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DPD 801- DESIGN PROJECT AND  
DISCOURSE

## Architecture for People



## Abstract (256 words)

This project addresses the complex challenge of urban integration between two informal settlements through the implementation of the Upgrading of Informal Settlements Policy (UISP). The project site is strategically positioned between these settlements, making it a crucial area for intervention. Leveraging existing infrastructure, such as the Eerste Fabriek Train Station in Mamelodi and Nellmapius in Pretoria East, the aim is to facilitate the reintegration of these communities into the city. Additionally, the project seeks to bridge the gap that has historically divided these two settlements by creating a shared public space, in line with principles of democratic space and public interest design.

The UISP guides a phased, in-situ upgrade approach, starting with essential services like water supply, electricity, community facilities, safety measures, clinics, early childhood development centers, and markets. These improvements not only enhance access to vital services but also contribute to the safety and well-being of the community.

In the context of place-making, architects play a pivotal role as mediators, harmonizing the aspirations of the community with urban planning and development demands. Their vision is to create a cohesive and inclusive urban environment that fosters a sense of belonging and community identity.

The overarching objective is to dismantle the historical barriers that have separated these informal settlements. The project envisions a dynamic, interconnected community hub that embodies inclusivity and addresses the current challenges informal settlements face. It is designed to be adaptable to future needs, ensuring that access to services, democratic urban spaces, and safety remains at the forefront of its design and implementation.



Figure 1: Mini Project digital painting( Author 2023)

### KEYWORDS

UISP, Public Interest design (PID), Democratic design, place-making, informal settlement

### Definitions of terms

**Informal Trader-** Individual conducting small-scale, Unorganized, self-employment-creating activities which might involve individuals or unremunerated relatives of the business owner, a small number of hired workers, or totally without any hired workers which the resource-poor engage in to increase household income generation opportunities. (IGI 2015)

**Informal settlement-** According Western Cape Government(2003) are illegal residential areas that do not comply with local authority requirements for conventional (formal) townships

**UISP-** Policy on upgrading informal settlements in South Africa

**Public interest design-** is a human-centered approach to the design of products, environments, and systems, expanding the disciplinary boundaries, professional practices, and relevance of architecture and other design disciplines in the twenty-first century (Anderson 2014:1)

# CONTENT

<b>Abstract (256 words)</b>	<b>1</b>
<b>Project Description</b>	<b>3</b>
Introduction	3
Context	4
Project Brief	6
Research Question	6
Problem Statement	6
Project Focus and Programme	6
<b>DISCOURSE THEORY</b>	<b>8</b>
Public Interest Design	8
<b>Summary of integrated design and technological Investigation(419 WORDS)</b>	<b>10</b>
<b>Documentation Iterative Design Process</b>	<b>12</b>
Design Development 1	12
Figure 13: Process Images and Drawings by Author(2023)	12
Design Development 2	13
Design Development 3	14
Figure 15: Process Images and Drawings by Author(2023)	14
Design Development 4	15
Design Development 5	16
<b>Final Iteration Images</b>	<b>17</b>
<b>Figure 19: Site plan( Author 2023)</b>	<b>18</b>
<b>Figure 21: Front Elevation ( Author 2023)</b>	<b>18</b>
<b>Figure 20: Floor plan( Author 2023)</b>	<b>18</b>
<b>Critical Reflection</b>	<b>19</b>
1- the impact of mini-project (403 words)	19
2- Major Project (542 words)	19
<b>Conclusion</b>	<b>20</b>
<b>References</b>	<b>21</b>
<b>List of Figures</b>	<b>21</b>

## DECLARATION OF ORIGINALITY

I declare that the mini-dissertation, Architecture for people, which has been submitted in fulfillment of part of the requirements for the module of DPD 801, at the University of Pretoria, is my own work and has not previously been submitted by me for any degree at the University of Pretoria or any other tertiary institution.

I declare that I obtained the applicable research ethics approval in order to conduct the research that has been described in this dissertation.

I declare that I have observed the ethical standards required in terms of the University of Pretoria's ethics code for researchers and have followed the policy guidelines for responsible research.

Signature:



# Project Description

## Introduction

The legacy of apartheid in South Africa continues to cast a long shadow over the nation's urban landscape, posing a complex challenge for urban planners, policymakers, and social scientists. One striking manifestation of this enduring legacy is the existence and persistence of informal settlements, often located near established urban areas or key infrastructure. Apartheid's deliberate design, marked by the construction of roads, rail, rivers, buffer zones of empty land, and other physical barriers, aimed to segregate people along racial lines, maintaining a system of racial inequality and social separation (Miller 2016). As articulated by Smit and Parnell (2017), "Roads, rivers, buffer zones of empty land, and other barriers were constructed to keep people separate. Twenty-two years after the fall of apartheid many of these barriers, and the inequalities they have engendered, still exist" (Smit & Parnell, 2017:123).

These informal settlements, often housing marginalized and impoverished communities, exist as the physical and social manifestations of apartheid's spatial planning (Parnell 1997). Integrating these settlements into the broader urban fabric is an ongoing challenge that encompasses housing, infrastructure, services, and social cohesion. Moreover, the informal settlements are not homogenous; they vary in terms of their spatial distribution, demographics, and levels of deprivation. The complexity of integrating these settlements lies in addressing not only the immediate needs for housing and services but also in redressing historical inequalities and fostering inclusive urban development. This project delves into the multifaceted dimensions of the complex urban integration of South Africa's informal settlements, using the Public interest design (PID) lens and upgrading of informal settlement policy (UISP) as guiding principles in exploring obstacles, opportunities, and evolving strategies in the post-apartheid era.

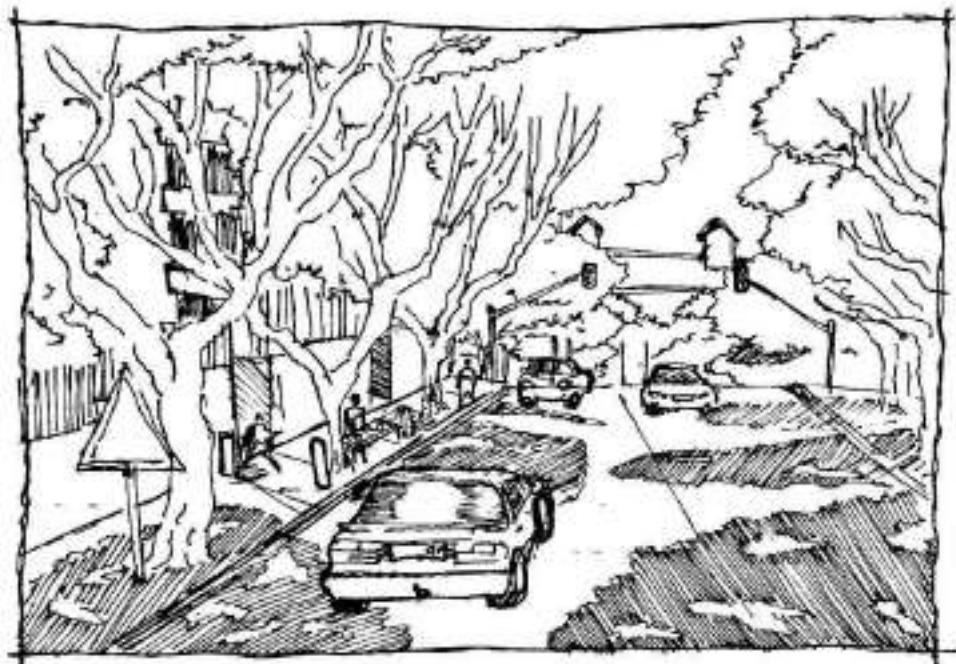


Figure 2: Storyboard images of Complex integration of informal settlement(Author 2022)

## Context

The context of this project is situated in a dynamic and evolving urban landscape in Pretoria, South Africa. The project site encompasses the Eerste Fabriek Train Station, which is owned and operated by Passenger Rail South Africa (PRASA). The station is strategically located at the boundary of Mamelodi East, a part of the Tsakane region, and Nellimapius, which is situated to the south of the train station. Nellimapius is the least developed side of the area having essential services, like hospitals and police stations in Mamelodi or Silverton. This location is significant as it serves as a nexus of connectivity, intersecting Love Drive and connecting to Tshamaya Road. Additionally, it's worth noting that Tshamaya Road was earmarked for the Bus Rapid Transit (BRT) system by the City of Tshwane(COT,2014:6).



Figure 3: Top left- CONTEXT MAP (SOURCE AUTHOR), Top Right-Important routes to the site map(Source Author), Bottom Left- Railway map (Source Author), Bottom Center- Nollie map(Author)

Bottom right- Location statistics(STATSA,2011)

Furthermore, a noteworthy development in the vicinity is the proposed addition of a new Gautrain station to the Eerste Fabriek Train Station(Cockyane 2010). This expansion is set to enhance the area's connectivity and accessibility, making it a pivotal transportation hub within Pretoria.

The project site itself is nestled between two informal settlements, one in Mamelodi and the other in Nellimapius. These informal settlements face significant challenges, including being prone to flooding from the nearby Pienaars River. Mabona(2022) states that the settlements have been established within the floodplain of the river, which has exposed their residents to the risks associated with seasonal flooding.

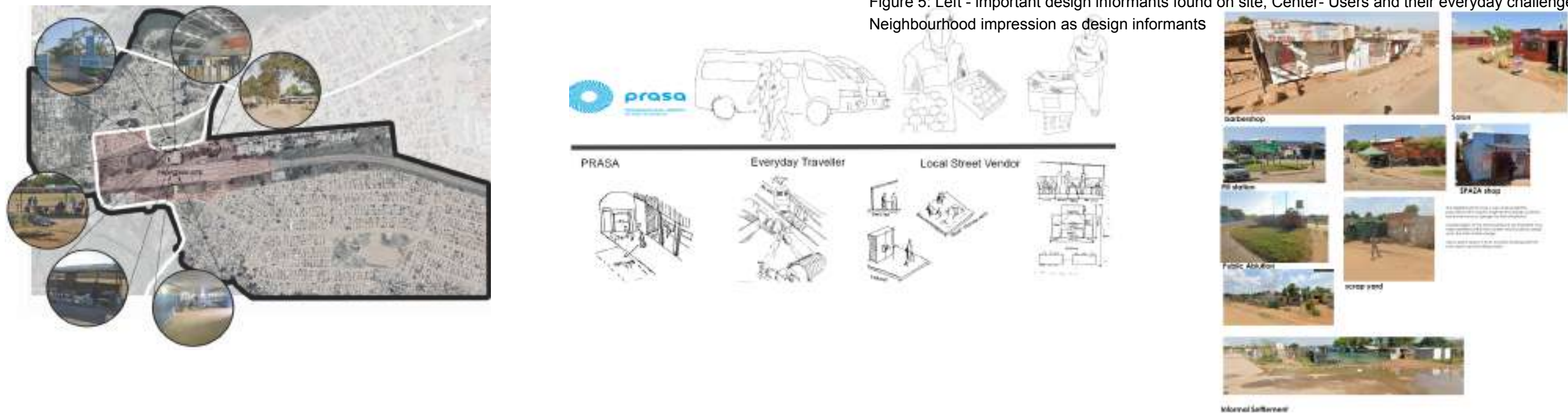
It is essential to acknowledge that both informal settlements are considered vulnerable communities, and the City of Tshwane has proposed plans to relocate them to safer areas due to the flooding issues( Mabona 2022). This relocation initiative is a critical aspect of the broader project, which aims to address not only their living conditions but also the integration of these communities into the urban fabric, fostering inclusivity and addressing historical divisions within the city.



