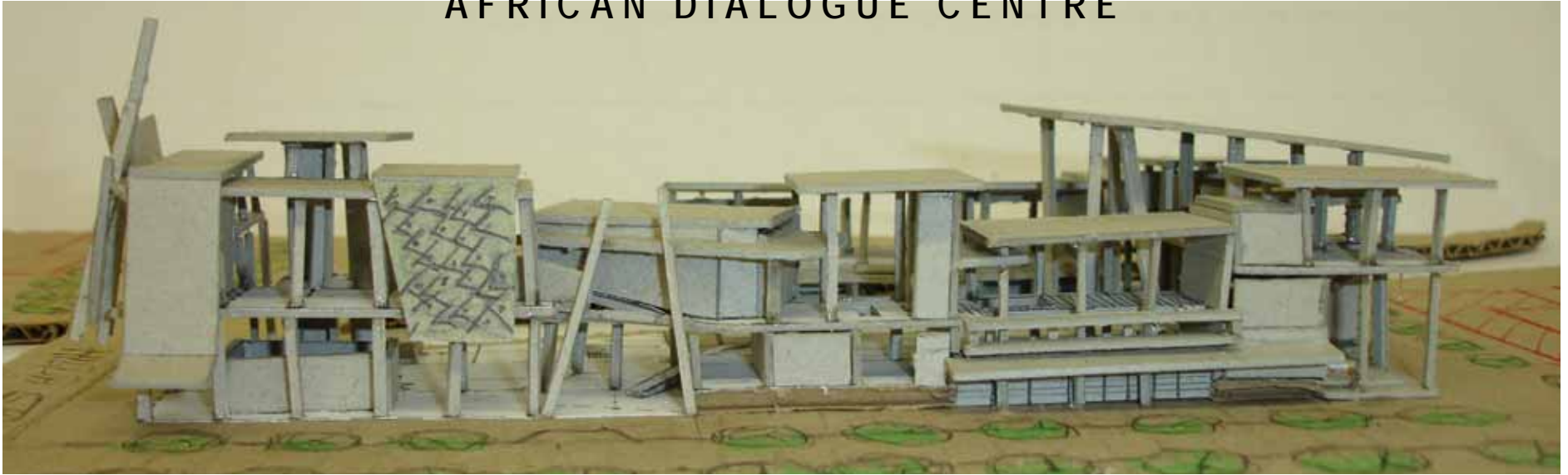


AFRICAN DIALOGUE CENTRE



Name: Phumlani. L. khuzwayo
Student no.: 27199632
Study Leader: Dr Amira Osman

This document is submitted in partial fulfilment of the requirements for the Masters Professional Degree in Architecture. The Research and presentation is entirely my own work, except where otherwise acknowledged.

To my parents (Mr V.Z.V Khuzwayo and Mrs R.N Khuzwayo) and my aunt (Buyi Mthethwa)

An African Dialogue Centre

Table of Contents

Chapter 1

Project introduction

Chapter 2

2.1 Objective

2.2 Research drivers

2.3 Problem statement

2.4 Community as a concept for designers

2.5 African social structure

Chapter 3

Precedent study

Chapter 4

4.1 History of Hatfield

4.2 Urban development plan

4.3 Site analysis

Chapter 5

Design investigation

Chapter 6

Design response

Chapter 7

Technical Investigation

IMAGES

Chapter 2.3

Pg 3 - Figure 1: foreigners murdered Ref: Graeme, H and Hllahla, P

Pg 3 - Figure 2: Brain drain Ref: Graeme, H and Hllahla, P

Chapter 2.5

Pg 3 - Figure 1: King Cetshwayo's Royal home Ondini cited from Baines, c

Pg 4 - Figure 2: Amazulu homestead cited from Tyler, 1891

Pg 5 - Figure 3: Masai homestead plan Ref: Guidoni, E. 1975: 44

Pg 5 - Figure 4: Masai homestead Ref: Guidoni, E. 1975: 46

Pg 5 - Figure 5: Plan of Bamileke village Ref: Guidoni, E. 1975: 124

Pg 5 - Figure 6: Chief at his house Ref: Guidoni, E. 1975: 125

Pg 5 - Figure 7: View from the chief's house Ref: Guidoni, E. 1975: 127

Pg 6 - Figure 8: View of village from top of the hill face Ref: Guidoni, E. 1975: 142

Pg6 - Figure 9: View of ancestors rest place from top of the hill face Ref: Guidoni, E. 1975: 144

Chapter 3

Pg1 - Figure 1: Main entrance to the South African Chancery in Berlin Germany. Ref: Architect & Builder 2004: 20.

Pg1 - Figure 2: Atrium of the South African Chancery in Berlin Germany. Ref: Architect & Builder 2004: 26.

Pg 1 - Figure 3: Typical floor plan of the South African Chancery in Berlin Germany. Ref: Architect & builder 2004: 34

Pg1 - Figure 4: Typical section of the South African Chancery in Berlin Germany Ref: Architect & builder 2004: 35

Pg1 - Figure 5: Artwork in the atrium of the South African Chancery in Berlin Germany. Ref: Architect & builder 2004: 24

Pg1 - Figure 6: Artwork on the vertical circulation wall of the South African Chancery in Berlin Germany. Ref: Architect & builder 2004: 28

Pg2 - Figure 7: External column representing 'Back bone' in the South African Chancery in Berlin Germany. Ref: Architect & builder 2004: 32

Pg2 - Figure 8: Courtyard sculpture in the South African Chancery in Berlin Germany. Ref: Architect & Builder 2004: 32

Pg2 - Figure 9: patterns representing jewellery in the South African Chancery in Berlin Germany. Ref: Architect & Builder 2004: 21

Pg2 - Figure 10 : Glass façade representing transparency in government. Ref: Architect & Builder 2004: 22

Pg3 - Figure 11: map of the Nordic Countries
http://www.nordicembassies.org/the_nordic_region/map/the_nordic_region_map.gif

Pg3 - Figure 12: Massing model of the Nordic Embassies
<http://www.nordicembassies.org/>

Pg3 - Figure 13: bird's eye view of the Nordic Embassies. Ref: Jodidio 2001:106

Pg4 - Figure 14 Main entrance to the Nordic Embassies
http://www.nordicembassies.org/pictures_views/pictures/bild_14.jpg

Pg4 - Figure 15: Side view of the Nordic Embassies. Ref: Jodidio 2001: 107

Pg4 - Figure 16: Side view of the Nordic Embassies
http://www.nordicembassies.org/pictures_views/pictures/bild_14.jpg

Pg4 - Figure 17: Perspective of the Nordic Embassies Ref: Jodidio 2001: 107

Pg5 - Figure 18: public space in the DTI. Ref: Korin

Pg5 - Figure 19: vertical circulation in the DTI Ref Korin

Pg5 - Figure 20: Public space in the DTI. Ref: Korin

Pg5 - Figure 21: Balconies in the DTI. Ref: Korin

Pg6 - Figure 22: Brickfields and Legae Commercial. Ref: Phumlani

Pg6 - Figure 23: Brickfields and Legae commercial. Ref: Phumlani

Pg6 - Figure 24: Street edge of Metro Mall. Ref: Phumlani

Pg6 - Figure 25: Street edge of Metro Mall. Ref: Phumlani

Pg6 - Figure 26: Market in Metro Mall. Ref: Phumlani

Chapter 4.2

Pg1 - Figure 1: Location of Hatfield on a Tshwane micro scale. Ref Tshwane Municipality.

Pg1 - Figure 2: Zoning, important nodes and gate ways entering Hatfield from all sides. Ref: S.T.A.R.T

Pg2 - Figure 3: Main Roads taking you in and out of Hatfield. Ref: S.T.A.R.T

Pg2 - Figure 4: S.T.A.R.T Proposal to link Gautrain station bus terminal with Rissik Train station (local train) through linking public spaces designed as part of the five different designs on the sites. Ref: S.T.A.R.T

Pg3 - Figure 5: Urban model on plan. Ref: S.T.A.R.T

Pg3 - Figure 6: Axonometric view of urban model. Ref: S.T.A.R.T

Chapter 4.3

Pg1 - Figure 1 Heritage map. Ref: University Of Pretoria Archives

Pg2 - Figure 2 Site analysis. Ref: Phumlani

Pg2 - Figure 3 Urban Analysis. Ref S.T.A.R.T

Pg2 - Figure 4: Site proposed for the African Dialogue Centre viewed

from Hilda Street bridge. Ref: Phumlani

Pg2 - Figure5: View of Gautrain Station site in relation to the site for the African Dialogue Centre. Ref: Phumlani

Pg3 - Figure 6 Building due for demolition. Ref: Phumlani

Pg3 - Figure 7 Building due for demolition. Ref: Phumlani

Pg3 - Figure 9: Building due for demolition. Ref: Phumlani

Pg4 - Figure 10: Park Street (Viewed from Grosvenor Street back towards the West). Ref: Phumlani

Pg4 - Figure 11: Hilda Street (Viewed from Hilda back towards the East). Ref: Phumlani

Pg4 - Figure 12: Park Street (Proposed development). Ref: Phumlani

Pg4 - Figure 13: Park Street (Proposed development). Ref: Phumlani

Pg5 - Figure 14: Hilda Street (View towards the North). Ref: Phumlani

Pg5 – Figure 15: Hilda Street and Park Street junction point.
Ref: Phumlani

Pg5 - Figure 16: Hilda Street (proposed development). Ref: Phumlani.

Pg5 - Figure 17: Surrounding context viewed from Hilda Street.
Ref: Phumlani

Pg6 - Figure18: View of the surrounding context getting developed.
Ref: Phumlani.

Chapter 7

Pg1 - Figure 1: Arial photo map of Hatfield Ref: Tshwane municipality

Pg2 - Figure 3: Brickfield and Legae (Johannesburg) Ref: Phumlani

Pg2 - Figure4: Metro Mall Market area (Johannesburg) Ref: Phumlani

Pg3 - Figure 5: Hector Peterson Museum (Johannesburg)

Ref: Phumlani

'I owe my being to the Khoi and the San whose desolate souls haunt the great expanses of the beautiful Cape – they who fell victim to the most merciless genocide our native land has ever seen, they who were first to lose their lives in the struggle to defend our freedom and independence and they who, as a people, perished in the result...

Angula N and Bankie B F 2000:29 cited from Thabo Mbeki president of the Republic of South Africa

I am formed of the migrants who left Europe to find a new home in our native land. Whatever their own actions, they remain still part of me. In my veins courses the blood of the Malay slaves who came from the East. Their proud dignity informs my bearing, their culture a part of my essence... I am the grandchild of the warrior men and women that Hitsa and Sekhukhune led, the patriots that Cetshwayo and Mphephu took to battle, the soldiers Moshoeshe and Ngungunyane taught never to dishonour the cause of freedom. My mind and my knowledge of myself is formed by the victories that are the jewels in our African crown, the victories we earned from Isandlwana to Khartoum, as Ethiopians and as the Ashanti of Ghana, as the Berbers of the desert.

I am the grandchild who lays fresh flowers on the boer graves at St Helena and the Bahamas, who sees in the mind's eyes and suffers the suffering of a simple peasant folk: death in concentration camps, destroyed homesteads, and dreams in ruins. I am the grandchild of nongqause...

I come of those who were transported from India and China, who being resided in the fact, solely, that they were able to provide physical labour, who taught me that we could both be at home and be foreign, who taught me that human existence itself demanded that freedom was a necessary condition for that human exercise. Being part of all these people, and the knowledge that none dare contest that assertion I shall claim that I am an African.'

An African Dialogue Centre

Objective Statement

To bring together the different African embassies and different African people into one space using architecture. To try and find common ties and overcome the differences that divide.

The architecture must create a platform that allows for transformation and unity to happen among different African people, creating an opportunity for different African people to interact in one space without fear of being discriminated against. Through the African artifacts on display and the traditional performances that will take place the people will have exposure and be able to learn about each others cultures.

A further opportunity will be created where different African governments and the general public can engage one another to exchange views and ideas on developing Africa.

An opportunity is created for the African people to have direct access to intensively and intellectually researched information on current African development plans so as to aid them into making informed decisions. At the end a unified, prouder and more involved African society is arrived at.

Assumptions

By focusing mainly on the social order and interaction created by vernacular African architecture it is possible to create an architecture

that different African people can relate to and identify with. This assumption allows for the spatial conventions of the different African styles to be focused on and used.

Literature study/precedent study to be covered

The literature examined goes beyond African Architecture alone, but also looks at other architecture beyond the African continent and tries to find a relation between the two. The theories of the architect Herman Hertzberger which talk about creating an architecture of interaction and creating a community are an example of such theories which are looked at in relation to the theories of African architecture.

The theories of an African architect Hassan Fathy which talk of respecting culture and community when creating architecture also forms a good basis from which to relate architecture to the international architecture outside the African continent.

In helping with the understanding of the African social order which informs African architecture some theories will be looked at. Theories by Msimang C.T a South African author who analyses and explains Zulu architecture from both his experiences and through research will be among the theories studied. Fanuel Mutsepe's theories will also be looked at since he also analyses African architecture from social structure and personal experience. There is also other literature by people such as Guidoni Enrico which takes its readers on a journey through the West African countries but are based purely on research rather than experience.

Research by people like Guidoni Enrico, Garlake Peter and others on African art and it meaning will be useful in the study.

Research Drivers

- How can architecture assist in creating a sense of community?
- How does indigenous African Architecture create a sense of community while reflect the culture of the community it is rooted in?
- How does art, architecture and culture relate in the African society?
- How can contemporary architecture learn from vernacular architecture while remaining contemporary in its creation?
- Does architecture alone create a sense of identity or is there more that is involved in creating an identity.

Problem statement

“Common ground is greater and more enduring than the difference that divides”
 Nelson Mandela. “Many rills make a big river” Nelson Mandela.

The spirit of community as well as that of unity is the one spirit which has been and is being highly upheld in the different African societies, cultures and countries. The word ‘ubuntu’ has been a major tool which has been used from ancient times till the present to perpetuate and keep the spirit of unity alive. Fanuel Motsepe’s research for his thesis document discovered that the word ‘ubuntu’ is used even beyond the borders of South Africa, mentioning some of the countries like: Zambia, Tanzania and Nigeria. ‘Ubuntu’ has other words linking to it and used by different cultural groups as a source of guidance for self conduct. ‘Umuntu ngumuntu ngabantu’ meaning, ‘you are who you are because of others’. One of the other famous sayings states: a child is raised by a village.

We are currently living in a world where technology and commerce play a major role in shifting peoples’ lifestyles and behaviours. Despite such shifts, Africa has realised that it needs to work as one in order to manage and withstand the difficulties that come across its way. We have seen this through the introduction of various different organisations and disciplines to safeguard and promote Africa’s economic and social welfare. Through these processes we experienced the birth of the African Union which became the main body that manages the progress of both the economic and social welfare of Africa. For example we had the 1st all Africa Congress on Biotechnology 2008 taking place in September 2008 and this was an initiative by the African Union. Through the formation of the African

Union, other supporting development structures have been established. One of those structures is the African Institute, a division entrusted with the powers for economic development and planning research in Africa.

The world as a whole fought very hard against racial discrimination with some people even putting their own lives on the line and losing them in some instances.

After the 1994 elections the Republic of South Africa entered into a new era where the constitution gave every man and woman equal rights regardless of their colour, ethnic group or culture. Besides all these struggles and achievements it is reported that as early as the 1990’s, South Africa has and is experiencing xenophobia. This has been focused mainly on African Foreigners. This situation became so bad that the South African President Thabo Mbeki delivered a speech in May 2001 condemning this behaviour.

Embassies are regarded as being countries in their own right and Pretoria is fortunate enough to have a large number of them both in the Hatfield as well as the Brooklyn area. The number of these embassies in Pretoria is estimated to be 112.

There are a lot of different cultures, resources and skills which are found in Africa but compared to the developed countries we still have many more to acquire. We even have some African citizens training in continents abroad with intentions of bringing back to Africa their acquired skills. On Wednesday 19 March 2008 an article on the South African Minister of Science and Technology was reported by Pretoria News as saying that there is a shortage of skills in Africa.

CHAPTER 2.3

The minister even suggested that development of education is not the only answer but there also need to be dialogues aimed at empowering Africa.

To try and assist Africa in its work towards a unified and dignified Africa, I saw a need for a publicly accessible, neutral meeting place for the collective African Embassies. Here, they will get to discuss common issues which are relevant in developing the African continent and linking it to the wider world.

Different African states can present cultural, social, economic and skills programs which can be of benefit to the other African states. Presentations and discussions from countries outside the African Continent will also become part of a knowledge base to better develop Africa. Due to the fact that the discussions which will be taking place will be done with an intention of assisting in developing the citizens of Africa, it is important that the outcomes are made easily accessible to all. A public information storage area is regarded as being one of the major benefits in this facility. 'Half education is more dangerous than no education'.

Exposing people to the richness of other cultures could be a useful mechanism in creating mutual respect. "Atannayita: y' atenda n nyina obufumbi" Ganda saying, which when translated means "The person who has not travelled widely thinks his or her mother is the only cook (the best cook)". 'Thairu (1975:168-169) argues for a future of greater regional integration through educational and cultural exchanges between African nations. This, he says, 'will bring into the open pan-African cultural similarities, promote more widespread understanding and tolerance on the continent, and contribute to greater overall African unity.' <http://web.africa.ufl.edu/asq/v3/v3i2a1.htm>

Seeing that Africa is known for its expression through its tangible and intangible artifacts (performance, craft and painting), having an art exhibition space show casing the art works from different African states and explaining their symbolic expression could go a long way in educating and creating respect among different people about each others cultures.

These exhibitions will be displayed on a rotation system with different countries showcasing their different assets each time. Cultural dance forms a major part of life within the different cultures when asking or thanking the Gods/ancestors for something or when purely celebrating. Having different African nations in one space, makes it necessary to have a performance space where cross cultural learning is facilitated amongst different people from various backgrounds and cultures.

Through this initiative, the public get to be informed directly by their collective government about developments and projects happening in their continent. Different nationalities get to learn and become more informed about each others countries and cultures, as a result develop respect for each other.

In an attempt to further assist with the development of Africa in both its social and economic affairs a platform for debate, sharing of information and delivery of such results to the public will be created. Seeing that there is an established institution like the African Institute which undertakes intensive research with regards to the development of Africa, it is therefore a wise decision for the African Dialogue Centre to create a link with them, possibly house them and help deliver their information to the public. The library and the electronic information facility in the African Dialogue Centre will become a good platform for

the African Institute to pass well researched information onto the public. Even education institutions like the University Of Pretoria stand to gain from the publicly accessible information in the library and the electronic facility. With the introduction of the African Dialogue Centre, an identity of a unified and progressive African culture will be strengthened. It was through the 1996 Rugby World cup held in South Africa that true transformation was experienced and felt in the air. In meeting for a common goal, people got to learn about each other, as a result celebrated as one and overlooked their differences. This experience served as a revelation of the importance of gathering spaces where an inclusive activity takes place.



Ref: Graeme H, Hlahla P 2008:1. Figure 1: (Pretoria News, foreigners murdered)



Ref: Graeme H, Hlahla P 2008:5. Figure 2 (Pretoria News, Brain drain)

Community as a Concept for Architecture

The spirit of community and working as one in achieving a goal is highly emphasised and valued within the different African cultures. At the same time the different African cultures highly respect nature as it is one of the main references in guiding their conduct from day to day. Sayings and idioms have also been created within the African cultures to further emphasise the importance of this collective over the individual. "Ngone eka genda yonke yababa", is a Swahili saying when translated to means; When Ngoro (stream from the river Nile) travels alone it goes astray. "Sisimizi wawili lawashindwi kavulu panzi mmojd", is a Swahili saying when translated means; two ants do not fail to pull one grasshopper.

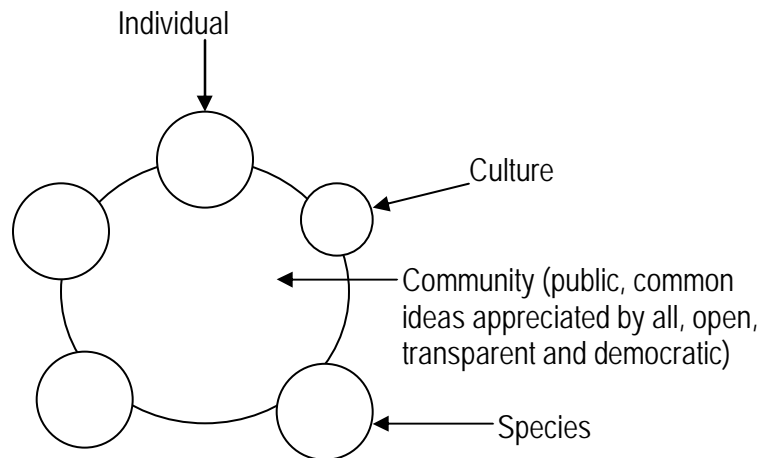
This is not to say that individual activities are not allowed, but it is merely to remind people that they belong to a whole. It is only these sources that allow one to confidently say 'therefore I am'. Even social scientists who do intensive studies focused on the different African social structures also agree that most African social structures are based around the importance of community. "Whatever happens to the individual happens to the whole group, and whatever happens to the whole group happens to the individual. The individual can only say: 'I am, because we are; and since we are, therefore I am.' This is a cardinal point in the understanding of the African view of man" (1969:109). ' <http://web.africa.ufl.edu/asg/v3/v3i2a1.htm> cited from (Professor John S. Mbiti (1969 and 1992))

Being involved in the field of architecture and looking at the importance of community, makes it critical for me to investigate how architecture is affected or influenced by this sense of community.

Before we look at the effects and influences that exist between architecture and community, Let us look at what constitute a community. 'Community, a population aggregate inhabiting a contiguous territory, integrated through common experience, possessing a number of common institutions, conscious of its unity, and able to act effectively in a crisis. In this sense, a community is a complex of activities which tie the inhabitants of an area into an interacting social group that works out its common life tasks in association. The population aggregate may range from a small tribal group to a modern metropolitan centre. Physically, the centre of a community is the place where lines of transportation and communication converge; usually such a centre is the business district of a town or city. The community is related to other places by physical and social ties, as well as by cultural, political and economic relationships that are organized in an orderly manner. The people living within the communal area feel they belong there: it is their home. A community is thus integrated psychologically and socially through the common experiences that are expressed in myth, legend, tradition, and folk tales.' (Halsey W. D 1972; 101)

Community is an identity, for example, the South African community at large is identified with democracy. Communities can be formed by different individuals, different cultures, different social groups

(communist, capitalist and many more) as well as different species. It is also possible to find a community within a community. For example, in Johannesburg you may find individuals being affiliated members of cultural groups, religious groups and many more. When you step back you will realise that these groups are interconnected to each other by the mere fact that together they come to form a South African community.



Due to common ideas and beliefs shared by different individuals, communities are formed and are made stronger by the frequent interaction of those individuals. This therefore requires that these different individuals find a common neutral place where they can meet. It is in these meetings that they, as a collective, get involved in activities, sharing of strengths, knowledge and even capital. 'Communities are structurally and functionally oriented around the social institutions which characterise human society: family, health centre, church, school, economic activities, recreation, government,

and welfare.' Halsey W. D 1972; 101. In answering the question of why people form communities and the cultural imperatives that drive individuals to come together in the collective, Aristotle says 'communities are formed not simply to oversee the practical details of justice, peace, defence, traffic, but rather for the sake of good life. Good life must satisfy four basic social desires: religiosity, intellectual growth, politics and conviviality' (V. Popovic 2005: 23).

In his research on 'Ubuntu' Fanuel Motsepe, realised that South African township society appreciates the outside space orientated towards the street more while relaxing in their yards. This he says is because members can enjoy the shade in their yards while getting to interact with the passers by on the street. This interaction process forms a major part in the concept of 'ubuntu'. It is through the interrelationship of functions and status that persons become identified with a community.' (W. D Halsey 1972; 101).

As a community, decisions have to be made collectively and as a result structures to aid in good functioning of the community are set in place. In the rural communities Inkosi (king) has his Induna Yenkosi (chief) overseeing the well being of his people and reporting back to him where needed. Induna Yenkosi (chief) becomes a link between the Inkosi (king) and his people. In the suburban areas, some sort of community representative group is created, to pass and handle community issues. Even in schools/ tertiary institutions a representative for the student community is formed so that they can link and represent the students to other bodies and sources. Such a student body is usually known as the S.R.C. (Student Representative Council).

When designs are approached with an open mind and a will to learn from their end users, the concept of community as a catalyst or driving force for design has a lot to offer in the creation of architecture. Herman Hertzberger is one of the few architects who have an understanding and respect for community (its function, space and need); this he shows through his designs and theories. 'Herman comments, that a revolution in Society facilitated a revolution in Architecture' (Brian O'Hanlon 2007- 01). Hertzberger believes that a building should not only be seen as a beautiful sculpture but rather a place where a sense of community is upheld and encouraged. "This is not a building, it is a settlement" (Brian O'Hanlon 2007- 01). Occupants give life to a building and not the other way around. As mentioned by Hertzberger; building transformation should not only be driven by the latest technology but should mainly be driven by the changes that happen with its occupants. It is therefore important that architects design buildings to accommodate people and not have people try and accommodate architecture.

Herman Hertzberger emphasises that when he designs he looks for the meaning first and when that is rooted down then form will follow. He also mentions that once he has realised the meaning in the design, functioning spaces within objects become more important than the objects themselves. 'Architecture is about people – not making architecture easier for people – it is about, what they are. "Everywhere you make steps", that is, if you wish a building to become a city in microcosm. Space becomes about connection of people, without any separation. Changing the use of the ground, whether it became steps for socialisation, or an outside roof that took the form of a hillock for crowds to sit on, coated in Astro-Turf.' (Brian O'Hanlon 2007- 01).

'Spaces at low road buildings are changed at will by their occupants, therefore the spaces become personalised'. (S. Brand 1992: 4).

Some of the other greatest designers who learnt and continue learning from and respect community as a concept for design are the self taught designers in the rural areas working within the boundaries of vernacular architecture. 'Vernacular buildings evolve. As generations of new buildings imitate the best of mature buildings, they increase in sophistication while retaining simplicity. They become finely attuned to the local weather and local society'. (S. Brand 1992: 4). This is the type of architecture which understands that a family is a type of community within a community. This is evident in the vernacular architecture that is found through out Africa and this we will be investigating later on in the document.

In a biography written by James Steele on Hassan Fathy's work, he mentions that community architecture is a tradition. The biography traces and reveals the origins of community architecture and locates its existence. 'The community builders have always dealt with man, synthesising his existence and taking account not only of his comfort but also of his history, his myth, his 'being – here on the earth, in other words, the whole purpose of his existence'. (J. Steele 1988: 8). In the biography James Steele mentions Hassan Fathy's theories on communal architecture becoming the community's language. Fathy says that communal architecture develops its own favourite forms and details with which that particular community can identify with.

Having gone through the study and the understanding of what constitutes a community and some of the elements which can be applied into the built environment in creating or enhancing the sense of community, it has been made clear that designers can use community as a concept when executing their designs.

It is therefore the designers' responsibility to look closely into the community and take valuable lessons when approaching designs. Hassan Fathy says, 'The community builders teach us also some additional and important lessons that studies in architectural schools alone cannot accomplish: they demonstrate to us that architecture is a collective and not an individual art, and that this collective architecture has its own vocabulary.

