Maano: A creative collaboration for a creative community

A craft shop for value added products in the Panagos Building, Paul Kruger Street, Pretoria CBD

Nicola Eardley



Nicola Eardley

Mentor and study leader: Professor Barbara Jekot November 2007

Submitted in fulfillment of part of the requirements for the Degree of Magister in Interior Architecture (Professional) in the Faculty of Engineering, Built Environment and Information Technology, University of Pretoria

Table of content

1.	Brief	ing document	pg /
	1.1	Real world problem	pg 8
	1.2	Problem statement	pg 10
	1.3	Sub-problems	pg 12
	1.4	Scope	pg 16
2.	Physi	ical context	pg 19
	The city		
	2.1.	Educational institutions	pg 20
	2.2	Informal trade	pg 22
	2.3	Pretorias heritage	pg 24
	The immediate surroundings		
	2.4	Existing urban environment	pg 26
	2.5	Urban design proposal	pg 28
	Building evaluation		
	2.6	Life of the Panagos Buildings'	pg 30
	2.7	Recorded building alterations	pg 32
	2.8	The buildings	pg 34
3.	Legislative context		pg 39
	3.1	Summary of zoning certificate	pg 40
	3.2	Activities and zoning	pg 41

1.	Metaj 4.1 4.2 4.3 4.4 4.5	, ,	pg 43 pg 44 pg 45 pg 46 pg 47 pg 48
<u>.</u>	Prece	edent studies	pg 51
		ialized retail outlets	P3
	5.1	Kim Sacks	pg 52
	5.2	Delogoa	pg 54
	5.3	•	pg 56
	Branc	ding through display	. 3
	5.4	Mannequinns	pg 58
	5.5	Clothes hangers	pg 60
	Reviv	ring heritage buildings	, ,
	5.6	Reichstag parliment building	pg 62
	5.7	Castelvecchio Museum	pg 64
ó.	Desig	n Proposal	pg 67
	6.1	Reaction to the urban space	pg 68
	6.2	Reaction to the building envelope	pg 70
	6.3	Reaction to the new functions	pg 74
	6.4	Marketing and branding	pg 76
	6.5	Track system	pg 80
	6.6	Lightings	pg 84
	6.7	Screen display system	pg 90
	6.8	Sliding panel display	pg 96
	6.9	Technical drawings	pg 100
7	Concl	lusion	pg 105
Apper	ndices		
	A: Ed	lucational institutions	pg 107
	B: Ex	isting building analysis	pg 113
		aano website	pg 123
		hedules	pg 125
	ist of illustrations p		
Refer	eferences		



Chapter 1

Briefing document

1.1	Real world problem	pg 8
1.2	Problem statement	pg 10
1.4	Sub-problems	pg 12
1.5	Scope	ng 16

1.1 Briefing document

Real world problem

The world is globalising. The definition of globalising as given by the book Globalization and Equity is "widening international flows of trade, finance, and information into a single, integrated global market" (Dinallo 2005:67).

The benefits of globalisation are that it stimulates trade and economic growth, reduces poverty, and contributes to economical and political stability (Dinallo 2005:xiv).

Globalisation has increased rapidly, largely due to the exposure and connectivity that the Internet offers. Internet shopping offers convenience and email is a reliable form of communication, but this 'cyber-life' is impersonal and is only available to select portions of the population. Personalisation requires a return to regionalism in order to take place and this can be achieved by activating small communities.

If a small community can be self-sustaining, by producing and selling a unique product that fills a niche in the immediate market, it can grow by expanding its clientele through the Internet.

Dinallo feels that if South Africa improves its economic policies, it could trade more and attract more capital flow, thereby improving the economical and political stability of the country (Dinallo 2005:90).

A number of South African-based companies, such as Monkey Biz, M.J. Visuals and Ardmore, are selling their goods from their websites. This is encouraging for other South African businesses and sets an example of how it can be done.

Skills and development

South Africa has a high unemployment rate. This is due to a lack of skills and business knowledge. Those who have learned unique skills, handed down from generation to generation, do not have the business skills to exploit their talents in order to generate an income.

Dinallo suggests that "given Africa's comparative advantage in abundance, low-cost unskilled labour, it should concentrate on producing simple, labour intensive-goods" (2005:68). However, if South Africa wishes to extend into the international market, training will be required to increase the quality of the merchandise.

Informal training centres such as Pop-up in Salvokop, Pretoria, provide a platform for training and business guidance for those who are unable to pay for a formal education but wish to gain a skill with which they can generate an income.

Under-utilisation of resources

Although some cities in South Africa started to address the problem of unemployment some time ago, the Tshwane municipality is lagging behind the rest of the country. Cape Town, Durban and Johannesburg have all hosted successful festivals that promoted the country's creative industries including the internationally recognised Design Indaba. At such events there is a notable increasing interest in value-added craft. Audrey D'angelo (www.busrep.co.za) wrote a report earlier this year on the importance of limiting the export of our rich supply of raw materials and rather producing value-added products in South Africa. This article was directed towards the production of jewellery, but the approach can and should be extended to all of our creative industries, including craft. Southern Africa

contains a wealth of precious and semi-precious gemstones that can be used more extensively for the production of value-added craft products (Cairncros 2001:4).

Ineffective marketing of cultural talents
Marketing is crucial for events such as the Design
Indaba, Decorex, Woman's Festival, SA Fashion
Week and other art festivals. Exposure is predominantly created via specialist magazines
and on the hosting city's website. These media
forms reach a limited cross-section of the population who already attend these events regularly. Many creative people are unable to develop
their talent because they are not aware of the
opportunities to do so. Tele-advertising and offering accessible free Internet access to sites
promoting such events will increase the variety
of attendees and thus, promote development in
these areas of expertise.

Heritage

South Africans idealise other countries such as America and Britain, but they ignore their own treasures and heritage. Significant buildings are being demolished without any resistance from the local building council. Most owners of historically and architecturally significant buildings are ignorant about their buildings' value and therefore, make poor choices regarding the maintenance and development of their estate.

A number of heritage buildings have been identified in Pretoria's central business district. It is the architect's and the urban designer's duty to guide entrepreneurs in the choice of sensitive new uses for abandoned and misused heritage buildings to develop our cityscape appropriately.

1.2 Briefing document

Problem statement

There is a gap in the local tourist market for value-added goods. Curios are available in abundance at the National Zoological Gardens nearby the Panagos Buildings, but these are of an inferior quality and are unsuitable for export.

A craft node at which the local and tourist communities intersect creates an ideal platform for related activities through which these communities can support each other. At this node, training of local talent for the production and trade of value-added craft products will take place. These activities must be undertaken at the same locale so that each activity can respond quickly to the other activities.

Taxi drivers mainly work in the early morning and later in the afternoon. When conducting personal interviews with some taxi drivers, they expressed a sincere desire to have a secondary source of income for a few hours during the day. Other interviews with informal street vendors brought forward the problem that working mothers' have of keeping their children occupied and out of trouble during the day. Others were simply keeping a friend company at his/her stall as they had no work. These personal interviews revealed the need and the desire to spend their hours productively to develop skills and to relieve boredom.

Proposed development

The chosen site is the Panagos Building on the corner of Paul Kruger and Struben streets. As part of the GAP urban framework proposal for Pretoria's CBD, Paul Kruger Street is highlighted for development into a pedestrian road which will link Church Square with the National Zoological Gardens and a taxi rank to the north. A tram route is designated to run along Paul Kruger Street and a tram station will be situated on the corner of Paul Kruger and Struben streets, diagonally across from the site. These urban design decisions will initiate new opportunities for additional retail activities, creating a commercial precinct. In addition to a retail division, the low level of education of the majority of the population calls for a training facility on the site at which short courses may be attended (Figure 1.1).

Owner/investor profile

The building is currently owned by the Methodist Church of southern Africa.

For the purpose of this project, the owner will be a single landlord who will manage the tenants who in turn will provide services that conform to the business profile of the craft node.

Client/tenant profile

The anchor tenant will be the craft shop, Maano. It will offer value-added traditional and contemporary craft products as well as a selection of topic related books. Maano will also include a coffee bar, coupled with a free Internet café on the first floor of the building to draw people through the shop. Two computer points are provided as well as a Wi-Fi hot spot.

The second tenant will be a bead shop on the street corner. It is through this shop that controlled access to the workshop detailed above will be provided.

In addition to the above described formal retail outlets, two small rentable spaces will be provided along the eastern façade. These spaces will be rented at a moderate rate to afford opportunities for informal craft related traders to upgrade their businesses into semi-formal trade posts. A small area will be made available inside the building where the merchandise, a fold-up table and chairs can be stored at night, and a large display window and double doors will open out onto the street.

User/buyer profile

The user profile that will be responded to is the existing local and tourist populations.

Many small businesses and primary schools are in the immediate vicinity of the site. There are also many tourist destinations in the area. Therefore, a high percentage of local patronage is expected on weekends and after school hours, while tourist patronage is expected during the week.

An onsite workshop will be used for bead jewellery, pearl threading, wire, and mosaic courses throughout the week. An arrangement will be made with nearby schools that students may conduct arts and craft classes at the workshop. When it is not being used for classes, the workshop will be made available to artists.

1.3 Briefing document

Sub-problems



Figure 1.1: Pretoria CBD

Context

The context under investigation is the portion of the Pretoria central business district north of Church Street.

A study which included pedestrian and vehicular movement, the needs of the local population and services provided has been completed and an urban design proposal has been put forward.

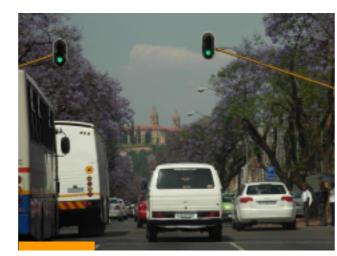


Figure 1.2: View of union Buildings from Struben Street

Flexibility

It is important to achieve flexibility in the new design system. It not only contrasts with the permanence of the existing structure, but allows the businesses to adapt to the changing desires of their clients and to change according to the available stock.

Craft

The production of handmade goods is something that is deeply rooted in South Africa's heritage. It is non-discriminatory as it is practised by both men and women and is worn by the rich as well as the poor. Some use it as a source of income while others enjoy it as a hobby, but the dexterity and skill needed must not be underestimated (Figures 1.3-1.4).

This genre of art can be taken to a high level of quality where the boundaries are tested and new, innovative materials and techniques are invented.

South Africa is rich in minerals (Cairncros 2001:4) and we should exploit these to enrich and promote the production of value-added craft.





١.

Figure 1.3: Women making grass baskets (top)
Figure 1.4: Men making wire ornaments (bottom)

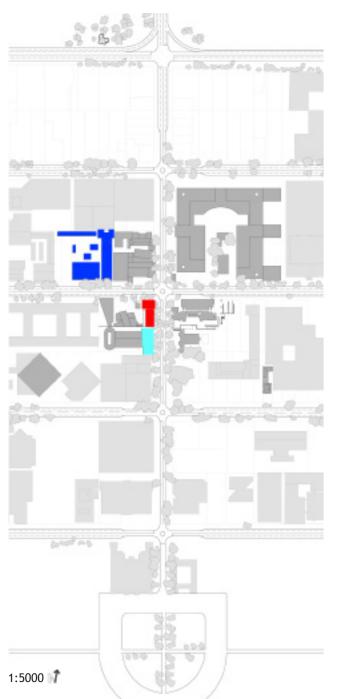


Figure 1.5: Educational institutions in the immediate context

Training

Large portions of the local population do not have the finance to further their education. Furthermore, traditional skills are being lost due to the younger generation's disinterest in their heritage. Providing a workshop where school children can learn the skills of their forefathers will introduce them to an alternative career path should they not have the means to further their formal education.

Courses will fall into two categories, basic and advanced. Training will include various day classes designed for hobbyists, who will pay a flat rate for a course and course-kit, and formal courses with weekly classes.