Figure 4: Left- Informal settlements map(Author), center- services plotting map( Google Earth Pro), Right- Program plotting map( Google Earth image manipulated by author)

This complex and multifaceted context sets the stage for a project that not only considers physical infrastructure but also the social, economic, and environmental aspects of urban development and integration.

Figure 5: Left - important design informants found on site, Center- Users and their everyday challenges, Right- Neighbourhood impression as design informants



## Project Brief

The proposed project will look into questioning the relocation of the informal settlement by using the UISP which prescribes an in-situ upgrading of the informal settlement. Architectural intervention at Eerste Fabriek train Station aims to transform the existing train station into a vibrant mix-use, community-centric public space, which aims to connect firstly the two informal settlements, stitch together Mamelodi and Nellimapius which was previously separated by the train station, and lastly Integrate this area into the city using the existing rail infrastructure which addresses the needs of the community and is accessible to the residents.

## Research Question

How can an architectural intervention within the context of rail infrastructure be strategically designed to facilitate the complex urban integration of informal settlements, while concurrently supporting and enhancing the livelihoods of local traders?

## Problem Statement

The urban landscape of South Africa is characterized by a pressing challenge of informal settlements, which are often situated near rail infrastructure and in some cases on it (Transnet 2006). These settlements are not only a manifestation of socio-economic disparities but also present an intricate urban integration challenge. In light of this, this research seeks to address the question: "How can architectural interventions within the context of rail infrastructure be strategically designed to facilitate the complex urban integration of informal settlements, while concurrently supporting and enhancing the livelihoods of local traders?"

The informal settlements in South Africa are often plagued by overcrowding, lack of basic amenities, and limited access to economic opportunities, resulting in a vicious cycle of poverty and exclusion (Huchzermeyer, 2004). Additionally, their proximity to rail infrastructure has raised safety concerns and often leads to conflict with transport authorities. The need for effective strategies to integrate these settlements into the urban fabric, while respecting the livelihoods of local traders, has become imperative.

To address this complex challenge, it is essential to consider the architectural interventions within the unique context of rail infrastructure. These interventions must go beyond mere housing solutions and encompass a comprehensive approach that fosters social, economic, and spatial integration (Pieterse, 2019). The livelihoods of local traders are closely intertwined with the informal settlements and need to be preserved and enhanced in the process.

The research will entail an in-depth analysis of the specific conditions of informal settlements located near rail infrastructure in South Africa and the unique challenges they pose. It will explore how architectural interventions can be strategically planned to address these challenges and contribute to a more inclusive and sustainable urban environment. By taking the role of the architect as a mediator as stipulated in spatial agency (Till, 2011) one can develop a nuanced understanding of the socio-economic dynamics in these settlements and the role of rail infrastructure, this research aims to provide actionable recommendations for architects, urban planners, policymakers, and local communities.(Awan, Schneider, till 2011)

## Project Focus and Programme

The Project position it self in Utilizing the Upgrading of the Informal Settlement Policy (UISP), the project will focus on the provision of essential social services and community facilities to meet the needs of the local community. Not the housing component these programs will be an addition to existing rail services.

Modiba(2021) states that the biggest impact of the floods in this area is the livelihood of the settlements, as most are unemployed or conducting informal businesses/trading. With the present element of informal trading inside and outside the train station, an **Informal trading market** is an important program to include.

According to UISP( SJC 2019), the second and third stages of implementation prescribe the construction of social, and community facilities and basic shared services. These facilities were chosen in response to lack of the facilities in the area and support by Modiba's (2021) findings on the site which indicate the formal aspects were reported as heavily impacted, which are Health, schools, housing, income, food security, income, and housing.

**Clinic-** The nearest medical facility is 2km away from the site, this program responds to Health indicators

**Early childhood development-** on the present assessment, there was no early childhood development center near the site, and is one of the services stipulated by the UISP to include, this adds the benefit of daycare and afterschool services to the train. This program responds to the school indicator

**Satellite police station-** Mapping of the site indicated that 390688 people are living in the study area (StatsSA 2011), the CSP(2018) states that for every 377 people, there is one police officer, but the SCJ(2018) argues that social injustice of deployment of police is in favor of white affluent neighbors and that satellite police stations should be deployed in a poor area like townships to help decrease the crime rate,

**Formal Retail -** from conducting a site visit, the people of Nellimapius have to cross the railway to access formal retail service as Mamelodi is more developed as stated above in the

context section, by adding a formal retail service we address income and food security as there will fresh food delivered to the community.

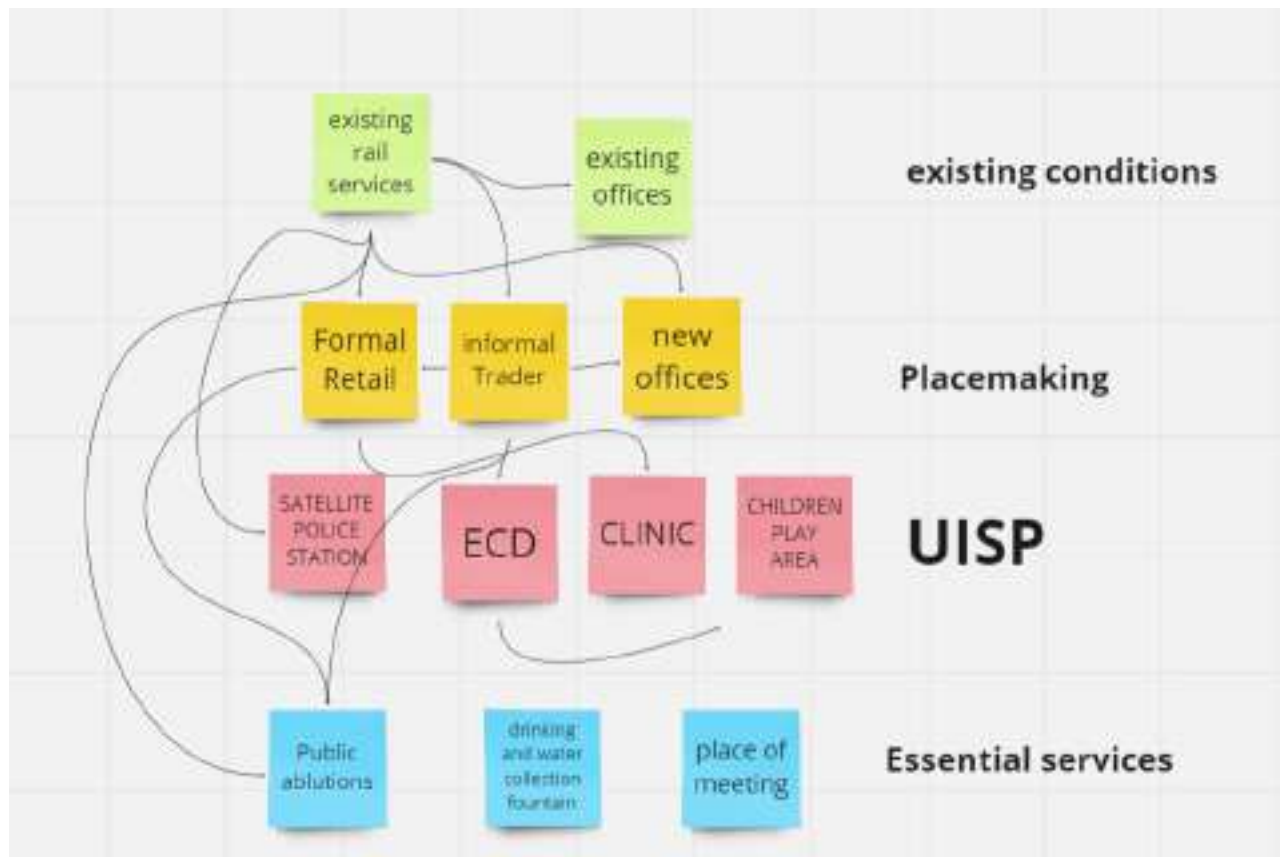
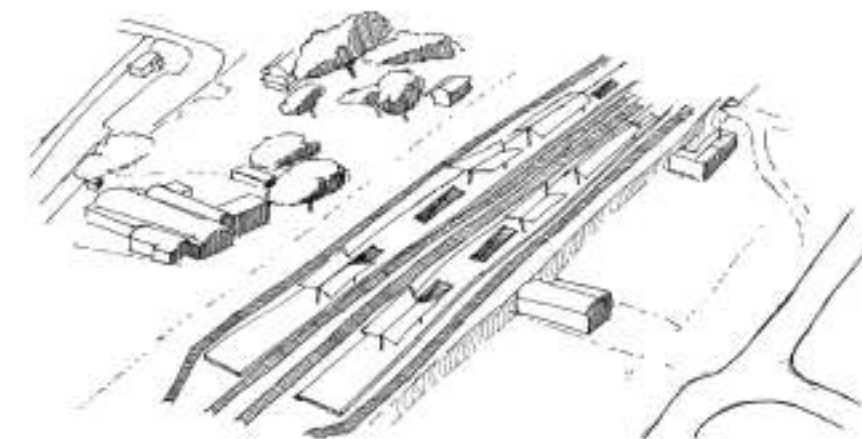
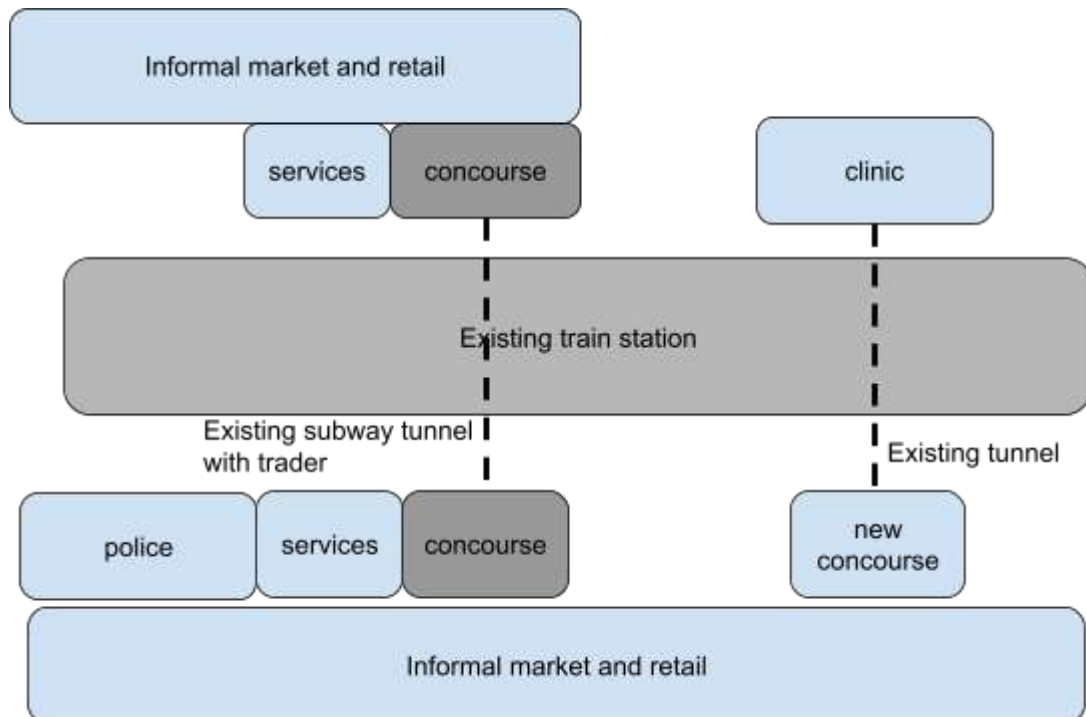