Furthermore, they warn us that architecture is not just the product of theorising and sociological or psychological analysis as is so often the case in present – day schools, but involves a knowledge of techniques as well'.(J. Steele 1988: 8). Hassan Fathy warns designers that they must not separate tradition and identity when designing for a community.

Tradition and identity mean more to the community than the architect's personal opinion. But this does not mean that designers must copy and paste the existing.

Working with the existing, designers are suppose to be able to analyze, extract and create meaningful as well as appropriate architecture that responds positively to its community and makes it easy for them to identify with. 'Authentic traditional design is a complex process of careful adaptation and assimilation in an act of gestation. This ritual revitalises the spiritual identity of the community through the proper act of building, and the master piece is created by the faith of the artist in his tradition more so than in the arrogance of his revolt.' (J, Steele 1988: 8 cited from Hassan Fathy (Architecture for the poor)).

African Social Structure and Typologies

Xenophobia is among some of the greatest challenges that are facing South Africa and other parts of Africa. For us as Africans to be able to confidently challenge and learn from other continents while developing ourselves as an African continent, we have to first learn how to live with each other. Once we understand each others differences and have respect for each other, it then becomes easier to take on other tasks. Due to different cultural groups having little knowledge and understanding about each others cultures, a sense of negative pride is created and perpetuated. In supporting the fact that there needs to be an intercultural relation developed in Africa, Professor Wolf suggests that we should look at the positive side of cross cultures and similarities that exist within. This he says will contribute in uniting us African People. He refers to this idea of cross culture as global cultural landscape.

<http://web.africa.ufl.edu/asq/v3/v3i2a1.htm>

“Ukulehla kwenqama akusho ukuthi iyabaleka kodwa ilanda amandla”, a Zulu saying which when translated means, when a ram reverses it does not mean that it is running away but it is merely gathering strength. Sometimes to have a better understanding of things or to be able to make a couple of steps forward, you have to take one or two steps back. Most of the African vernacular architecture was and is designed around accommodating and capturing both the culture and social structure of the people using it. It is therefore important that we go back and look at some of the African architecture and see if we can extract informative lessons from it.

When one is familiar with a certain group’s architectural layout and the treatment there of, it becomes easy for that person to tell some things

about that group. For example one can tell where the highest order of a tribe is, that is if hierarchy is practiced in that tribe. The architecture can even inform one about the accepted way of circulating around a certain space.

Extracting some of the important elements which capture the cultural elements in the vernacular architecture and applying them in the design while still keeping the architecture in touch with current trends of the times in which we are living in, we stand to get an appropriate and responsive architecture. “World culture” will only come into being through a cross – fertilization between rooted cultures on the one hand and universal civilization on the other.’ (Frampton K 1983: 148). In an attempt to try and achieve this goal we will take journey through Africa and look at its architecture. We will start the journey from the Southern parts of Africa and make our way up the continent.

Most of the different tribal groups in Africa were either nomads or permanent settlers and this had a profound influence in their architecture. Locally available materials also played their own part in influencing the types of structures that were possible to achieve at the time. In most of the cases the village layout was determined by certain natural elements. This was because certain natural elements had different symbolic importance for different cultural groups. Orientation was than found to be more symbolic than a means of trying to bring light and warmth into the built structure.

South African Koi/ San

The different Koi/San tribes residing in South Africa are amongst some of the tribes who have high respect for both nature and orientation. Both nature and orientation have a very strong underlying meaning for these tribes. The tree (natural) and fire (artificial), form the two main natural components that get considered and incorporated when both the **Kung** and the **Heikum** tribes (Koi/San tribes residing in the Republic Of South Africa) set up their architecture. These two natural components are of high importance because through them the highest order in the tribe can be demarcated. Even visitors and everyone in the tribe can orientate themselves using these elements.

The village is set up in a semi-circle formation while the structure and form of the huts is that of a half dome. Due to the belief that their God is orientated towards East, this has been celebrated as being the most sacred orientation for the **Kung**. To have a relationship or connection with God, the openings of the Kung's huts are oriented towards east.

The tree and fireplace are symbols of the highest order in the **Heikum** tribe. This is where important tribal or senior meetings are held. This spot is made more important by the fact that the chief resides there facing the rest of the village. In their semi-circle formation the villager's huts have their openings orientated towards the chief's hut. The chief lights the sacred fire next to the tree.

Closest family members, relatives and high members of society get to have a spot closest to the chief. The less important members of the tribe are placed far from the chief

Zulu architecture (South Africa)

The central kraal settlement pattern is one of the most commonly used architectural layouts in most African countries. Opportunity for social interaction and good surveillance over livestock makes this layout to be very favourable. (E. Guidoni 1975: 42) says that this type of settlement pattern is mostly found in particular tribes like the Tsonga of Mozambique, the Masai of Kenya and Tanzania as well as in the Zulu tribes from South Africa. He further mentions that the settlements in these different tribes only differed from each other through the materials which they use to construct the enclosing shelters.

Despite the shape of the central kraal settlement, hierarchy is still portrayed within the Zulu homesteads. After God (umvelinqanga) and ancestors (amadlozi), the king is the highest order in the Zulu tribe. The importance of the king as the highest order within the Zulu tribe is even emphasised through idioms. 'Izwe elenkosi nabantu abakhekulo abayo inkosi'. (C.T. Msimang 1975:1). When translated to English this means that all the land and the people that are on it belong to the King.

Kings home (South Africa)

Before we study the rest of the Zulu homesteads it is important that we first study the king's castle (Isigodlo). To show his wealth and power, the king usually built himself a number of homes throughout the province and would visit them at different times. One home would be as big as a town. The kraal, which his homestead was designed around, was not to house livestock but was a place for gatherings as well a place where ceremonial celebrations took place.

The layout of the central kraal settlement is planned according to the main Gate axis. The most important hut in the settlement is always placed directly opposite the main gate leading into the yard. Isigondlo is the main hut in the whole homestead. This is a very big hut which uses a minimum of four supporting pillars (izinsika) to keep it upright. It is in this hut where the king keeps his thrown, welcomes his visitors and holds meetings with his right hand men. On either sides of the main hut (isigodlo) the king has his various huts for different occupations. He could have different huts for eating, keeping his attire, sleeping, entertaining himself and some for his wives.

On either side making their way towards the gate, the rest of the huts are allocated according to their descending order of hierarchical importance. The king's right hand men are positioned to the right hand side from the king's main huts and on the left are the king's children. At the main gate into the Castle (Isigodlo) is where the castle gate keepers huts are placed.

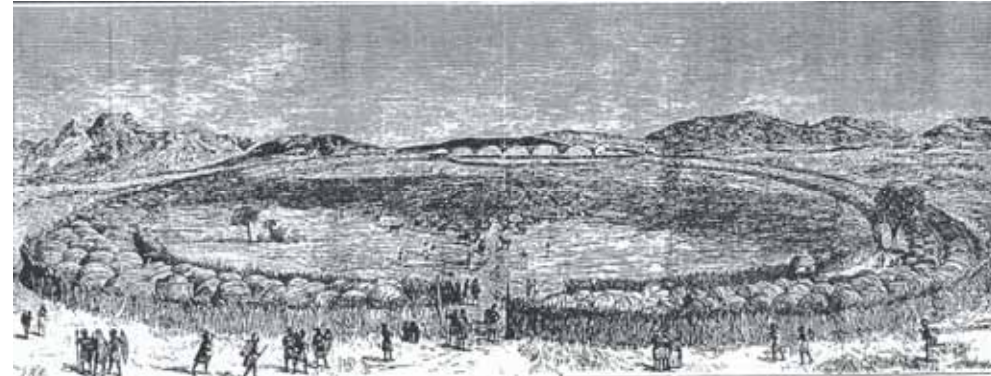


Figure 1: King Cetshwayo's Royal home Ondini cited from Baines, c

Zulu home (South Africa)

Whenever a Zulu man wanted to move out of home and start his own home, by order he had to take his mother along. He therefore had to build her a hut (ilawu) within the bigger homestead. This hut (ilawu) had to be built irregardless of whether the mother was still alive or had passed on to the next life. Since the mother was the most important figure in the homestead, her hut was also of high importance. This meant that her hut was built in line with the main gate access. The mother of the household head was regarded as a living ancestor. She had the authority to call her son into order if she felt that things were getting out of hand within the homestead.

The second most important figure in the homestead was the head of the family (usokhaya) together with his hut (indlunkulu). It was only

after the two most important huts had been built than the rest of the other huts followed. In descending order towards the main gate would be the first wife's hut followed by the second wife's (Iqadi) hut. The rest of the wives (Amabibi) would then be placed on the left hand side (ekhohlo) of the main hut facing the gate.

Girls and young ladies shared their living space with their mothers. Girls would only get their own hut (ilawu) if there were too many of them in the family. After all these huts had been allocated, for the sake of security, the boys' huts were placed on either sides of the gate.

Even inside the huts there was demarcation of space usage, the women used the left hand side of the hut and the males used the other portion of the hut. Only members of the family were allowed to sit closer to the door. The closest members of the family reserved the privilege of sitting closest to the door. Visitors had to sit as deep as they possibly could towards the inside of the hut.

When entering the yard, visitors were at all times expected to use the main gate. There were two other small gates giving access in and out of the homestead. These were only used by family members. These were located next to the main hut as well as to the left hand side (ekhohlo) of the home stead. Unlike in the king's homestead, the kraal in a normal man's homestead is built to house livestock.

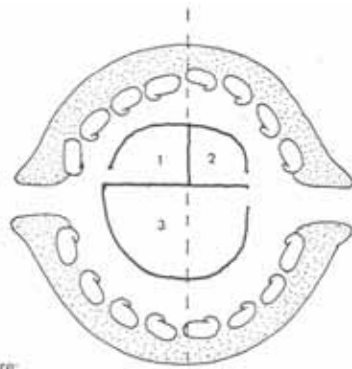


Figure 2: Amazulu homestead cited from Tyler, 1891

The Masai and Tsonga

The Masai and the Tsonga are amongst the African tribes that make their living off farming livestock. As mentioned before, these tribes also form part of the group who use the central kraal settlement pattern when building their homesteads. Like most African cultures, ritual sacrifices for the ancestors (chirilu) form an important part of Tsonga culture. This is why they designate a sacred spot for these sacred rituals to take place. Once again the importance of the tree is realised as it is also used within the Tsonga tribe to mark the sacred place. Through the axis which is used to set up the homesteads, they are able to set aside the chief's wives from the visitors and the rest of the family.

As much as the Masais homesteads are built on a similar layout, the men are usually housed outside the homestead.



Livestock enclosure:
1. sheep / 2. calves / 3. adult cattle
Figure 3: (Masai homestead plan)



Figure 4: Masai homestead Ref: Guidoni, E. 1975: 44, 46

Bamileke (Cameroon)

Axis is used to help set up the Bamileke village while also giving a distinct order of hierarchy. The king's residing point and also of those who are close to him is demarcated by the intersection point of the layout axis. This axis intersection point is also celebrated as a ceremonial plaza. The position at which the king's house is placed, has a clear and direct view/ access to the ceremonial court, main entrance, wives houses, guest houses and many other important features.



1. main access / 2. market / 3. skulls and statues of ancestors / 4. entrance gate / 5. guest house / 6. chief's house / 7. site of the puberty rites / 8. wives' huts.

Figure 5: Plan of the village
Ref: Guidoni, E. 1975: 124, 125, 127



Figure 6: Chief at his house



Figure 7: View from the chiefs house

The Dogon of the upper Niger

Due to the elders being regarded as walking encyclopaedias in the different African tribes, they get to be highly respected. Because of this reason the Dogons appoint the oldest person in the tribe as a chief (Hogan).

The Dogon village is marked and pulled together by four important spaces. The central space in the village claims its importance because of it being a sacrifice space. Due to the tribes respect for their ancestors, they allocate them a sacred space within the village and this is usually at the face of the cliff. Being the highest member of the Dogon society, the Hogan is given the most prominent spot in the village. Together in consultation with other elders the Hogan decide the way forward for the village. As a result this meeting place is a sacred space.



Ref: Guidoni , E. 1975: 142, 144

Figure 8: View of village of the hill face Figure 9: View of ancestors rest place from top of the hill face

Dogon of Mali

In this village orientation of both the house as well as that of the village layout are important. The door giving access to the house has to be orientated towards North. The Dogon of Mali also offer the position of chief to the oldest member of the tribe. Together the chief and the ancestors get the prominent space in the village. The ancestral resting places are sculptured on the façade of the Hogan's house. Through these sculptured pocket spaces on the façade of the Hogan's house one can trace back the generation of the tribe.

There are also symbolic reasons behind the way in which the houses and the granaries are structured or built. 'The soil of the ground – floor..... is the symbol the earth and of Lēbē, restored to life in the earth. The flat roof, square like that of flying granary, represents heaven, and the ceiling which separates the upper storey from the ground – floor represents the lying between heaven and earth.' (Guidoni E 1975:148).

Jennē and Timbuktu

'Besides the residence of the king or chief and the principal religious edifice (mosques in the Islamized towns), the populous centers in the Sudanese area always have a market, the true driving force behind the urban activities, and it is this institution that, both symbolically, distinguishes a town from a mere seat of a chief.'(E.Guidoni 1975:165). A market can be seen as an important place in a town because that is where most people from different backgrounds get to meet and possibly network.

Creating an identity

In his theory on identity, Kevin Lynch makes us aware of the fact that identity is usually created by the things that people can relate too. Identity and meaning can be seen as being one with each other. In trying to portray a certain meaning through the way in which the structure is created, may lead into birth of a certain identity. Kevin Lynch also mentions that identity can go beyond the structure itself. It can also be created by the functions which take place within a particular place or structure. 'Alternatively an object seen for the first time may be identified and related not because it is individually familiar but because it conforms to a stereotype already constructed by the observer.' (Lynch, K: 1960: 6)

In a conference held at Windhoek in May 1999 to commemorate the 36th anniversary of the (OAU) Organisation of African Unity most delegates felt strongly about putting Africa's identity at the forefront of what we are doing as Africans. Hon. Geingob one of the delegates mentioned that Africa's culture today which leads to identity is more than an ethnic one. In backing up his statement he stated that Africans shared cultural values have become the main driving force in creating any African identity. In support of the above statement Hon. Makoba M W was quoted saying: 'The definition of who is African today is based on three elements: history, culture, and consciousness.'" Angula, N and Bankie, B F 2000: 28. In reflecting the importance of culture as an identity Hon. Makoba M W quoted the speech presented by Lee Ten hui the president of Republic of China : ' "It is my firm belief that our culture is the most important factor that has allowed the Republic of

China to achieve successful political reforms in the past five years." (Angula, N and Bankie, B F 2000: 33)

Regionalism

'Among other factors contributing to the emergence of a regionalism of this order is not only a certain prosperity but also some kind of anti – centrist census - an aspiration at least to some form of cultural, economical and political independence.' (Frampton. K. 1992:314)
We are currently living in a world that is changing very fast and globalisation has become a new language in everyone's' daily discussions. Architecture has also found itself being affected or influenced by globalisation and this is not an answer to architecture.

When one looks at traditional or vernacular architecture, it responds to climatic conditions, landscape and culture of the region in which it is rooted in. By this I am not saying that we must replicate vernacular, stay in the past and ignore the latest technology available at the present time. What I am saying is that there are elements to be learnt

and extracted from vernacular architecture while staying aware of the trends and technologies happening around the world. Architecture should be able to learn from other architecture across its own borders but still remain rooted in its context as it applies some of the lessons it has learnt.

Alvaro Siza is one of those architects who have been highly celebrated for creating architecture which is rooted in its context and responds well to the site in which it is embedded. It is said that while applying local materials in his designs he still use modern techniques and his architecture reflects the current time in which it is built. ' "world culture" will only come into being through a cross – fertilization between rooted culture on the one hand and universal civilization on the other.' (Frampton. K. 1983:148).

South African Chancery in Berlin Germany

'The diversity and richness of the peoples of South Africa are reflected in the new Embassy building in Berlin'. Architect & Builder 2004: 20

This is an architecture representative of the South African culture while still keeping in touch with the contemporary architectural trends. Through the articulation of spaces, selection and application of materials as well as the use of art, a South African signature has been stamped in Germany.



Figure 1: Main entrance
Ref: Architect & builder 2004: 20

Figure 2: Atrium
Ref: Architect & Builder 2004: 26

The atrium in this building acts as a main linking space. Different offices belonging to one department have their own shared common spaces which extend out into the main atrium space (Main communal space). Through this effect a sense of community within a community is created. MMA who were the project architects referred to the atrium space as 'inkundla'. This is a Nguni word for a gathering space.



Figure 3: Typical floor plan. Ref: Architect & builder 2004: 34



Figure 4: Typical section. Ref: Architect & builder 2004: 34, 35



Figure 5 & 6: Artwork in the atrium space
Ref: Architect & Builder 2004: 24, 28

CHAPTER 3



Figure 7: External column representing 'Back bone'



Figure 8: Ref: Architect & Builder 2004: 32

The different symbolic artwork applied in both the atrium and outside spaces has helped in giving more meaning to the architecture. Some of the structural elements have been given more meaning beyond their own function. 'The external structural column, which represents the "backbone" of the new democracy.....' Architect and Builder 2004: 32. The artwork has even been extended to free standing sculptural artwork detached from the building's structure.



Figure 9: patterns representing jewellery
Ref: Architect & Builder 2004: 21



Figure 10: Glass façade representing
Transparency in government.
Ref: Architect & Builder 2004:22

A lot of metaphor has been used in order to give the architecture an appropriate meaning. The glass applied on the façade by the main entrance is symbolic of South Africa's transparent Government. While on the rest of the other facades, the horizontal aluminium strips applied on them are symbolic of jewellery (bangles and necklace) won by African people.

Nordic Embassies in Berlin Germany



Figure 11: map of the Nordic Countries

http://www.nordicembassies.org/the_nordic_region/map/the_nordic_region_map.gif

'Nordic cooperation is based on a common cultural heritage, common history and common values with regards to people, democracy and justice.' http://www.nordicembassies.org/the_nordic_region/
In 1952 Five different countries (Royal Danish, Finland, Republic of Iceland, Norway and Sweden) came together to form the Nordic council. In celebrating this history the five different countries looked for an architecture which would best represent all of them equally.



Figure 12: Massing model of the Nordic Embassies

<http://www.nordicembassies.org/>



Figure 13: bird's eye view of the Nordic Embassies. Jodidio 2001:106

The five different ambassadorial buildings forming the Nordic Embassies are a representation of the different countries which make up the Nordic council. An extra neutral building (Felleshus) which does not belong to one of the countries but belong to all of them combined completes the complex. To represent the unity that is celebrated by these countries, all the buildings on site are tied together by a copper skin.

CHAPTER 3



Figure 14 Main entrance to the Nordic Embassies
http://www.nordicembassies.org/pictures_views/pictures/bild_14.jpg



http://www.nordicembassies.org/pictures_views/pictures/bild_14.jpg



Figure 15: Side view of Nordic Embassies. Ref: Jodidio 2001: 107



Figure 17: Perspective of Nordic Embassies Jodidio 2001: 107

Department of Trade and Industry (South Africa)

The compilation of this complex has a certain resemblance to the Nordic Embassies. It is made up by a series of buildings which come together into creating one whole complex. The different buildings are pulled together by the main roof over the public spaces.

Even while enjoying fresh air within their different balconies, occupants are given an opportunity to interact with each other as well as with passers by.



Figure 18: public space in the DTI Ref Korin

The public space gives occupants and visitors an opportunity to interact as they move from one building to another. This makes the outside circulation space feel more than just a circulation space.



Figure 19: vertical circulation in the DTI Ref: Korin



Figure 20: Public space in the DTI Ref: Korin



Figure 21: Balconies in the DTI Ref: Korin

Brickfields and Legae (South Africa)

The commercial activities on the street face of the building, help create a visually safe and alive street edge. With their threshold canopy, the commercial activities have also helped in reducing the building down to human scale for passers by on the street pavement.



Figure 22: Brickfields and Legae Commercial. Ref Phumlani



Figure 23: Brickfield and Legae commercial. Ref Phumlani

Metro Mall (South Africa)

The building allows for normal human activities and social interaction inside and around it to take place and continue freely. Passers by are given enough space to circulate around the building. They are even provided with resting points for when catching a breath or waiting for someone.



Figure 24 & 25: street edge of Metro Mall

In allowing for thorough fare through the building market vendors are given free advertisement. Good design of the building has made business marketable for its customers.



Figure 26: Market in Metro Mall

Site location

The chosen site is located in the suburban/business area (Hatfield) of Tshwane. Hatfield is an area blessed with a large number of embassies belonging to various countries, University Of Pretoria and many other institutions. Easy access to Hatfield whether you are entering it from Tshwane CBD, Pulekwane or Johannesburg makes it a good location. Like many other places Hatfield also has a history of how it came about.

History of Hatfield

Like many other towns, Hatfield started out as a small farm. Due to the introduction of infrastructure and the rise in demands it grew to become what it is known to be today. The names of different people who are seen as being major contributors in the development of Hatfield are inscribed on its various streets. Duncan Street named after Patric Duncan a Colonial Secretary of Transvaal is an example of street recorded history.

Hatfield was only considered as being a part of Pretoria after 1916. It started off as being a farm plot (Koedospoort) owned by Cornelius Bronkhoist in the late 1850's. After being sold to the Methodist society in 1885 by Cornelius's decedents the farm was officially passed on to Patric Duncan in 1903. Two years later the layout design of the new town (Hatfield) started under the control of W.R Lanham who had received the commission.

In that same year 1905, the 2nd earl of Selbourne was appointed as the British Governor of Transvaal. The newly designed town was then

named Hatfield, the same name that the 2nd Selbornes farm was called back at home where he came from.

While Hatfield was still a farm plot the site where the University Of Pretoria is currently located, was used as grazing ground for farm stork. The definition of the extent to which the University of Pretoria was to occupy the land was demarcated by Hugh Crawford and Tielman who were commissioned for the job in 1910. The extent of the University was then demarcated through Burnett Street, University road; Lynnwood Street and Albert Street (now known as Roper Street). These are the four streets enclosing the University.

Due to the introduction of the University and the major access route which existed, Hatfield saw a growth in its residences. As the number of residents grew, a demand for the commercial sector was soon realised. With the introduction of the long awaited Gautrain which is currently under construction Hatfield is seeing another change or development in its skyline and landscape.

S.T.A.R.T

Urban development study and design of Hatfield was conducted in a group effort. This is a group made up of Masters Professional students working in both the Hatfield area as well as University Of Pretoria Hatfield Campus. The group is named S.T.A.R.T (Social Transition Through Activation of Regenerative Techniques).

Zoning of Hatfield by S.T.A.R.T (Social Transition Through Activation of Regenerative Techniques) group work



Figure 1: Location of Hatfield on a Tshwane micro scale



Figure 2: Zoning, important nodes and gate ways entering Hatfield from all sides.

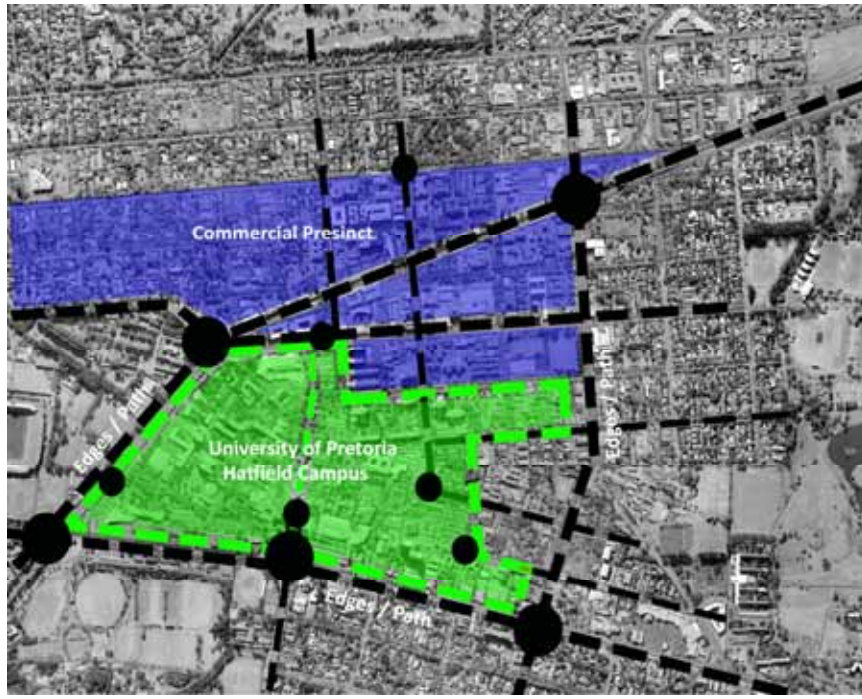


Figure 3: Main Roads taking you in and out of Hatfield.



Figure 4: S.T.A.R.T Proposal to link Gautrain station bus terminal with Rissik Train station (local train) through linking public spaces designed as part of the five different designs on the sites.