Formal training will focus on teaching local talent to use their new skills to generate an income. Only a registration fee will be required to cover the cost of the equipment. A subsidy will be obtained from the Department of Arts and Culture of South Africa to help cover the costs incurred.

When not in use, the workshop will be rented out on an hourly basis to anyone wishing to use it as a studio or to use the equipment provided. The right environment for studio work will be supplied and thereby, newly trained craftsmen will be encouraged to use their skills without delay to begin generating an income. Interested persons will be able to book telephonically or via the Internet. Those aspiring to become facilitators at the workshop can attend training in this area should a post become available.

Marketing and branding

The value-added products will fill three different marketing profiles, namely local population, tourist population and export.

All marketing and branding will give credit to the designer or craftsman and acknowledge the authenticity of the design and materials used.

The Internet site to be created for the collaboration will facilitate orders and provide exposure to a national and international market.

Heritage

The Panagos Building is one of the oldest buildings still in use in Pretoria, South Africa (Figure 1.6). The design solution will respect the heritage value of the building while at the same time it will re-energise the interior spaces in line with the new functions.

Use of light

The majority of the fenestration is located on the eastern and western façades, resulting in a high concentration of light inside these spaces in the early morning and late evening respectively.

Lights will be installed to supplement the natural light where necessary. Track spotlights are the preferred choice because of their flexibility.

The continual changes in light intensity and quality throughout the day will heighten the experience of passing time and allude to passing time in the life of the building, and therefore, should be retained as far as possible.



Figure 1.6: 1939 Panagos Building

Panagos Building War college (tertiary education) Princess college (primary education)

Scope

Definitions

a) Local

"Belonging to, existing in" is the definition of the term 'local' given in the Pocket Oxford Dictionary. For the purposes of this dissertation the area to which 'local' belongs is the northern part of Pretoria's central business district (CBD). This area extends from Boom Street to Visagie Street (northern and southern parameters respectively) and Potgieter Street to Du Toit Street (western and eastern parameters respectively).

b) Value-added

The term 'value-added' refers to products which are of a higher value than other, similar products. The term is used to describe craft items sold at the shop. They will be of a higher quality than craft items sold at most curio shops and they will be suitable for export.

c) Craft related

The term 'craft related' refers to any product or service that has a craft-like character.

d) Panagos Building

What are known as the Panagos Building are in fact two buildings. As this is a commonly used name for the buildings when ever the words Panagos Building is used it refers to both buildings.

e) Corner building

The term corner building is indicative of the northern building which is situated on the corner of Paul Kruger and Struben Streets on erf 102 portion 4.

d) Southern building

The southern building refers to the elongated building built on Paul Kruger Street on erf 102 remainder.

Assumptions

It will be assumed that the Tshwane Inner City Project Spatial Development Framework (TICP SDF) GAPP proposal for Pretoria city centre (defined in Chapter 2.5) will be realised and will be enforceable for the future development of this precinct. This includes the development of Paul Kruger Street into a pedestrian spine.

Delimitations

The craft workshop will be limited to affordable materials only on account of the increased security risk that more expensive materials would impose.

Only craft related products will be sold and craft related activities will be exclusively promoted at the craft node.

Goal

The goal of this proposal is to develop a creative and adaptable platform at which South Africans can develop their skills, start their businesses and showcase their designs.

Chapter 2

Physical context

The city			
2.1.	Educational institutions		pg 20
2.2	Informal trade		pg 22
2.3	Pretorias heritage		pg 24
- 1 .	P		
_	nmediate surroundings		
2.4	Existing urban environment		pg 26
2.5	Urban design proposal		pg 28
ئلم اند. D.	ar avaluation		
Building evaluation			
2.6	Life of the Panagos Building		pg 30
2.7	Recorded builing alterations		pg 32
2.8	The buildings		pg 34

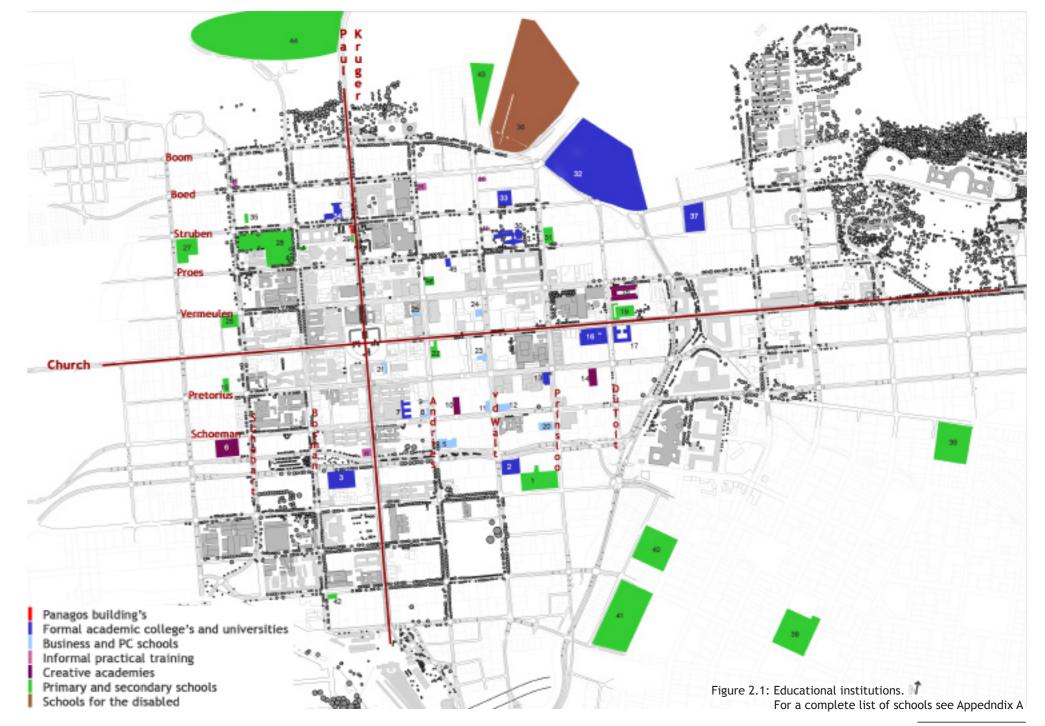
2.1 Physical context: The city

Educational institutions

Education appears to be one of the dominant forces drawing people towards the Pretoria CBD. This has been documented and illustrated on the attached map. Apart from a few larger schools around the periphery, there are a number of small nursery, primary and secondary schools (indicated in green) scattered around the centre of the CBD. For parents, these schools are conveniently located as they are on their way to work.

Tertiary education is available at formal academic colleges and universities (indicated in dark blue) offering a variety of diplomas and degrees. However, the most common tertiary education disciplines offered in the area are computer and business courses. A concentration of these small colleges offering PC and business management training can be found towards the southeast of Church Square (indicated in light blue).

The high demand for business skills is balanced with a moderate amount of institutions offering courses which appeal to the creative sector of the population (indicated in purple). There are three cooking schools, namely Snowflake Bake for Profit Community Project and Bon Appétit Training Restaurant in Du Toit Street and Citicol Twin Palms Training Restaurant in Schoeman Street. Other creativity focused institutions include the Sasol School of Music and Credo College, which offers training in fashion design and dressmaking. Informal training also takes place at small hair salons that offer training in hair braiding.



Informal trade

According to Prof Lightelm from the University of Southern Africa (UNISA), there are more than 2 100 informal businesses in Pretoria that are concentrated largely at transport interchanges (2005:1). Of these, approximately 660 are found in Marabastad, which is situated adjacent to the Pretoria CBD.

The CBD, however, is also bursting with informal trade along important pedestrian streets such as Van der Walt and Boom streets. Ligthelm notes that informal businesses seldom grow to meet market growth; rather, new traders will establish their businesses where demands are not fully met. Through his study, Ligthelm classifies 85% of these informal traders as survivalists, making insufficient profit to support a family, and 90% show little interest in trying to seek further opportunities (2005:3).

Between 5 and 16 February 2007, several informal interviews were conducted with vendors and taxi drivers in the Pretoria CBD. Many of the vendors said that they were able to feed and send their children to school from the money

they earned. Collaboration between the street vendors and the permanent shops in the area is important. Some vendors rent overnight storage space from the larger shops in which to store their table and goods, whereas some shops offer storage free of charge based on the agreement that the vendor will use them as their general suppliers.

Fear was expressed about rumours that the South African Government was intending to "clean up the city" for the upcoming 2010 Soccer World Cup by chasing away all of the street vendors. This fear was only felt by the illegal vendors. Along Boom Street, legal vendors cook food and set up tables under gazebos (provided by the government for a monthly fee) from which they sell their wares to passing pedestrians. Their dislike for the illegal vendors is obvious, but the same partnership is established between them and their general suppliers for storing their equipment. According to one of the illegal vendors, the monthly fee to legalise her business is too high even though she will be provided with a gazebo and tables.

This reinforces Ligthelm's findings that informal traders seem unwilling or unable to take the necessary steps to grow their businesses into larger more profitable businesses (2005:4). He suggests that a "social welfare route" should be taken, but does not give any clear suggestions of how this should be done or what it should accomplish. Presumably, by formalising the trading space and providing amenities (much like what has already been done at the Durban beach front) their work environment will improve and thus, will initiate a sense of pride in their businesses. This may eventually lead to ambition to grow ones business, but foremost, will improve the image of informal trade and attract a larger cross-section of the population's patronage.

When a mobile market started providing vendors in Diepsloot with fresh produce in February 2007, the vendors suggested spots where the truck should be based (Diamini 2007). As in the Diepsloot example, the vendors of the Pretoria CBD area should be intrinsically involved in any undertaking to improve their work environment because they know their needs intimately.

2.3 Physical context: The city

Pretoria's Heritage

A number of buildings in the vicinity were considered as heritage buildings during a class exercise in March 2007. Decisions were guided by the book Plekke en geboue van Pretoria: 'n Oorsig van hulle argitektonies en stedelike belang by S. Le Roux (1991).

The SA War College is a concrete and masonry, modernist building which was built in 1954. Previously, it housed the Hotel Boulevard and before that, the Protea Hotel. It is currently owned by the government and used as an educational institution that provides accommodation for its learners.

The Panagos Building is one of the oldest buildings in the CBD that is still in use. The masonry buildings are in poor condition. They are used for commercial activities at ground level and a church and accommodation occupy the first floor.

The Old Jewish Synagogue was built in 1898 with a Byzantine western façade. The cost of

the bricks was donated by Sammy Marks, a well known philanthropist. Of special significance is the Treason Trial which started in December 1959 and ended in 1961 and which took place in the synagogue after the Department of Public Works expropriated the land in 1952. The Steve Biko inquest took place in the Old Jewish Synagogue as well. It has now fallen into disuse and is in urgent need of repairs.

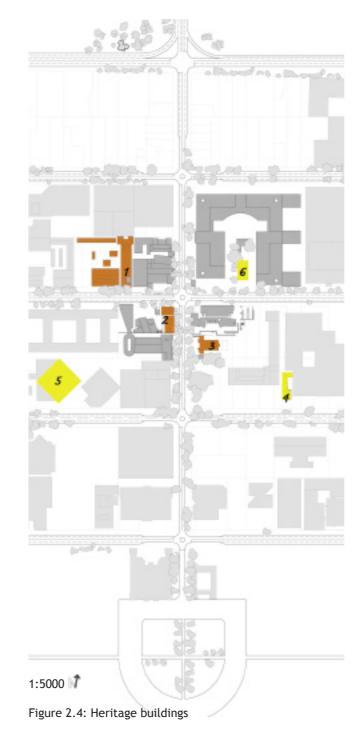
Telkom west tower is an art deco building from the 1930s. It is a concrete building with masonry infill and is the taller of the two towers seen behind the Panagos building in figure.