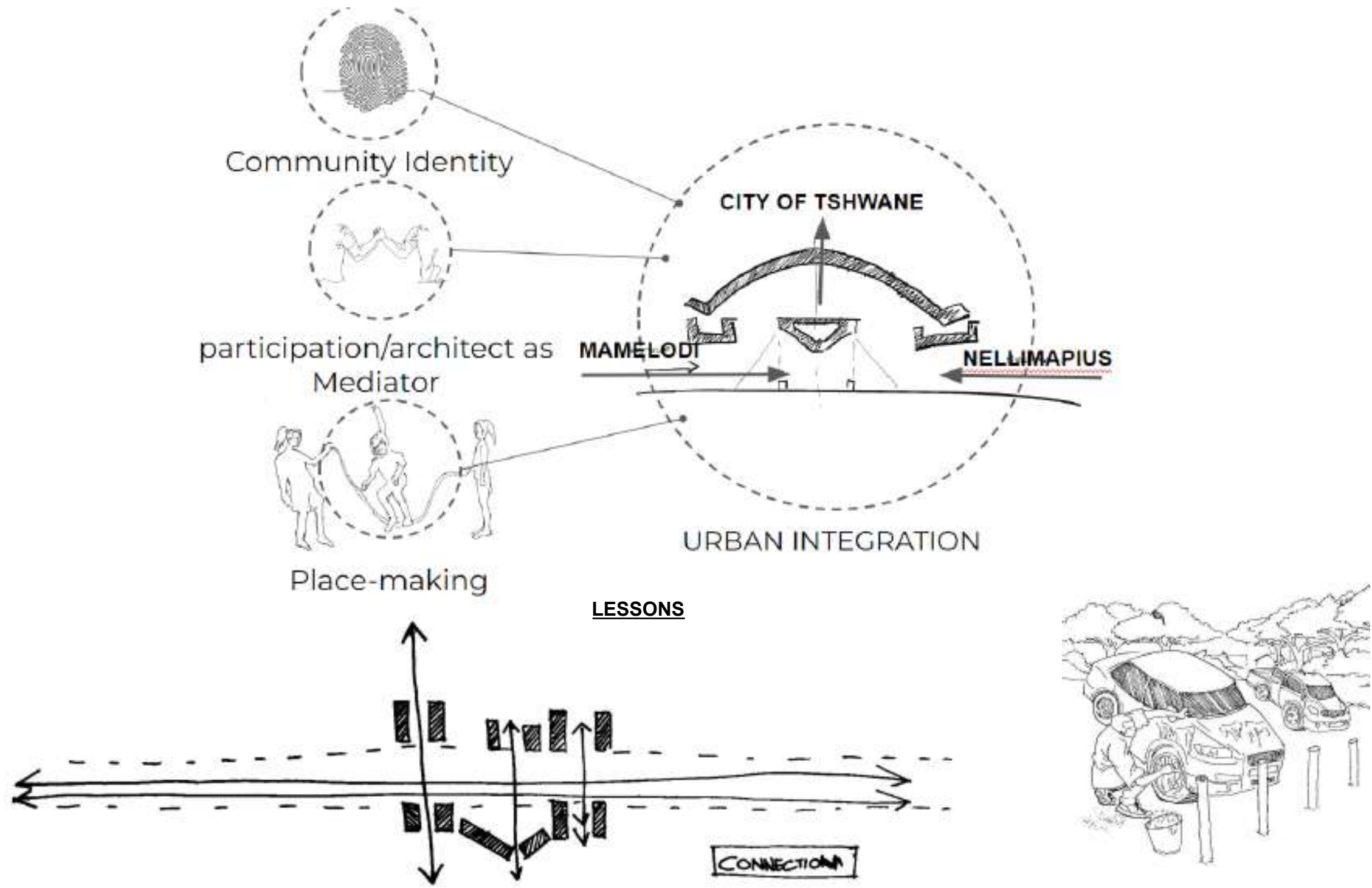
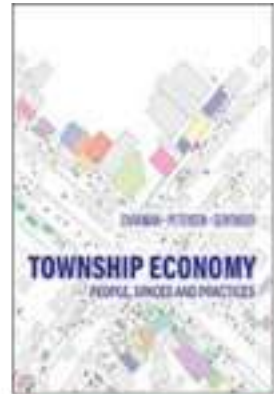
Figure 6: TOP LEFT- program diagram (Source Author 2023), Top right - Urban Block Vision (Source Author), bottom left- Bubble diagram of existing and new spaces(Source Author 2023), Bottom Right- Image of existing Context.





# DISCOURSE THEORY

## Public Interest Design



Township Economy (Local businesses)

Figure 7: Public interest design Lessons( Image Manipulated by Author 2023)

# UISP

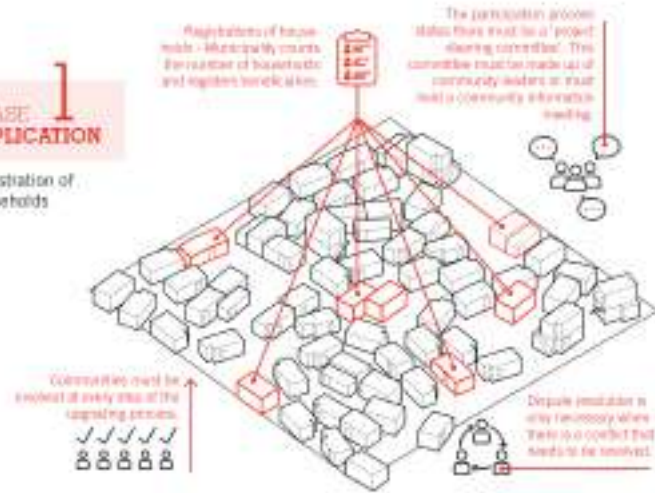
## WHAT IS THE UISP?

The Upgrading of Informal Settlements Programme (UISP) was introduced in 2004. One of its aims is to include communities in the upgrading process to reduce the disruption of upgrading, but also ensure communities are involved in the upgrading of their areas. The UISP is meant to be incremental, where upgrading is done in four stages. The first three phases focus on community participation, supply of basic services and tenure security.



### 1 PHASE APPLICATION

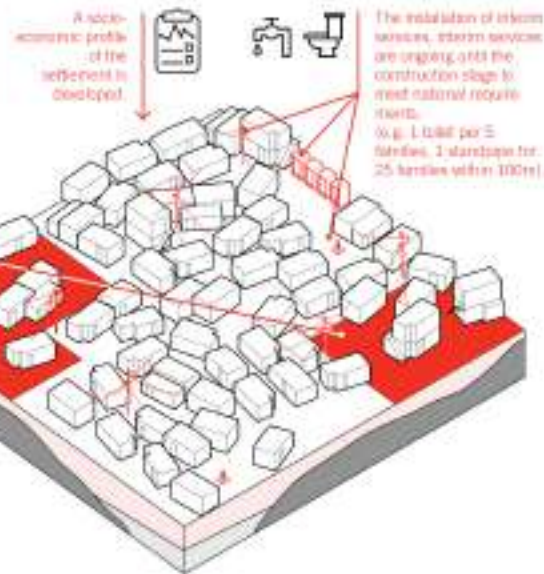
Registration of households



### 2 PHASE PROJECT INITIATION

Acquiring land where required through negotiation or expropriation when not municipally owned land.

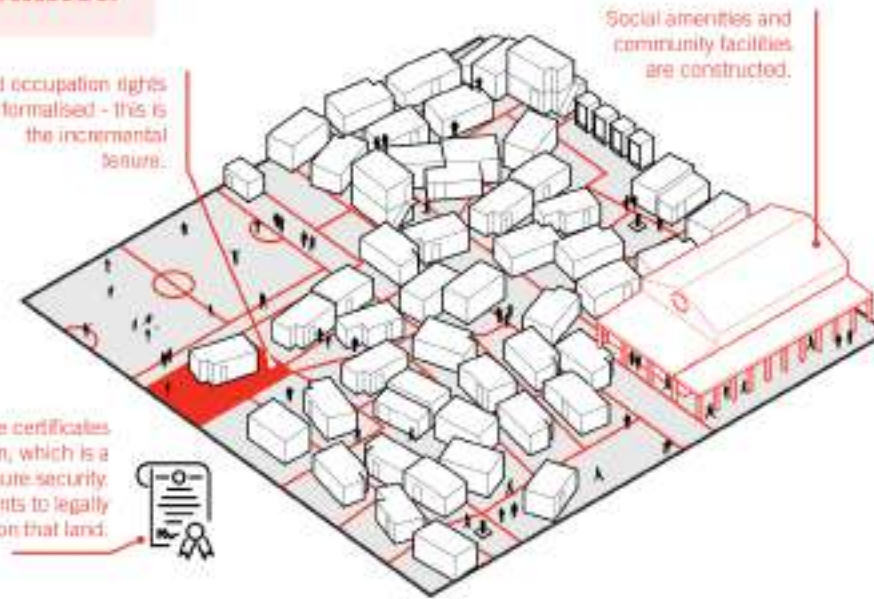
The planning studies are conducted to determine and understand the physical context of the site.



### 3 PHASE IMPLEMENTATION

Land occupation rights are formalised - this is the incremental tenure.

Residents receive certificates of occupation, which is a precursor to tenure security. It allows residents to legally live on that land.

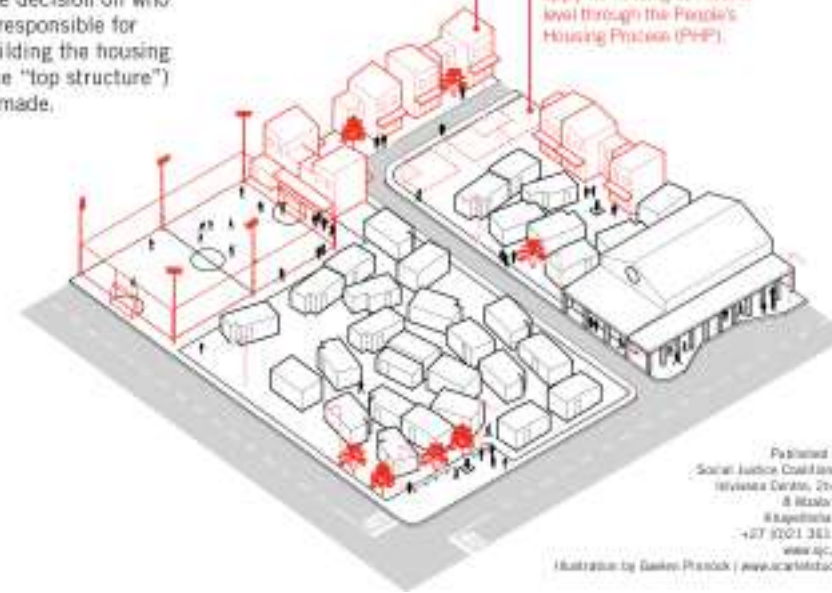


### 4 PHASE HOUSING CONSOLIDATION

The decision on who is responsible for building the housing (the "top structure") is made.