Figure 5:

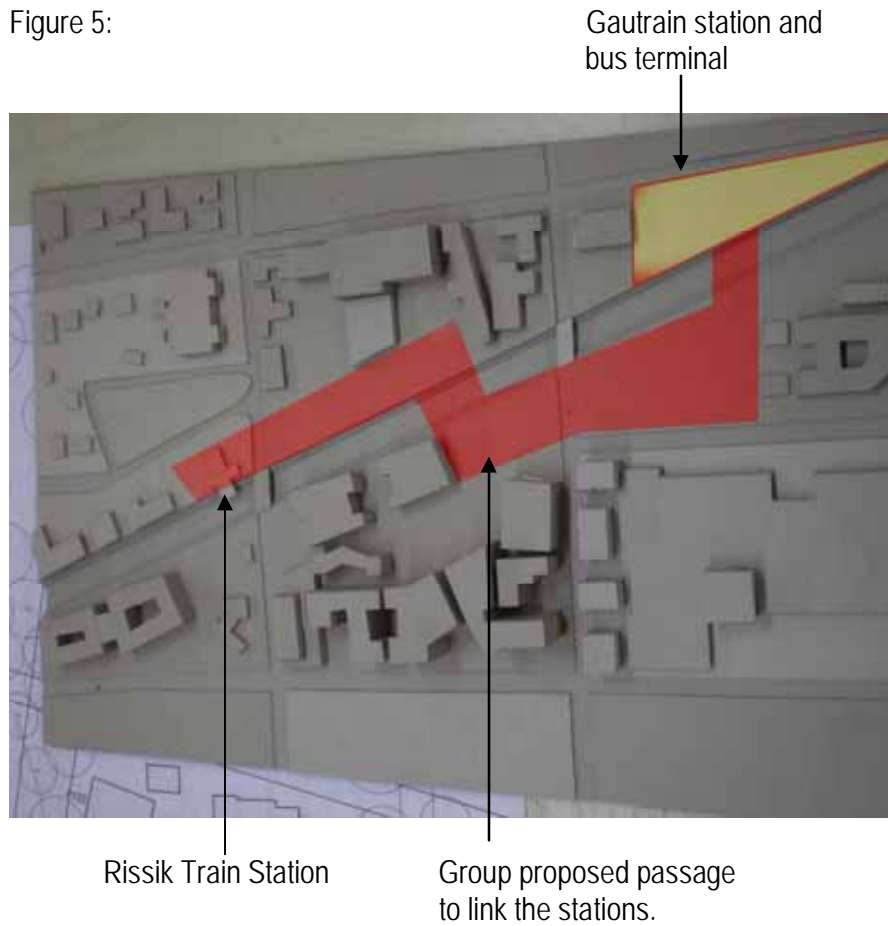


Figure 6:

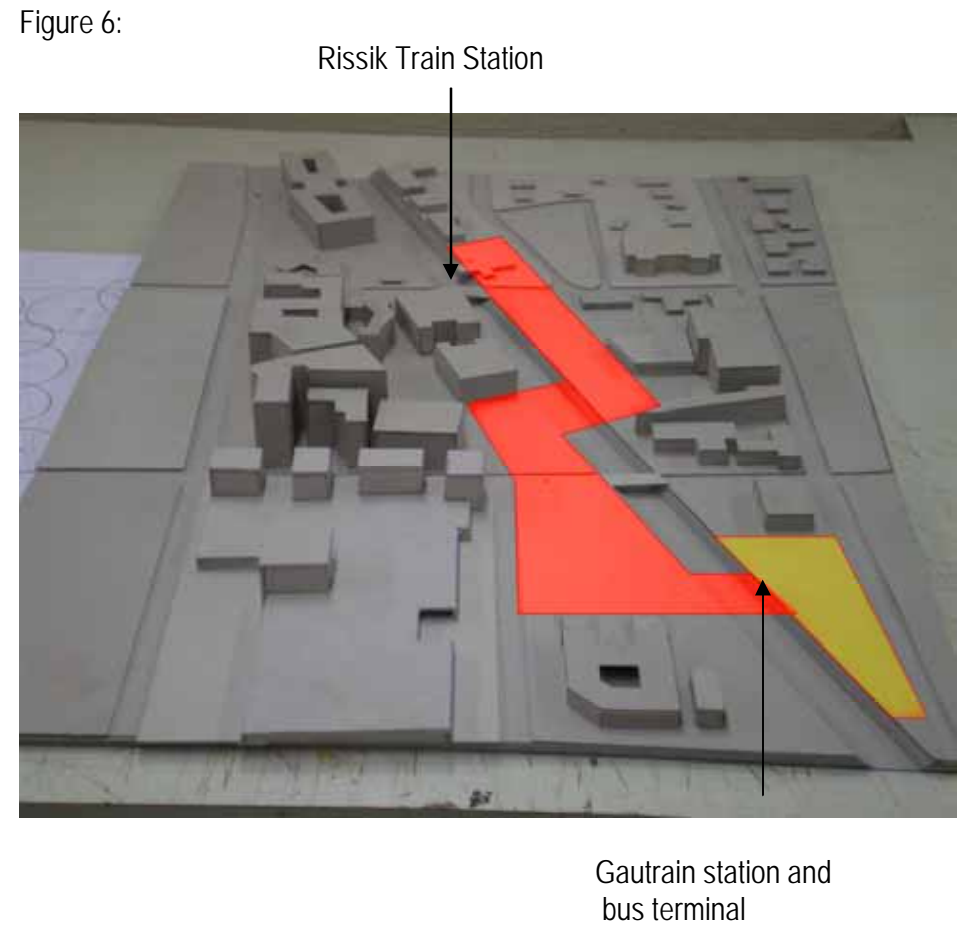




Figure 1

The map shown above was created in 1990 in order to mark sites that are regarded as being of important historical value. The sites marked with a dark purple colour are regarded as being of highest important historical value. While the sites marked with a light pink colour are regarded as being of important value.

In this map sites proposed for consolidation and construction of the African Dialogue Centre have no marks showing any historical value. Due to the introduction of the Gautrain the Tshwane Municipality has come up with new urban development proposals. These proposals have paved a way for some of the structures marked as being important to be removed. Some of the structures marked as being important are already being replaced by new developments.

Figure 2



Rissik train proposed site Gautrain bus terminal Gautrain station

Our student group framework creating a pedestrian link between the Gautrain station and Rissik Station

CHAPTER 4.3



Figure 3

Planned for low mixed Density by Tshwane Municipality

Planned for business use by Tshwane Municipality



Figure 4: Site proposed for the African Dialogue Centre viewed from Hilda Street bridge.



Figure 5: Gautrain Station under Construction

proximity of the site proposed for the African Dialogue Centre.

CHAPTER 4.3



Figure 6



Figure 8



Figure 7



Figure 9: Building planned for demolition to give way for the proposed African Dialogue Centre

CHAPTER 4.3



Figure 10: Park Street (Viewed from Grosvenor Street back towards the West)



Figure 12: Park Street (Proposed development).
By: Phumlani .L. Khuzwayo



Figure 11: Hilda Street (Viewed from Hilda back towards the East)



Figure 13: Park Street (Proposed development).
By: Phumlani. L. Khuzwayo



Figure 14: Hilda Street (View towards the North).

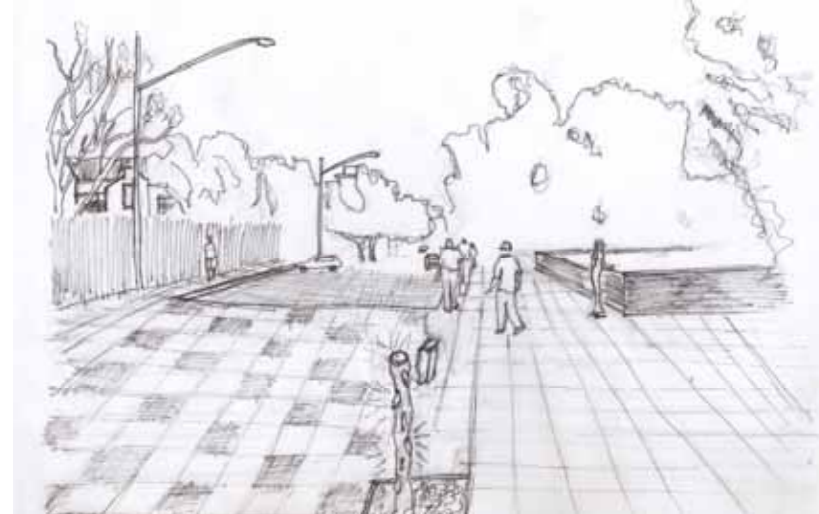


Figure 16: Hilda Street (proposed development).
By: Phumlani. L. Khuzwayo



Figure 15: Hilda Street and Park Street junction point

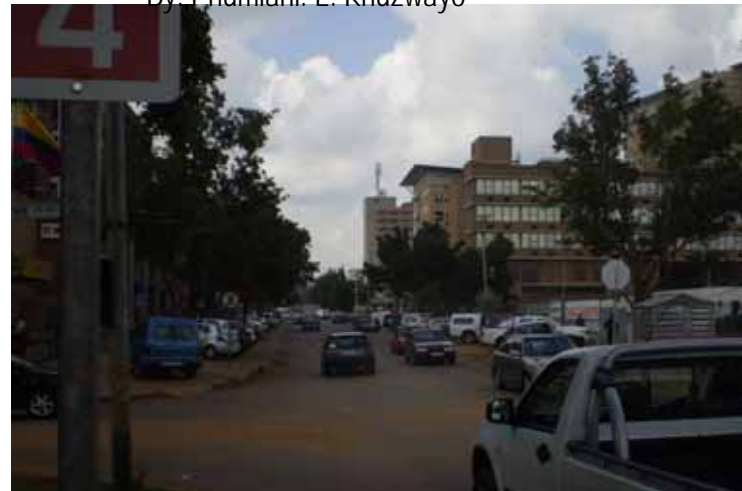


Figure 17: Surrounding context viewed from Hilda Street



Figure18: View of the surrounding context getting developed.

Edges around the African Dialogue Centre are developed with an intention of creating a pedestrian friendly environment. Introduction of street lights, benches, rubbish bins and water drinking points will aid in creating comfort and a park like feel for pedestrians.

Client

Due to the fact that the project is aimed at preserving African culture while also aiding in the development of Africa as a Continent there will be a number of stake holders involved. Being in South Africa, dealing with matters of culture and continental interest it is important that appropriate South African governmental departments are involved in the project. Because of all the Research that is carried out by Africa Institute it will of huge benefit to have them get involved in the project.

- African Union
- Department of Foreign Affairs
- Department of Art and Culture
- UNESCO World Heritage
- Africa Institute

Design brief

To create an architecture which welcomes all it's African people and those who are from outside the continent. The architecture is to create opportunities of cultural interchange and exposure.

While taking care of the social matters, the architecture must also be aimed at aiding boost investor confidence in the African Continent. Platform for Showcasing opportunities that are currently available in Africa and those that have potential is to be made available by the architecture. To aid in the development of Africa, people

will be given an opportunity to voice their views directly to the politicians.

Response to brief

Story telling has always formed a major part of the different African cultures as a result I have provided a **library**.

Different African cultures pride themselves with their different **African dishes**, hence I have provided **restaurants**.

Art, forms a major part within the different African cultures, for people to learn about each others cultures I have added an **art gallery**.

Show business is currently growing at a fast pace in Africa, in celebration of this I have provided an **African cinema/Audio visual**.

Performance is one of the most important activities in Africa, be it celebrating, mourning and much more, this is why I have included a **performance hall** in the complex.

Africa has been involved in the business of **trade** longer than anyone knows; this is why I have added **offices** where investors and potential investors can update themselves with the current opportunities opening up in the African Continent.

Importantly in almost all African cultures there is a **sacred place or tree** where the elders gather around to discuss issues and deliver important announcements from. This created a need for **conference rooms** and a platform for public announcement.

Markets form a major point of interaction and socialising in Africa, hence I have allowed for them to take place.

Art is also extensively incorporated into vernacular architecture for different reasons; hence I'm also playing with some patterns on the skin of the building. Africa has also been extensively involved in the **trade of copper**, this material I have also incorporated on the skin of the building.

Concept Development

The design concept is realised through merging the ideas of community informing architecture and that of community within a community.



Figure1: concept study of a community within a community. This idea is tied together by the saying, 'together we stand divided we fall'.



Figure2: plan of Batufam village (Cameroon) Ref: Guidoni 1975: 124. This is a village that is occupied by the Bamiikile tribe. Placing of the market at the entry points of the village encourages interaction among the residents. Through this idea a sense of community is created as the markets are a common meeting place for all residents before they despatch to their different places.



Figure3: Ref: Guidoni 1975: 158 In the capital of Lunda Kingdom (Angola) a sense of community within a community has been taken as far as being expressed in their family homes. The different houses in this community are designed around a

CHAPTER 5

courtyard system which encourages interaction and a sense of community within the different family members. A bigger sense of family within the bigger village is created through the main plaza which the entire village is designed around.

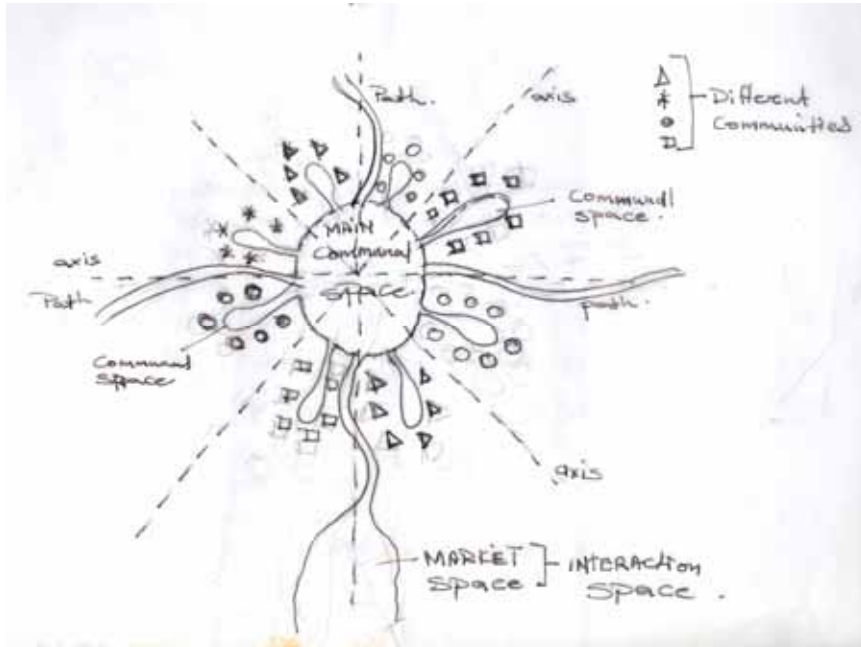


Figure4: Concept from theory

Above is a sketch compiling together all the lessons learnt from the two villages and the idea of community within a community. This concept is a reference point driving the design through its development.



Figure5: Touchstone



Figure6: touchstone

The touchstone shown above is a concept influenced by a Swahili idiom. 'Sisimizi wawili lawashindwi kavula panzi mmoid', when translated to English means: One ant cannot lift a grasshopper but two ants can lift a grasshopper.

CHAPTER 5

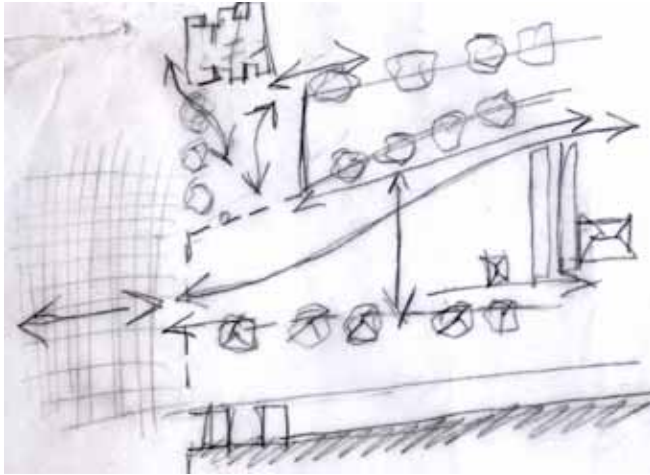


Figure 7: Circulation study
This is a study of the existing and future pedestrian circulation on site.

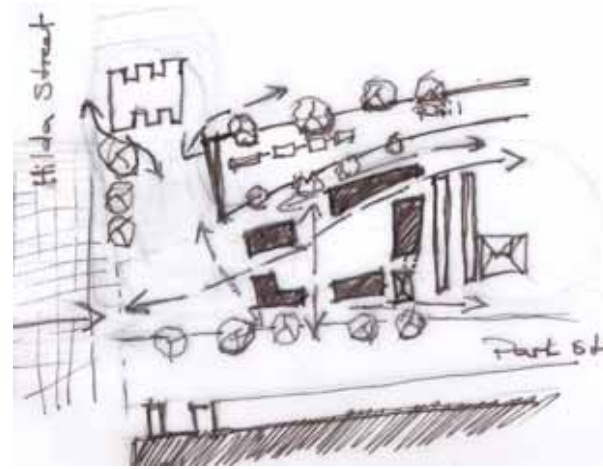


figure 8: concept 1

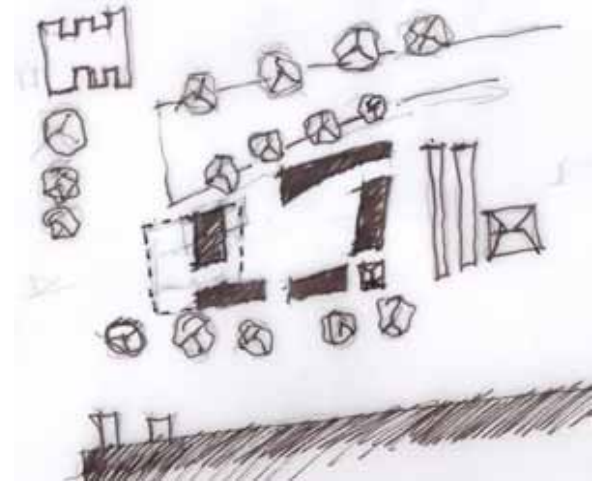


Figure 9: concept 1 development
Design decisions informed by the study.

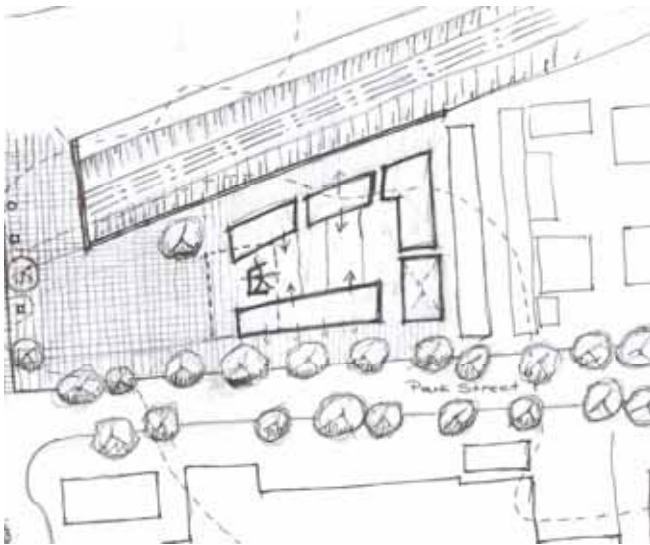


Figure 10: Concept development

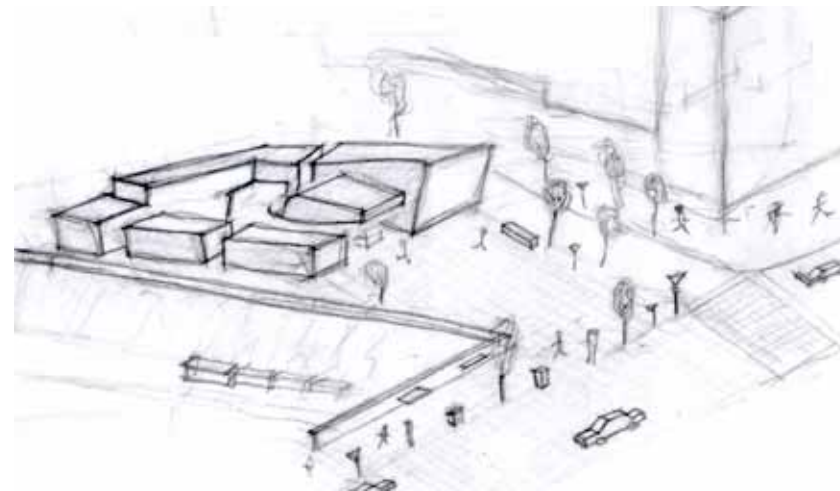


Figure 11: Massing study of concept1

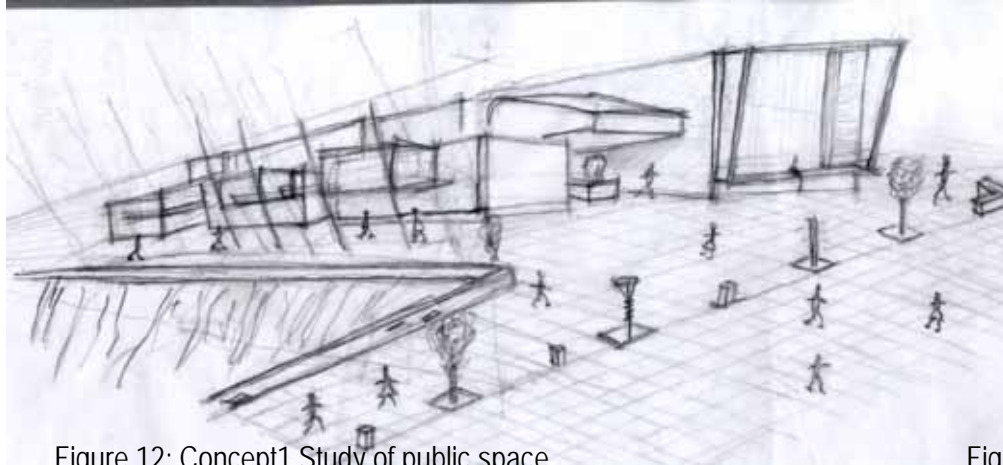


Figure 12: Concept 1 Study of public space
The design is to create a public friendly environment for both passers by and those who want to enjoy its space.



Figure 14: Concept of treating the street edge

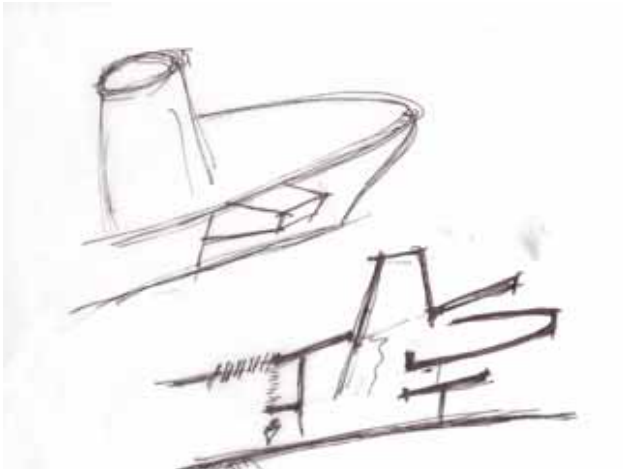


Figure 13: Study of design allowing natural ventilation.

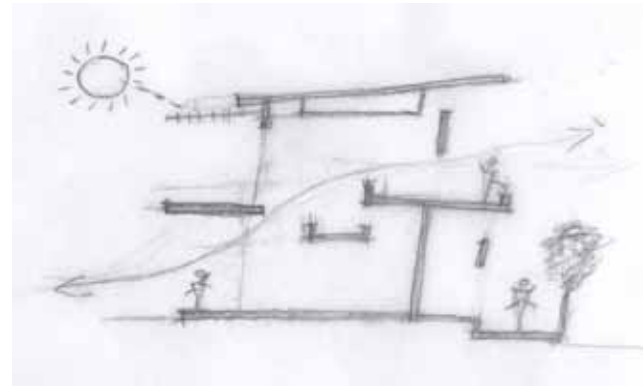


Figure 15: Study of design allowing natural ventilation.

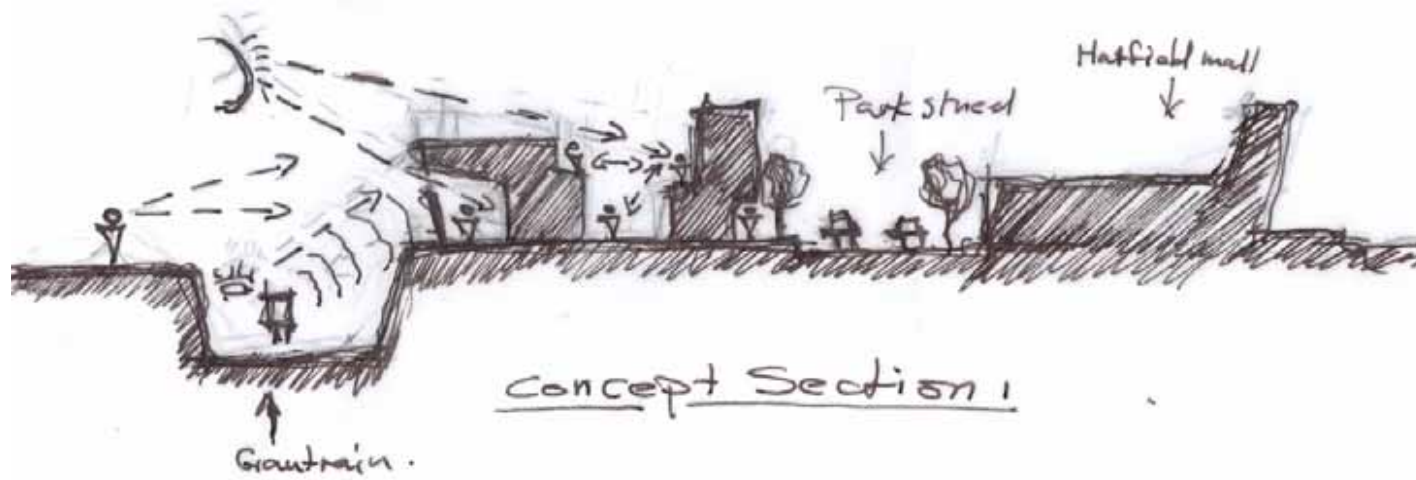


Figure 16: Study of massing and special relation through section

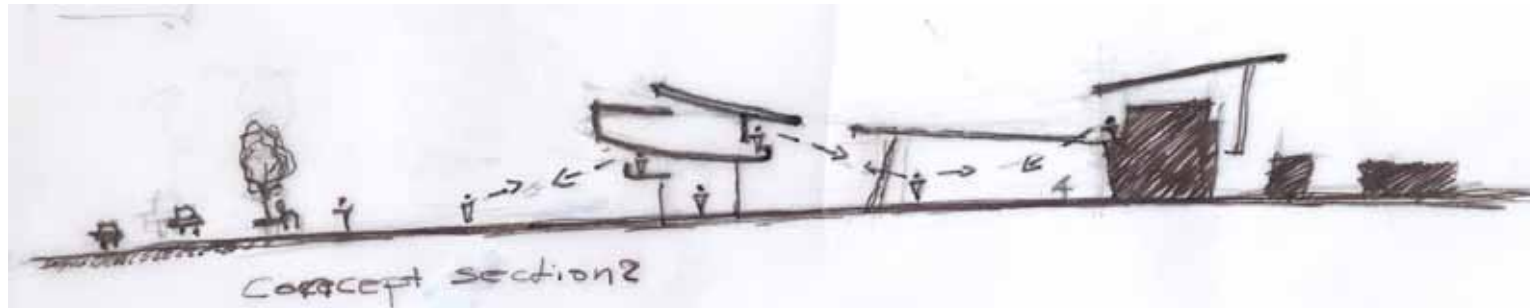


Figure 17: Study of public interaction through section.

The design is to provide opportunities for interaction between people on the street and those inside the building. The design is to also take advantage of the opportunities provided by the street edge.

Design concept development



Figure 18: Concept development plan

Ground floor: Markets, Restaurants, Performance, exhibition and library. The structure is designed to allow pedestrians to go through the courtyard space and link with their own path.

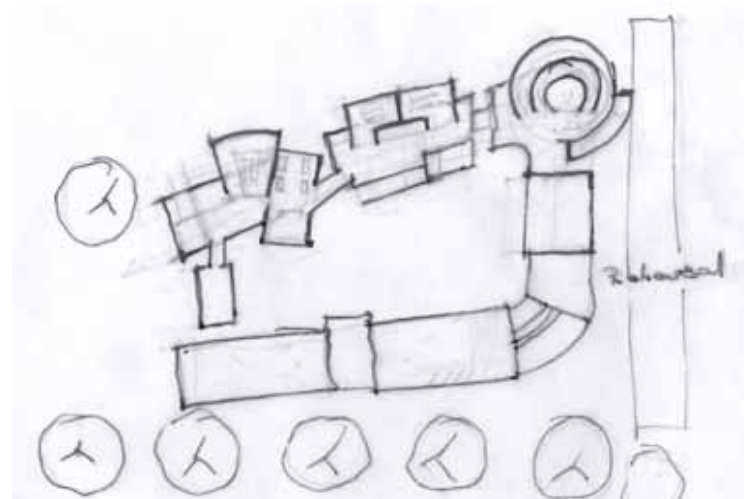


Figure 20: First floor: seminar rooms and double volume areas.