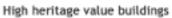
The Jansen House is a single storey Victorian house which was previously the headquarters for the South African Deaf Society but has since been abandoned. Interestingly the Little girl who grew up in this house married David Panagos who's Father owned the Panagos Building.

The National Library Head Office is a single-storey colonial building and is in good condition.



Figure 2.3: Panagos Building with Telkom Tower's behind in 2007





- 1: War School
- Panagos Building
- 3: Old Synagogue

Average heritage value buildings

- Telkom west tower
- Jansen House
- 6: National Library head office



Figure 2.5: Old Jewish Synagogue in 2007



Figure 2.6: Jansen House in 2007



Figure 2.7: National Libray Head Office in 1991

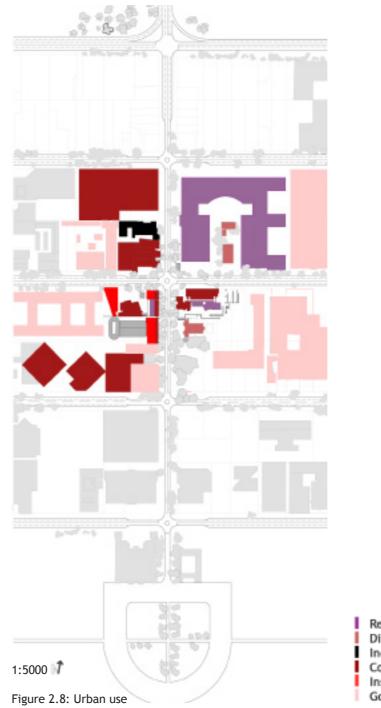
Figure 2.2: SA War College on Struben Street in 2007 pg 24

2.4 Physical context: The immediate surroundings

Existing urban environment

The land usage in the immediate vicinity of the Panagos Building is mostly a mixture of commercial and government. In addition, a church congregation meets on the first floor of part of the Panagos Building and two small schools are situated on the same block. There are also two abandoned, government-owned buildings of heritage significance, namely the Old Jewish Synagogue and Jansen House, which can be seen from the Panagos Building.

Of the commercial activities in the existing environment, there are a number of restaurants in the surrounds. The variety of places to eat would cater for the people working in the area and would attract outsiders to the CBD at night. By drawing life into the city after working hours security will increase and tenants can increase their working hours to generate more income. This is a valuable opportunity for service providers as land in the CBD is expensive.



Residential

Disused government owned

Industrial

Commercial

Institutional Government Physical context: The immediate surroundings

Urban design proposal

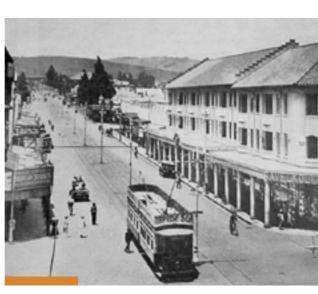


Figure 2.9: Tram on Paul Kruger Street in 1922



The TICP SDF GAPP proposal for Pretoria city centre identifies Church and Paul Kruger streets as key movement corridors. This is further strengthened by the Union Buildings-Freedom Park visual axis.

By creating a pedestrian spine consisting of tram routes along a portion of Paul Kruger Street, services, public space networks and government offices will increase commercial opportunities. This will extend from Boom Street and will end in a pedestrian node at Church Square.

For the purpose of this dissertation a transitional zone will be created narrowing intersecting roads as they approach the pedestrian spine. This restricts vehicular access and encourages motorists to find alternative routes.

The reintroduction of the tram network (Figure 2.4) will improve the public transport in the CBD and decrease the traffic of privately-owned vehicles. Tram stations will be placed periodically along the tram route, including one on the corner of Paul Kruger and Struben streets (Figure 2.5).

An underground parkade will be built on the corner of Paul Kruger and Struben streets below a block of residential flats. This parkade may be used during business hours by visitors and at night by the residents of the flats.

Panagos Building Under ground parking Padestrian spine Tram stations 2.6
Physical context: Building evaluation

Life of the Panagos Building

Building taken over during the SA War by British Military Govenor of Pretoria for a military hospital store. (Personal interveiw with D.Panagos)

The property formed part of M.W.Pretorius' estate (Meiring 1980:44)

> Deeds of transfer to Mr Schoeman 14 March 1861 (Panagos 2007)

Designed and Built by Architect Mr Zagt 1897 (Pamagos 2007) 1880 (Meiring 1980:44)



Deed of Transfer Mr Hollebrands bought from Col Bush 2 September

> Deed of Transfer Erf 102/C Mr Christo Panagos 19 January

Deed of Transfer Erf 102/R Mr Christo Panagos

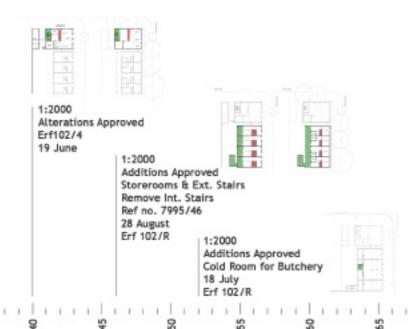
11 March

ings still in use in Pretoria. It was built in the late 19th century, but was only named the Panagos Building after 1920 when Mr Panagos bought the property from Col J.G Bush. In an interview with David Panagos, he stated that the date of completion of the Panagos Building was 1897, Meiring, however, believes that the date of completion was 1880 (1980:44).

The Panagos Building is one of the oldest build-

According to Meiring (1980:44), M.W. Pretorius (1819 - 1901) owned the property and built his house there. In a handwritten student research document found at the University of Pretoria, it reveals that the Panagos Building was built on the foundations of this house (the document has not been archived and does not indicate the author or date written). The first known deed of transfer is dated 1861 and is to H.J Schoeman.

The Panagos Building is actually two buildings built alongside one another. Both of these buildings face east towards Paul Kruger Street, originally Market Street. These façades combine to create a seemingly continuous façade and thus, give the impression of being a single building.





Deed of Transfer to Methodist Church of Southern Africa 30 June

Figure 2.11: Life of panagos building

Physical context: Building evaluation

Recorded building alterations

First floor plan

1:500 🕅



Figure 2.12: Redrawn plans of 1940 alterations

Over the years alterations have been done to the buildings that make up the Panagos Building in order to respond to new uses. These alterations are probably the reason why they have not fallen into disuse.

The corner building was converted from a house into a pharmacy on the ground floor and an apartment on the first floor in 1940. To accomplish this, the internal staircase was removed, and the veranda on the northwest corner of the house was bricked in to create a new timber staircase and a door on the northern side allowing the residents of the upstairs apartment to have their own private entrance. When the internal staircase was removed, a structural wall was replaced with a beam supported by the exterior walls (Figure 2.7).

1946

Ground floor plan

1:500

The south building was built as four double-storey apartments. The internal staircases were removed in 1946 when alterations were done to make the ground floor suitable for retail and to turn the first floor into small apartments. The new first floor apartments had access via a new communal, concrete staircase leading to the western balcony. Two concrete beams resting on columns were added to support the first floor when some of the internal supporting walls were removed. The western veranda was bricked in to create storage for the shops on the ground floor (Figure 2.8).

1952

In 1952, approval was given to convert a storage room into a cold room for the butchery in the southern building (Figure 2.9).



First floor plan 1:500



1:500

Figure 2.14: Alterations done in 1952



Other alterations

Both buildings are masonry and are plastered and painted. They face east and are connected by a bridge on the first floor. A 1,5 m-wide alley between the buildings was closed in for stor-

Figure 2.13: Redrawn plans of 1946 alterations.

Physical context: Building evaluation

The building

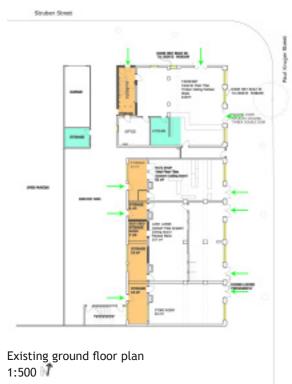


Figure 2.15: Evaluation of existing building's

1200 150 MINISTER STATE STREET, STREET 757 STREET, TOTAL Existing first floor plan 1:500

Built in veranda's

Fenestration

Entrances Room's with services Additions

The Panagos Building is noteworthy because of its distinct vernacular architectural style and more importantly, because of its longevity. Other buildings found nearby which were built in the same era have either fallen into disuse. like the Old Jewish Synagogue, or been replaced with less flattering structures, like the Synagogue House which has been replaced by Struben Street Motors.

The building's endurance is partly due to its response to the changing demands of the CBD. With each new tenant came new interventions. Unfortunately, the renovations were disrespectful towards the original buildings. A roughly made brick wall was added to give security to the cash loans employees, the back veranda facing a garden has been bricked in and now faces a service vard, and a monstrous brick and concrete staircase currently provides access to the balcony. As disrespectful as these renovations were, they remain part of the buildings history; therefore, some of these structures will be refinished, but the building materials of others will be reused onsite.

Great attention has been given to the detailing of the front façades. The doors and windows create a rhythmic pattern, and are framed in timber and separated by columns. The facade seems to wrap around the corner building onto the northern façade and stops abruptly after approximately 3 m. The rest of the buildings have received little thought, and doors and windows are placed haphazardly wherever needed.

The interior space receives the most natural light in the early morning as the eastern facade has the most windows. This light is quite sharp and hard on the eyes. At sunset, a very soft,

pleasant light fills the building, but this light is unsuitable for tasks and must be supplemented with artificial lighting.

Corner building layout

The corner building faces east, with little fenestration on the other facades. There are four entrances into the building. Firstly, there are two large doors entering into the biggest ground floor room, one on the eastern facades and one on the northern facade. A back door is found on the western façade, leading to the kitchen. The final entrance is found on the northern façade and opens onto a staircase, acting as an entrance to the first floor. From the stairs there is a succession of small rooms leading to a large room currently used as a church hall.

The south-western corners of both floors house the services such as kitchens, a toilet and a vestry that was previously a kitchen. A chimney rises from the first floor kitchen level, passes through the first floor kitchen and out the roof. The toilet was originally located outside, but toilets have now been installed on both floors.

South building layout

This building has little fenestration on the western facade and none on the northern and southern façades. The building may be entered on the western and eastern sides of the building. Four identical entrances, originally the front doors to four apartments, are found on the eastern side and there are four back doors on the western side. An external staircase gives direct access to the western balcony, onto which four more doors lead.

Water and sewerage services, which run along the outside of the building, were probably installed when the upstairs apartments were created. All of the pipes are placed on the outside of the western façade of the building and are an eyesore. Bathrooms were built for each apartment and water is provided to the back rooms of the shops. An additional bathroom is located behind the garage where the old outhouse was.

Detailing differences

On closer inspection, the two buildings reveal different details suggesting that they were not built at the same time. This may account for the different completion dates available for the Panagos Building as mentioned before.

Although the buildings appear to be identical at first, creating a single, continuous front façade, subtle differences are easily identified with further investigation. These differences include the columns, window frames, doors, windowsills and first floor construction (Figures 2.11 - 2.15).

Columns decorating the front façades of the buildings differ in proportion and the corner building's columns are more ornate (Figures 2.12 - 2.13).

The timber window frames at ground level of the northern building's front façade have an arch design, cannot be opened and are underlined with an ornate windowsill. Those of the southern building are rectangular with small opening windows at the top, and the windowsills are less ornate. The size of the large windows is roughly the same. The most distinct design difference is mainly hidden by the corrugated roof sheltering the walkway and is above eye level; therefore, it does not break the continuity of the front façade.





Figure 2.16: South Building column base (left). Figure 2.17: Corner Builing column base (right).

In figure 2.14 the original timber doors of the corner building can be seen. These have since been removed and replaced with stacking-folding doors. The southern building still has the original timber double doors and these are in a good condition.