The decision of who is responsible for building the top structure is dependent on municipal funding and the geographical challenges of the site.

If residents are to build their own top structure, they can apply for funding at national level through the People's Housing Process (PHP).



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## Lessons

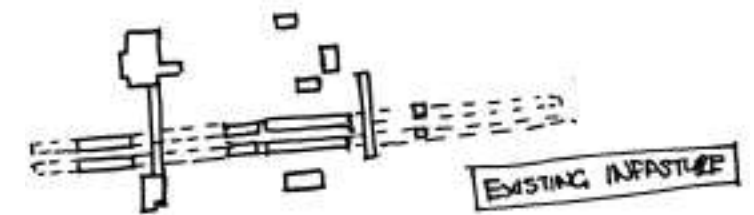
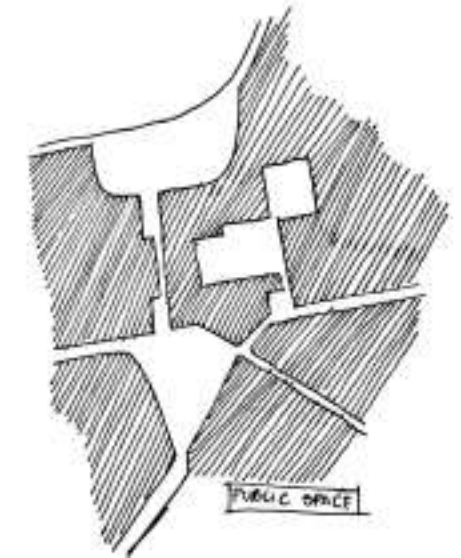
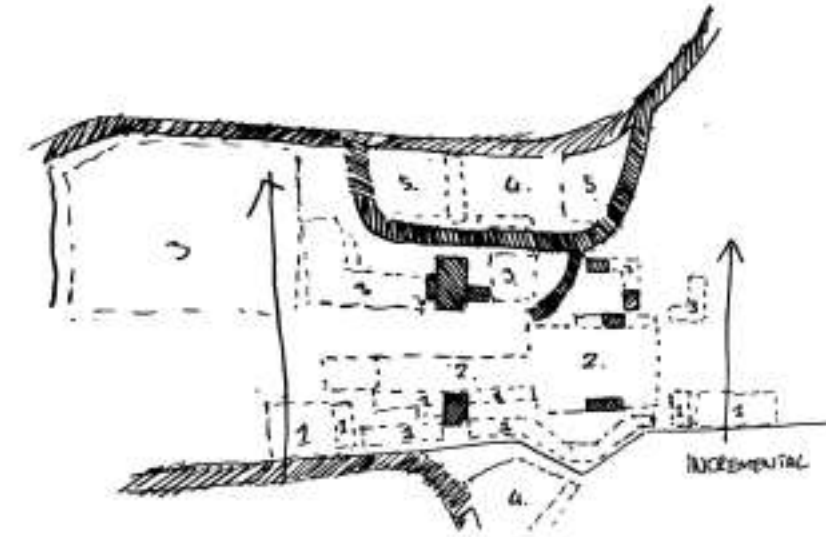
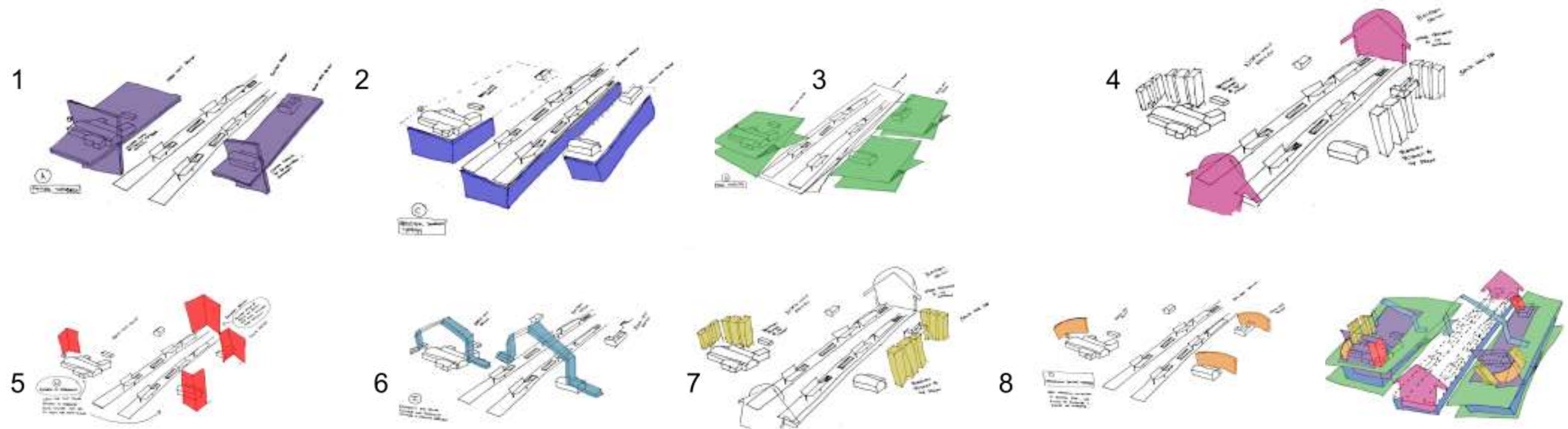


FIGURE 8: IMAGE SOURCED FROM SOCIAL JUSTICE COALITION(2019) to Left- Design Intention from Theory(Author 2023)

## Summary of integrated design and technological Investigation(419 WORDS)

The integrated design and technological investigation at the heart of this project embarked on a journey of creative evolution, ultimately shaping the vision and construction techniques for a significant architectural endeavor. The process began with an exploration of design principles, drawn through a series of drawings that would guide this project. However, it quickly evolved as delving deeper into understanding the site and the materials at our disposal. This exercise presented images that has principles that related to design intention, rooting them to discourse using Joonsung Kim's conceptual of taxonomy framework for public interest design(Kim 2018).

Figure 9: Design Intentions and Principles ( Source Author 2023)



This series of project images signifies the integration of design thinking guided by Joonsung Kim's contextual taxonomy (Kim, 2018), reflecting my design intentions through the lens of nine distinct principles.

The first sketch underscores the significance of community identity and cultural considerations, aligning with the principle of Social Construction (Kim, 2018). This model focuses on creating social opportunities to actively engage people in community development, facilitating the construction of socially meaningful projects in a democratic and interactive manner, upholding essential social values.

The second sketch adopts an industrial approach, drawing from Industrial Typology principles as part of the Open-source Design framework (Kim, 2018) that encourages

collaboration with technical experts in design or acquiring technical knowledge outside of architecture.

The third sketch embraces a naturalistic perspective, where the design harmonizes with the natural surroundings, reflecting the principles of Advocacy Design, particularly when addressing urgent needs in challenging contexts (Kim, 2018). assisting people in dire circumstances, including Disaster Relief , designling infrastructure, and clean water systems using the UISP.

The fourth and Eighth sketch introduces the concept of visual tectonics and indigenous thinking that the utilization of local building knowledge and methodologies visual celebrating them, a core aspect of Collective Capability (Kim, 2018) .

The fifth and sixth sketch is dedicated to dismantling historical barrier and socioeconomic and social equity considerations, notably the apartheid buffer zone, which follows the design for political activism lens (Kim, 2018), which empowers local communities to be involved in meaningful projects.

The seventh image focuses on form repetition, aligning with the concept of Participatory Action Research and Practice, where local and technical knowledge generators collaborate as equal partners (Kim, 2018).

The final image amalgamates all these different modes of thinking, providing a comprehensive guide to steer us through the design process, positioning the project in advocacy design and social construction framework of the taxonomy.

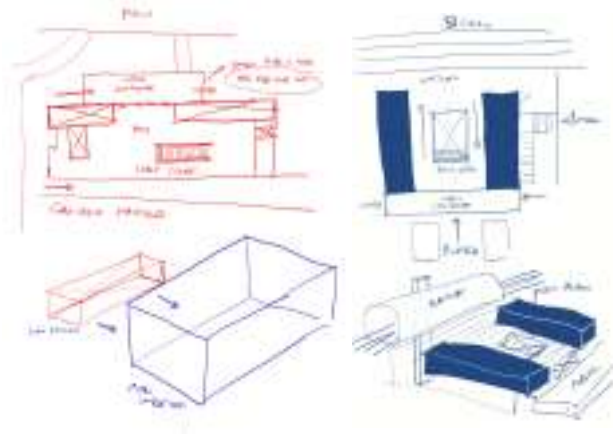
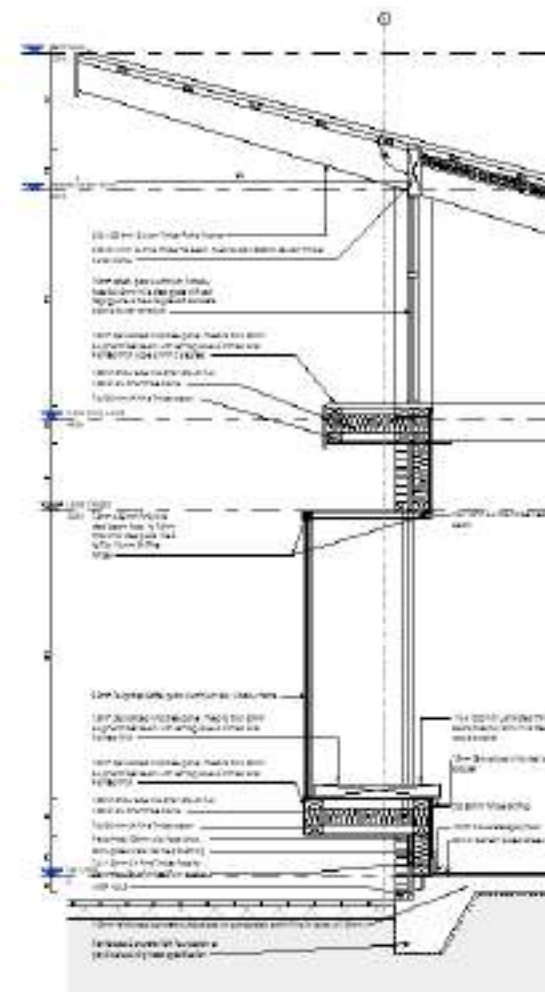


Figure 10: to the Right Sketch of Gautrain Layouts( Author 2023)

A pivotal phase of our investigation involved on-site visits to three Gautrain stations. These visits were essential in acquiring insights into the spatial layouts and construction technology, which would prove instrumental in shaping our design. It was during this stage that we identified brick, concrete, and steel as the primary materials to be employed in the project based on the existing current materiality of face-brick, concrete, steel roof structure and cladding, each is also echoed in the Gautrain building as there are rigidity proves ideal for this typology. This is also supported by the rich local culture of brick-making in the community. This presented an opportunity to infuse local culture and craftsmanship into our design. The incorporation of this community brick-making practice into our technical investigation became a pivotal element.