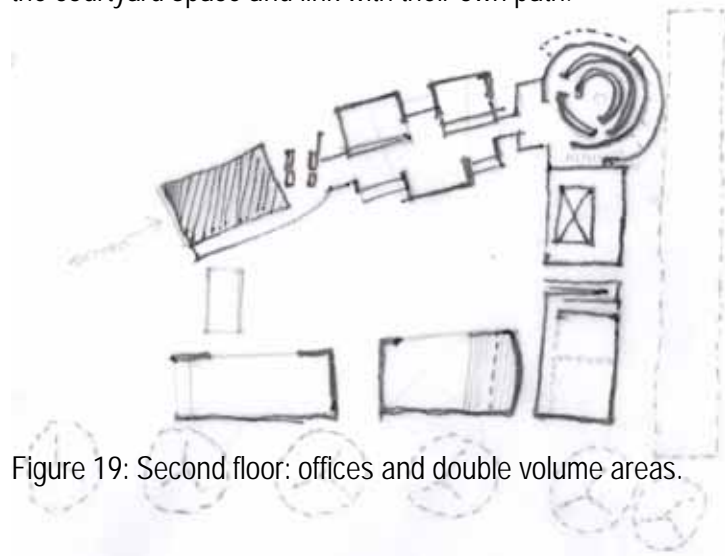


Figure 19: Second floor: offices and double volume areas.

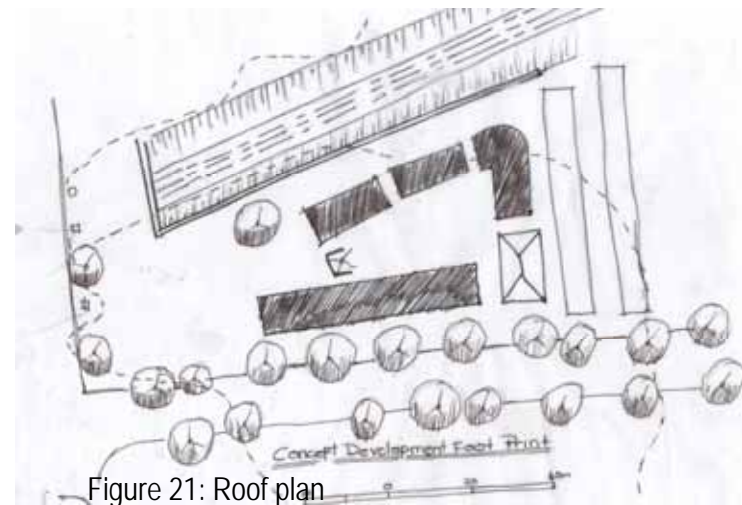


Figure 21: Roof plan

Design concept development

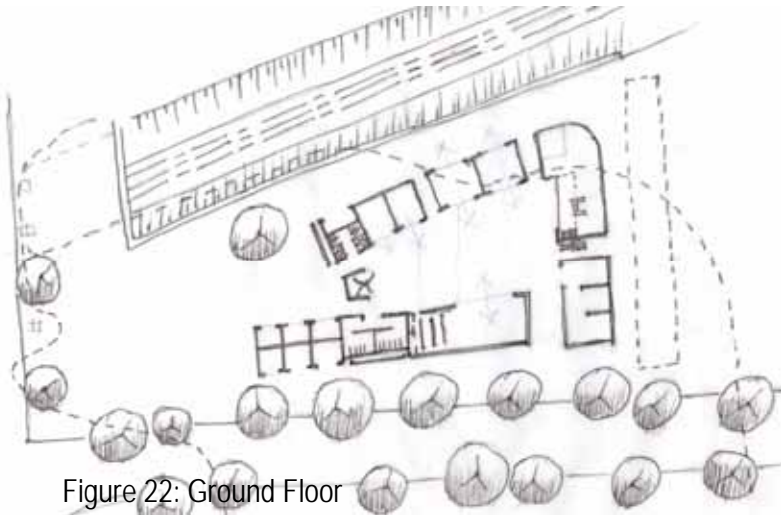


Figure 22: Ground Floor

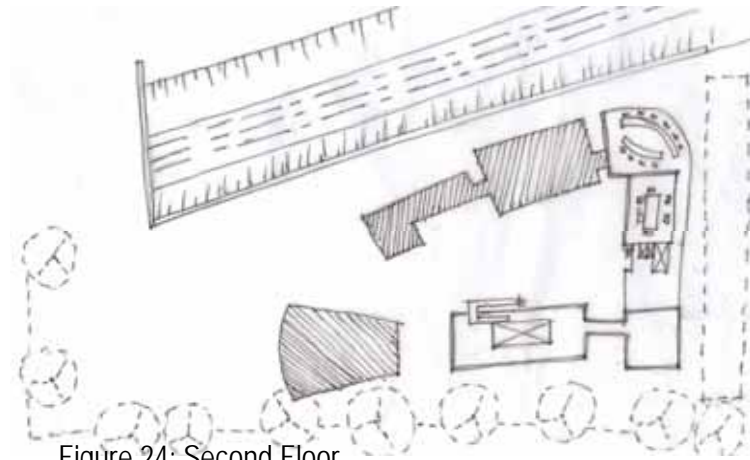


Figure 24: Second Floor

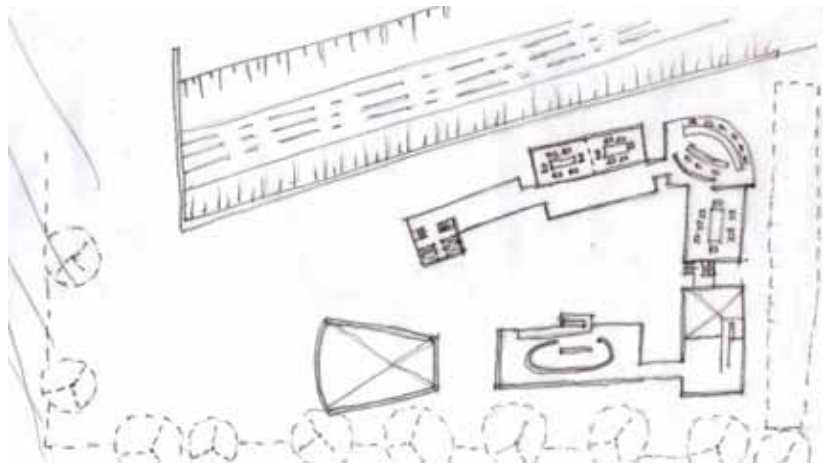


Figure 23: First Floor

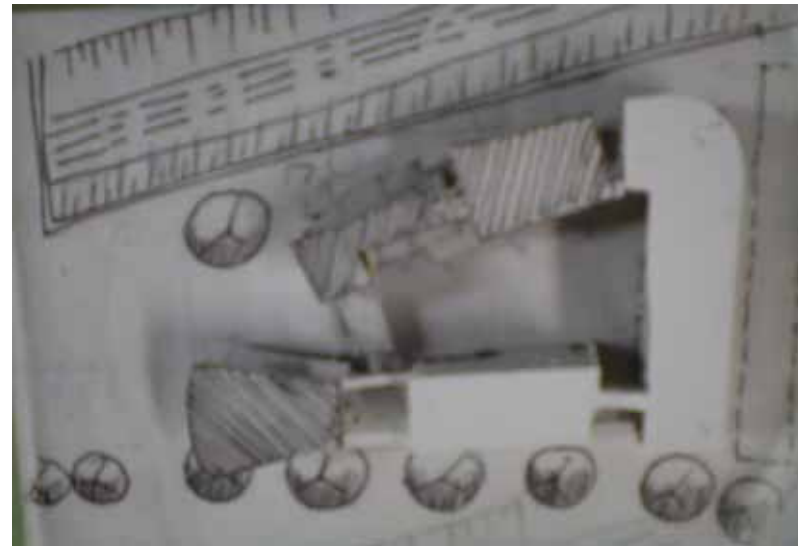
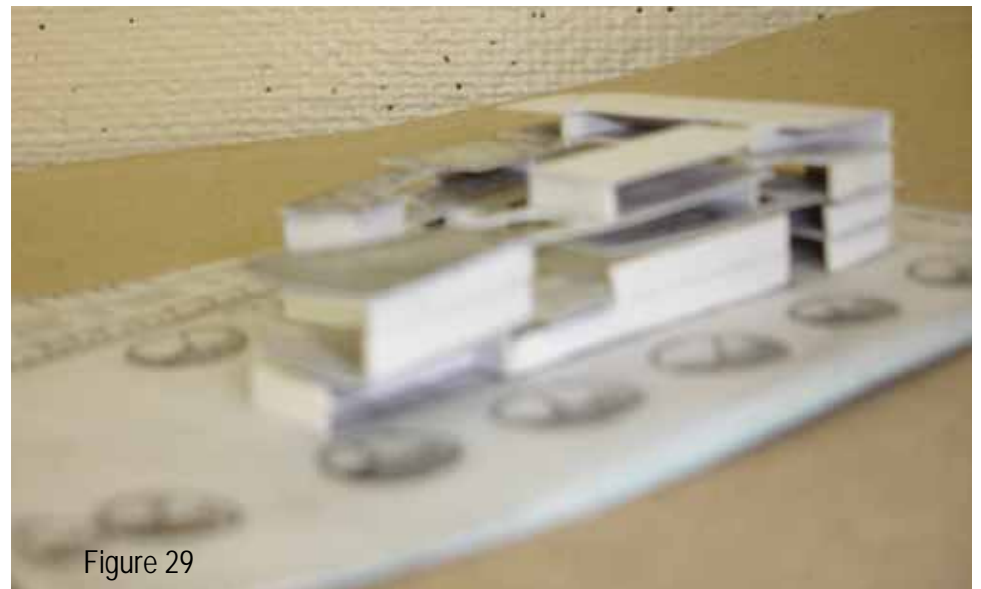
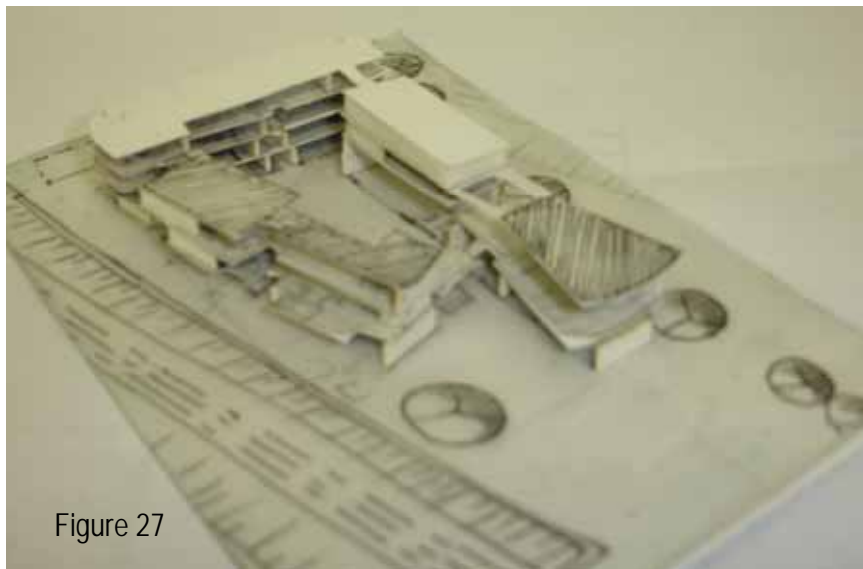
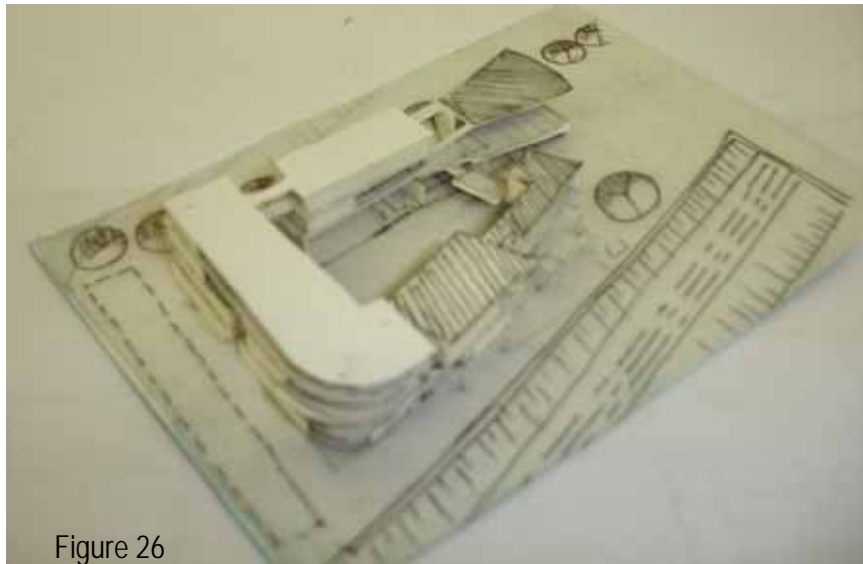


Figure 25: 1st concept model



Concept development: exploring the footprint

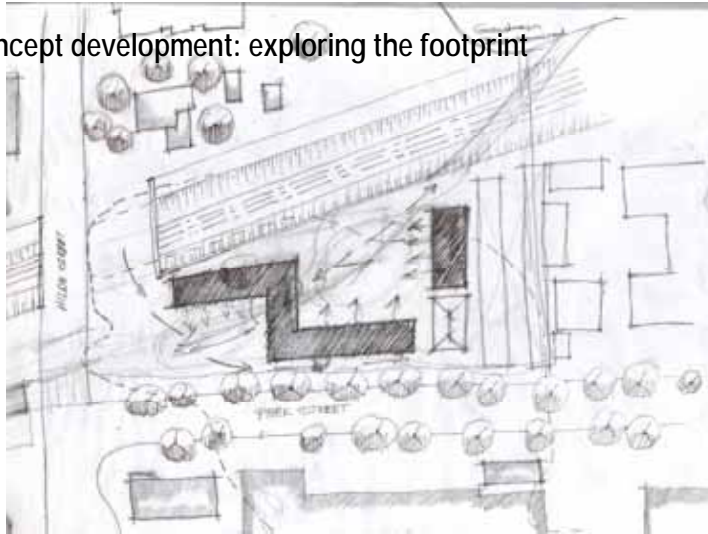


Figure 29: Creating private and public outside space.

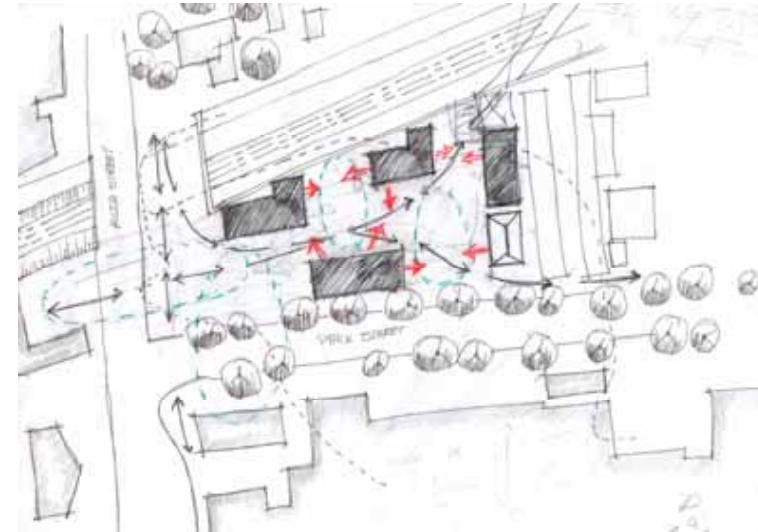


Figure 31: Buildings interconnected by public space and its activities.

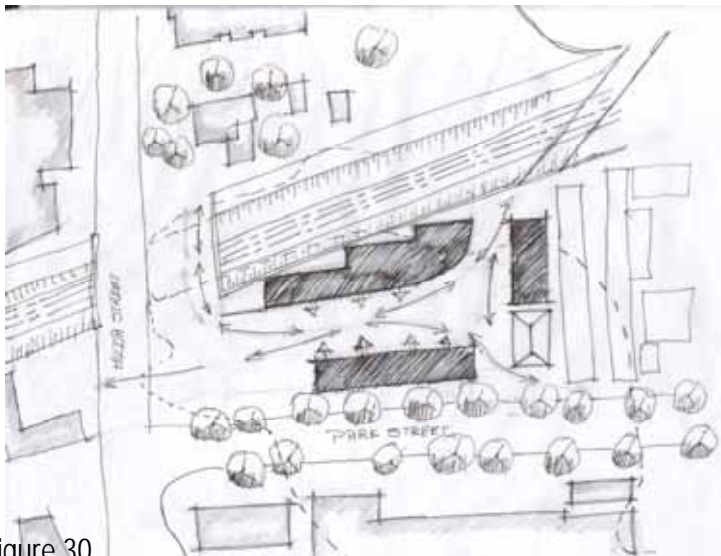


Figure 30

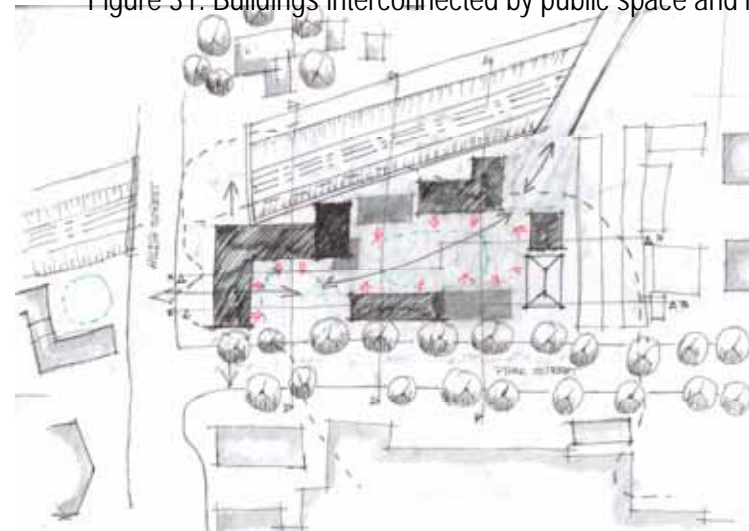


Figure 32

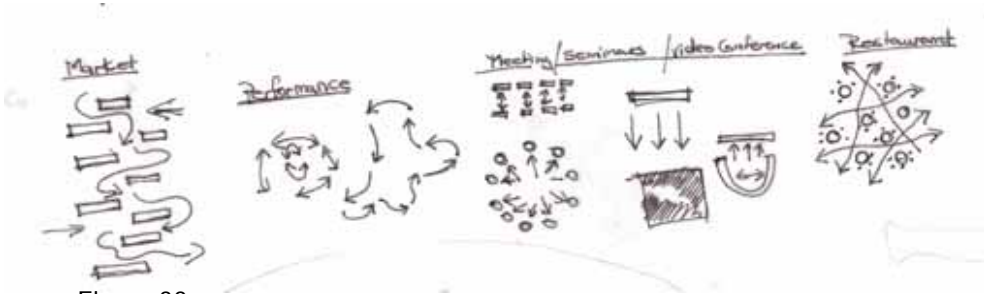


Figure 33

Abstract study (pattern) of activities due to take place in the different spaces.