Structurally, the buildings differ as well. The corner building has a timber board first floor, whereas the southern building's first floor is concrete to support the brick bathroom walls.



Figure 2.18: Southern uilding ground floor facade in 2007



Figure 2.19: Panagos building in late 1900's

Due to the meticulous attention to detail found in the corner building's construction, it is reasonable to assume that it was built first. In addition, the building footprint resembles that of a house and is likely the one built on the foundations of M.W. Pretorius's house as suggested by the student assignment mentioned earlier. This conclusion is also supported by the fact that the first floor of the southern building is concrete, which is a more contemporary material.

As the southern building must have been built at a later stage when the original building components where no longer available, similar windows, doors and even cornices had to be sourced.

The corresponding fenestration, floor heights and roof height, and the exterior walls' matching colour preserved uniformity.



Figure 2.20: Corner Building ground floor facade in 2007

pg 39

Chapter 3

Legislative context

3.1 Summary of zoning certificate

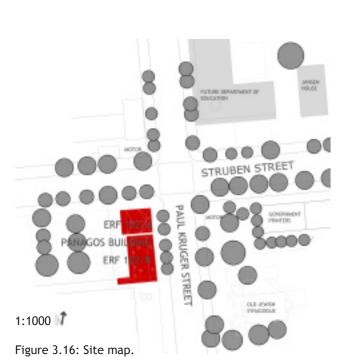
pg 40

3.2 Activities and zoning

pg 41

3.1 Legislative context

Summary of zoning certificate



The Panagos Building is built on erf 102/4 and erf 102/R, which are zoned for general business and have a 2,5 floor space ratio limit. The maximum height allowed is 25 m and the coverage may not exceed 60%. The building line from the street is 3,5 m, but no restrictions have been enforced

The buildngs may be used for the following purposes:

poses:
Business buildings
Government buildings
Parking garages
Places of instruction
Places of public worship
Places of refreshment
Residential buildings
Restricted industries
Retail industries
Shops
Social halls

Vehicle sales

Consent from the council is required for the following purposes:

Dwelling house

Filling station

Institutions

Motor workshops

Places of amusement

Public garage

Restricted industries

Special buildings

Sports grounds Warehouses

Purposes for which buildings maynot be used:

Panel-beating Spray-painting 3.2 Legislative context

Activities and zoning

The Panagos Building is currently being used for retail, residential, refreshment and public worship purposes. From this list of activities, residential and public worship will be discontinued and a place of instruction will be added.

All the activities will be controlled and specialised, conforming to the genre of craft.

All the above activities conform to the City of Tshwane's zoning for the area; therefore, no application for rezoning is necessary.

og 43

Chapter 4

Metaphysical context

4.1	Craft of southern Africa	pg 44
4.2	Contemporary craft	pg 45
4.3	Craft jewellery	pg 46
4.4	Ceramics	pg 47
4.5	New materials	pg 48

4.1 Metaphysical context

Craft of southern Africa



The Ndebele people of southern Africa live mainly in Pretoria and Mpumalanga. Only a few of the Ndzundza group of Ndebele group still practice the decorative art of painting and beadwork (African Home 2007).

Further out from Pretoria, in KwaZulu-Natal, the Zulu people still wear outfits decorated with feathers, beads and skin for traditional functions. The colours and symbols created from beads have specific meanings, indicating the person's social status and where they are from. Originally, these messages were illustrated with dyed seeds, but were replaced with glass and plastic beads once trade with India began. Unfortunately, the style of storytelling is being lost with each generation (African Home 2007).

Beads are now frequently combined with wire to make hand crafted items (Figures 4.1 - 4.5), but the creativity of the craftsmen has compelled them to find new materials to work with in innovative ways.

4.2 Metaphysical context

Contemporary craft



Craft has become somewhat of a fashion item in modern society (Figures 4.6 - 4.8). From accessories to home decor, people are drawn to the colour and the informality that still maintains a strong sense of style.

Wire is no longer used in the traditional sense when designing a wire table like the one below (Figure 4.6). The standard of construction was raised by welding the frame, spot welding the infill wire into place and then powder coating the entire table red (Pingmag 2007: African crafts).

Buckskin was previously worn by the Zulu people of South Africa for traditional occasions (Fisher 1992). Now, dyed bright pink and purple, the buckskin of the handbag given as an example hardly resembles the traditional outfits (Figure 4.7).

Metaphysical context

Craft jewellery







Figure 4.10: Imiso ceramics: earring 1 Figure 4.11: Imiso ceramics: earring 2

Figure 4.12: NHD jewellery: Twin round on chocolate suede choker Figure 4.13: NHD jewellery: Round/one

The function of what we today consider traditional craft was to adorn the people for ceremonies and war, and display their social and marital status (Fisher 1992:13-17). The materials used were originally found in their immediate environment and later incorporated imported objects such as beads. Today, with globalisation and the availability of information, almost any material can be used to continue the tradition of adornment. Figures 4.10 to 4.13 convey ceramic jewellery. Various tools are used to assist the craftsmen in order to maintain a certain standard during production such as the bead board used for the design of bead jewellery (Figure 4.14).



Figure 4.14: Bead board

Metaphysical context

Ceramics

Ceramic art seems to take the role of functional art and alters it until it reaches a high level of artistic value. Vases, piggy banks and soap dishes are only a few examples of functional objects which have surpassed their function and entered the realm of high art.

Many different aesthetic qualities can be achieved with ceramics by using different pigments and glazing techniques, making it quite a versatile medium to work in.

Ceramics SA is an association that promotes community awareness and appreciation for ceramic artists and their work. This kind of formalised gathering of related crafts is important for establishing and backing up a class of craftsmen that have reached a certain standard of manufacture and guarantee customers quality.

		4.00
4.15		4.34
4.16	4.30	4.35
4.19	4.31	
4.18	4.22	4.36

Figure 4.15 - 4.18: Various functional ceramic objects

Figure 4.19 - 4.21: NHD ceramic jewellery Figure 4.22 - 4.25: Various ceramic vases















Metaphysical context

New materials



Figure 4.26: Umgexo (Medicine necklace) of glass beads and test-tubes 9cm x 66 cm



Figure 4.27: Tsonga-Shangana, South Africa Nceka (shoulder wrap-over cloth) Textile and saftey pins

"Many African people have found modern equivalents for traditional objects in, what Western consumer-oriented communities might consider, 'trash'." (Nettleton 2003:52). However, many new materials are not recycled, but are simply used in a new way (Figure 4.27 - 4.31).

As with traditional objects, new materials usually carry symbolic meanings. Traditional healers may now incorporate test-tubes into their jewellery design, replacing horns which were once used to store medicines (Figure 4.26).

In the case of mother-of-pearl buttons, the new material closely resembles the original material, shells. In this case the buttons are easier to work with as they are already made with holes. First used simply to replace shell patterns on fabrics (Figure 4.31), buttons are now used to create three dimensional objects like wall lights (Figure 4.28).



Figure 4.28: Button wall light
Figure 4.29: African craft09: hand bag
Figure 4.30: African craft07: Recycled plastic bag ottoman.

Figure 4.31: Xhosa (Fringo), South Africa, Textile with beads, buttons and embroidary.

pg 48





Chapter 5

Precedent studies

peci	alized retail outlet	
5.1	Kim Sacks	pg 52
5.2	Delagoa	pg 54
5.3	Earth, eire & ice	pg 56
3rand	ling through display	
5.4	Mannequins	pg 58
5.5	Clothes hangers	pg 60
Reviv	ing heritage buildings	
5.6	Reichstag parliment building	pg 62
5.7	Castelvecchio Museum	pg 64

5.1

Precedent studies: Specialised retail outlet

Kim Sacks

Oxford Road, Johannesburg

5.3

Figure 5.1: Grass baskets

Figure 5.2: Kim Sack's white ceramics

Figure 5.3: Head rest and bead necklace

Figure 5.4: Ceramics, mirrors and wall hanging

Figure 5.5: Shelley Mailsel ceramics on glass shelf

Figure 5.6: Shelf display

Figure 5.7: Ivory bangles

Figure 5.8: Ivory bangles

Figure 5.9: Art vark cutlery display

Figure 5.10: Kim Sack's white ceramics in glass display case

Figure 5.11: Bead baskets

Figure 5.12: Beads

Figure 5.13: Katherine Glenday's ceramic display.









As a backdrop in her shop design, Kim Sacks uses crisp white walls. The merchandise is arranged in layers; below, at and above eye level. Smaller bowls and jewellery are placed at eye level where patrons can view them without straining, the walls are filled up to the ceiling with fabrics, woven plates and pictures, and larger objects are simply placed on the floor or on low level

Sacks's use of strong contrast sets her shop apart as it creates a sense of sophistication while

displaying the strong African character of the

merchandise as well. She seems to consciously source neutral articles to sell alongside her own monochromatic ceramic artworks. White ce-

ramics are placed on timber shelves and reed

baskets are hung on white walls.

shelves.









Articles sourced from other artists are displayed in small, lockable cabinets and sold on consignment. This is mutually beneficial as Sacks carries the risks of running the shop, but is able to supply her patrons with a wider variety of merchandise extending beyond her scope of expertise.

A traditional African method of storing bangles is mimicked in her bangle display. In the book Africa Adorn, it tells how the 'fan' (supreme chief) of the Bamileke people of Cameroon would wear a collection of bracelet's made from a single tusk. These bracelets would be stored on a wad of palm fibres. In Figures 4.7 and 4.8, one can see how sack cloth has been used in a similar way. This display is, however, unsatisfactory on its own as it does not allow patrons to easily try on the bangles. Therefore, a basket that holds an example of each design of bangle has been placed below the hanging sack cloth to permit fitting and to catch any fallen bangles.





Delagoa

corner of Pretorius and Eastwood Street, Pretoria



Figure 5.14: Stacking diplay tables on castor wheels

Delagoa's shop design is similar in approach to Kim Sacks. White walls are used as a backdrop and the merchandise is organised in layers of differing heights. Conversely, not having an inhouse artist means that no one style is dominant and a far more lively atmosphere is created by the intense variety of colour, shape and texture.

The shop caters for a wide clientele. Products range from traditional craft items to designer pieces, from functional art to the purely ornamental, and from textiles to ceramics. Every available space is jam-packed with merchandise. Mobiles hang from a false ceiling and even handmade furniture is available for sale.

The solitary shop assistant sits at the till, which is placed near the shop entrance. The shelves never exceed eye level, allowing the shop assistant to have a view of the entire shop.

In Figure 4.14, purpose-made shelves on caster wheels are shown. Due to the purpose-made shelves' ease of mobility, the shop has the potential to adapt to new demands of changing merchandise.



Figure 5.15: *Pay counter* Figure 5.16: *Various bowls*

Figure 5.17: *Ceiling display*

pg 54

5.3

Precedent studies: Specialised retail outlet

Earth, Fire and Ice :Gems and crystals

Monte Casino, Johannesburg

5.18 5.19 5.20 5.21

Figure 5.18: Crystal balls. Johannesberg: Monte casino.

Figure 5.19: Lockable cabinets. Johannesberg: Monte casino.

Figure 5.20: Canterliever shelves. Johannesberg: Monte casino.

Figure 5.21: Built-in display



On entering this shop, one is overwhelmed by the variety of colours and shapes of the crystals and gems.

There are three areas of investigation which are unique to this type of store; lighting, security and merchandise. The lighting brings the stones to life and enhances their character. Shop displays can either encourage patron exploration and self-service, or acts as a means of increasing security.