Receiving significant inquiries regarding sustainability, we encountered a challenge with the extensive steel needed for our project, prompting an exploration of alternative materials like Receiving significant inquiries regarding sustainability, we encountered a challenge with the extensive steel needed for our project, prompting an exploration of glulam timber due to its flexibility and strength for a single-story structure. However, as our vision expanded to larger public buildings, the design shifted, incorporating two additional levels



and a split-level layout to suit the site's slope. Despite considering glulam's potential limitations for the intended scale, feedback steered us back to conventional materials like brick, concrete, and steel, utilizing portal frames as the primary building technology. glulam timber and try to limit the design to a single-story structure. However, the process caused fear of designing and self-doubt. The single-storey structure design hindered the aim objective of the project by adding the design shifted, incorporating two additional upper levels and a split-ground floor level layout to suit the site's slope. Despite considering glulam's potential limitations for the intended scale, feedback steered us back to conventional materials like brick, concrete, and steel, utilizing portal frames as the primary building technology.

tasked with creating a performance assessment for a design project, with a specific focus on safety. To achieve this, a collaborative process with colleagues investigating safety aspects in design was used. Together, the formulation of criteria through a co-design process was done. These criteria were then applied to the design to attain the desired outcomes. The investigation into safety during the co-design

process drew on various sources, including the work of VPUU(2016), the theory of UN-Habitat(2020) on public safety, and insights from planning against crime: preventing crime with people, not barriers, South African Crime Quarterly(Landman 2016) as well Creating defensible spaces (Newman 1996). This collective knowledge helped us establish criteria to evaluate the safety level of the public space in our design. Subsequently, the project integrated these criteria in an iterative design process to enhance the overall safety rating.

The integrated design and technological investigation began with the formulation of design principles and expanded to incorporate a profound understanding of site dynamics and materials. It navigated through multiple design iterations, contemplating sustainability, and adapting to the local culture's rich heritage. The feedback and challenges encountered along the way ultimately guided us back to a refined choice of materials and construction techniques, marking the evolution of a robust and thoughtful architectural design.

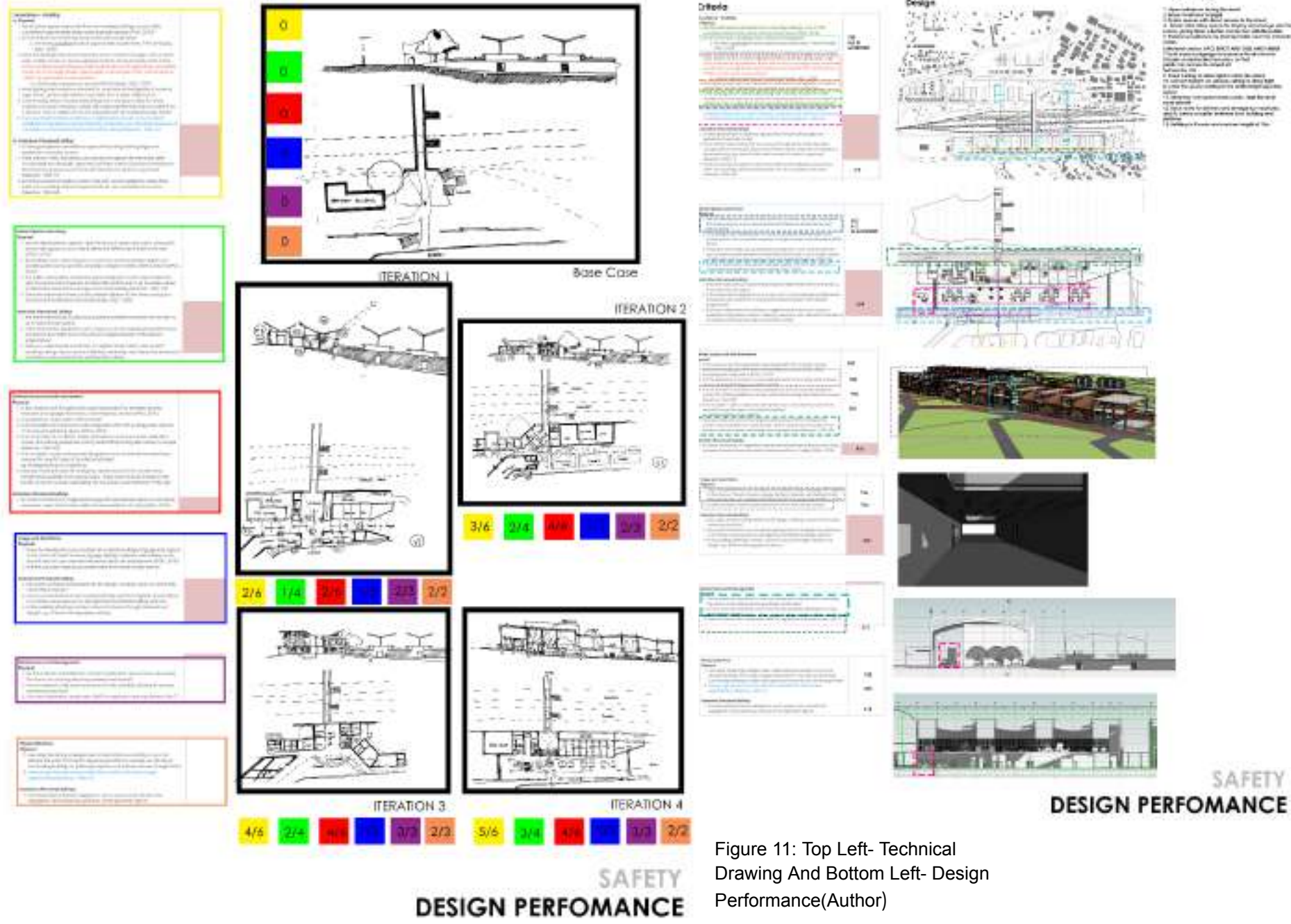


Figure 11: Top Left- Technical Drawing And Bottom Left- Design Performance(Author)

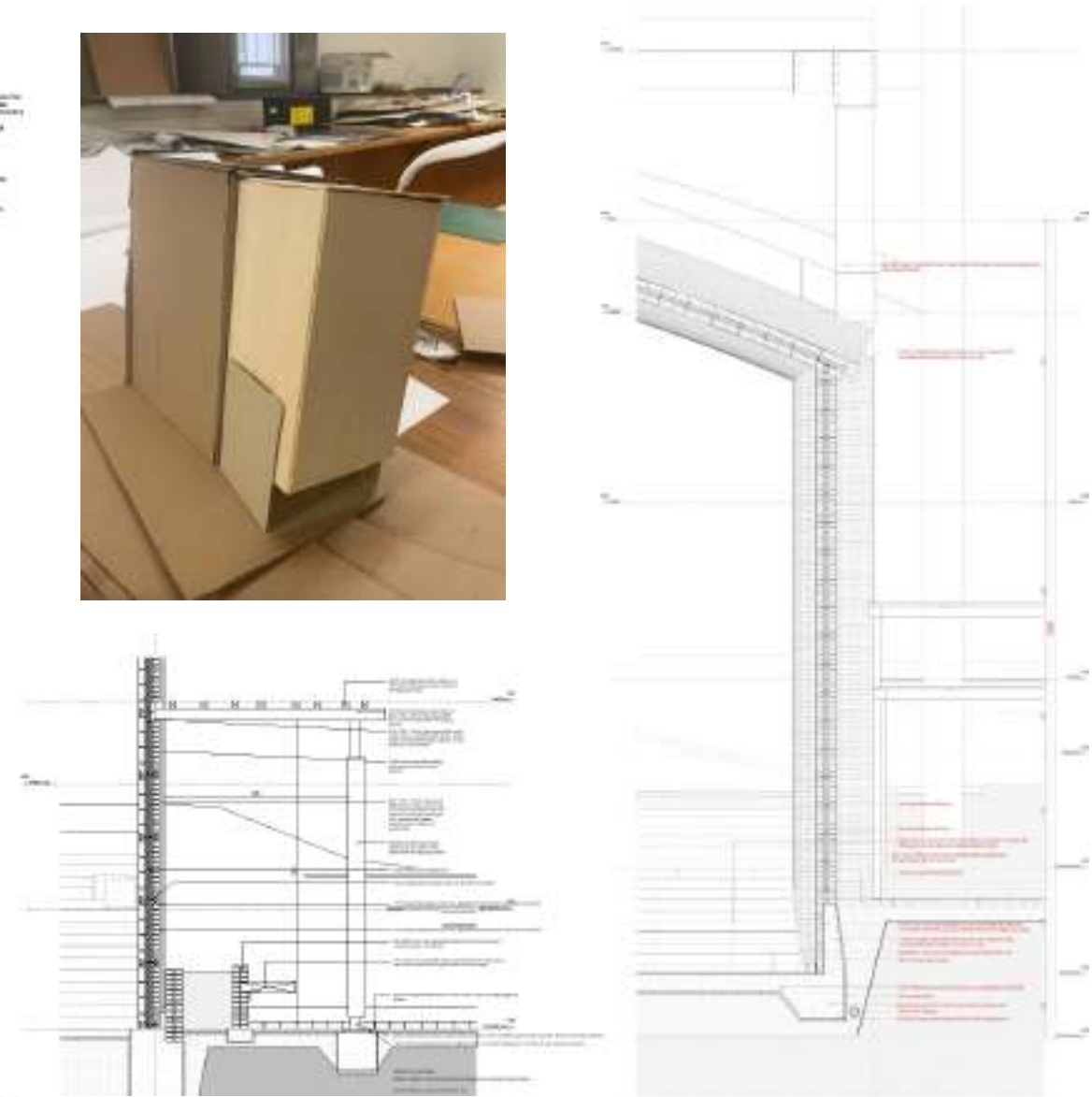


Figure 12: Technical drawing and model of design

# Documentation Iterative Design Process

## Design Development 1

In the initial phase of the project, we embarked on a creative journey, gradually stacking layers of significance to conceptualize and shape the space. This process was guided by the insights and input of our informant which UISP, site analysis, and design principles that informed each layer of the design. Our journey began with creating a model and a series of drawings, envisioning the potential form and function of the building guide by UISP implementation stage 1 (SCJ,2019)for in-situ upgrading its important to determine the need for reblocking but the layout of the informal settlement ideal with sufficient space so there was no need for reblocking. These activities served as the foundation for establishing the overarching design principles that would steer the entire project. Zoning diagrams were also down to get a better understanding of the context and start generating form. The main aim of this exercise was to get all the ideas for the project on paper.