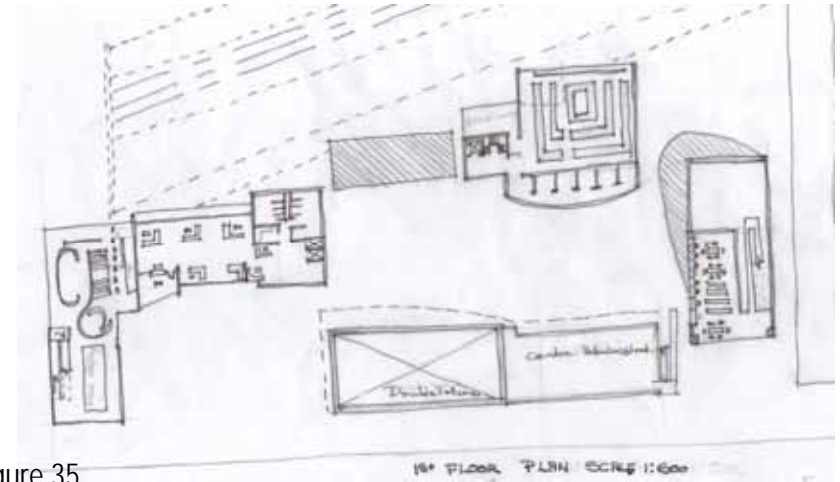


Figure 35

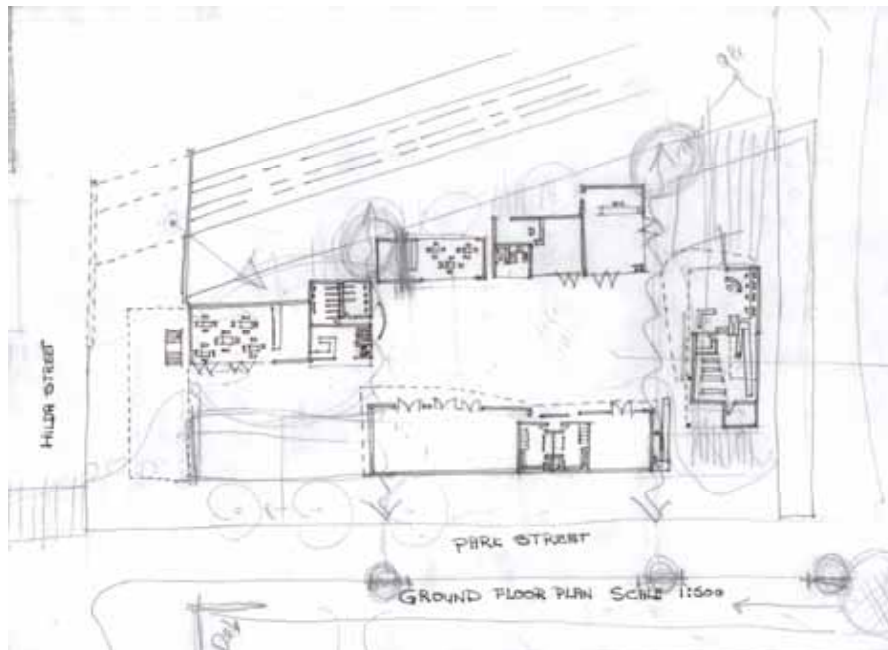


Figure 34

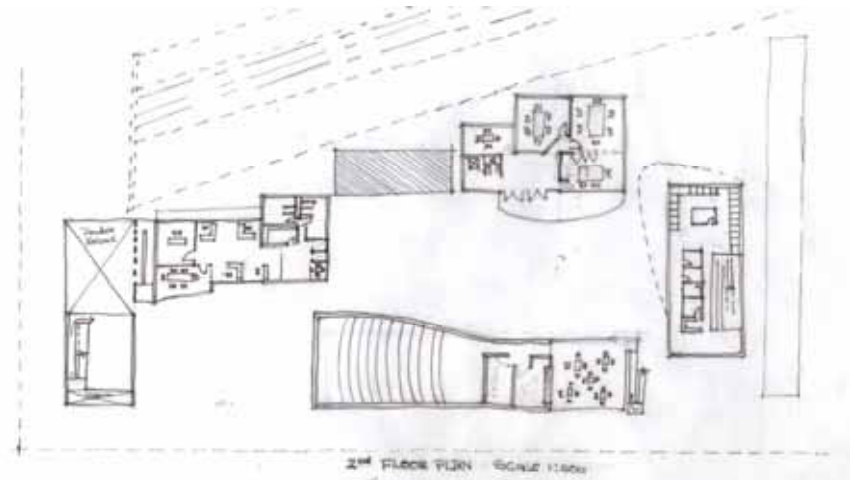


Figure 36

CHAPTER 5

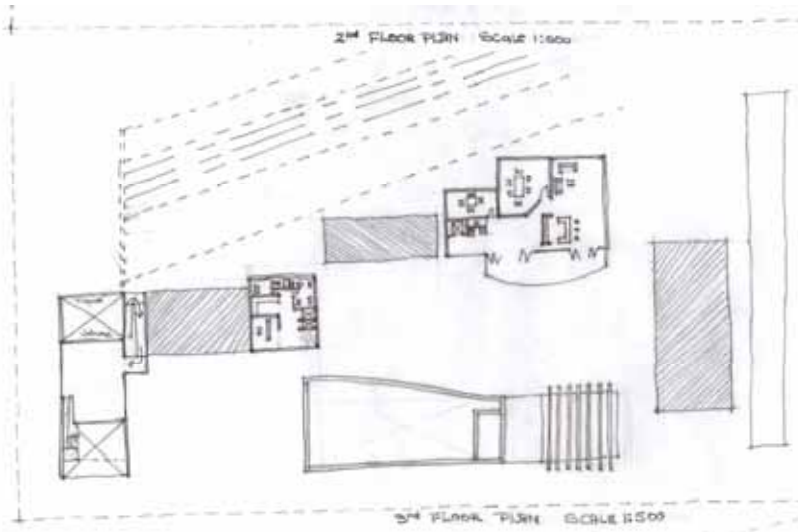


Figure 37

Massing investigation

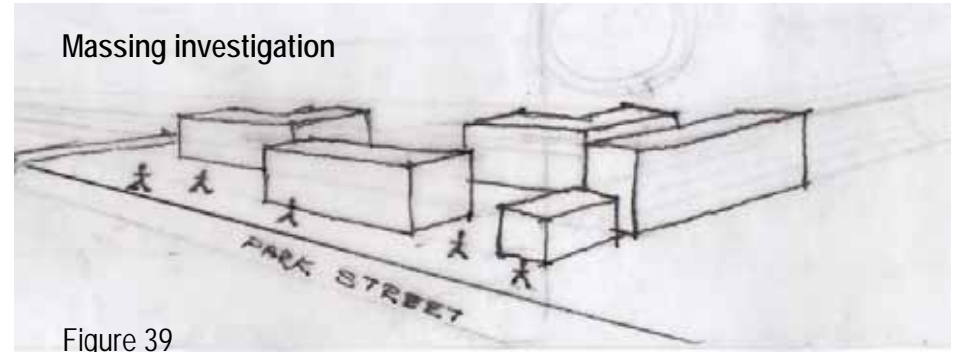


Figure 39

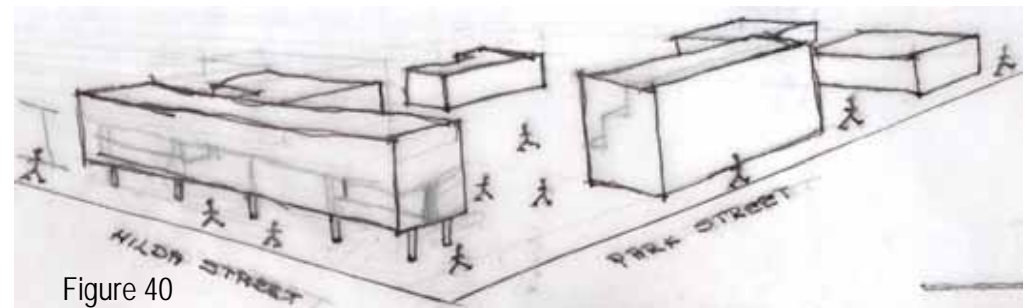


Figure 40

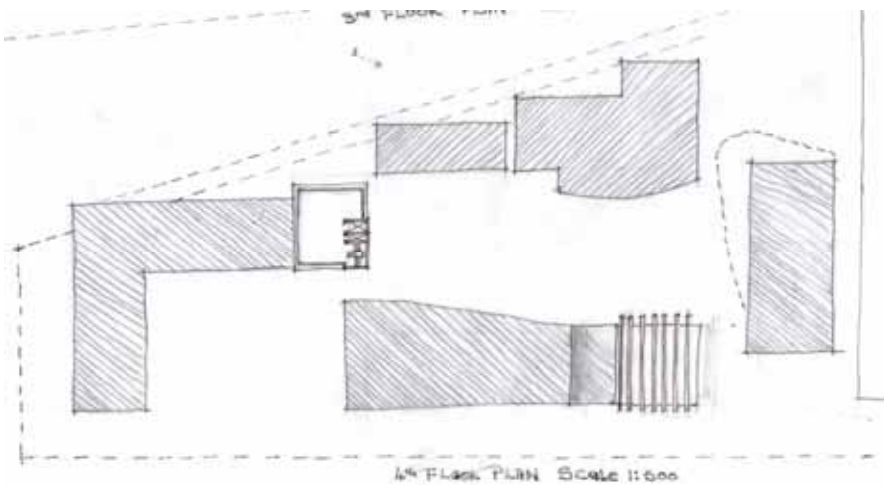


Figure 38

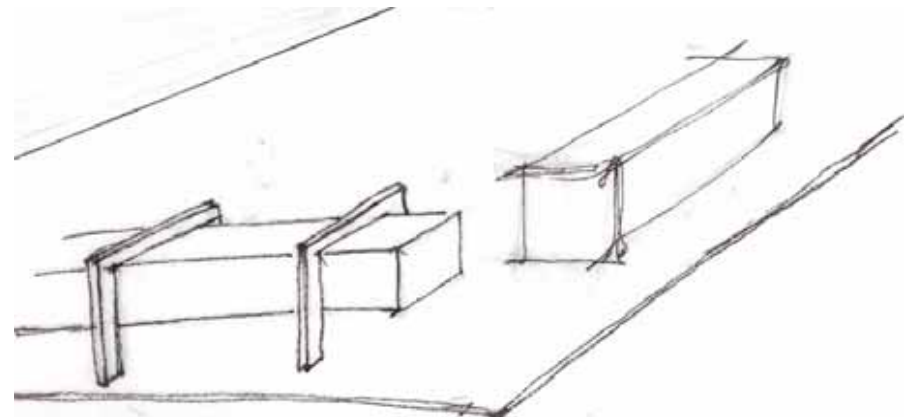


Figure 41

CHAPTER 5

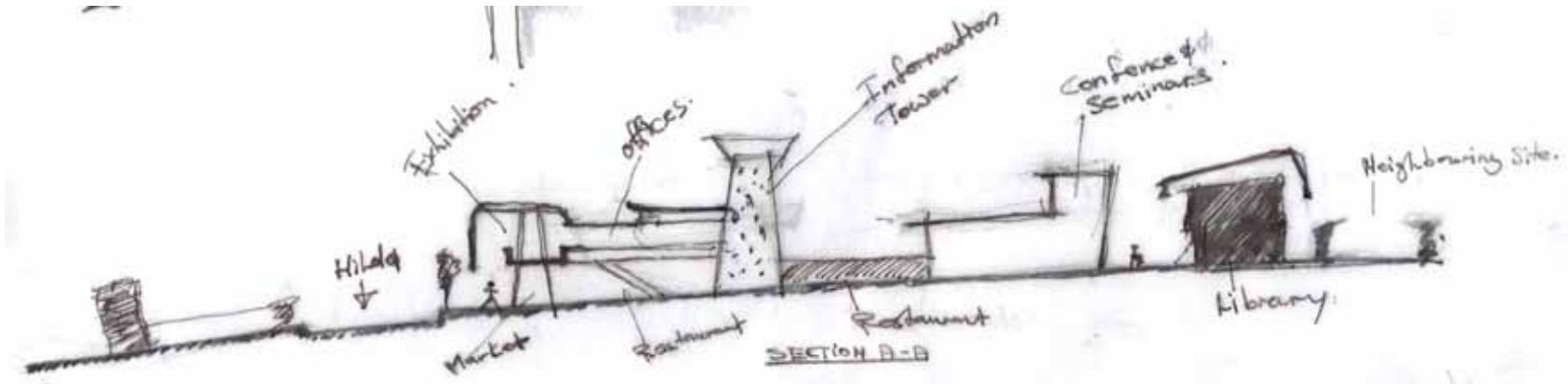


Figure 42

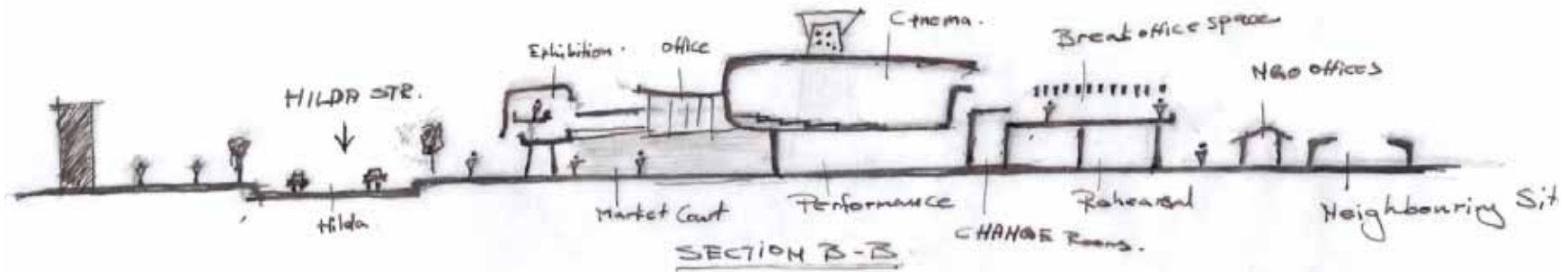


Figure 43

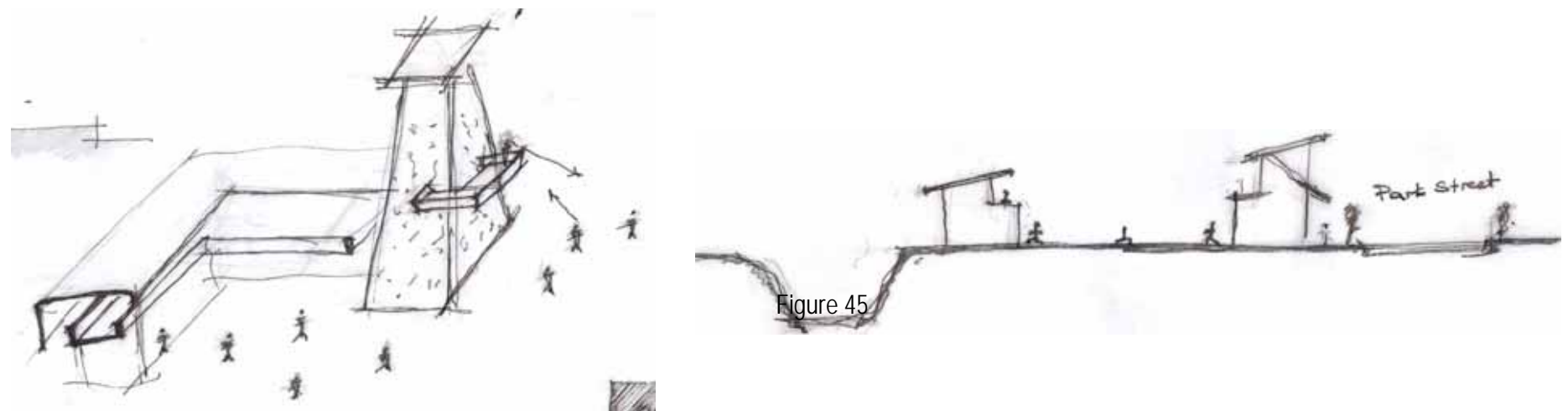


Figure 45

CHAPTER 5

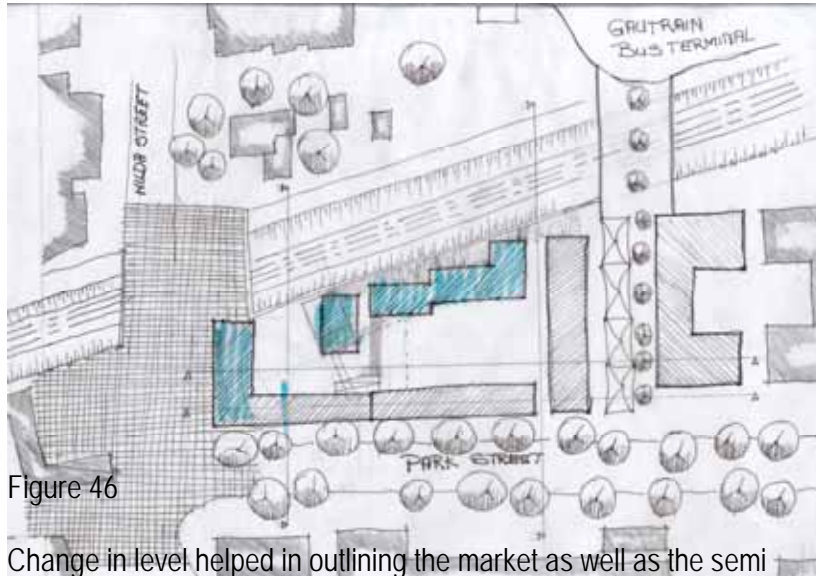


Figure 46

Change in level helped in outlining the market as well as the semi private public. The two spaces shared energies with each other without interfering on each others activities.