At the shop Earth, Fire and Ice, the choice of lighting is determined by the physical characteristics of the gemstones on display. Transparent or translucent gemstones are most beautiful when light shines through them to expose the crystal patterns inside. In Figure 4.18, a crystal ball is mounted on a light box. It is simple in design, only acting as a backdrop and therefore, it does not distract one's attention from the merchandise. The other dominant source of light in the shop is downward shelf lighting (Figures 4.19 - 4.21) which highlights other areas of interest and intensifies the colours.

As the values of the different gemstones vary quite dramatically according to availability and size, different intensities of security are necessary. The layout of the shop is designed so that the shop assistant can view the entire shop without leaving the central counter and pay point (Figure 4.22). Lockable cabinets at the back of the store house the valuable, large, unfinished gemstones (Figure 4.19). Customers only need assistance here if they wish to purchase something. On the other hand, finished products such as rings and necklaces are kept in the counter where the shop assistant can help anyone wishing to try on something without leaving his/her

pos

The less valuable jewellery and gemstones are displayed in baskets on a table in front of the counter manned by the shop assistant (Figure 4.23). Here, patrons can browse at their leisure, picking up and exploring the world of gemstones.

The merchandise sold stays within the scope indicated by the name of the shop, Earth, Fire and Ice: Crystals and gems; however, a variety of client profiles are catered for. Collectors have a variety of ornamental gemstones to choose from. Beautifully cut precious and semi-precious stones to create one's own jewellery and ready-made jewellery can also be purchased.

Merchandise is displayed and grouped together according to these levels of refinement. It is separated even further by making the affordable jewellery, pendant and stones available for patrons to help themselves, while the valuable merchandise is locked in display cabinets for safe keeping.



Figure 5.22: Display table

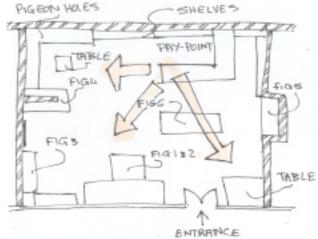


Figure 5.23: Diagram showing the shop layout. The arrows indicate the shop assistants view from the pay point.

Figure 5.24: Sally Buttons, in the Woodlands Mall, displays a simple, elegant shop front. In keeping with the monochrome branding of the shop, grey-silver mannequins are dressed in the latest fashion and are placed in front of a large, ornate mirror. This mirror allows passer-by's to see the entire outfit at a glance.

5 4

Precedent studies: Branding through displays

Mannequins



Figures 5.25: A variety of original mannequins are shown on The Cool Hunter website. As craft is generally rich in texture and colour, a monochromatic mannequin with a smooth finish will be most suitable for this scheme.





Figures 5.27 - 5.28: Timber busts and hand mannequins have been imported from Indonesia to display the craft jewellery of Beads Entwined. The slender fingers of the hands are best suited to show off small items such as rings and bracelets on the counter, while the larger busts are positioned on the shelves. Deep grooves have been cut into the edges of the busts. This subtle

intervention complements the design and creates hooks on which necklaces can be hung.





Figures 5.29 - 4.31: Big Blue is a well known franchise known for its fun selection of clothing and jewellery, and its eye catching shop displays.

Below the till, inside the glass counter, an array of gems, necklaces and earrings are displayed under 50 W diachronic halogen miniature spotlights. The glass shelves allow the light to pass through and thus, fewer bulbs are required to adequately light up the entire cabinet.

High gloss, plastic hand mannequins in various colours add to the feeling of abundance when laden with bold bangles and bracelets (Figure 5.32).

The laser cut, powder coated, steel tree is useful for displaying earrings at the till, but the design is very busy and therefore, the earrings disappear into the detail.

pg 58

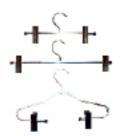


Figure 5.33: Wire clothes hanger

5.5

Precedent studies: Branding through displays

Clothes hangers

Clothes hangers are often overlooked as an aspect of branding and marketing in smaller shops. When customers are shopping, every detail should remind them of the particular shop and imprint the branding of the shop in their minds (Figures 5.33 - 5.35).

The clothes hanger has the advantage of constantly being in the shopper's line of site. When shoppers see an item that they wish to purchase, they see it on the hanger and immediately a correlation is made between the shop and the clothing they like. This increases the number of regular customers and promotes word-of-mouth advertising.

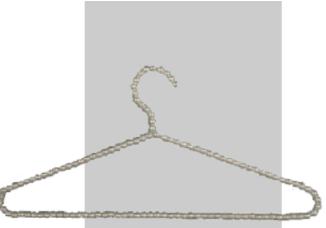
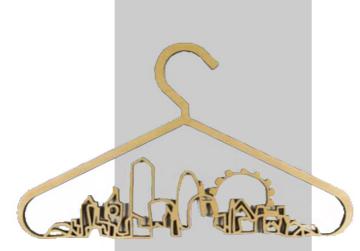


Figure 5.34: Pearl clothes hanger



Fiure 5.35: Laser cut city-scaoe clothes hanger

Precedent studies: Reusing heritage buildings

Reichstag parliament building

Berlin, Germany Archirect: Lord Norman Foster



Figure 5.36: Graffiti of Russian soliers



Figure 5.37: Reichstag building after WWII

The Reichstag was reopened as the Bundestag, the German parliament, in April 1999. The original building, designed by architect Paul Wallot, was bulky; therefore, Lord Norman Foster's approach involved making a "light, clean modern insertion" (Russell 1999:103) of glass and steel. This was to be clearly separate from the original building envelope. The spaces were arranged according to function and movement.

While under construction, some alterations to the design were made. The building incurred severe damage from fire and bombs during World War II (Figure 5.37) and much of the structure was found to be irreparable, with a third of the original structure having to be removed. Graffiti left behind by Russian soldiers during the war was also found (Figure 5.36). It was decided that the graffiti should not be removed so as to remind us of the negative effects of war.

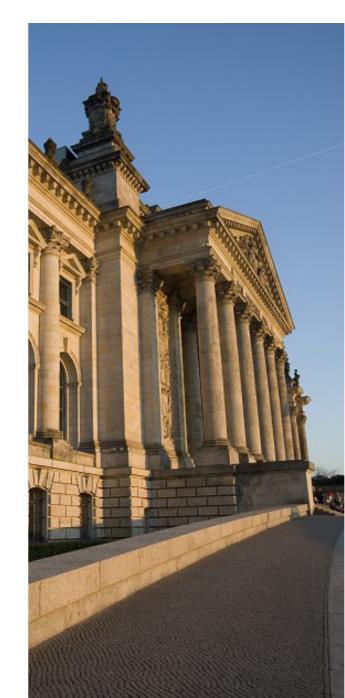




Figure 5.38: Visitors looking down at the parliment in session (above)

Figure 5.98: Entrance (left)



Figure 5.40: Glass dome at night

The well known glass dome has become the cities icon as it can be seen from almost anywhere in the city and is a unique addition to the cityscape (Figures 5.38 & 5.40). This dome contains a double spiral ramp that allows visitor to experience a superb view of the city or to look down onto the parliament in session. This design decision is described in the Architectural Record as "architectural transparency as an expression of political accessibility" (Russell 1999:111).

Foster's noteworthy response to this building was one of honesty. Every era of the buildings history was recognised for what it was, no matter how uncomfortable it may be, and a clear distinction between the old and new was made by inserting a visual and tactile difference into the design and materials.

Precedent studies: Reusing heritage buildings

Castelvecchio Museum

Verona, Italy

Archirect: Carlo Scarpa

Carlos Scarpa is known for his use of luscious materials and for reviving craft in a contemporary manner (http://www.architecturee.com). Although he has an appreciation for other styles of architecture, he considers himself to be a true son of his region and has strong feelings for his roots (http://www.GreatBuildings.com/ buildings/Banca_Popolare_di_Verona.html).

Castelvecchio Museum in Verona is considered his highest achievement in terms of his delicate handling of ancient buildings. In order to distinguish the old from the new, reveal joints and spatial slots were used, and are said to be like "miniature conceptual moats" (http://www.architecturee.com).



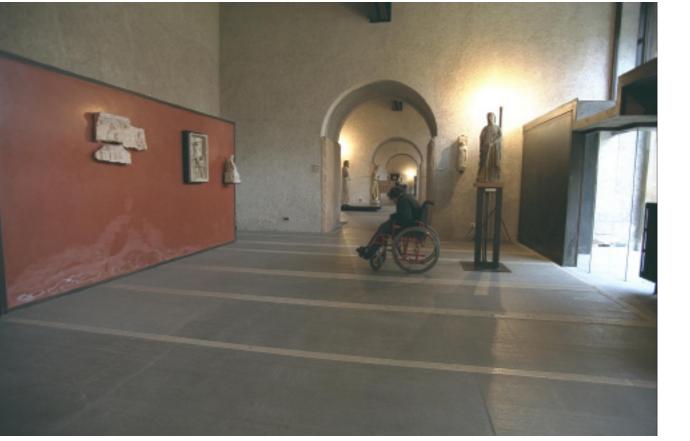






Figure 5.40: Interior view of Castelvecchio Museum

Figure 5.41: Circulation space in the Castelvecchio Museum Figure 5.42: Double volume space in the Castelvecchio Museum



Chapter 6

peer o

Design proposal

6.1	Reaction to the urban space	pg 68
6.2	Reaction to the building envelope	pg 70
6.3	Reaction to the new function	pg 74
6.4	Marketing and branding	pg 76
6.5	Track system	pg 80
6.6	Lighting system	pg 84
6.7	Screen display system	pg 90
6.8	Sliding panel display system	pg 96
6.9	Technical drawings	pg 100

6.1 Design proposal

Reaction to the urban space

The Panagos Building is situated on an important intersection for vehicular and pedestrian movement. This will give the businesses excellent exposure. Pedestrians passing slowly by have an opportunity to see the displays windows. Motorists can park diagonally across the road in the underground parkade (north east of the building) and this parkade will provide parking for the residents at night and for customers during the day. Above this parkade, there will be a tram station. The tram station and the parkade together form a large node from which people will disperse. Being located close to this node is another advantage in terms of exposure.

To pedestrianise the streets, the pavement has been extended by 2 m, narrowing the road into a single lane. To the west of the building, a court yard is developed into a public space. This public space overflows onto the oversized pavement and wraps around the northern side of the building and flows into the eastern side. This means that the building will have to be accessible from three sides, making access difficult to control. A decision was, therefore, made to keep the buildings that make up the Panagos Building independent from one another to assist in controlling access.

A cooking school will be developed on the adjacent site and will have a roof garden overlooking the public space. This roof garden relates to the balcony on the western side of the building. Although the buildings are to be kept separate to maintain control of access, visually, they will almost become one, being at the same height and overlooking the same space.

To the south of the building is a primary school, Princess College. Being under the age of 13, these young children have nowhere to buy lunch or to spend their recess on the schools property, and when the children leave the school to get food, the teachers can no longer protect them. The roof garden will be made available to the school children during recesses and a kiosk in the public space will offer a place for the children to buy food in a semi-controlled environment. The kiosk is in close proximity to the school and within eyesight of the roof garden so that the teachers can watch over the children and make sure that they are safe.