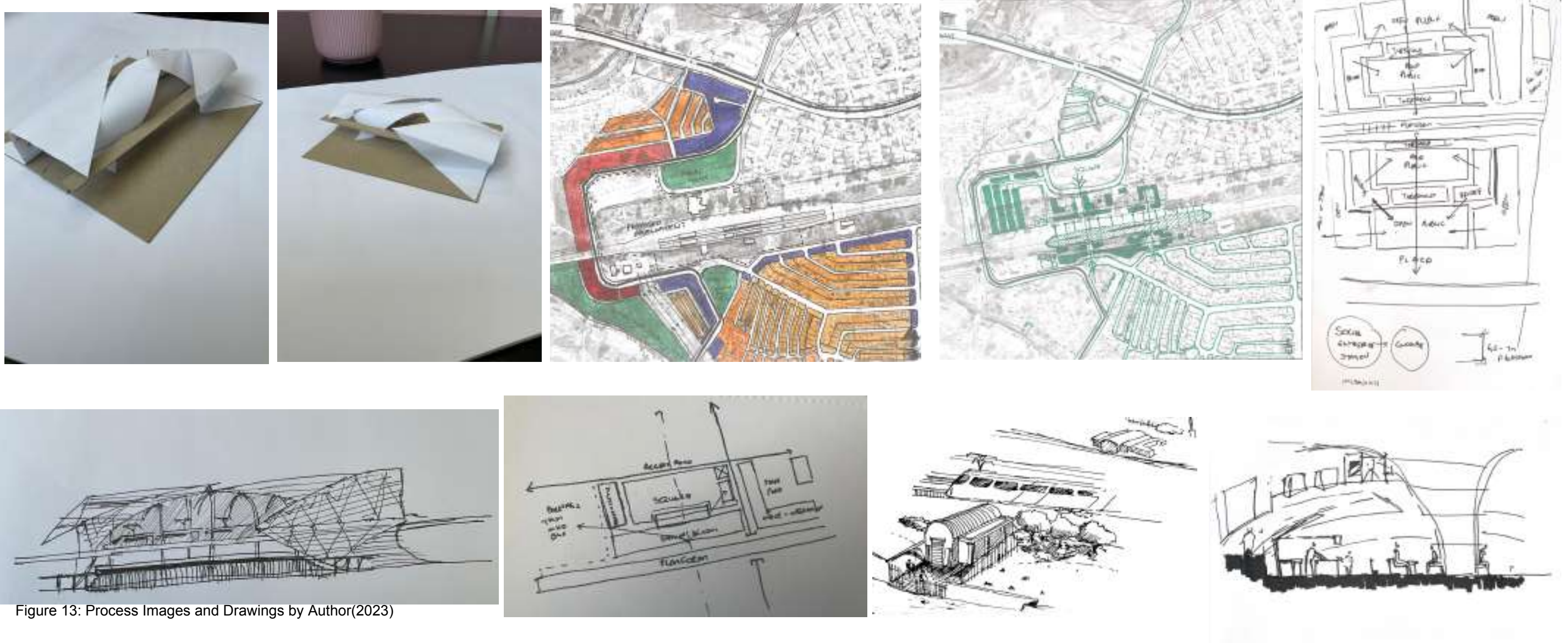


Figure 13: Process Images and Drawings by Author(2023)

## Design Development 2

As we delved into the process of refining our concepts, we directed our focus toward the roof, recognizing its pivotal role in train station design. In response to this insight, our approach involved a meticulous examination of the barrel roof concept, which drew inspiration from the existing train station's distinctive barrel roof as lessons learned from the UISP on using as much of the existing structure as possible as our design principle. We then proceeded to fine-tune this notion while also exploring and experimenting with the spatial arrangement of the station, this time at a more workable scale.

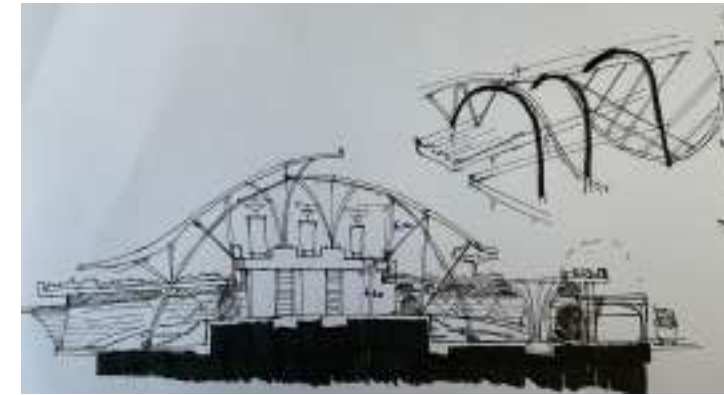
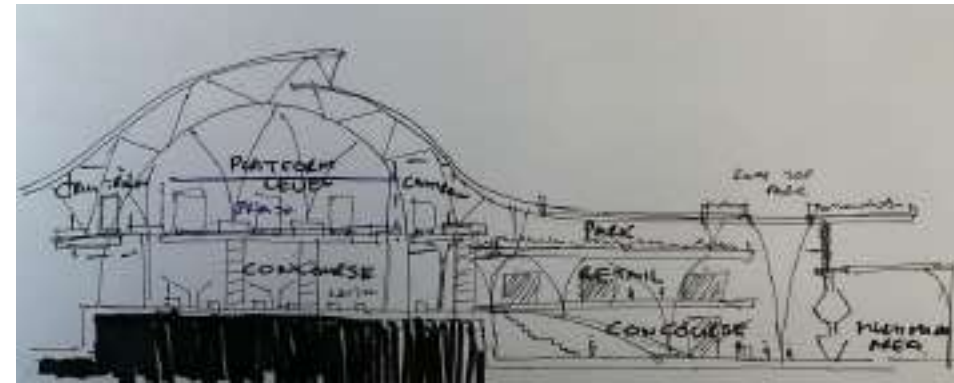
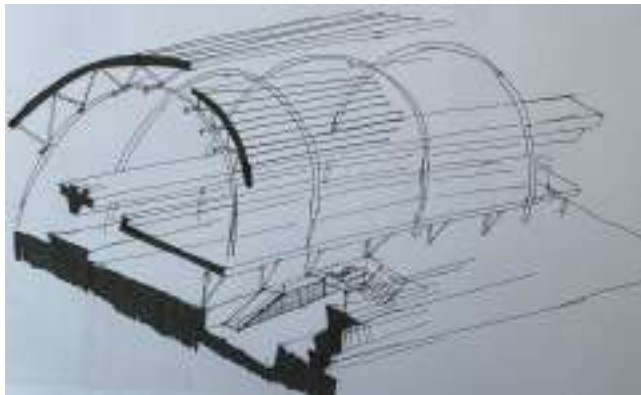


Figure 14: Process Images and Drawings by Author(2023)

### Design Development 3

During the third development phase, It was important to recognize the need to take a step back and shift our focus toward the spatial layout. The design had become somewhat disorganized and lost its meaning, prompting a reassessment and adjustment of our approach in response to site analysis using more theory as a basis to design the station instead of the functionalist approach we originally had. To achieve a more contextually relevant representation, we initiated a series of drawings and more models to design larger spaces for the public and more intimate spaces to incorporate the informal traders which was the challenge we aimed to resolve. Additionally, there was a introduction of building technology into the equation, particularly exploring glulam timber construction methods as a viable approach.

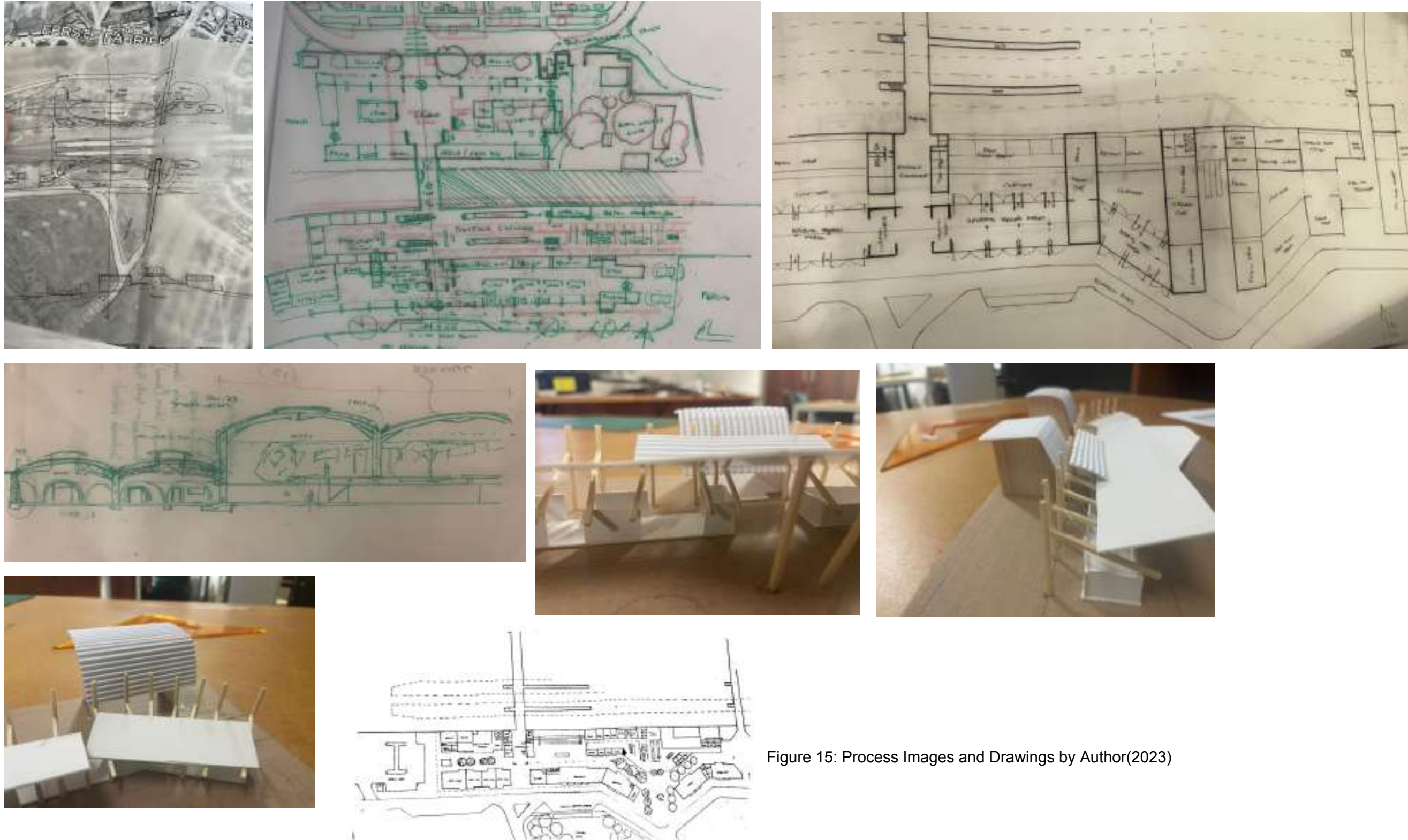


Figure 15: Process Images and Drawings by Author(2023)



## Design Development 4

As we refined our program, we used the UISP as a guide and explored materiality, form, and spatial layout. Looking at the work of Warwick Junction Market as a precedent lesson learned was the principle of inclusive planning which highlights the “demands a greater recognition that space matters and means planning with, rather than for someone). It includes concerns over how space can offer livelihoods for everyone”(Huber 2017). Revisit the site to observe the trader and understand how they used their space. Learning that display and storage are key elements of informal trade and. Investigating portal frame structures as it is very effective at handling long spans with minimal materials while still trying to design imitate spaces for the informal traders, the shift from glulam to steel solved the rigidity issue for the number of people using the facility, and the design began to achieve most of our design intentions.