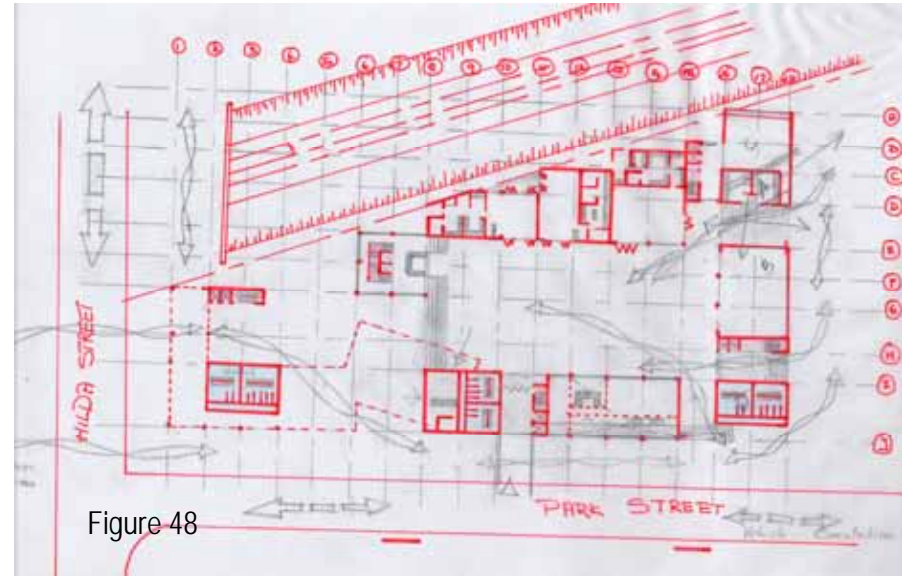


Figure 48



Figure 47

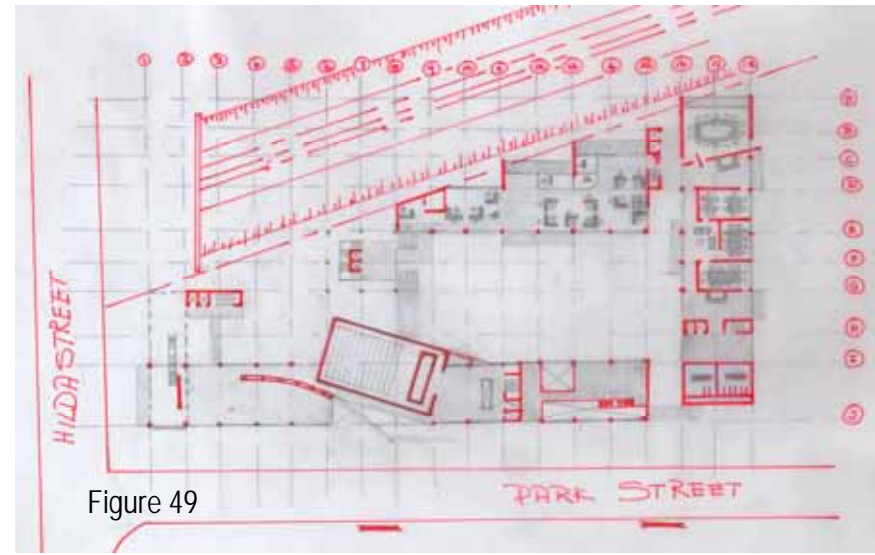


Figure 49

2nd model development: Tower represents a tree for elders

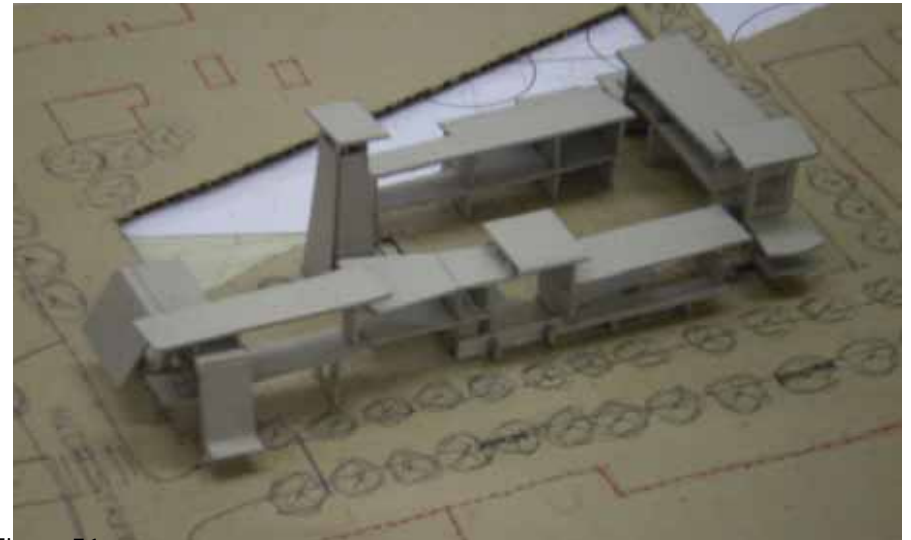


Figure 51

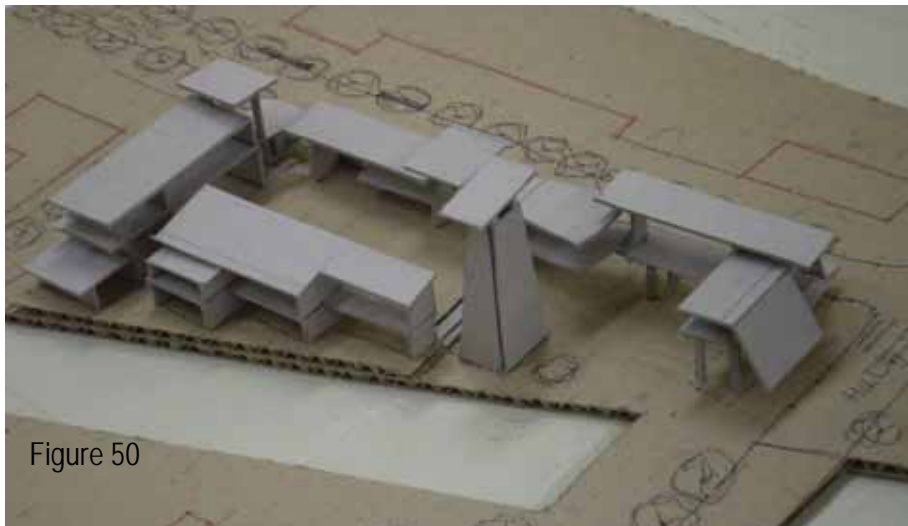


Figure 50

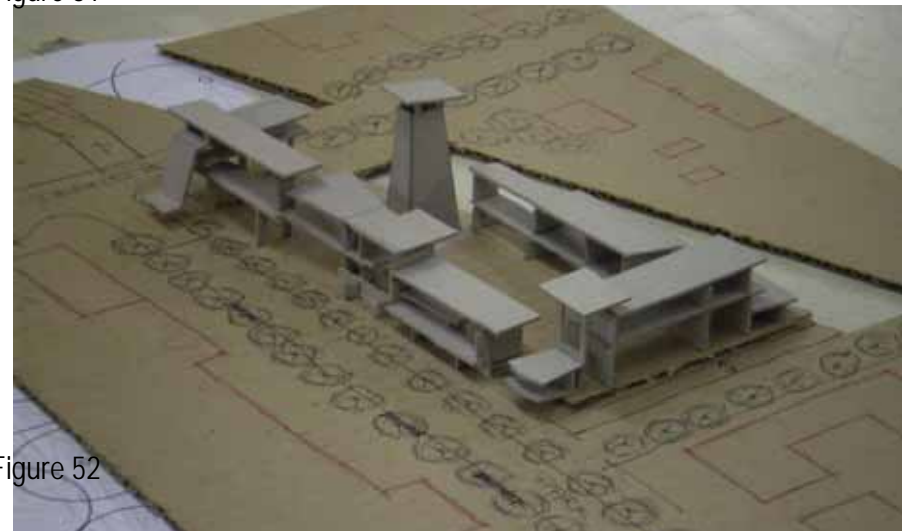


Figure 52

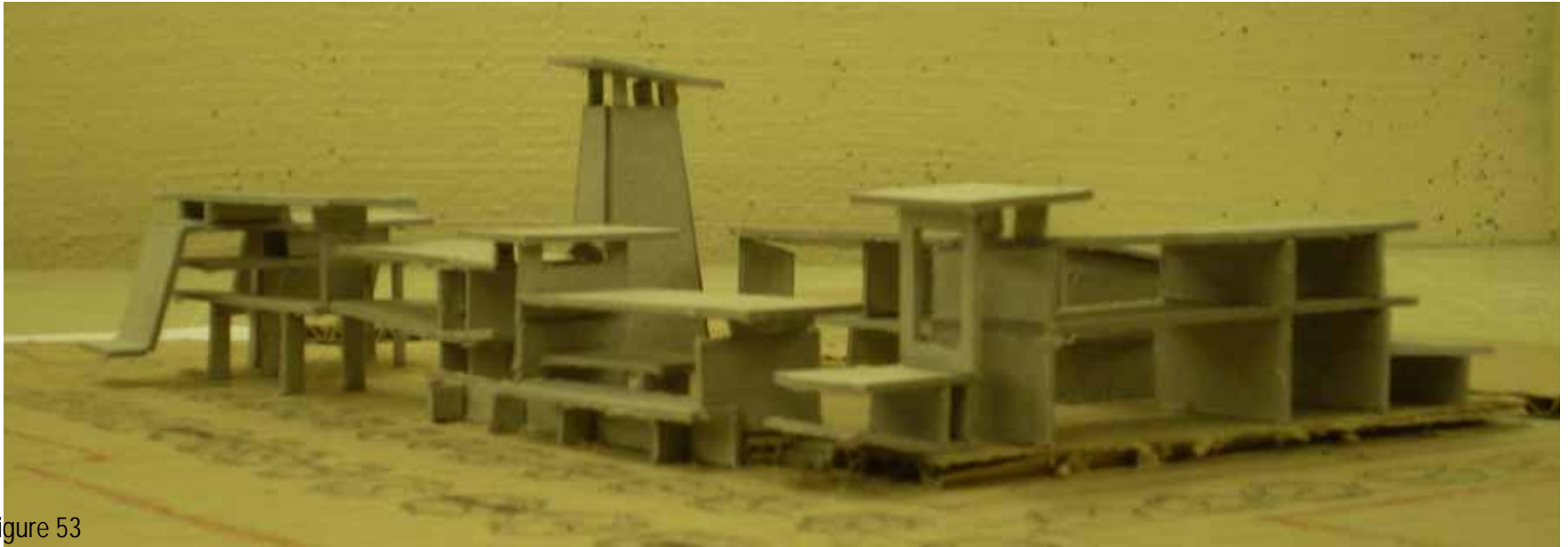


Figure 53

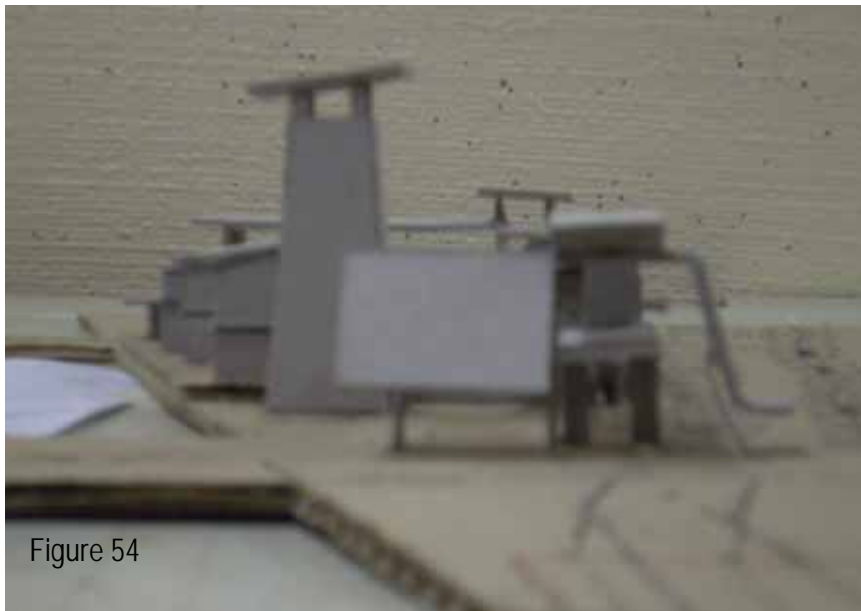


Figure 54

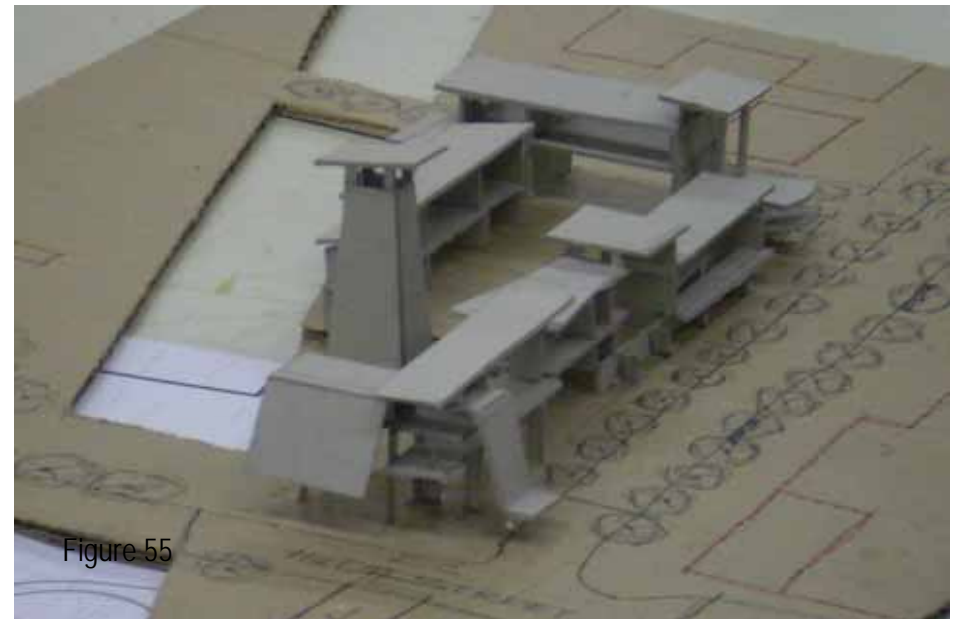


Figure 55

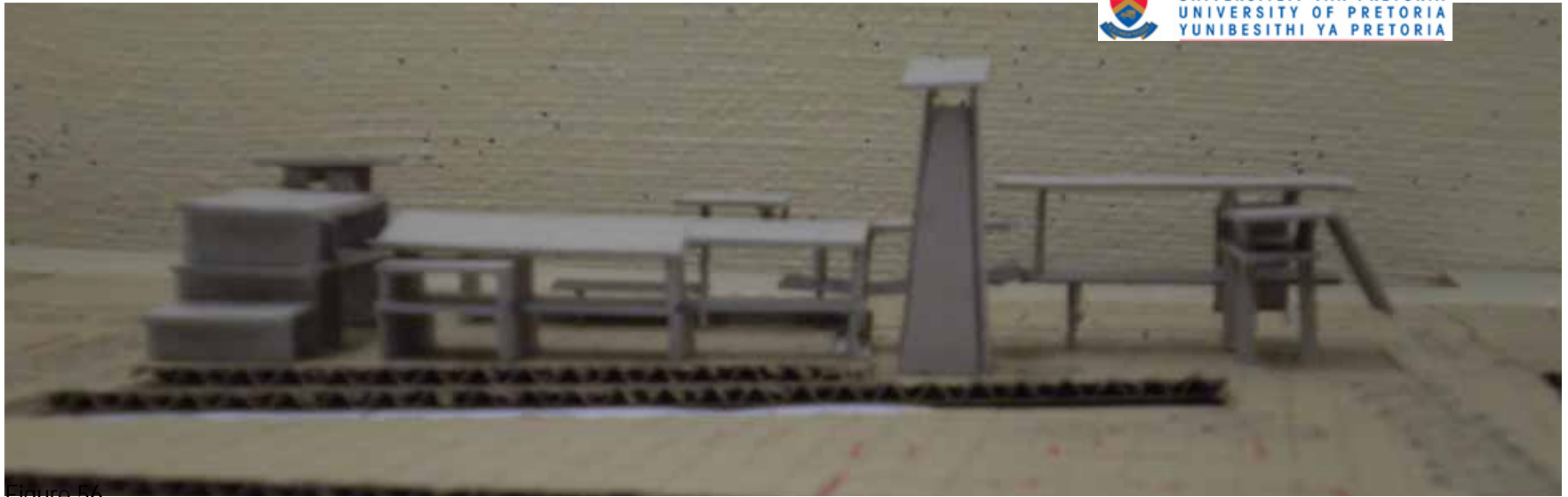


Figure 56

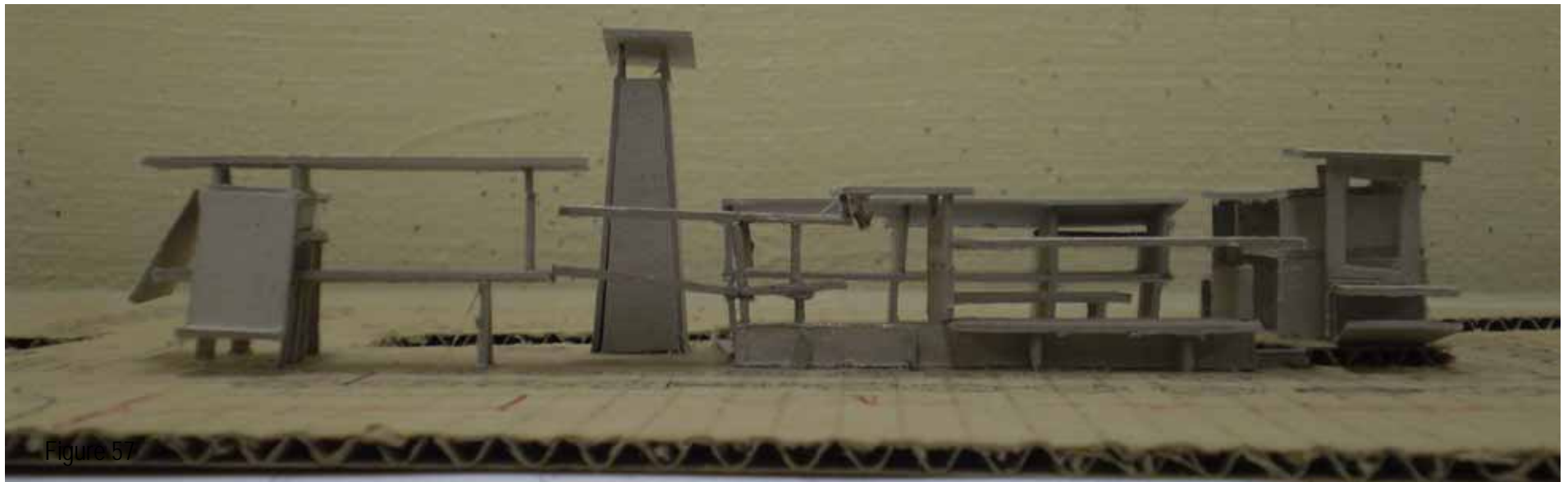


Figure 57

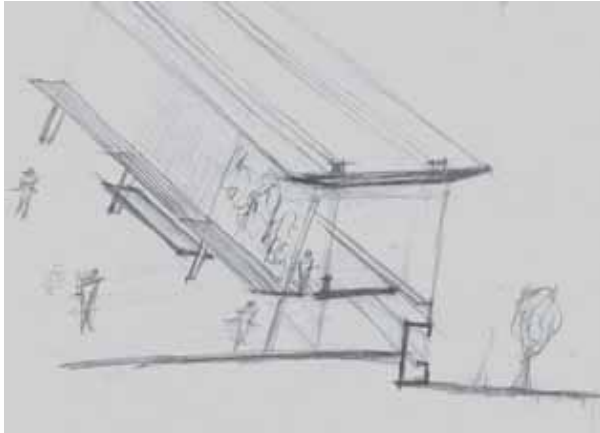


Figure 58

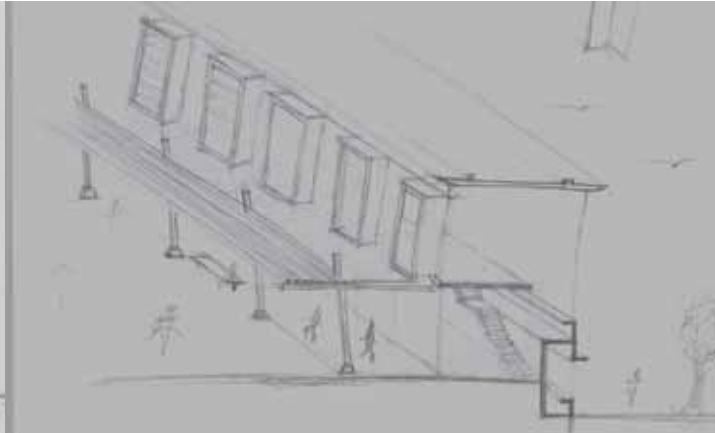


Figure 59

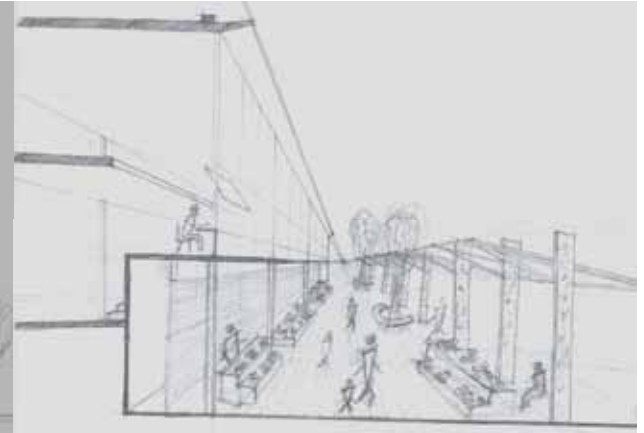


Figure 60

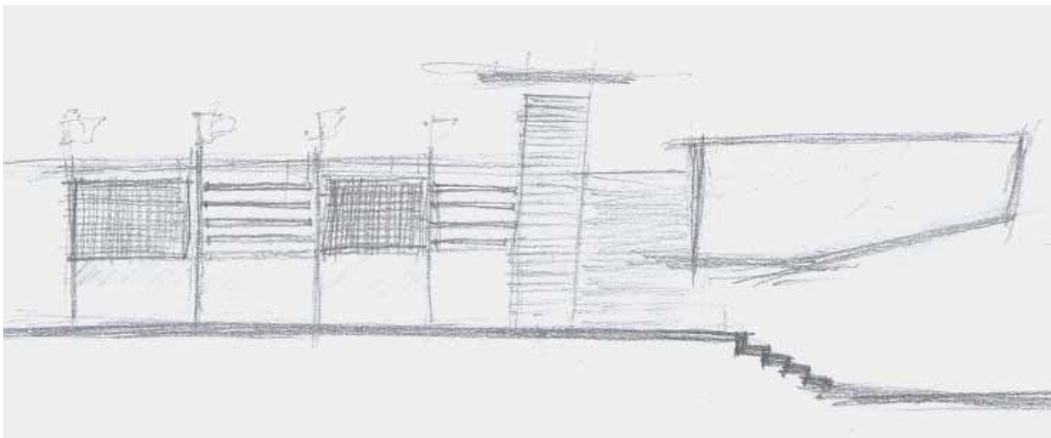


Figure 61

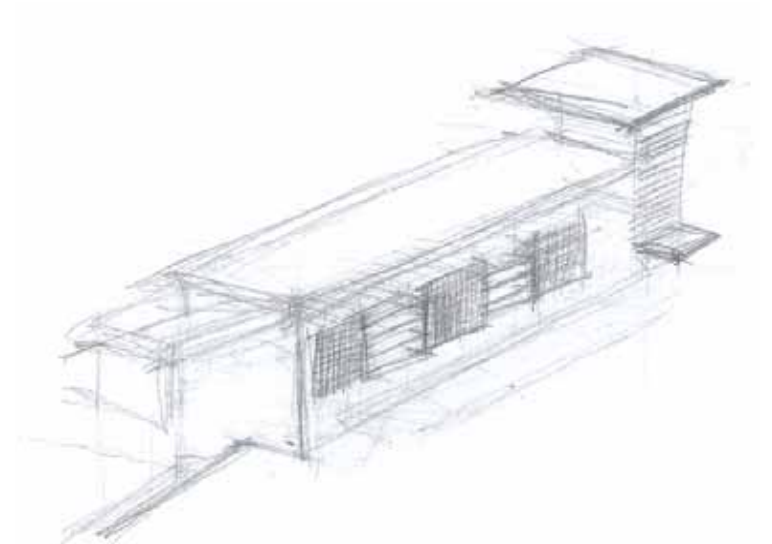


Figure 62

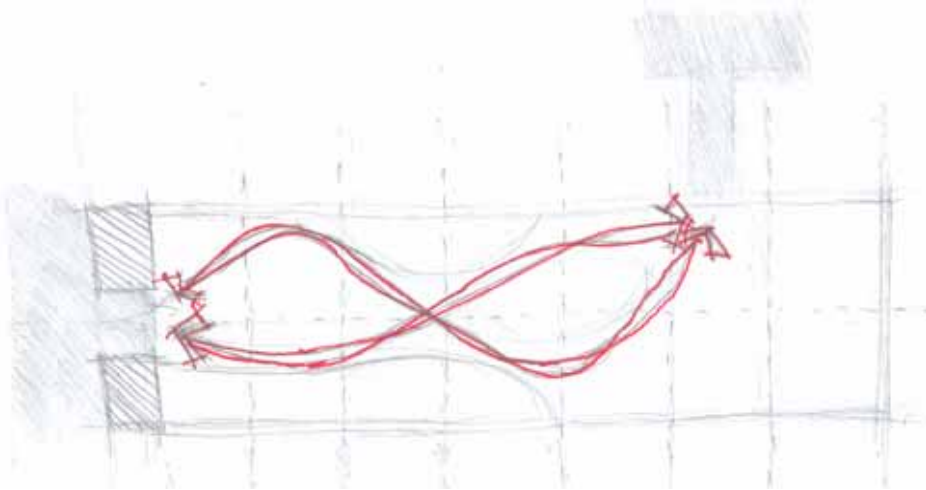


Figure 63: Circulation concept in seminar areas

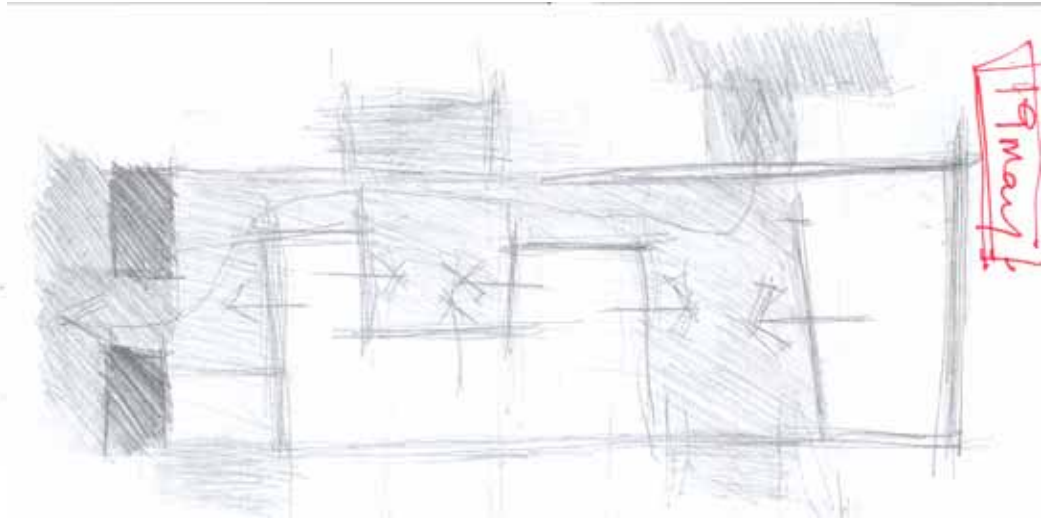


Figure 65

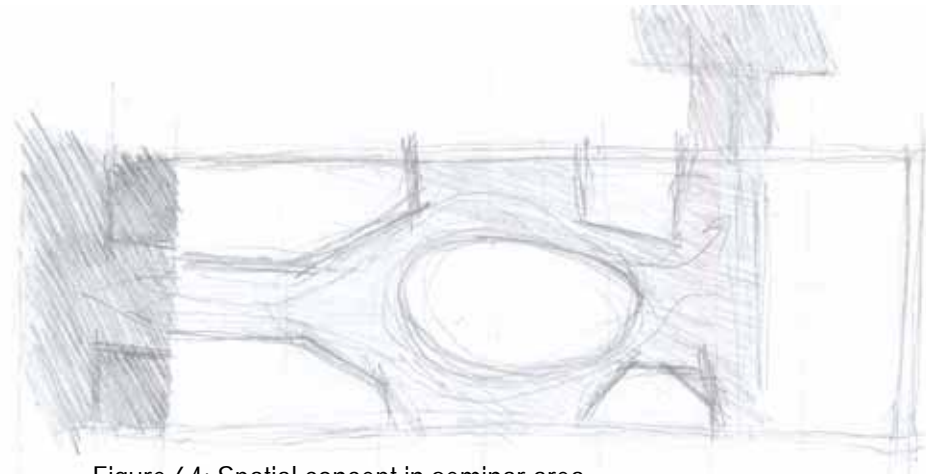


Figure 64: Spatial concept in seminar area

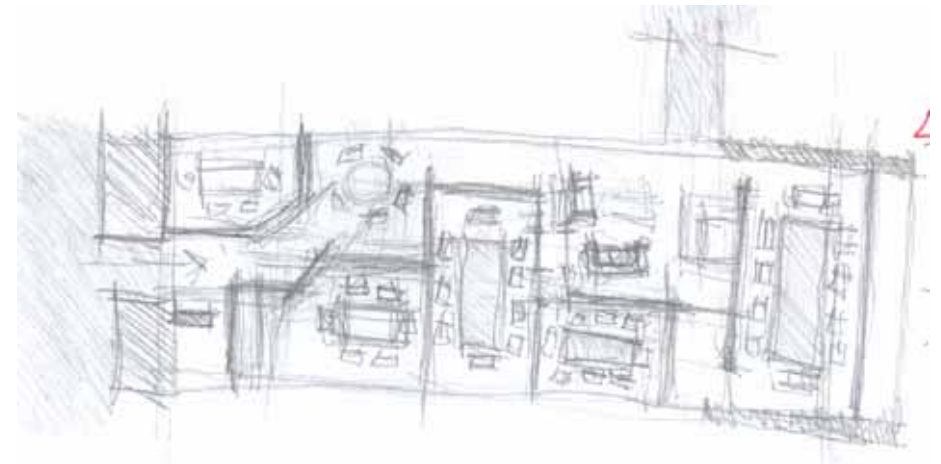


Figure 66



Figure 67

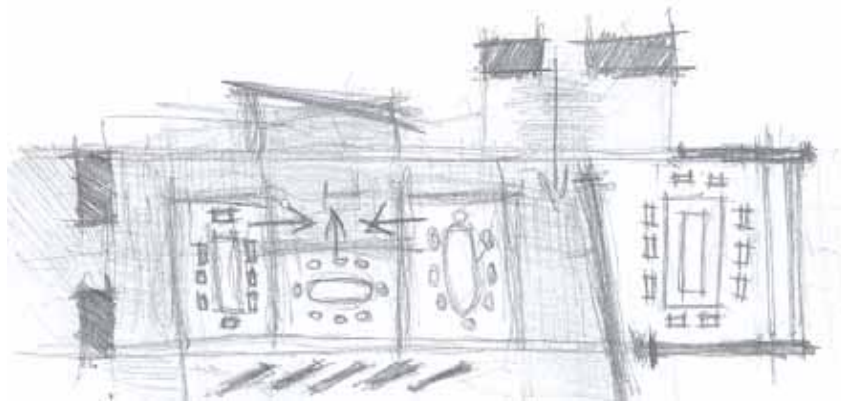


Figure 68

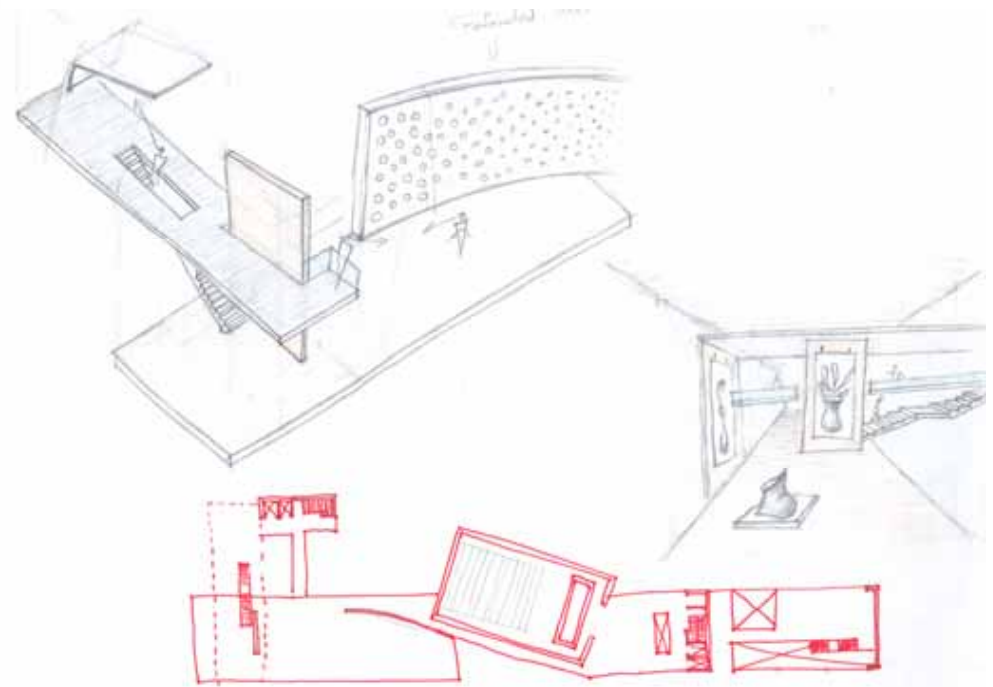


Figure 69: Spatial concept of exhibition area

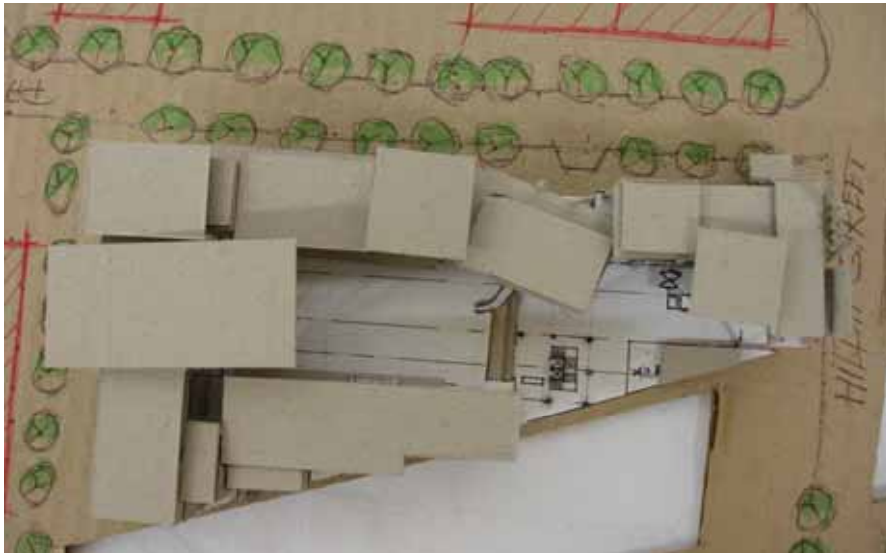


Figure 70



Figure 72



Figure 71



Figure 73

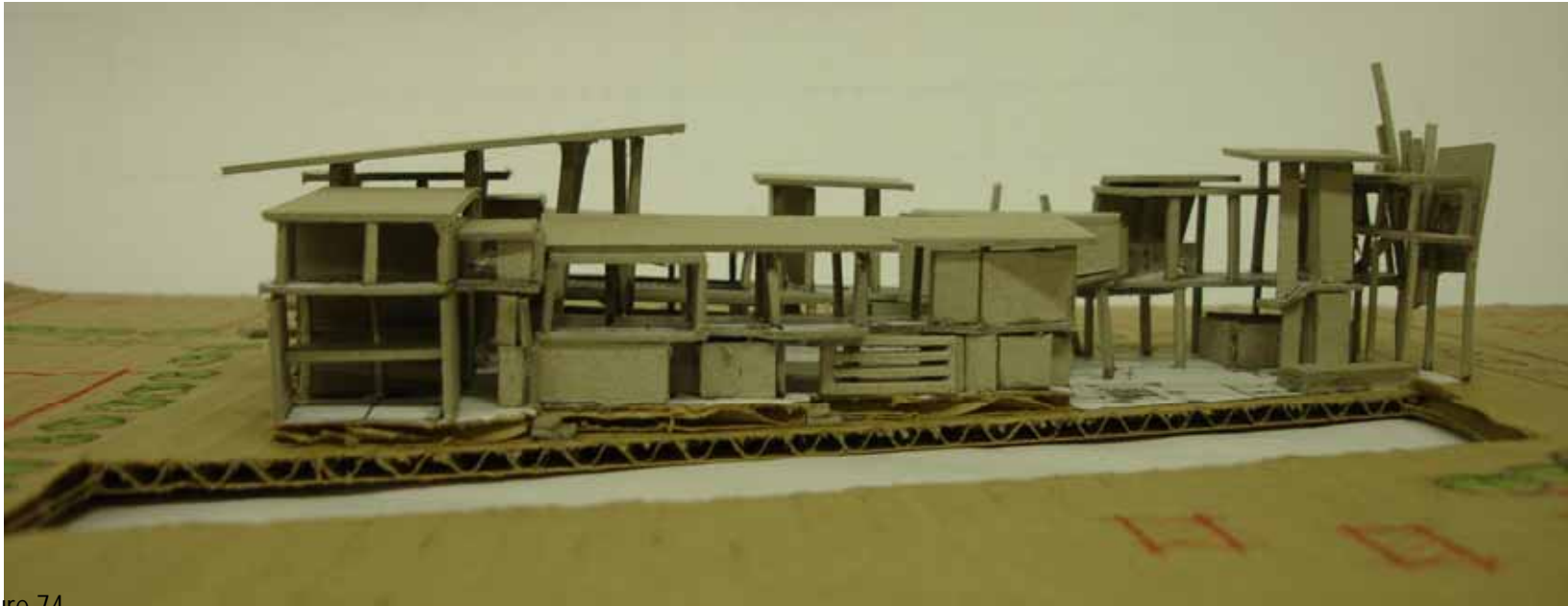


Figure 74

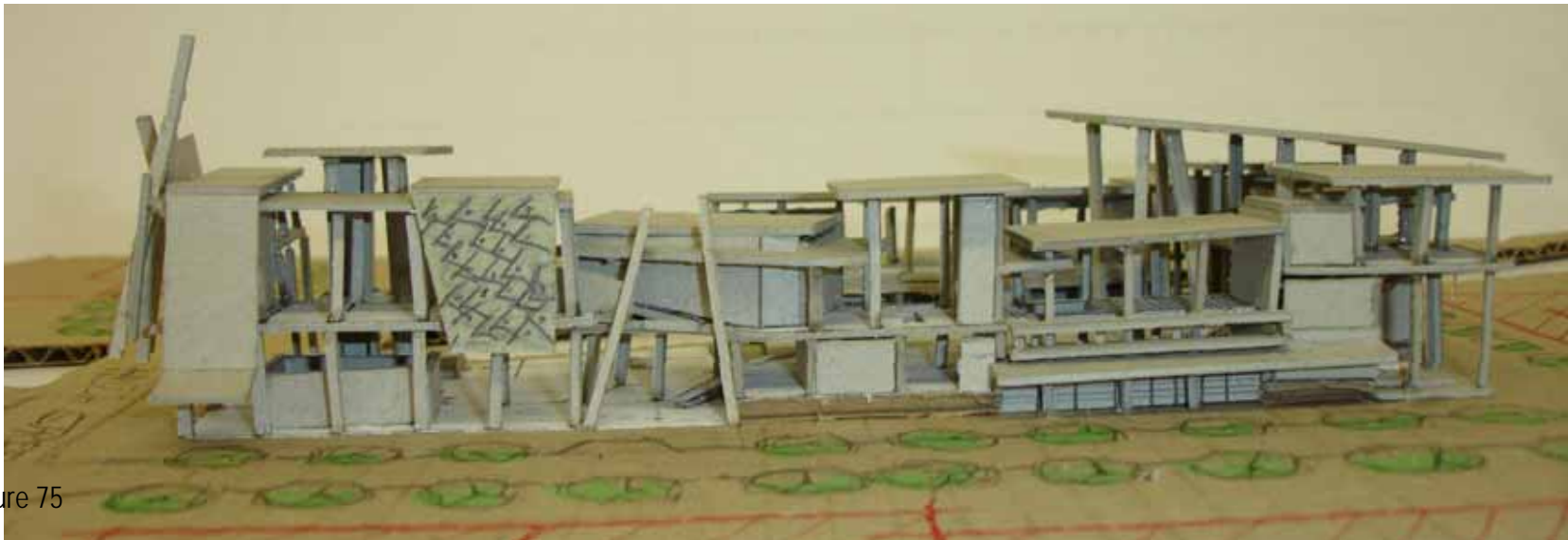


Figure 75

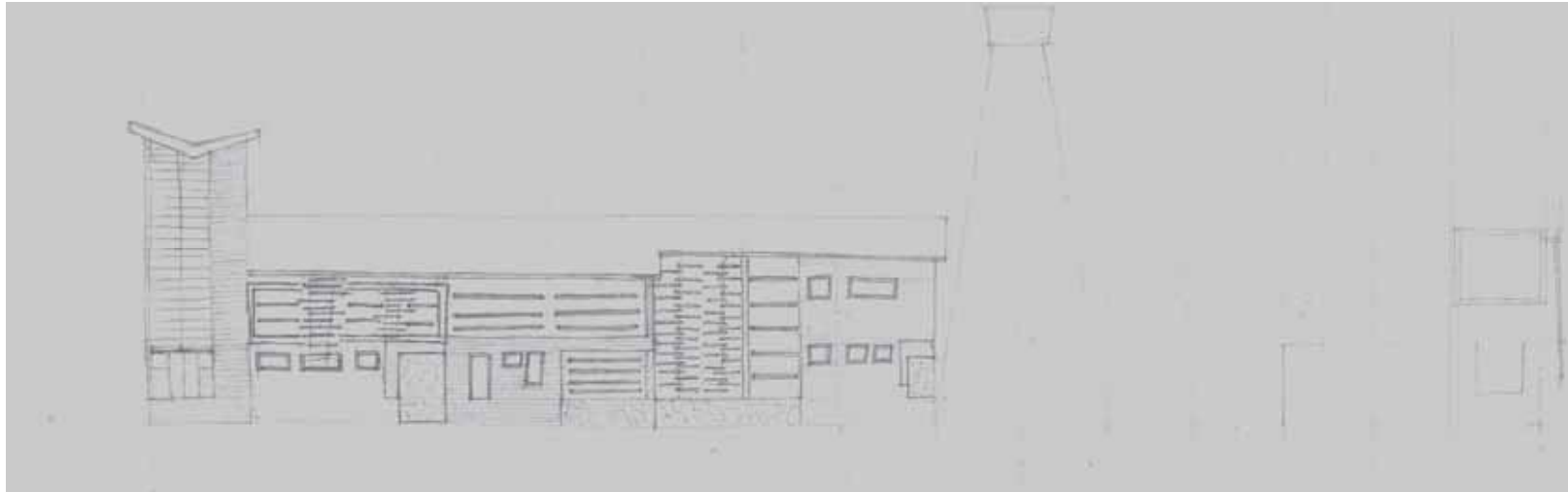


Figure 76

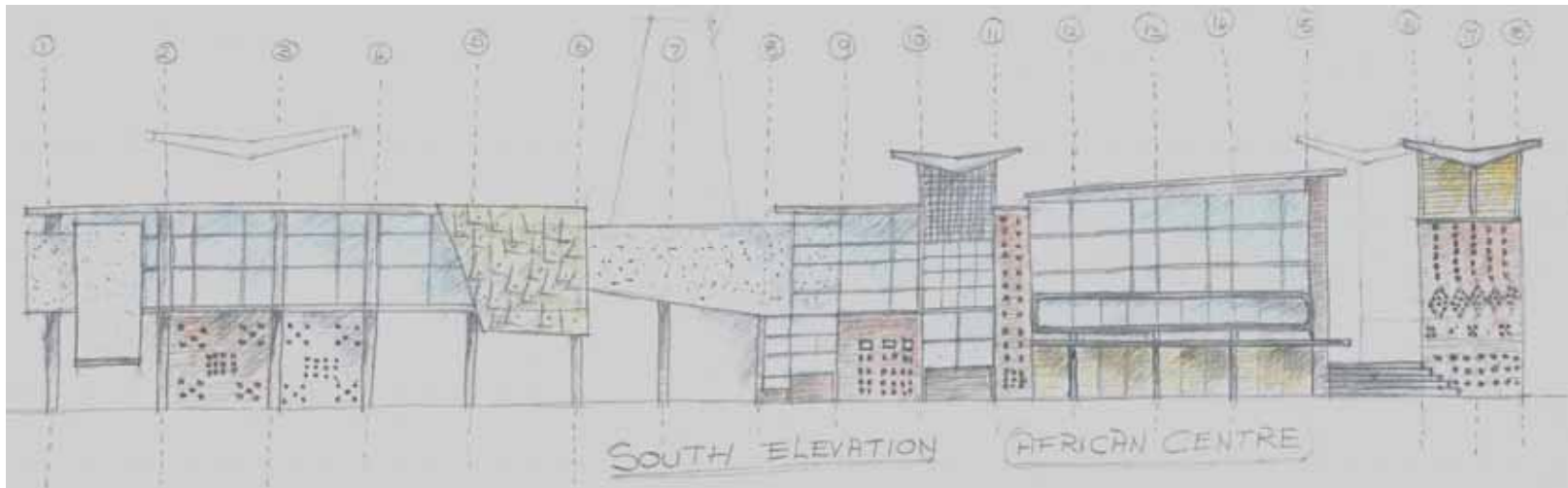


Figure 77









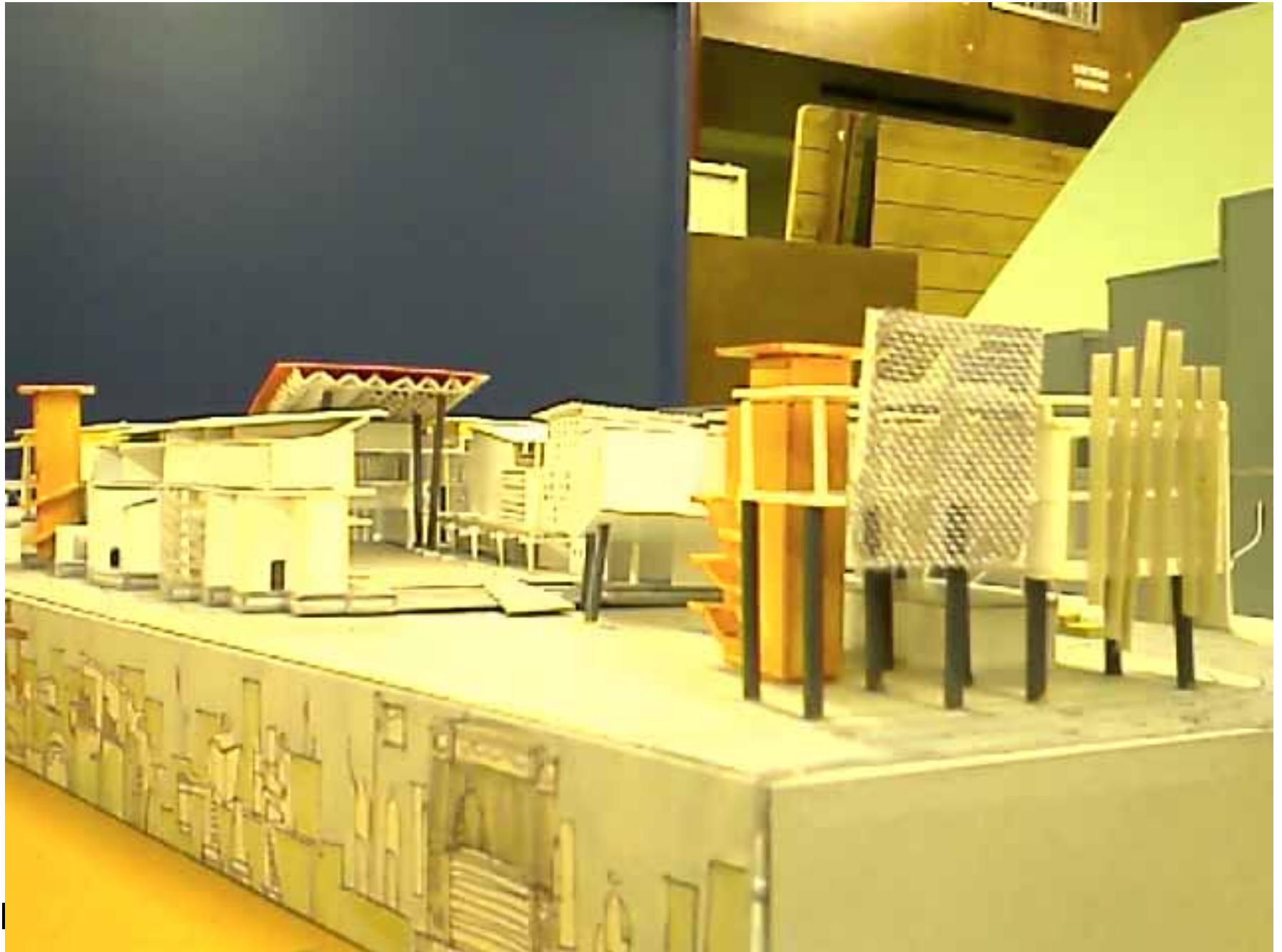
CHAPTER 6



CHAPTER 6



CHAPTER 6







Site

The site is made up by a number of sites consolidated into one. The consolidated sites are currently residential sites and one small ground floor level parking/ car wash shelter. The stand numbers of sites as they stand currently are: R/156; 2/156; 1/156; 1/157; R/157 and 1/158. Figure 1: Ref: Tshwane municipality



Wind



Ref: B.R Schulz 235 – 236; 237 – 238

Materials

The building is mainly put together through the use of locally sourced and manufactured materials. Most of these materials have embodied thermal properties which are created from the early stages of the products manufacturing process. These materials are well suited for the South African (Gauteng) weather.

Skin of the building: The wall covering of the building is mainly composed of three materials; clay brick, concrete and glass.

Roof of the building: the roof of the building is made up of a combination of both IBR roof sheeting and concrete flat roof.

- Clay brick:

This is a locally found and produced material. This material has been created to withstand the different weather conditions that take place within the different parts of the country. Due to its good thermal properties, this material allows for comfortable internal living conditions. It also has good properties when it comes to acoustic insulation. The product being good in both the thermal and acoustic insulation, it reduces the application of extra materials as a result reduces the building cost. Using the method of wall cavity when building in brick, increases thermal and acoustic properties of the built structure.

Brick allows for different ways of treatment ranging from plastering it, living it in a face brick state as well as creating a variety of patterns out of it. Clay brick has good fire resistance properties these are further tested and ensured by the different manufacturing companies.

Chapter 7

Due to the fact that brick is a partly recyclable material, it makes it a good choice to build with.

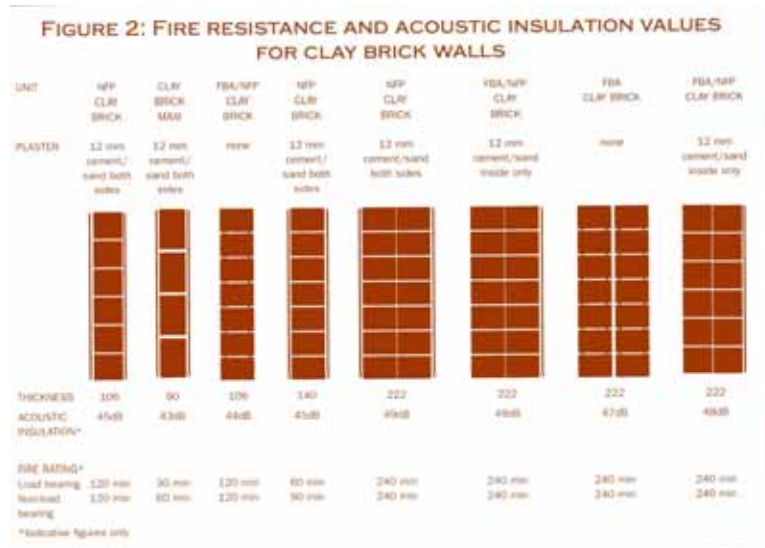


Figure 2: Ref: Clay Masonry technical guide: pg 13

Due to a huge number of different projects which have been built in the Republic of South Africa using clay brick as a means of construction, the country has created a substantial amount of experienced and skilled brick laying professionals. This therefore creates an opportunity of locally sourcing the labour and creating job opportunities for many within the country.

The use and application of clay brick has been used in a range of building types in this country (R.S.A) ranging from residential to commercial building. Being a robust material clay brick has found itself being used in a lot of buildings regarded as public buildings.



Figure 3: Brickfield and Legae (Johannesburg)
Ref: Phumlani



Figure 4: Metro Mall (Johannesburg)
Ref: Phumlani

Chapter 7



Figure 5: Hector Peterson Museum (Johannesburg)
Ref: Phumlani

Above are images showing some of the successfully designed and constructed clay brick buildings. These buildings are also heavily occupied by general public.

- Concrete

Concrete is also a locally found material and due to its plasticity it allows for different types of shapes and forms to be created out of it. It also has thermal properties. Due to concrete being a robust material, it becomes a good material to build with when building public buildings.

The structural columns in the structure of the African Dialogue Centre are built with the use of concrete. The free standing columns which people and vehicles move around have been left in a circular form.

