of Hope., [n.d.]. *Anchor of Hope*. [online]. Available from: <https://www.eschoolnews.com/steam/2023/04/17/5-essential-stem-education-reads/> [Accessed: 1 October 2023].

Ascione, L., 2023. *5 essential STEM education reads*. [online]. Available from: < https://anchorofhope.co.za/about-us/> [Accessed: 27 October 2023].

Atom., 2023. *Item P0488_01 - Bloemfontein. Railway station*. [online]. Available from: <https://atom.drisa.co.za/index.php/bloemfontein-railway-station-2> [Accessed: 27 July 2023].

Auret, H., 2023. *Bloemfontein map 1936*. Image.

Binet, H., and Vaussanvin, C., 2019. *Hedmark Museum, Hedmark Museum by Sverre Fehn*. [online]. Available from: <https://www.atlasofplaces.com/architecture/hedmark-museum/> [Accessed: 09 May 2023].

Botes, M., 2015. *Historic Ramkraal Jail*. [online]. Available from: <https://nationalmuseumpublications.co.za/historiese-ramkraal-tronk/> [Accessed: 27 July 2023].

Boylen, W., 2023. *African Beading Workshop with Watiri Boylen*. [online]. Available from: <https://space2b.com.au/african-beading/> [Accessed: 27 July 2023].

Dale, K., Burrell, G., 2011. *Disturbing structure: Reading the ruins*. [pdf]. Heritage Western Cape. Available from: <http://dx.doi.org/10.1080/14759551.2011.544888> [Accessed: 27 July 2023].

Dataurbanism., 2012. *Describing Space through Graphs*. [online]. Available from: <https://senghorreid.tumblr.com/post/35700754584/dataurbanism-describing-space-through-graphs> [Accessed: 25 September 2023].

Dlangamandla, F., Green, J., Nortier, C., Thom, A., 2021. *The crumbling house that Ace Magashule built*. [online]. Available from: <https://www.dailymaverick.co.za/article/2021-02-28-the-crumbling-house-that-ace-magashule-built/> [Accessed: 5 October 2023].

Dovey, K., 2010. *Becoming Places*. New York. Routledge.

Du Bruyn, L., 2023. *Mangaung's Batho Township: A treasure trove of Black history*. Bloemfontein. National Museum.

Du Bruyn, L., Oelofse, M., 2019. *"A hygienic Native township shall be developed": The founding and development of Batho as Bloemfontein's "model location" (c. 1918 - 1939)*. [pdf]. Historia, 64, 2, November 2019, pp 47-81. Available at: <https://www.researchgate.net/publication/340396051_A_hygienic_Native_township_shall_be_developed_The_founding_and_development_of_Batho_as_Bloemfontein's_model_location_c_1918-1939> [Accessed 09 May 2023].

Duffin, T., 2022. *5 Wood Carving Tools You Need to Buy*. [online]. Available from: <https://tadhgduffin.com/5-best-wood-carving-tools-2023-review/> [Accessed: 27 July 2023].

Firstaid4u., 2023. *Ontario Childcare Providers*. [online]. Available from: < http://firstaid4u.mysandbox.ca/course-info/ontario-child-care-first-aid-regulations/> [Accessed: 27 July 2023].

Fourie, L. 2014. *Gateway for Justice, A Human Rights and Legal Aid Centre, Batho*. M.Arch(Prof) (Thesis). Bloemfontein: University of the Free State

Gamo, R., and Popp, A., 2016. *Weaving the courtyard*. [online]. Available from: <https://www.archdaily.com/793046/moma-ps1-yap-2016-weaving-the-courtyard-escobedo-soliz-studio?ad_source=search&ad_medium=projects_tab> [Accessed: 09 May 2023].

Garden Cities Institute., [n.d.]. *Welwyn Garden City*. [online]. Available from: <https://www.gardencitiesinstitute.com/resources/garden-cities/welwyn-garden-city> [Accessed: 25 September 2023].

Google Earth., 2023. *Google Earth*. [online]. Available from: < https://earth.google.com/web/@-29.12791872,26.2295763,1382.41668055a,670.01150621d,35y,-13.8116709h,60.45546819t,0r/data=OgMKATA> [Accessed: 1 October 2023].

Gottdiener, M., 1993. *A Marx for Our Time: Henri Lefebvre and the Production of Space*. [pdf]. American Sociological Association. Available at: <https://www.jstor.org/stable/201984> [Accessed 07 October 2023].

Heringer, A., 2011. *Training Centre for Sustainability, Morocco*. [online]. Available from: <https://www.anna-heringer.com/projects/teaching-centre-morocco/> [Accessed: 21 September 2023].

Heritage Western Cape, 2012. A *short guide to and policy statement on grading*. [pdf]. Heritage Western Cape. Available from: <https://sahris.sahra.org.za/sites/default/files/additionaldocs/Annexure%202%20-%20A%20Short%20Guide%20to%20Grading.pdf> [Accessed: 27 July 2023].

Hollmén Reuter Sandman Architects., 1995. *Women's Centre in Rufisque, Senegal*. [online]. Available from: <https://www.flickr.com/photos/hollmenreutersandman/albums/72157674805831515/with/29503625093/> [Accessed: 08 September 2023].

Hollmén Reuter Sandman Architects., 2009. T*una Haki project for an orphanage in Moshi, Tanzania 2007–2009.* [online]. Available from: <https://www.flickr.com/photos/hollmenreutersandman/albums/72157671373590483/with/30132292745/> [Accessed: 08 September 2023].