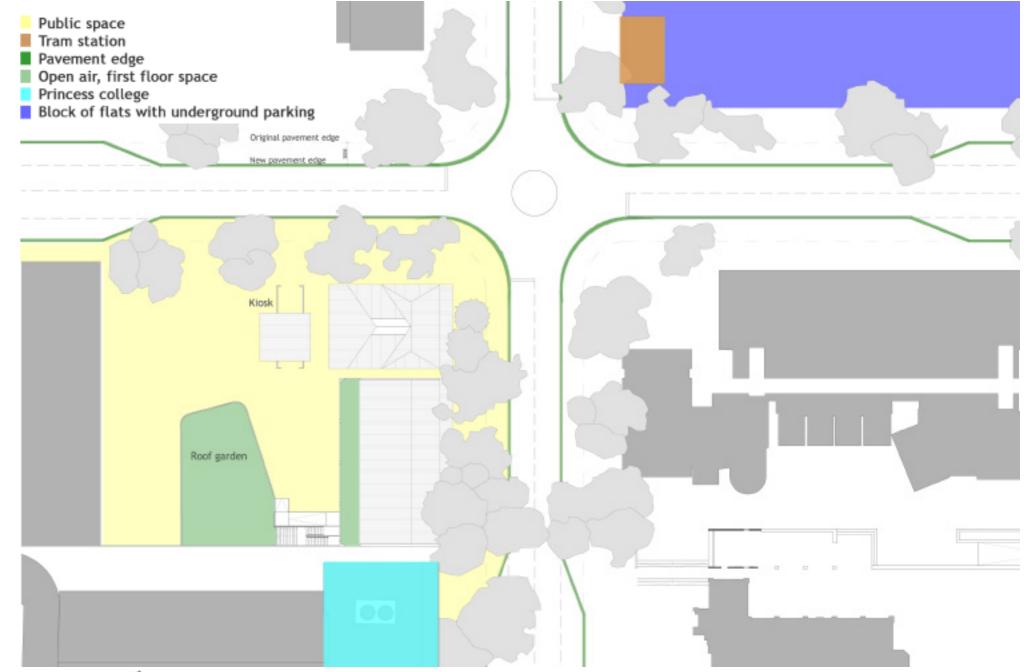


Figure 6.1: Site plan 1:500

pg 68

6.2 Design proposal

Reaction to the building envelope

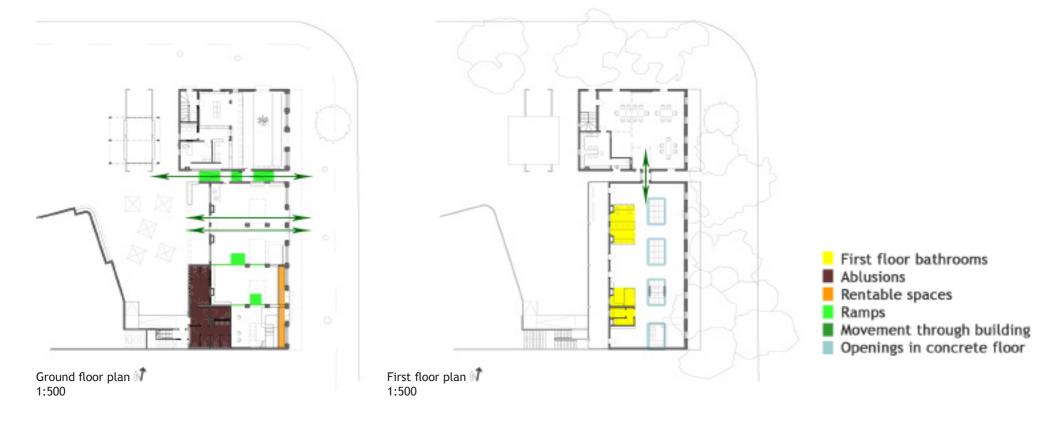


Figure 6.2: Plan

pg 70

The two buildings are separated by a 1,5 m-wide alley, which connects the public space on the western side to the pedestrianised street on the eastern side. This axis has been extended to the west through the public space and to the east across the road through a low cost residence and office block. The buildings are connected on the first floor by a bridge built over the alleyway. The timber structure around the bridge which is rotting has been redesigned.

The corner building has two main entrances on the northern and eastern sides. The southern building has entrances on the western and eastern sides.

Due to the architectural value of the buildings' front façades, they will be restored to their original design and condition. The remainder of the original structure will be altered where necessary to suit the new functions.

All of the stone cladding will be restored to its original appearance. The traces of the original blue slate pavement will be salvaged and reused in the new pavement design. All of the timber

frame doors and windows on the western façade will be restored. Although the aluminium frame windows on the first floor are not the original windows, they are in excellent condition and will be left as is. The pillars, walls, roofs, gutters and down pipes will be repainted to resemble the buildings' original appearance.

Every gypsum ceiling will be removed as they are all damaged beyond repair. This will expose the trusses and increase the volume on the first floors.

The four chimneys are no longer used. Three of the chimneys will be used to house the electrical conduits needed for the first floor, while the fourth chimney will be used to house water pipes needed for the coffee bar. Bricks will be removed to accommodate two access panels for each chimney at each floor, one at eye level and one just below the soffit or trusses.

South building

Two rentable spaces are to be partitioned off and spill out onto the pavement on the eastern side of the building. These spaces will provide for display windows and are just large enough to store a fold up table, a chair and some merchandise. The main entrance to this building is to be on the eastern side, through two double doors. These will be directly opposite the other entrance of two single doors on the western side of the building, which will lead into the public space.

The internal walls separating the space into different shops and apartments will be removed to create a continual flow of space.

The section of the walls below the balcony is to be removed to create a sheltered exterior space before entering the public space. Ablutions will be provided in the remaining space under the balcony and will extend into the building on the southern-most end. The ground floor will step down onto the veranda, so a raised floor will be installed here to create a level floor space throughout. The sewerage and water pipes will be cased in the dry walls and will run underneath the raised floor. The access to the ablutions will only be via the public space on the western side of the building.





Demolished walls

Figure 6.3: Demolision plan

pg 72

The bathrooms on the first floor will be stripped of all sanitary ware and the walls will be broken down to various heights according to there new functions. The plaster will be removed from these walls to expose the bricks and a sealant will be applied to the remainder of the walls. The southern-most bathroom's walls will be left as is and this space will be used as a changing room. The next bathroom will be broken down to a height of 350 mm and topped with a melamine surface, and will be used for displaying ceramics with space for storage drawers underneath. The last two bathrooms' walls will be broken down to support the melamine surfaces of the coffee bar and the Internet café.

A roughly constructed brick wall was built to provide security for the cash loan business currently on the premises. This wall will be removed and the bricks will be reused to build the first few steps of the staircase leading to the first floor.

The original concrete ground floor steps at two places. Ramps will be installed to accommodate wheelchair users at these floor level changes. Any carpets will be removed and ceramic tiles will be salvaged. A floor pattern will be created using coloured cement on both the ground and first floors. The existing ceramic floor tiles will be salvaged and used to create mosaic details in the floor pattern. The existing vinyl tiles of the 'muti' shop will be discarded as they are in a poor condition.

The original skirting must be salvaged where internal walls are removed and used to restore sections of skirting which are damaged or miss-

ing from the remaining walls. The remaining walls will be painted white to lighten the room and to contrast starkly with the colourful merchandise.

Removing the gypsum ceiling below the soffit will expose the holes where the original staircases rose to the first floor. These opening will provide a visual connection between the two floors and allow natural light to pass through to the ground floor. The southern-most opening will accommodate a new staircase to the first floor.

North building

Most of the interior walls will remain as is, with the exception of the timber toilet walls on the first floor. Where these walls have been removed. the timber floor will be stained a darker colour. indicating the original floor plan. The original skirting must be salvaged where internal walls are removed and used to restore sections of skirting which are damaged or missing from the remaining walls. The smaller rooms will serve as offices, a staffroom and a kitchenette.

The existing ground floor kitchen will be stripped of its equipment and the space will be used for the pay point.

All of the timber work will be restored, including the staircase, the first floor and the window and door frames.

This building contains only one chimney on the southern side, which will house the water pipe for the kitchen on the first floor.

Once again, a floor pattern will be created using coloured cement on the ground and the existing ceramic floor tiles will be salvaged and used to create mosaic details in the floor pattern.

The gypsum ceiling will be removed so that the first floor room will be illuminated by the skylight. A track system will hang from the trusses to carry the track lights and hanging displays.

6.3 Design proposal

Reaction to the new function

By integrating the peoples' skills, the community becomes self sustaining. The resources and skills in the collaboration complement and reinforce one another. The creative skills of the people are limited to basic craft, but with training, these skills can be refined and with business guidance, these skills will become tools with which a sufficient income-generating career can be built. A platform from which the newly trained craftsmen can sell their works, alongside works of established craftsmen, will create exposure for these new craftsmen and for the workshop as well.

Layers approach

Layers of structure, lighting and display systems will be placed over the old layers. The new layers will be distinctly different from the layers of the original buildings. Different materials and construction methods create a distinction between old and new layers, so metals (mostly galvanised mild steel) will be used.

The first layer forms the structure on which the following layers will be placed. A system of beams spanning between the trusses will be connected to each other via sliding doors and light tracks. On the walls, there will be more tracks carrying screens, onto which hook-in shelves will be placed.

The second layer comprises the lights. Track spot and pendant lights will provide lighting with a flexible system that can respond to changing needs.

Thirdly, the display screens and mannequins comprise the final layer, onto which the merchandise will be placed.

Different materials

The original buildings' materials consisted of plastered brick, concrete and timber. As mentioned before, galvanised mild steel has been chosen for the new structures as the cool,

smooth feel of metal contrasts with the warm, textured feel of plastered walls. Concept models where used to explore the possibilities of the material in different forms, namely wire and sheet metal.

Work done with wire was found to be more successful when a welded rod frame was used, around which a thinner wire could be worked. This ensures a higher level of precision and a better end product. Sheet metal will be bent with precision tools in order to ensure a high quality end product. Steel angles and channels are also to be used to create the display systems.

The blank canvas

The focus of the patrons should be on the merchandise; therefore, neutral colours will be used to create the 'blank canvas' on which the merchandise will be displayed. To create a distinct branding image, colour plays a vital role. This problem will be overcome by using strong forms and texture to generate an image which is immediately noticeable and undeniably South African

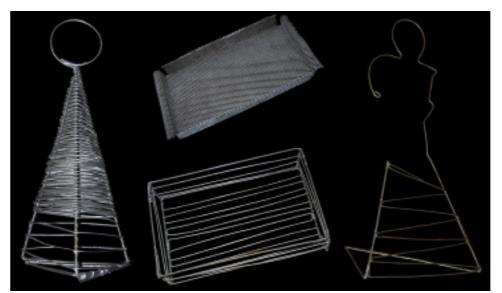


Figure 6.4: Experiments in wire and metal

6.4
Design proposal

Marketing and branding

When designing the branding and marketing of the business, a balance was needed between what the up-market clientele desired and a tendency to lean towards a European image. The image designed for the shop has to incorporate the unique South African flavour that foreigners crave without resorting to gimmicks and clichés. The branding of this shop started with a name that alludes to its genre, Maano.

Name and slogan

The word 'maano' means 'to craft something' in Northern Sotho. The scheme is crafting more than objects, it's crafting a community. It's crafting a place of learning and self empowerment, as well as a place where tourists and locals meet. No longer kept at an appropriate distance until brought together in a dramatised encounter, tourists can now interact with South Africans as they live their daily lives. From this

flows the slogan, the core of what can be expected to find here, 'A creative collaboration for a creative community'.

Font style

Some font styles are well known and therefore, are not sufficiently unique to create a strong image. Others are too visually overpowering and prescriptive, leaving little room for the shop and brand to evolve and to react to its patrons' needs. Therefore, the font style, Papyrus was chosen for its informality and simplicity. The proportion of the letters does not put strain on the eye, but it still has a recognisable character

Papyrus : maano

MAANO
MAANO
MAANO
MAANO
MAANO
MAANO
MAANO
MAANO
MAANO
MAANO
MAANO

madno

maano

Figure 6.5: Various font styles



Figure 6.6: First branding concept. Post card hand out.



Figure 6.7: Second branding concept. Business card hand out and fashion label.



Figure 6.8: Final branding concept

Merchandising

The first concept was rejected due to the fact that having a realistic person as a focal point suggests that the target market is defined by race and sex (Figure 4). In an attempt to erase this subliminal message, an outline of the realistic picture replaced it (Figure 5). A strong focus remained on the person in the image and therefore, the image was cropped so that only the beads, an image strongly related to craft, remained (Figure 6). To this, small images of craft items suggestive of what may be purchased from the Maano shop were added.