The columns which are bound within the wall structures have been created in a square form. This makes connection between the column structure and the wall infill easy.

Concrete has also been used on the flat sections of the roof. This gives an allowance for easy placement of some of the mechanical plants that help with the comfort of the building. When well water proofed, the use of concrete on the flat sections of the roof makes it easy to control rain water.

The plastic properties of concrete allow for flexibility in design. When taking advantage of the plastic properties, elements can be designed to be multi functional. An example of such features is the courtyard façade covering the library section of the building. The wall has extended to being both a seating bench as well as a desk on the top level.

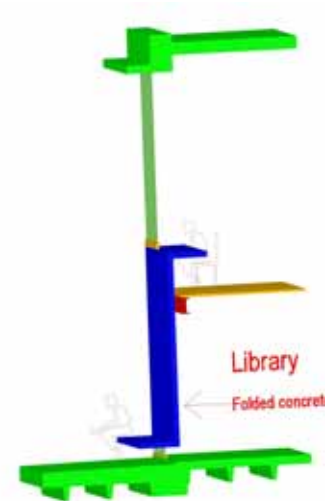


Figure6:
Ref:Phumlani.

- Glass

Due to the intentions of allowing maximum light into the building and the least use of electricity during the day, a huge amount of glass has been applied into the design of the African Dialogue Centre on the Southern Facade. To allow light into the building and control the amount of heat that enters, vertical and horizontal sun screening louvers have been applied on the Western, Eastern and Northern façades. In an attempt to have good thermal control, double glazing has been used.

Distribution of services

All the services in the building have been distributed in such a way that they are easily located by everyone using the building. Fire escapes have been evenly distributed through out the building. All building blocks have fire escapes on either side. Almost all the fire escapes spill out to the open courtyard, allowing for easy and safe escape. All the distances between the different fire escapes have been designed to meet SABS standards.



Figure 7

In most cases, fire escapes have been designed to double up as vertical circulation in the African Dialogue Centre. All the vertical circulation nodes have been located at the entry points leading towards the main courtyard. This way it makes it easy for the different occupants to find their way around the building. For easy access and identity, both the vertical circulations and the ablutions have been located in close proximity of each other. Ablutions have been located in such a way that they are easily accessible by occupants on either side of the courtyard within the complex.



Figure 8

The courtyard layout has been designed in such a way that it allows communal engagement, easy through movement by passers by and good protection against bad weather and heavy sun.

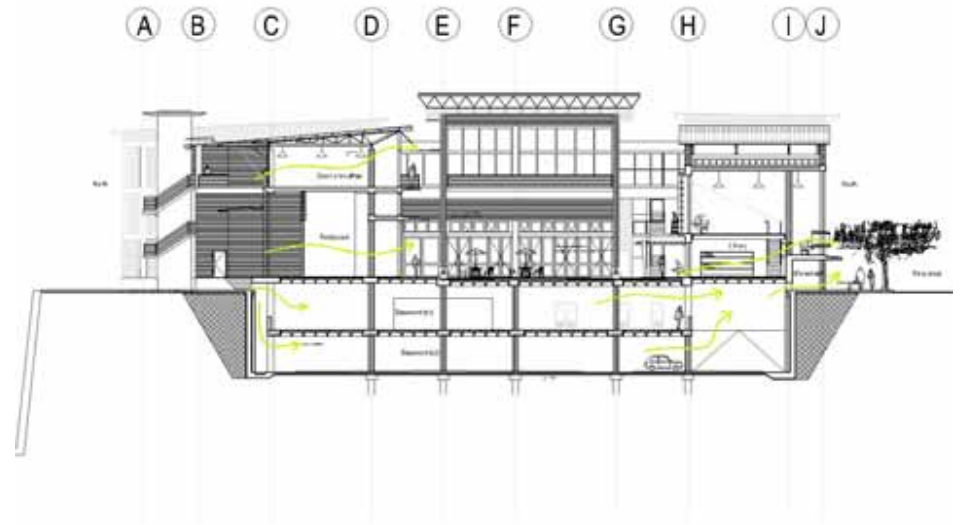


Figure 9

In an attempt to save on the electrical energy used by the building through mechanical cooling and ventilation the architecture has been kept as naturally ventilated as possible. This refers to both the human occupied spaces in the building as well as in the parking basement. In places where mechanical ventilation and cooling has been installed, it is only there as a back up system.

Structure and supporting services

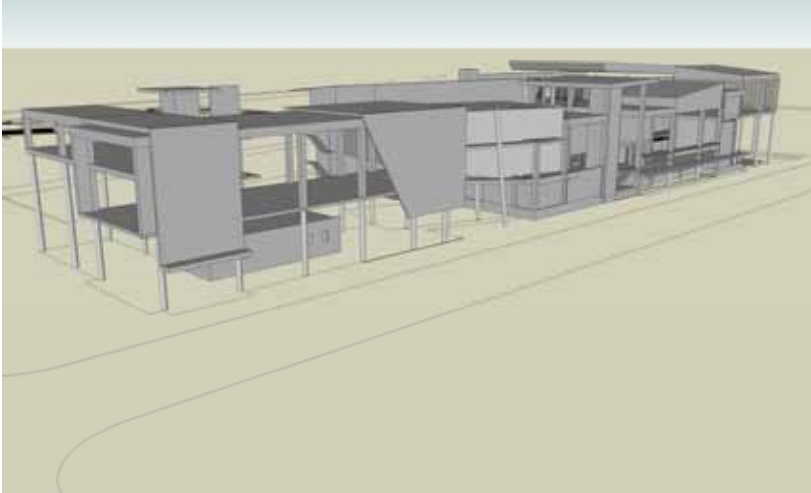


Figure 10:

The structural grid has been designed to accommodate maximum and comfortable car parking in the basement area. It has also been structured to allow for flexible design of occupational spaces and free public circulation on ground level and above.

Concrete elements which have been designed to enclose internal spaces are also used as structural bracing members.

Due to the high live load that is imposed by vehicles on the structure, the basement floor levels have been designed using coffer slabs. By using this system, the depth of the structure is reduced. This means that less concrete is used as a result the structural dead load is also

reduced. This allows for the minimum width of structural columns to be used.

Due to the fact that human live load is less than that of the vehicles, beam and flat slab system has been used above ground level. To help reduce the depth of beams and slabs, column spacing has been kept to a maximum of 8000mm.



Figure 11:

All the vertical circulation structures have been designed to be higher than most of the building. This allows for the public to easily locate them. While in some specific areas vertical circulation structures have been used as structural bracing members.



Figure 12:

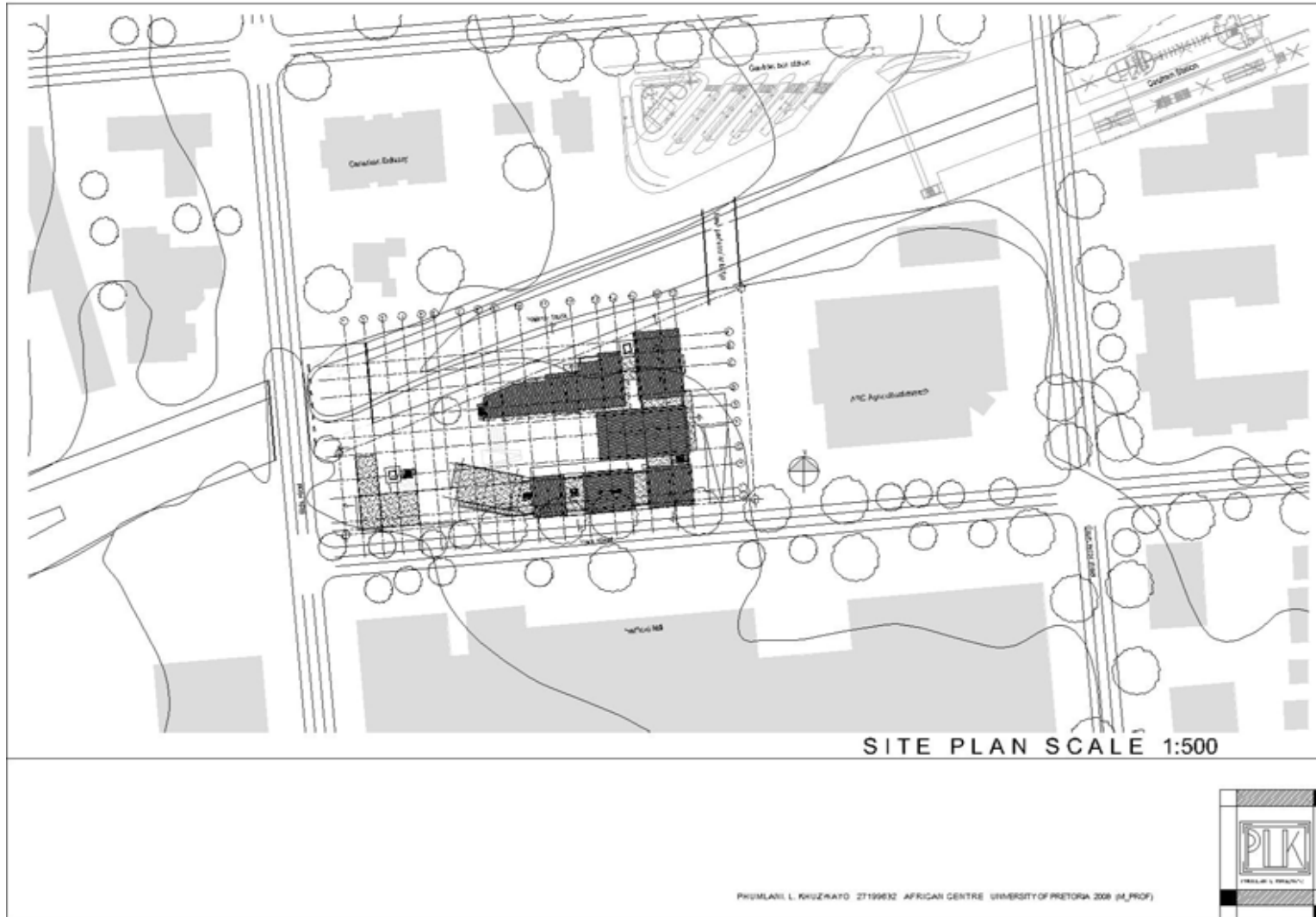
The application of sun screening louvers on the eastern, western and northern façade, help reduce excessive running of mechanical cooling systems.

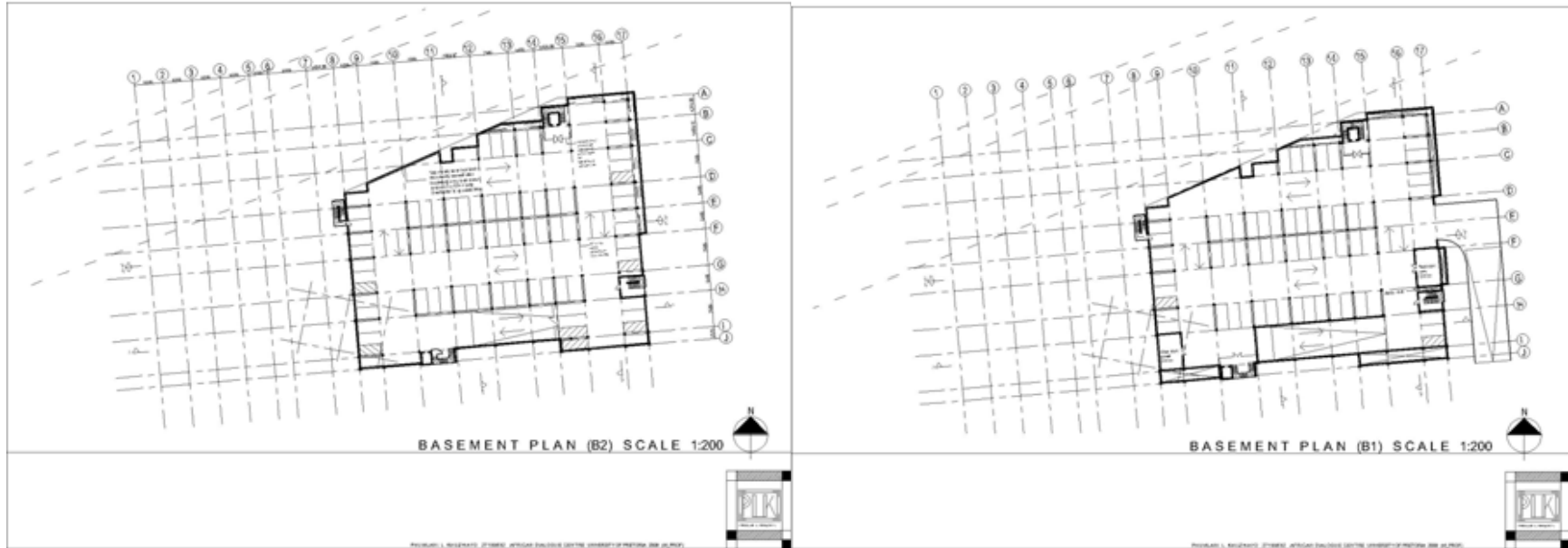
To help control the climate inside the building, air-conditioning systems have been allowed for in the design. The audiovisual area as well as the library will share the air-condition plant located on the flat roof above the library main entrance. While the conference rooms, performance area as well as the delegate entertainment area get to share the air-conditioning plant on the flat roof next to the eastern fire escape. The restaurants get to use the slip unit air-conditioning system.

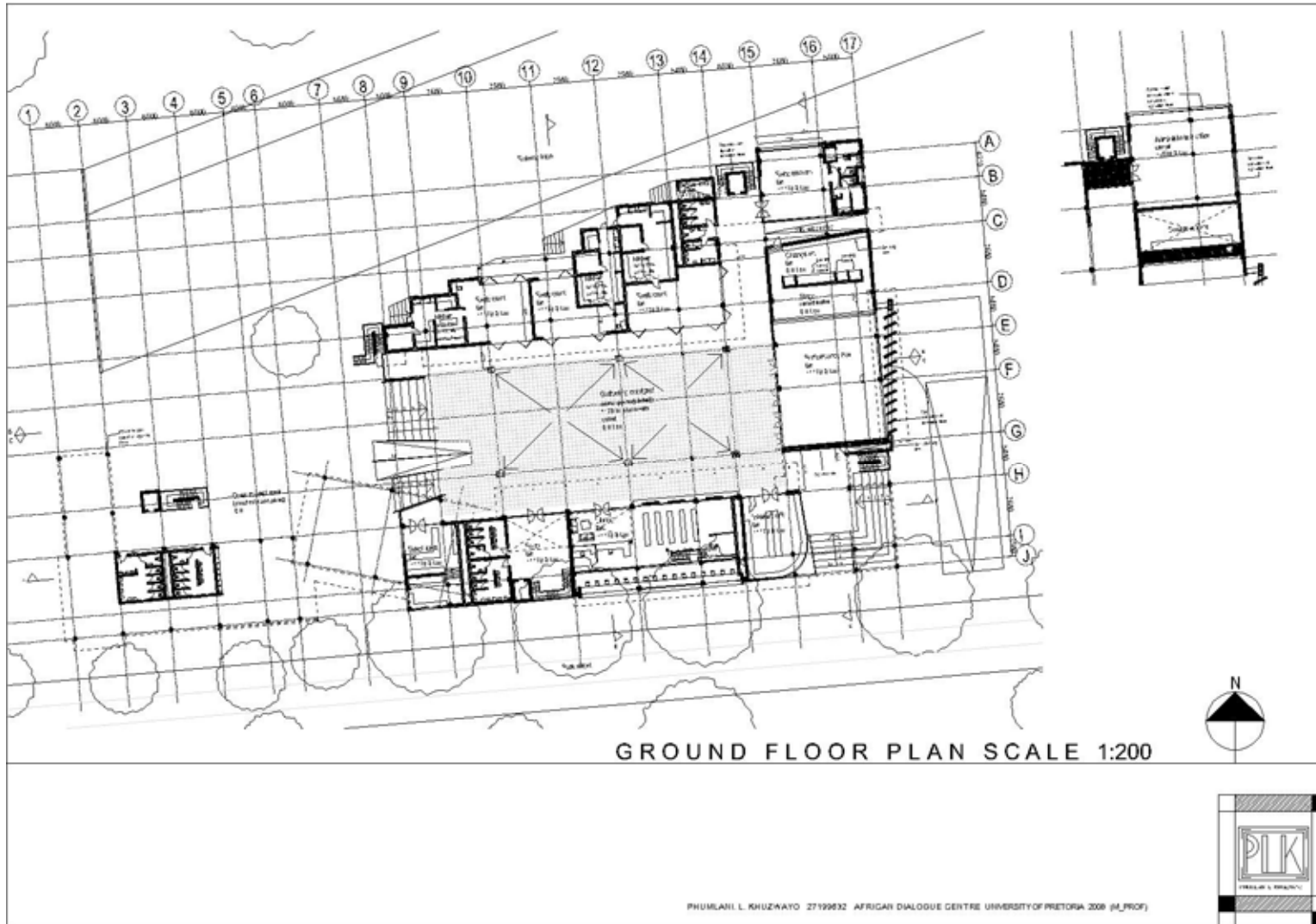
For easy access, cleaning and less disturbance on people visiting the building the refuse area has been allocated behind the restaurants.