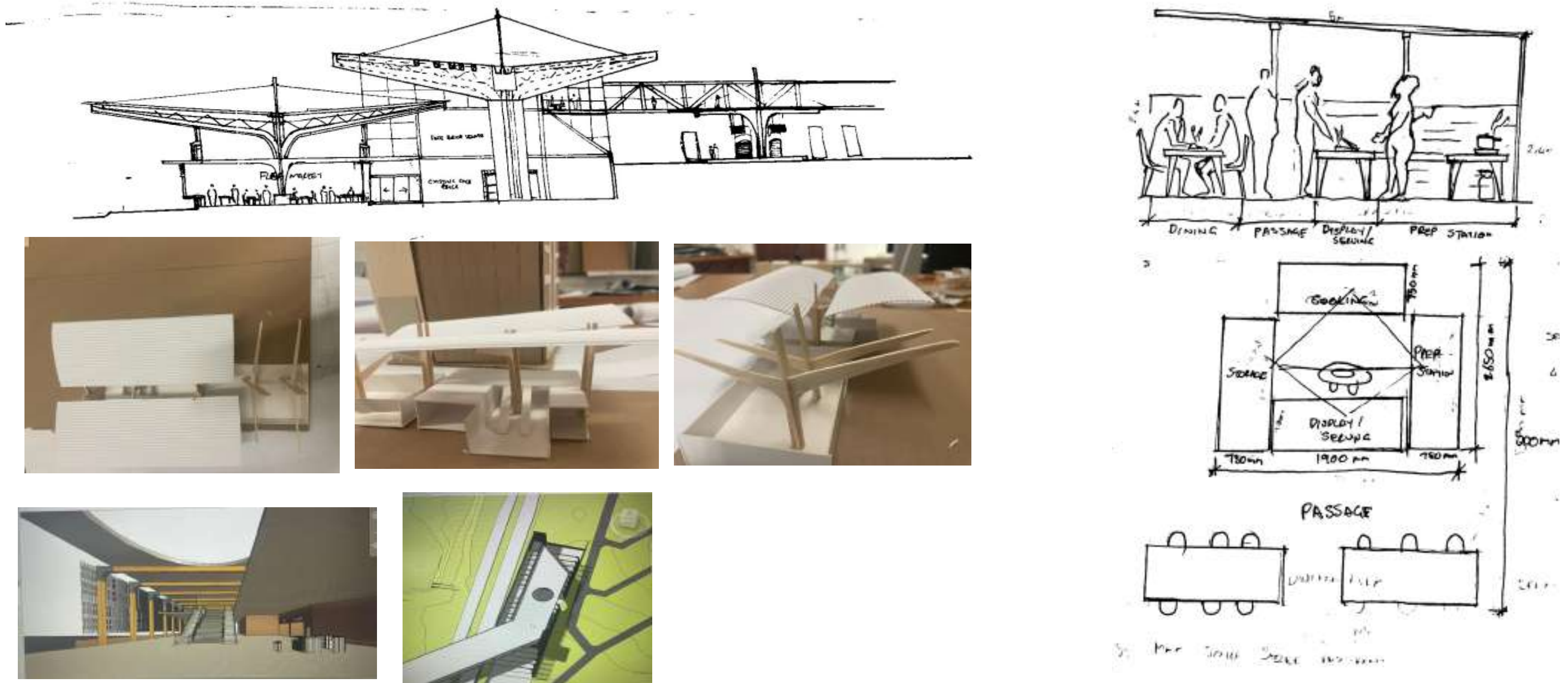


Figure 16: Process Images and Drawings by Author(2023)

## Design Development 5

According to Hamdi(2010) "a skilled community planner should also perform as an enabler to build people's capacities for generating opportunities in adaptive and transformative ways." Place-making was now the key focus of this development while adopting all the lessons learned in the previous iteration of the project. The location of the informal traders' stall is now throughout the design of every circulation. This enabled traders to generate opportunities for the sale of products. The series of barrel roofs links back to the design of the principle of working with the existing, as stipulated early on. The safety design performance criteria developed using co-design principles had a lot of influence on the design. Using the criteria to iterate the potential of the building that from observation seemed unsafe. This was a back-and-forth process where making one element safe creates other unsafe and uncomfortable spaces in designing the required introspection throughout. This process resulted in dispersed services around the design to cater to the needs of the users. The design principle of community identity naturally arose through this process as a key element learned from the neighbor impression exercise during the early mapping stage of the project. The mural as the advertisement was one this lesson applied in this phase of the project as they play a significant role in the township economy, from my research on murals in South Africa, Ntuli(2023) states that murals in the township are used to connect the individual and the local community to specific, this becomes important to achieve the overarching goal of integrating the community to the city.

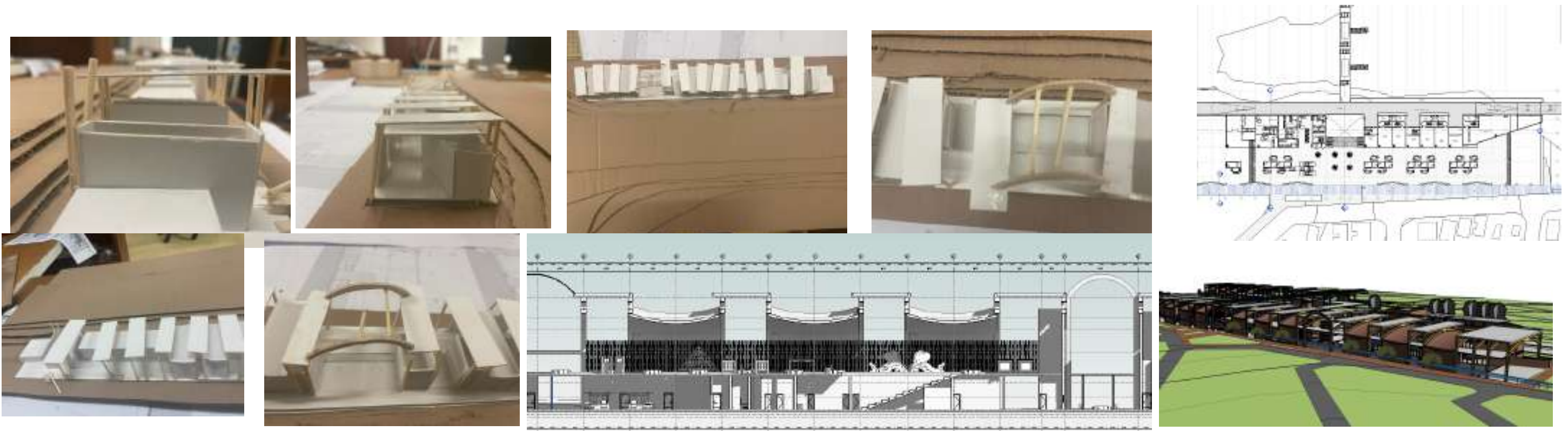


Figure 17: Process Images and drawings by Author(2023)

# Final Iteration Image



Figure 18: 3D images by Author(2023)



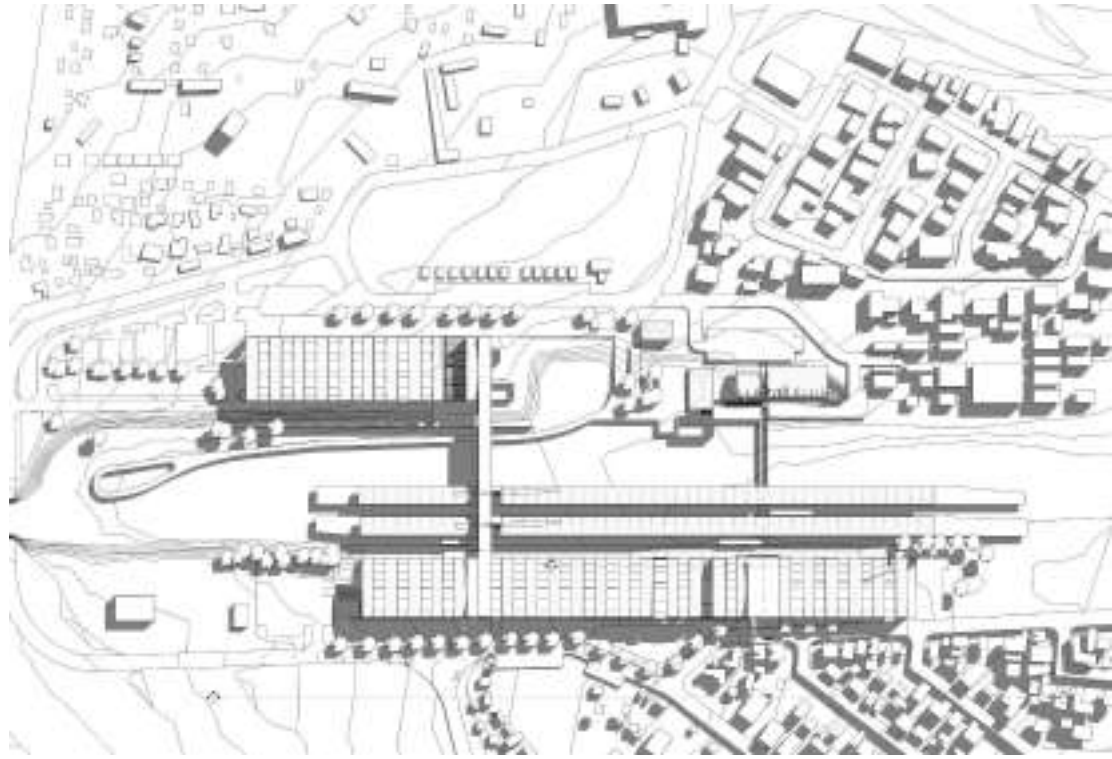


Figure 19: Site plan( Author 2023)