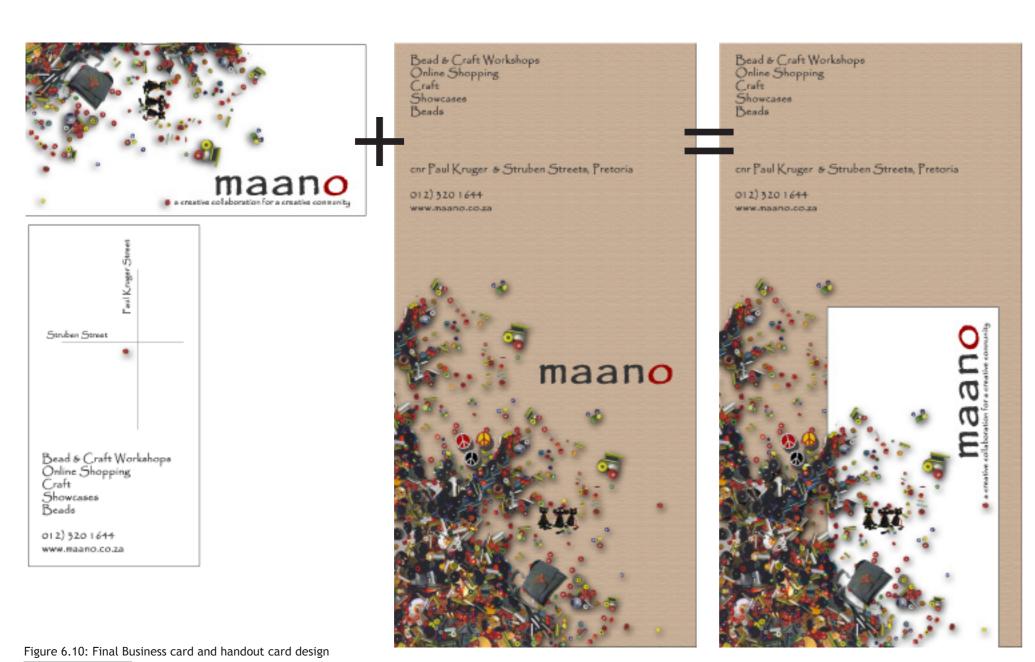
A series of stationary was designed, including a business card, handouts and a merchandise label. The handout was made from handmade paper and has the company's details, slogan and logo printed on it. Handmade paper was chosen as it can be made onsite in the workshop. The design can be used as a template in papermaking classes and successful projects can be used for promoting the shop. The logo is cropped for the business card so that when stapled to the handout the beads of the logo seem to spill off the handout and onto the business card.

For the merchandise label, the logo has been scaled down to fit onto the card. Some South African Internet shopping websites do not have a physical shop to sell their goods from, such as www.mjvisuals.co.za. These businesses and other craftsmen can sell their goods directly from the Maano shop and full credit will be given to the supplier or craftsman inside the merchandise label (Figure 7). This gives a brief summary of the goals of the business and an open space can be left on which to write the price of the merchandise.



Figure 6.9: Scale 1:1

Merchandise label cut out with fold and cut lines.



U = 64 × De Serti Carlo w E MacRediret x9645Mass No (- 10 - (- 2) Baps - (- 10 look - 1 @ Means Design (Ph/) Ltd. Training Ехро'я Recommended Reading On-Line Shapping Contact (Js Events Calender maano a creative collaboration for a creative community Lead Intranet * 180% × 🛊 Surt 🧀 Hans (Kurning) - Pikra. . . 🎉 Plaans Design (Pty) L...

Internet

In order to encapsulate the spirit of collaboration, Maano's website will contain links to a large variety of other websites that support self empowering communities such as monleybiz. co.za and lovingafrica.co.za (see Appendix C for a copy of the Maano website). Events across the country will be promoted and workshops held at the Maano studio can be booked from here.

Since South Africa is a country where Internet access is a luxury, free Internet access will be made available via Wi-Fi, and two computers will be provided near the coffee bar and will have restricted Internet access. As the focus of the business is not providing Internet access but promoting the collaboration of craftsmen, the two Internet stations will only allow access to the Maano website and its website links.

Figure 6.11: Maano website home page

6.5
Design proposal

Track system

The first layer to be placed over the existing building fabric is the track structure that will support most of the display and lighting systems. The building was seldom maintained; therefore, the gypsum ceilings are rotting from rain water damage. The ceilings will, for that reason, be removed to expose the trusses. The condition of the trusses will be evaluated for structural integrity. Should the trusses be found to be unsafe, they will be repaired or replaced depending on the severity of the damage. If the trusses need to be replaced, the new trusses should be replicas of the original ones.

The new truss-suspended track system hangs between the trusses from custom-made, galvanised mild steel hangers. Cold-formed galvanised mild steel channels ($100 \times 50 \times 20$) hang perpendicular to the trusses. Channels were chosen above tubes to reduce the load on the trusses.

The subsequent layer will be the tracks. Two existing track systems are to be used to fulfil the requirement of the system. Firstly, two Hillaldam 400 sliding door track systems will be used to hang luminairs, mannequins, clothing rails and other displays from. They will be attached to the channel beams, 600 mm apart. The combined weight that the track systems can carry is 800 kg. Secondly, a Match 100 series three-phase track light rail is to be connected to the channel beams between the two Hillaldam tracks.

The above-mentioned tracks serve to strengthen the structure and distribute the load between the steel channel beams.



Figure 6.12: Track system detail 1:10

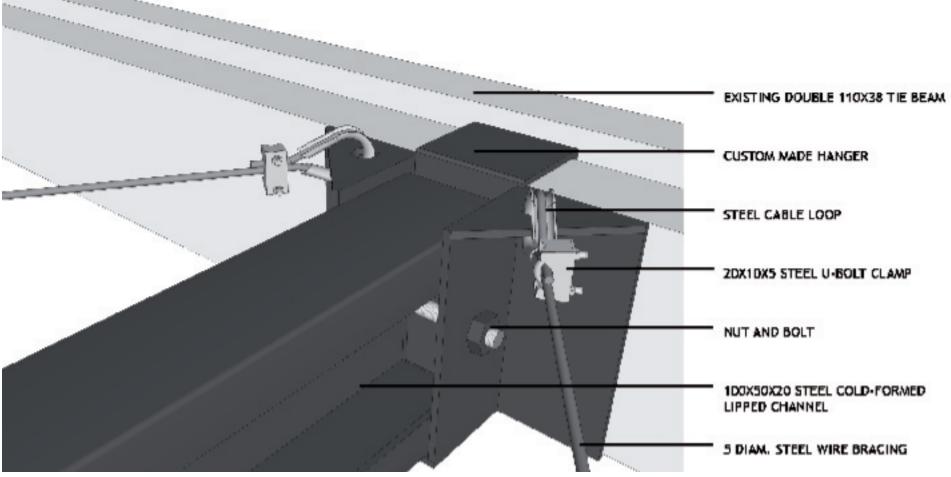


Figure 6.13: Hanger on truss detail

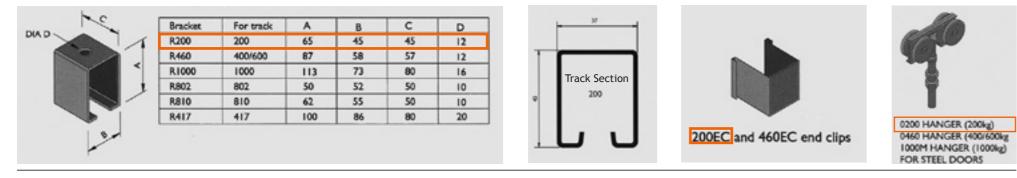


Figure 6.14: Components of the Hillaldam sliding door track system

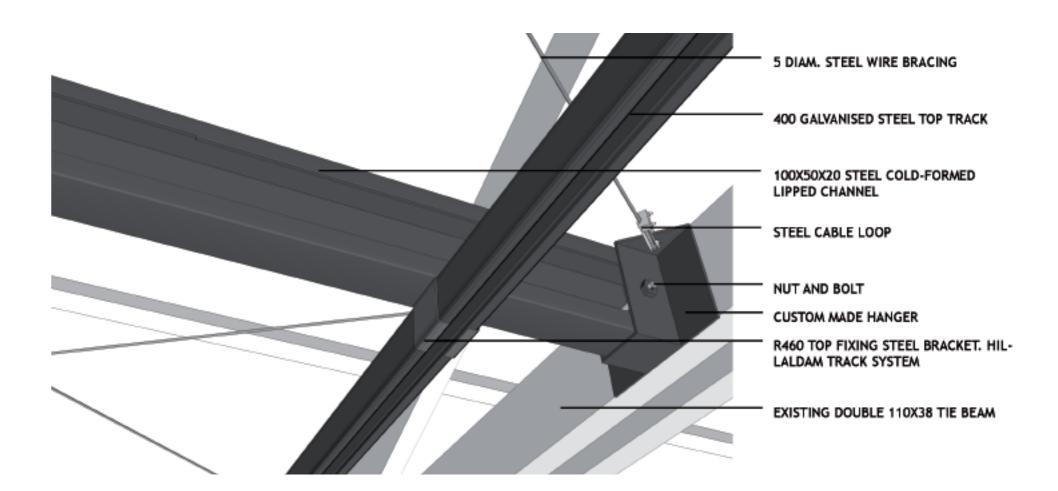


Figure 6.15: Hillaldam 400 sliding door track attached to channel beam

6.6 Design proposal

Lighting

Due to the varying light intensity throughout the day, it is important to ensure that the merchandise is sufficiently illuminated at all times, without taking away from the atmosphere created by the natural light. Therefore, directional lights are to be used to give the client control over lighting.

It is important to achieve flexibility in the lighting system. It not only contrasts with the permanence of the existing structure, but allows the business to adapt to the changing desires of the clients and to change according to the available stock. Regularly making changes to the display keeps the shop image fresh and encourages patrons to visit frequently.

Track lights are to be used in the public spaces and recessed down lights and pendant lights are to be used were needed in offices and amenities.

LTS track lights

A three-phase track system for surface mounting gives the client the flexibility to switch the three circuits off separately. Spotlights are used to direct light onto the displays. The Match 100 Series, low voltage lamp with two coolbeam lamps will be used. It has an integrated electronic transformer with two adjustable light heads that are flexible in all directions. Where an alternative to spotlights is desired, low voltage pendant lights are available to fit the three-phase track light rail. These pendant lights are placed above the coffee bar to indicate a change in function.

Travelling column

The travelling column is a purpose-made lampshade, made of wire and handmade paper. The concept was derived from the columns supporting the first floor. The travelling columns, when placed directly above the structural columns, visually extend through the floor into the first floor space. In order to break away from the rigidity that the structural columns impose on the ground floor interior space, the new columns have been incorporated into the flexible track system. A u-bolt and clamp has been modified by drilling a hole through the clamp to accommodate the Hillaldam 0460 galvanised steel hanger. This is used to attach the travelling column lampshade to the track system. One of the LST pendant lights will be placed on the three-phase light rail at the centre of the travelling column, with its own lampshade removed.