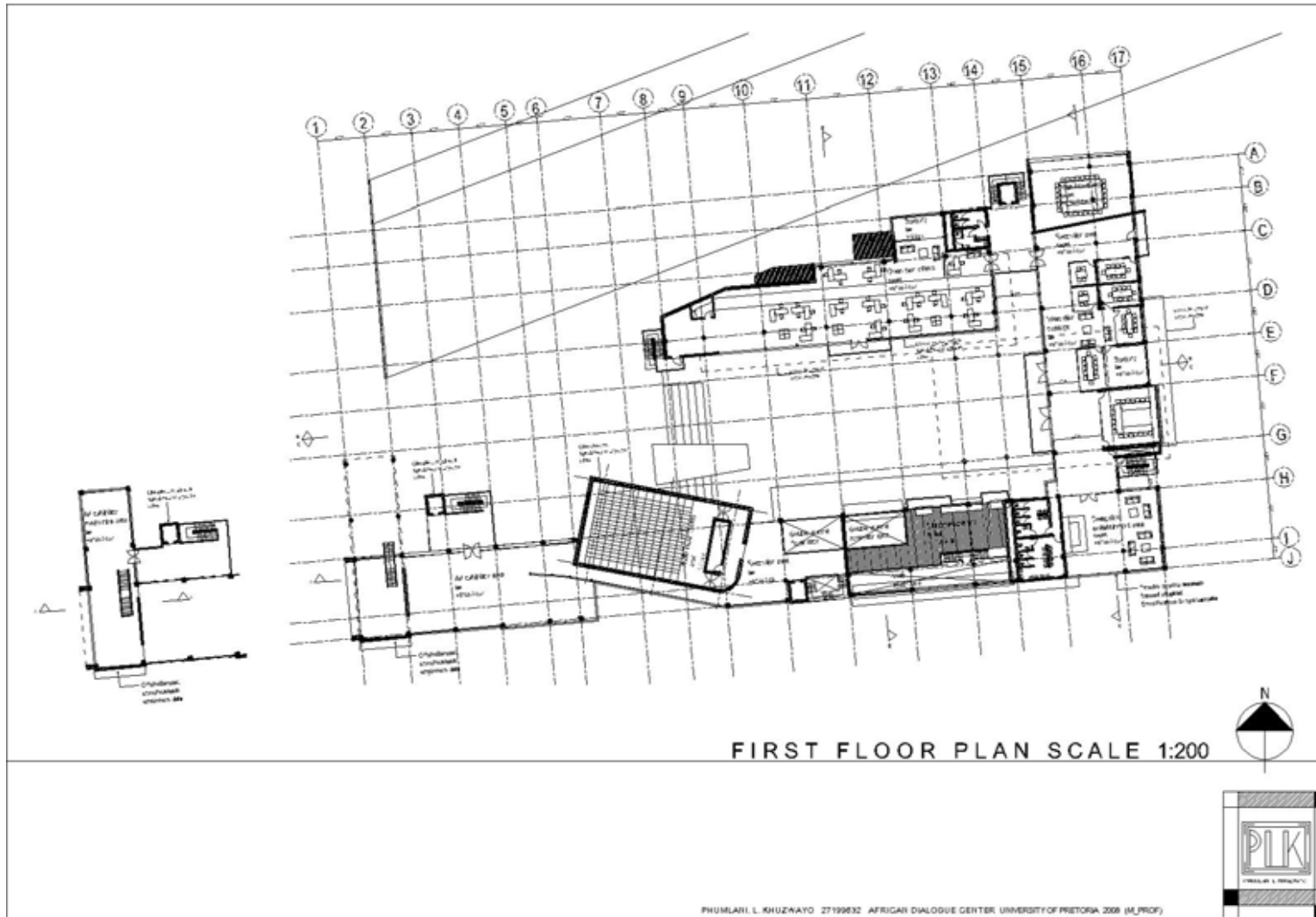
Ablutions have been allocated on the northern and southern edges in order to take advantage of the municipality sewer lines which are positioned on those sides.

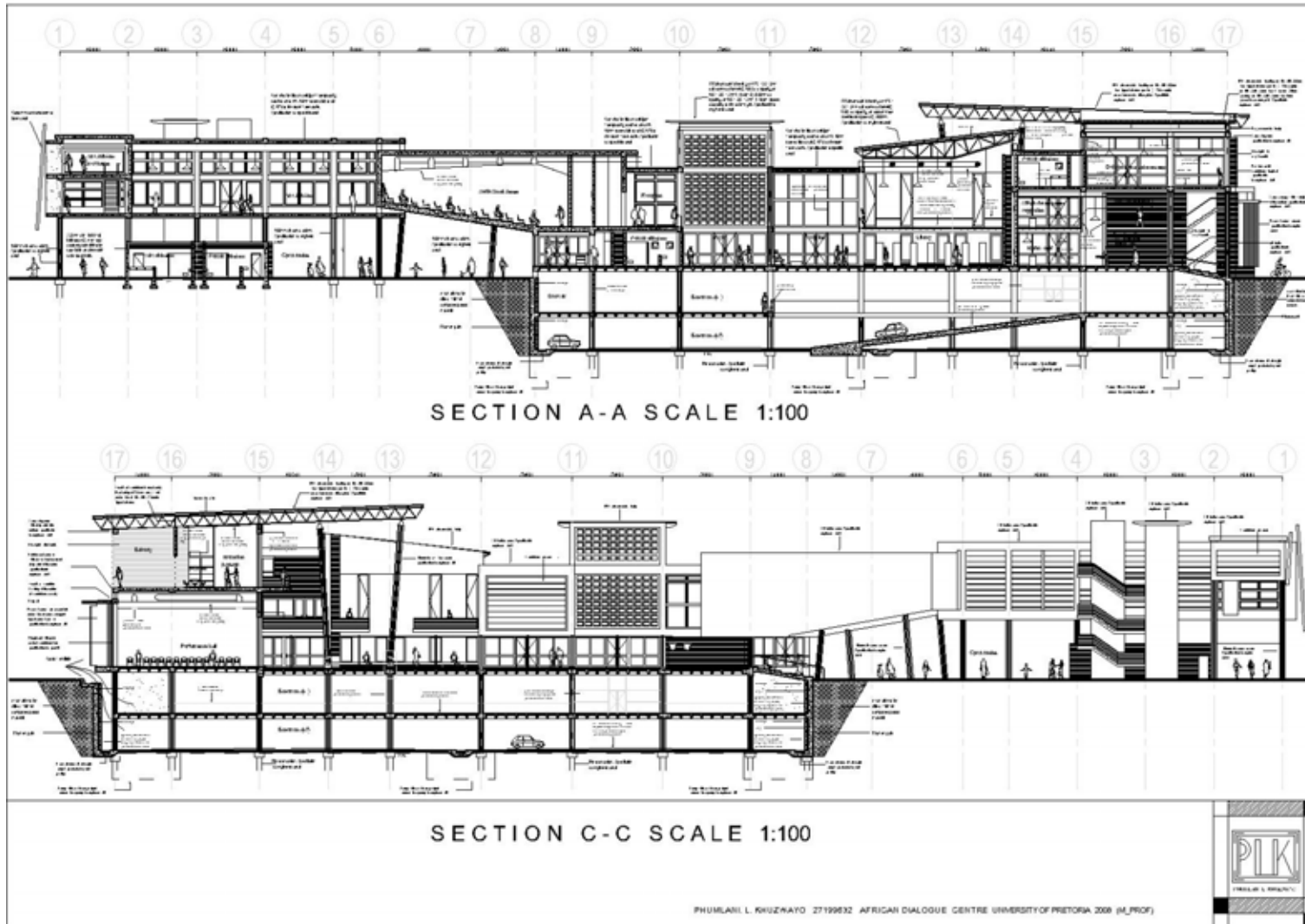
All the rain water from the roof as well as the courtyard will be discharge to the municipality storm water system.

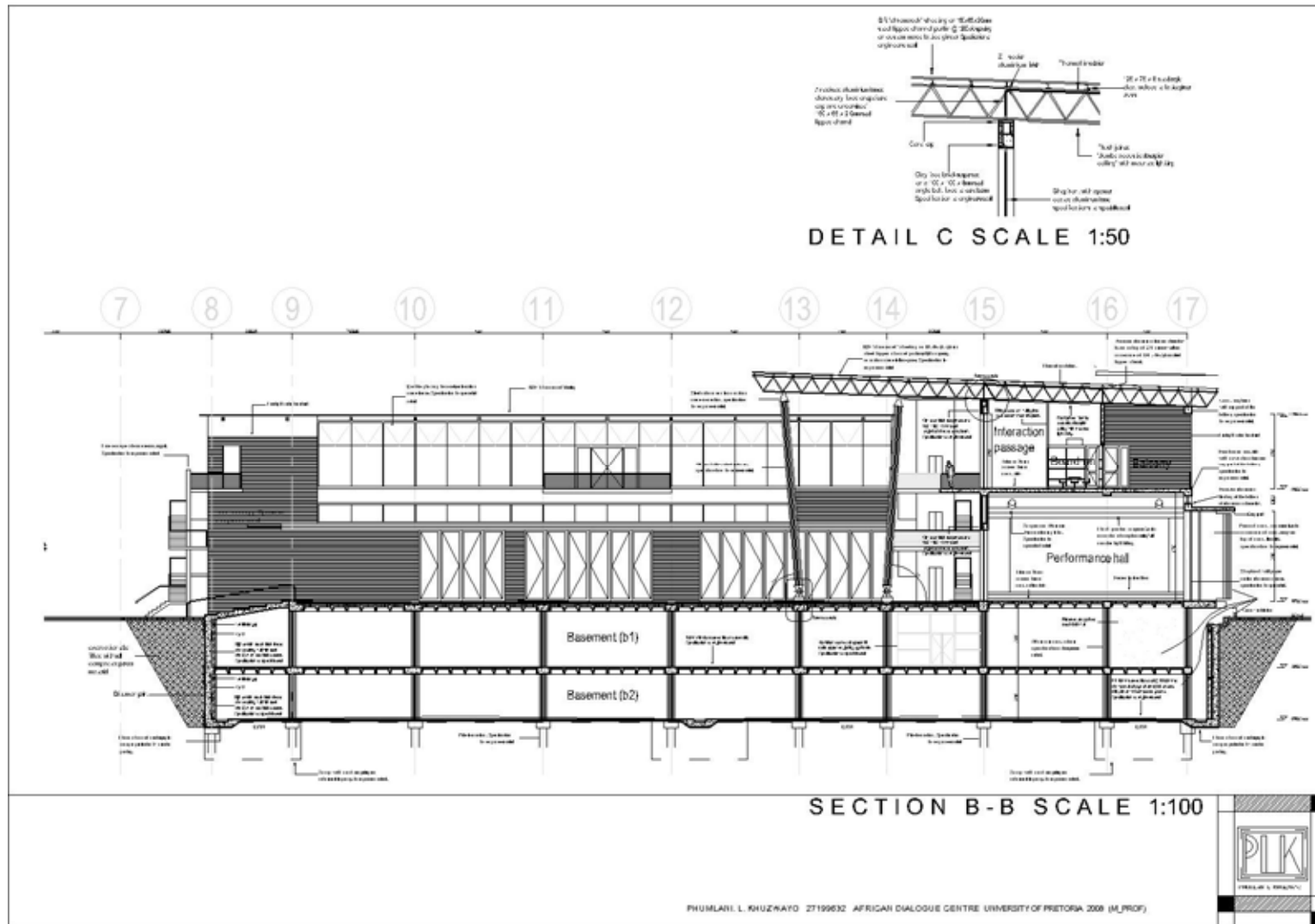


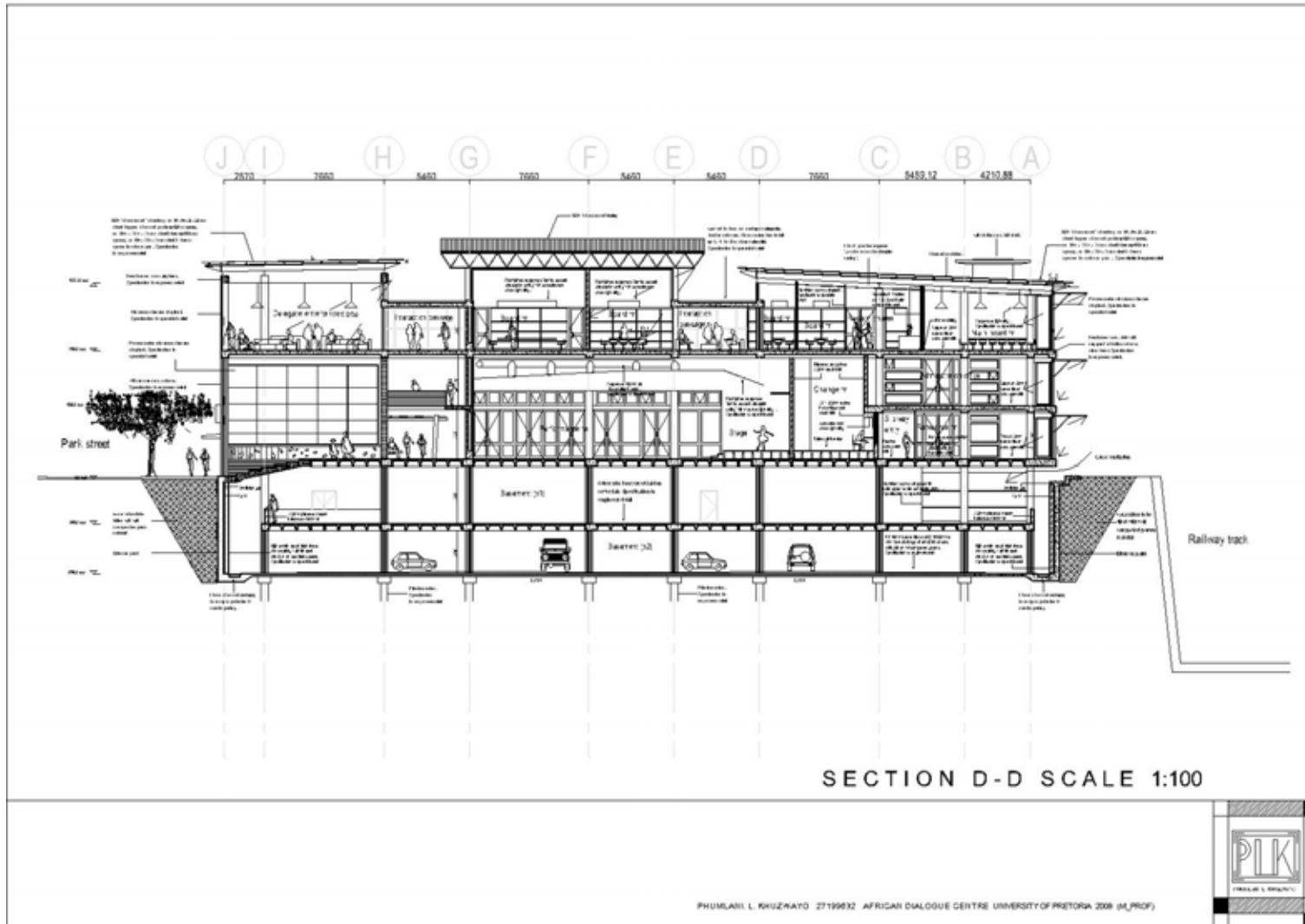


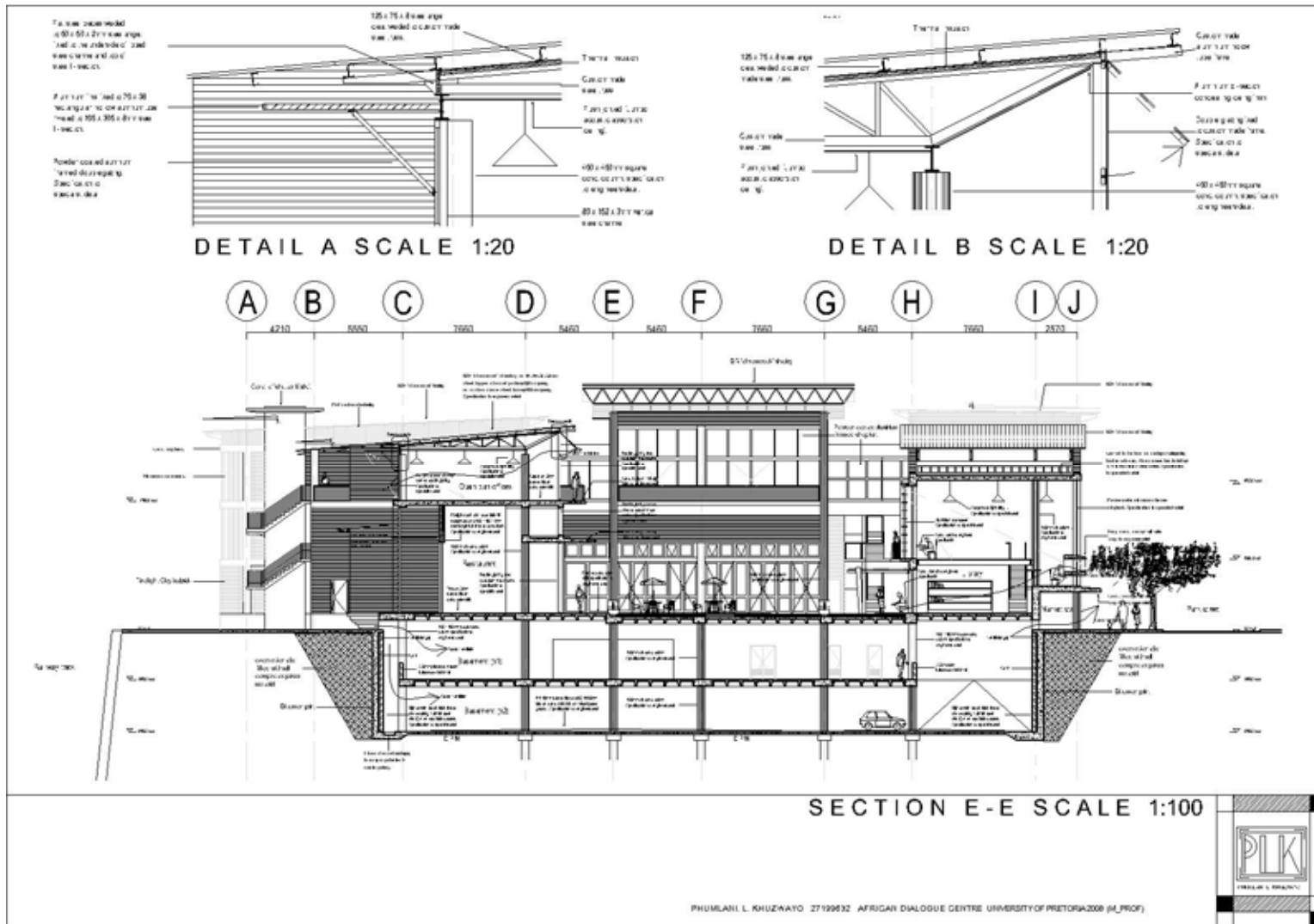


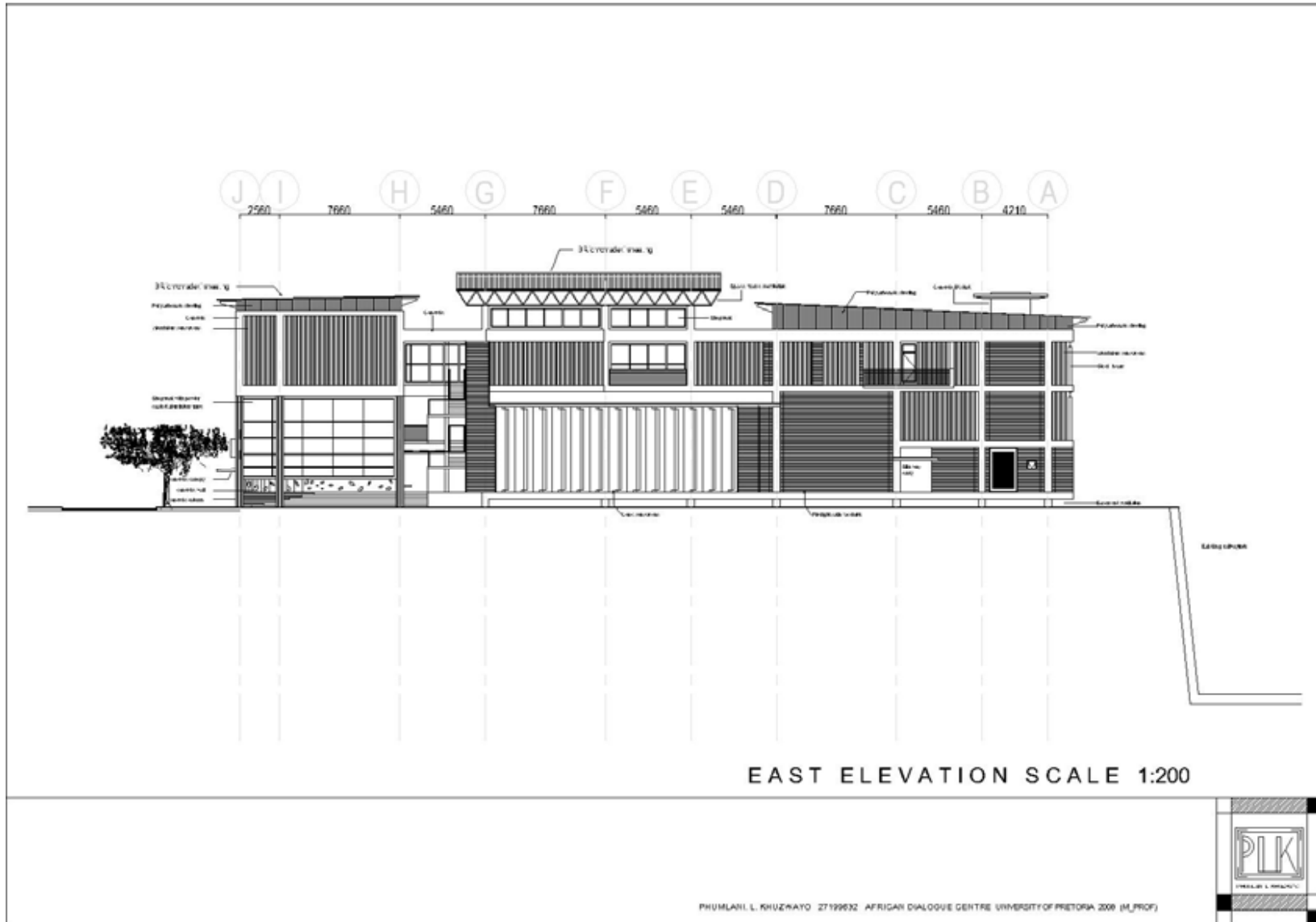


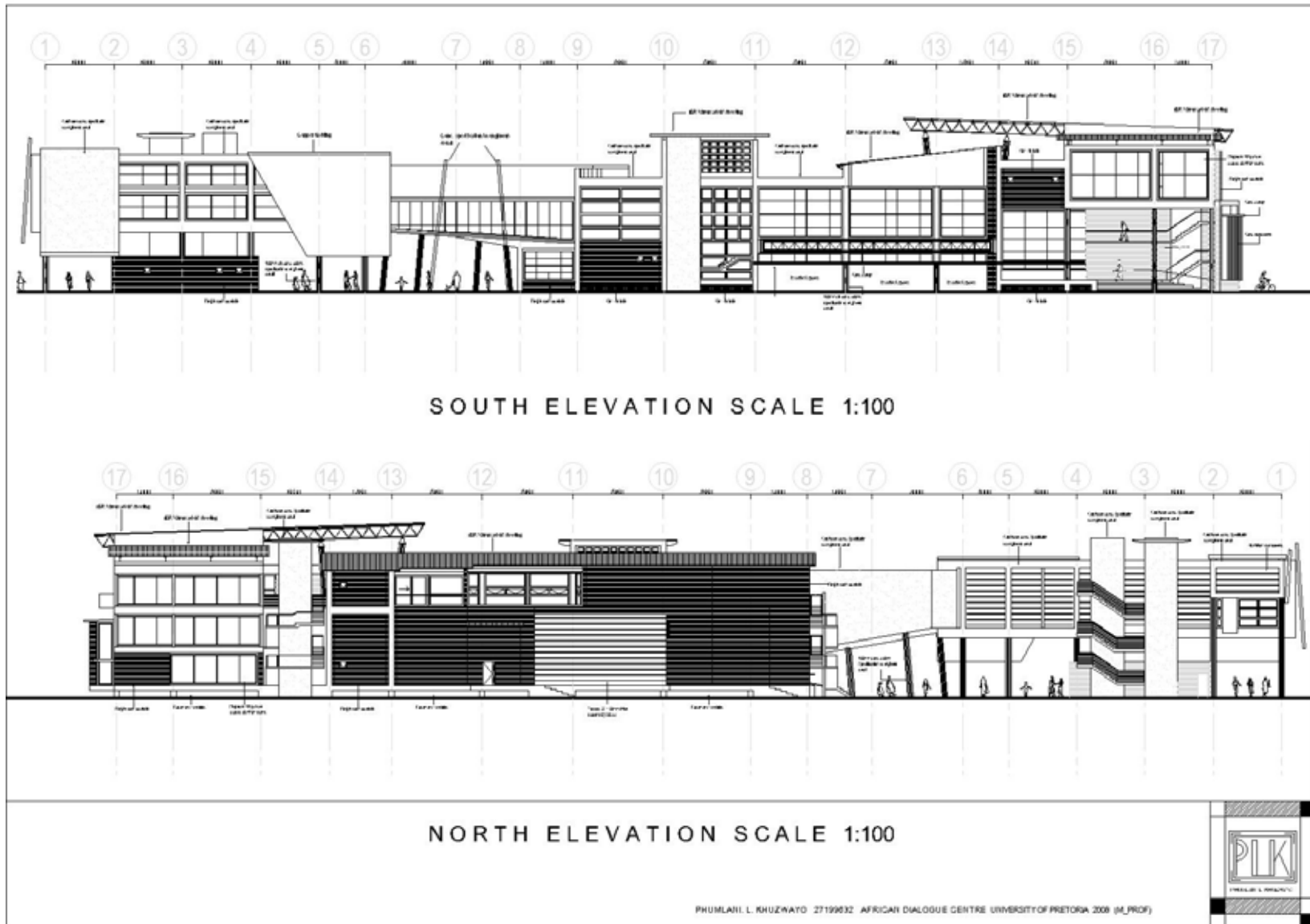












Bibliography

Angula, N and Bankie B, F. 2000. The African origin of civilisation and the destiny of Africa. Gamsberg Macmillan publishers (PTY) Ltd

Frampton, K. 2002. Modern Architecture a Critical History. Thames & Hudson Ltd. Lond

Garlake, P. 2002. Early Art and Architecture of Africa. Oxford University Press. United Kingdom

on

Guidoni, E. 1975. Primitive Architecture (History of World Architecture). Electra/Rizzoli. New York

Lynch, K. 1960. The MIT press (Massachusetts Institute of Technology). Cambridge, Massachusetts and London, England

Msimang, C T. 1975. Kusadliwa Ngoludala. Shuter & Shuter. Pietermaritzburg

Steele, J. 1988. Architectural Monographs Hassan Fathy. Academy Editions. London/ St. Martin's Press. New York.

Sir Francis, F; Shores, L; Robert, H; Halsey, W, D. 1972. Colliers Encyclopidia. P.F. Collier and Son LTD.

Jodidio, P. 2001. Architecture now. Taschen. KÖln, London, Madrid, New York, Paris, Tokyo

Journal

B. R. Schulze. Climate of South Africa Parts General Survey. Department of Environment Affairs (Weather Burea).

Frampton, K. 1983. Prospect for a Critical Regionalism. The Yale Architectural Journal, Volume 20. pg 148 – 156

..... 2004. South African Chancery. Architect & Builder. January/ February

Internet

O'Hanlon, B. 2007.

<http://www.cooperationcommons.com/cooperation-commons/talk-delivered-in-dublin-by-architect-herman-hertzberger>

<http://web.africa.ufl.edu/asq/v3/v3i3a1.htm>

<http://web.africa.ufl.edu/asq/v3/v3i2a1.htm>

<http://www.swaziweb.net/bushman>

Interviews

Fanuel Motsephe