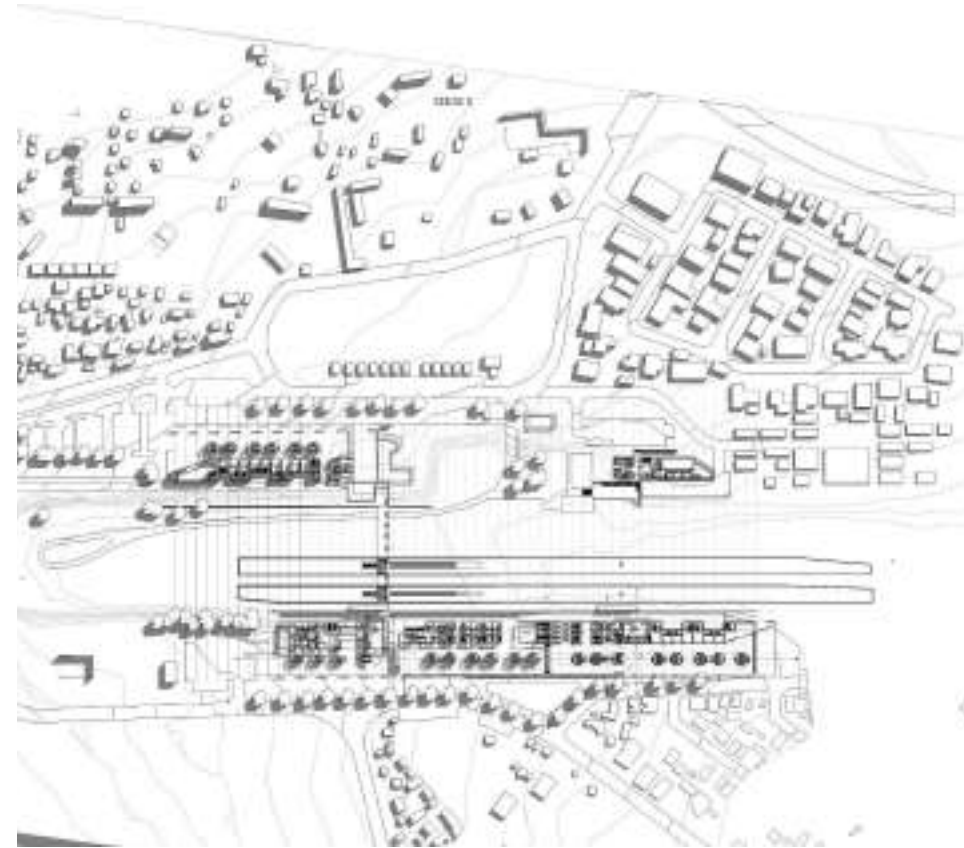


Figure 20: Floor plan( Author 2023)

Figure 21: Front Elevation ( Author 2023)



# Critical Reflection

## 1- the impact of mini-project (403 words)

In the initial stages of the mini-project, I was uncertain about the direction of my master's dissertation, and the entire process felt somewhat disorienting. The focus on spatial buffer zones that historically divided our cities began to reveal itself slowly as I navigated through the project's prompts and intuitive workflow. Although it initially felt like a deviation from the main task of site selection and documentation, I realized the importance of trusting the process, especially as we were the first group in the new curriculum, often feeling like guinea pigs during our undergraduate years.

The mini-project involved the creation of two AI Afrofuturistic digital paintings designed to stimulate contemplation about architecture's role in society. The artwork titled "Today's Architecture Lives Outside of Reality" presented a compelling critique of contemporary architectural practices and their societal consequences.

The central theme of architecture's detachment from reality and its exclusionary tendencies is vividly conveyed through powerful imagery and accompanying text. The metaphor of architects crafting "pocket worlds" for ideal clients while disregarding the broader context critiques the elitism within the field. The idea that architects might have "bloody hands" due to the consequences of their designs raises ethical questions about their responsibilities.

The contrast between promises and harsh realities in the artwork is striking, with an elder figure perched outside an informal settlement set against a futuristic cityscape. The reference to post-colonial contexts adds layers of historical and political significance to the critique.

The use of Afrofuturism as a creative lens is notable, challenging conventional norms and envisioning alternative futures where marginalized voices are empowered. This blend of science fiction and African culture provides an engaging backdrop for discussing contemporary issues.

the mini-project effectively raises questions about architecture's role in perpetuating inequality and exclusion, encouraging viewers to ponder the moral and ethical dimensions of architectural practice. The emotional and intellectual engagement fostered by the evocative language and imagery makes it a powerful medium for critical reflection.

Ultimately, the mini-project Afrofuturistic Digital Paintings serves as a thought-provoking platform for discussing the integration of informal settlements into the urban fabric, which is the focus of my master's research. It has added a new layer to my normative position, emphasizing that architecture should be a connector, not a barrier. By challenging

conventional notions and highlighting the consequences of architectural decisions, this artwork offers a compelling critique of the field and encourages viewers to reconsider the impact of architecture on our world.

## 2- Major Project (542 words)

My major project outcome has been a transformative journey in my development as an architect and my exploration of public interest design. Initially, I had the ambition to address the apartheid buffer zone that divided our South African cities. However, I was uncertain about how to translate this concept into architectural design. During the site selection phase, I found my way to the townships around Pretoria, particularly a small township I'm familiar with, Nellimapius, just outside Mamelodi. This township is situated like an island between the Bronkspruit Road, lacking basic services and having to share resources with Mamelodi, necessitating a journey to Silverton, Pretoria, for essential services.

Originally, I had chosen a site at the entrance of the township to design a public space that would connect Nellimapius to the rest of the city. However, as my research progressed, I learned about the proposal for a new Gautrain station at the Eerste Fabriek station on the northern boundary of the township. This prompted me to relocate my site closer to the train station, where I discovered two informal settlements nestled on both sides of the station. Drawing from my exposure to public interest design discourse during my honors year and the encouragement of my supervisor, I recognized that this would be an incredible challenge to undertake.

The project's scale and the methodology of public interest design initially overwhelmed me. I was afraid that I wouldn't be able to complete it, especially as I was working on it solo. The thought of designing or even altering the existing station was intimidating. Still, I had to overcome these fears, knowing that no one else was going to take on this project, and my true desire was to avoid creating a station that was just like any other in South Africa, with little consideration for the surrounding community. I needed to delve into the public interest discourse and base my design on existing policy, specifically the upgrading of informal settlement policy. This policy breakthrough made the project more coherent and gave me a clear direction.

Throughout this process, I questioned my role as an architect in the world and what I truly wanted to achieve. It was a frustrating period as I tried to convey my understanding of integration, all the while feeling like I lacked sufficient expertise in the topic, which led me to believe I might be confusing my audience.

The major project's outcome has refined my normative position as an architect. It has reinforced my commitment to designing architecture that is not just for people but, more importantly, architecture that is designed with the people's well-being and aspirations at the forefront. This, to me, is the most significant takeaway from this project.

The major project outcome represents a personal and academic journey of growth and transformation. It has been a process of self-discovery, challenging my fears and uncertainties, and ultimately finding a deeper commitment to socially responsible architecture through public interest design and policy integration. This project, rooted in the real-life challenges of the community, reflects my dedication to addressing societal issues through architectural solutions. It is a significant step forward in my evolution as an architect and my pursuit of creating meaningful and community-focused architectural designs.

## Conclusion

This project takes on the intricate challenge of urban integration in South Africa, addressing the enduring impact of apartheid's spatial planning. Informal settlements, often situated near established urban areas and essential infrastructure, are physical and social manifestations of apartheid's historical divisions. Integrating these settlements into the broader urban landscape involves housing, infrastructure, services, and fostering social cohesion. The complexity arises not only from addressing immediate needs but also from redressing historical inequalities and promoting inclusive urban development. This project employs the principles of Public Interest Design (PID) and the Upgrading of Informal Settlements Policy (UISP) to explore obstacles, opportunities, and evolving strategies in the post-apartheid era.

The integrated design and technological investigation served as the initial building block of our project, a process that began with the exploration of design principles and gradually evolved as we gained a deeper understanding of the site and available materials. This journey encompassed a broad range of design perspectives, from community identity to economic equity, and from naturalistic influences to the consideration of historical barriers. The process involved co-designing safety criteria and applying them to the design, ensuring that our ultimate vision was underpinned by a comprehensive approach.

The major project, focusing on the integration of informal settlements and guided by the Upgrading of Informal Settlement Policy (UISP), marked a pivotal transformation in my architectural journey. It involved a shift in site selection, relocating to an area near the Eerste Fabriek Train Station, which was strategically positioned between two informal settlements. This decision was made to tackle the historical buffer zone that had divided the communities. Initially overwhelming, the project challenged my role as an architect, pushing me to redefine my aspirations. It reaffirmed my commitment to socially responsible architecture, emphasizing the importance of creating meaningful and community-focused designs.

In the mini-project, the exploration of Afrofuturistic digital paintings provided a thought-provoking platform for discussing the role of architecture in society. It encouraged reflection on the ethical dimensions of architectural practice, particularly its potential to

perpetuate inequality and exclusion. This artwork underscored the need for architecture to be a connector, not a barrier, and laid the foundation for my commitment to designing architecture that prioritizes people's well-being and aspirations. This is the basis for my normative position

Throughout this journey, I faced uncertainties, self-doubt, and moments of profound self-discovery. The challenges and feedback encountered along the way ultimately guided me toward a refined choice of materials and construction techniques, emphasizing a robust and thoughtful architectural design.

This journey has not only strengthened my understanding of architecture's role in society but has also reinforced my dedication to addressing societal issues through architectural solutions. It highlights the importance of public interest design, ethical considerations, and the integration of policy frameworks like UISP into architectural practice. My major project has underscored that architecture should not be detached from reality but should be a powerful instrument for positive change.

As I move forward in my architectural career, I am committed to ensuring that my designs are deeply rooted in the principles of inclusivity, social equity, and public interest. This comprehensive journey has been an instrumental stepping stone in my growth as an architect, and I look forward to applying the lessons learned and the values embraced in future projects, always striving to make architecture a force for positive change in the world.

This project is a comprehensive endeavor that not only aims to upgrade the physical infrastructure but also works towards fostering inclusivity, addressing historical disparities, and building a vibrant, interconnected community hub in the post-apartheid era.

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## List of Figures

Figure 1: Sketch of context( Author 2023)Figure 1: Mini Project digital painting( Author 2023)

Figure 2: Storyboard images of Complex integration of informal settlement(Author 2022)

Figure 3: Top left- CONTEXT MAP (SOURCE AUTHOR), Top Right-Important routes to site map(Source Author 2023), Bottom Left- Railway map (Source Author 2023), Bottom Center- Nollie map(Author 2023) Bottom right- Location statistics(STATSA,2011)

Figure 4: Left- Informal settlements map(Author 2023), center- services plotting map (Google Earth Pro 2023), Right- Program plotting map( Google Earth image manipulated by author 2023)

Figure 5: Left - important design informants found on site, Center- Users and their everyday challenges, Right- Neighbourhood impression as design informants

Figure 6: TOP LEFT- program diagramm(Source Author 2023), Top right - Urban Block Vision (Source Author) , bottom left- Bubble diagram of existing and new spaces(Source Author 2023)

Figure 7: Public interest design Lessons( Image Manipulated by Author 2023)

FIGURE 8: IMAGE SOURCED FROM SOCIAL JUSTICE COALITION(2019) to Left- Design Intention from Theory(Author 2023)

Figure 9: Design Intentions and Principles ( Source Author 2023)

Figure 10: to the Right Sketch of Gautrain Layouts( Author 2023)

Figure 11: Top Left- Technical Drawing And Bottom Left- Design Performance(Author)

Figure 12: Technical drawings of building

Figure 13-17: Process Images and Drawings by Author(2023)

Figure 18: 3D images by Author(2023)

Figure 19:Site plan

Figure 20: Ground floor Plan

Figure 21: Front Elevation