Hollmén Reuter Sandman Architects., 2022. *Hostels for Girls 2016–2022*. [online]. Available from: <https://www.flickr.com/photos/hollmenreutersandman/albums/72177720299817442/with/52147659582/> [Accessed: 08 September 2023].

Lee, C., 2022. *Bisa Butler's stunning quilted portraits celebrate Black identity and African roots*. [online]. Available from: <https://edition.cnn.com/style/article/bisa-butler-quilt-portraits-african-roots-spc-intl/index.html> [Accessed: 27 July 2023].

Li, W., 2023. *Laser Cutting: The Ultimate Guide*. [online]. Available from: <https://www.xtool.com/blogs/xtool-academy/laser-cutting> [Accessed: 27 July 2023].

Local Pros., 2021. *Bloemfontein, Local Pros*. [online]. Available from: <https://www.localpros.co.za/city/bloemfontein/> [Accessed: 08 July 2023].

Marais, L., 2021. Bloemfontein: Three Decades of Urban Change. In: Lemon, A., Donaldson, R., & Visser, G. (Eds.). *South African urban change three decades after apartheid: Homes still apart?*. Switzerland: Springer Cham, pp 117-127.

Mashambanhaka, F., 2019. *3D Printing Africa: South Africa's 3D Printing Sector*. [online]. Available from: <https://3dprint.com/242448/3d-printing-africa-south-africas-3d-printing-sector/> [Accessed: 27 July 2023].

Moeti, P., 2018. *R120mln to build Ramkraal prison vanished*. [online]. Available from: <https://www.sabcnews.com/sabcnews/r120mln-to-build-ramkraal-prison-vanished/> [Accessed: 27 July 2023].

Monzon, L., 2021. *MTN Launches Free Online School in South Africa – And It's Impressive*. [online]. Available from: <https://www.itnewsafrica.com/2021/10/mtn-launches-free-online-school-in-south-africa-and-its-impressive/> [Accessed: 27 July 2023].

Obakki., 2023. *African Baskets: Weaving Stories of Women*. [online]. Available from: <https://obakki.com/blogs/journal/african-baskets-weaving-stories-of-women> [Accessed: 27 July 2023].

Pintos, P., 2021. *The Richard Rogers' Drawing Gallery / Rogers Stirk Harbour + Partners*. [online]. Available from: <https://www.archdaily.com/957660/the-richard-rogers-drawing-gallery-rogers-stirk-harbour-plus-partners?ad_medium=gallery> [Accessed: 09 September 2023].

Pintos, P., 2022. *Bodmin Jail Hotel and visitor attraction by twelve architects*. ArchDaily. [online]. Available from: <https://www.archdaily.com/983435/bodmin-jail-hotel-and-visitor-attraction-twelve-architects?ad_source=search&ad_medium=projects_tab> [Accessed: 09 May 2023].

Platt, J., 2020. *The Community Redefining Johannesburg's Inner-City Landscape*. [online]. Available from: <https://theculturetrip.com/africa/south-africa/articles/the-community-redefining-johannesburgs-inner-city-landscape/> [Accessed: 27 July 2023].

POPUP., [n.d.]. P*eople Upliftment Programme (POPUP).* [online]. Available from: < https://popup.co.za/about-us/> [Accessed: 1 October 2023].

Québec., 2023. *Horticulture and garden centre operations*. [online]. Available from: <https://www.quebecmetiersdavenir.com/en/training/horticulture-and-garden-center-operations/> [Accessed: 27 July 2023].

SAHRIS, 2012. *Old Prison, Bloemfontein*. [online]. Available from: <https://sahris.sahra.org.za/node/33241> [Accessed: 27 July 2023].

Santibañez, D., 2021. *Civic Centre Lleialtat Santsenca 1214 by Harquitectes*. [online]. Available from: <https://www.archdaily.com/889515/civic-centre-lleialtat-santsenca-1214-harquitectes?ad_medium=gallery> [Accessed: 09 May 2023].

Simpson., A., 2013. S*urveillance State*. [online]. Available from: <https://www.nytimes.com/2013/07/21/books/review/the-panopticon-by-jenni-fagan.html> [Accessed: 07 September 2023].

South Africa. 1969. National Monuments Act, Act 28 of 1969. Pretoria.

South Africa. 1999. National Resources Act, Act 25 of 1999. Cape Town.

Stats SA, 2023. B*eyond unemployment – Time-Related Underemployment in the SA labour market*. [online]. Available from: <https://www.statssa.gov.za/?p=16312#:~:text=South%20Africa's%20unemployment%20rate%20in,the%20fourth%20quarter%20of%202022> [Accessed: 17 May 2023].

Strickland, S., 2012. *First Coast homemaker clubs show how home economics skills are still important*. [online]. Available from: <https://www.jacksonville.com/story/entertainment/local/2012/04/18/first-coast-homemaker-clubs-show-how-home-economics/15869528007/> [Accessed: 27 July 2023].

The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance. 2013.

UFS., [n.d.]. *Bloemfontein*. [online]. Available from: < https://www.ufs.ac.za/adhoc-pages/visit-the-ufs/bloemfontein#:~:text=Bloemfontein%20(direct%20translation%3A%20flower%20fountain,north%20of%20the%20Orange%20River.> [Accessed: 3 October 2023].

United States of America. 2023. Economic Development Authority Part iii: Community Development Division. Government Gazette, 26(45), June 28. Iowa: Iowa Administrative Code.

van Tonder, W., 2023. *Aerial drone image of Ramkraal Prison*. Image.

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