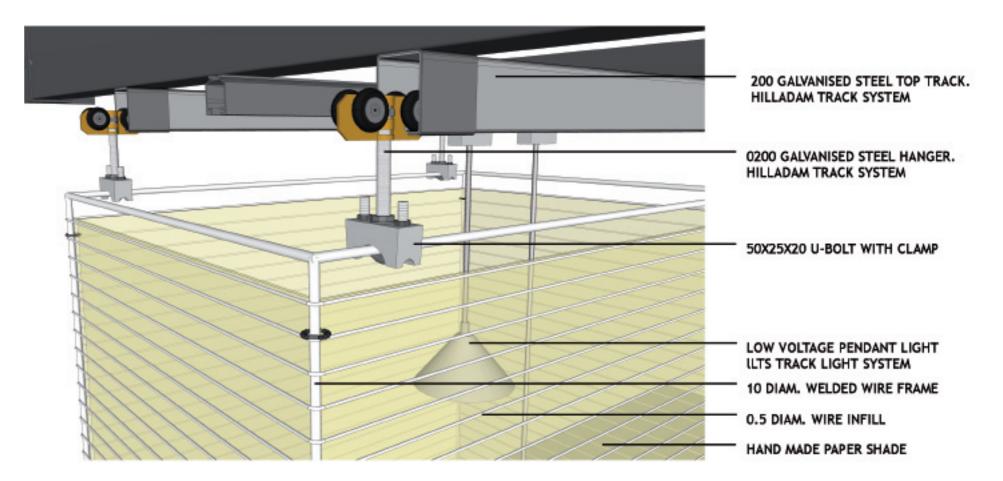


Figure 6.16: Travelling column on Hillaldam 400 sliding door track system

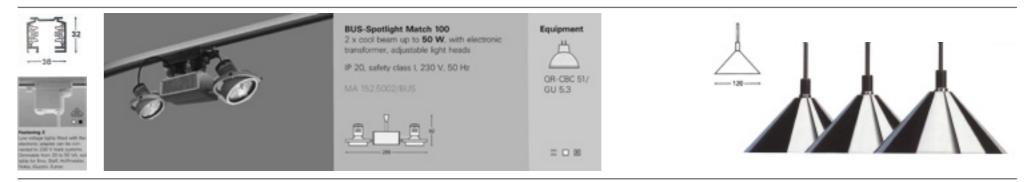


Figure 6.17: Components of the LTS low-voltage pendant and track lights

Fashion

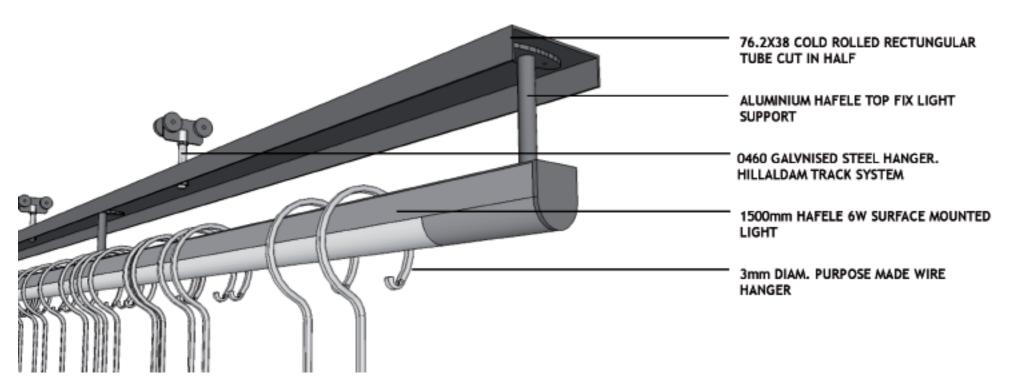


Figure 6.18: Clothing rail light on hangers

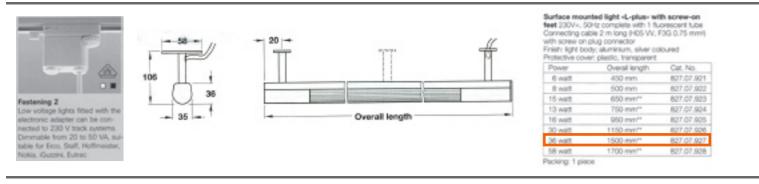


Figure 6.19 & 6.20: Components of the Hafele rail light and LTS fastener

In order to maintain the atmosphere created by the natural light, the clothes rail will house the lights needed to illuminate the fashion merchandise.

The clothes rail incorporates the Hafele 1 500 mm long, surface-mounted rail light into the track lighting system. A 76,2 x 38 galvanised steel tube is cut in half, making a light beam onto which the light rail can be attached. Holes are drilled into the beam to accommodate two Hillaldam 0460 steel hangs. The electrical wire runs inside the screw on feet and along the top of the u-shaped beam. The LTS 'fastening 2' is used to connect the wire to the three-phase track.

Wire coat hangers will be made in the workshop to be sold in the Maano shop, but the circle design will be used exclusively for the Maano fashion display. Coloured glass beads will indicate the size of the garment (small, medium or large) and will correlate with the coloured border of the merchandise label (Figure 6.).

Of the first concepts, the hanger with the beads in the bottom corner (Figure 6.) was rejected because this detail would be lost once the clothing was placed on the hanger. There was also a weakness in the construction of the hanger when the two ends of the wire did not meet (Figure 6.). The weight of the clothing would pull the hanger out of shape, so where the wire would have ended at the beaded circular detail, the wire continues to join the other end of the wire to form a hook (Figure 6.).

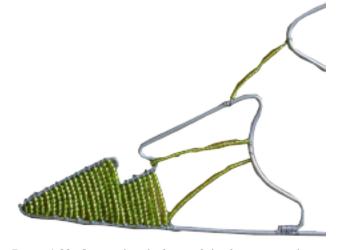


Figure 6.22: Corner detail of one of the first wire and bead clothes hanger model's

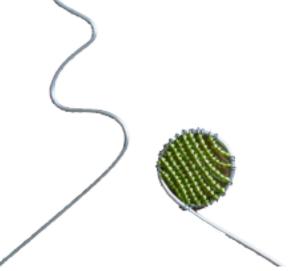


Figure 6.23: Joint detail of one of the first wire and beads clothes hanger model's



The final design was chosen for the visually strong circular extension that can be easily seen when displaying clothes. The construction was strengthened by bringing the two ends of the wire together to form the hook of the clothes

In order to emphasise the spatial height, the hook of the clothes hanger was elongated to produce a mass of vertical lines.

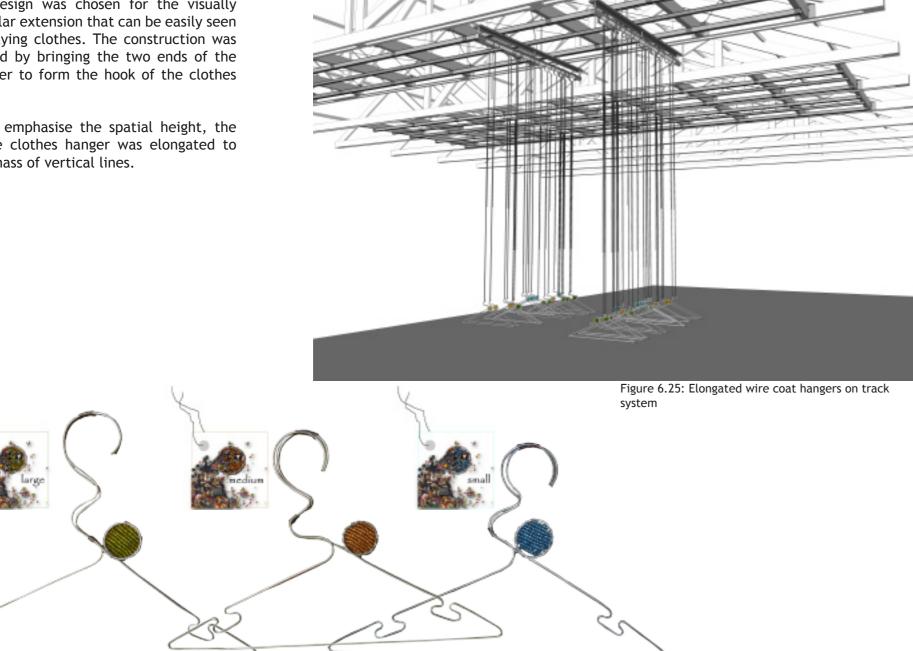


Figure 6.24: Wire coat hangers for fashion display with coloured glass beads corrulating with merchandise labels

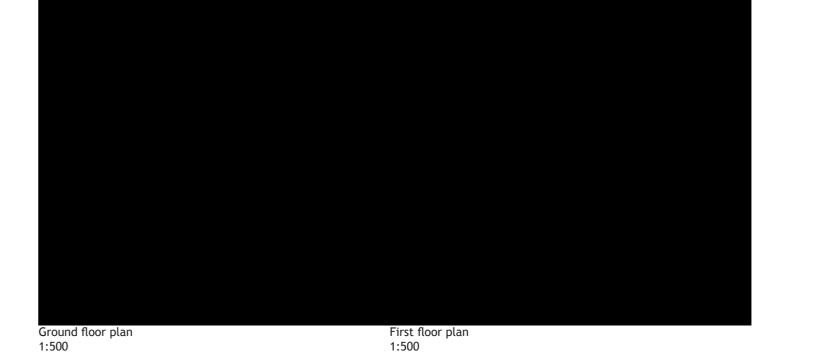


Figure 6.26: Electrical plan

6.7 Design proposal

Screen display system



Figure 6.27: Various backboards used to best display merchandise.

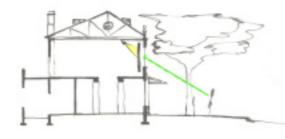
The second flexible track system is the screen display system. This system incorporates the existing Hillaldam 100 sliding door track system to mount custom-made screens to the interior walls of the buildings. Bent sheet metal will

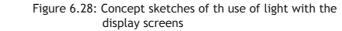
make hook-in shelves from which the merchan-

dise will be displayed.

Regarding the eastern walls in particular, many large windows make it difficult to use the walls for displays. The screens will make it possible to move the displays in front of or alongside the windows as required. Dishes made of glass beads and gemstones are most attractive when light is shining through them. By placing the screen displaying such items in front of the window, it allows the natural light to illuminate them during the day. At night, spotlights can be directed towards these items so that they can be seen on display from the street.

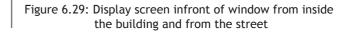












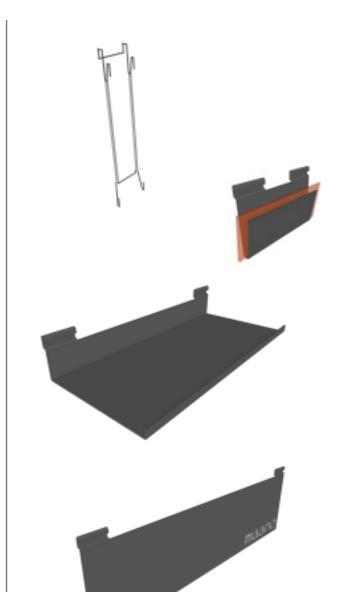
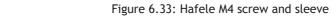


Figure 6.30: Accessories for the display screen that hook onto the wire mesh



Figure 6.31: Te



(add-on facility)

Length

End screw with M4 thread

Packing: 100 and 2000 pcs.

steel, can be used as end bolt

Figure 6.32: Screen detail of backboard being fixed into place

8 mm Cat. No. Nickel-plated 020.92.711 020.92.720

Burnished 020.92.113 020.92.122

10 mm

A100 GALVANISED STEEL SIDE FIXING BRACKETS

HILLALDAM TRACK SYSTEM

HILLALDAM TRACK SYSTEM

A100 GALVANISED STEEL TOP TRACK

30X30X5 ANGLE FRAME WELDED AT 45 DEGREES AT THE CORNERS

15mm SLEEVE, SMOOTH WITH M4 IN-

8mm STEEL END SCREW WITH M4

TERNAL THREAD

TREAD

Sleeve, smooth with M4 internal thread steel, suitable for double-sided

Length 15 mm 18 mm 22 mm

Bright 267.00.011 267.00.012 267.00.013 Galvanized 267.00.911 267.00.912 267.00.913

constructions

Packing: 100 and 1000 pcs.

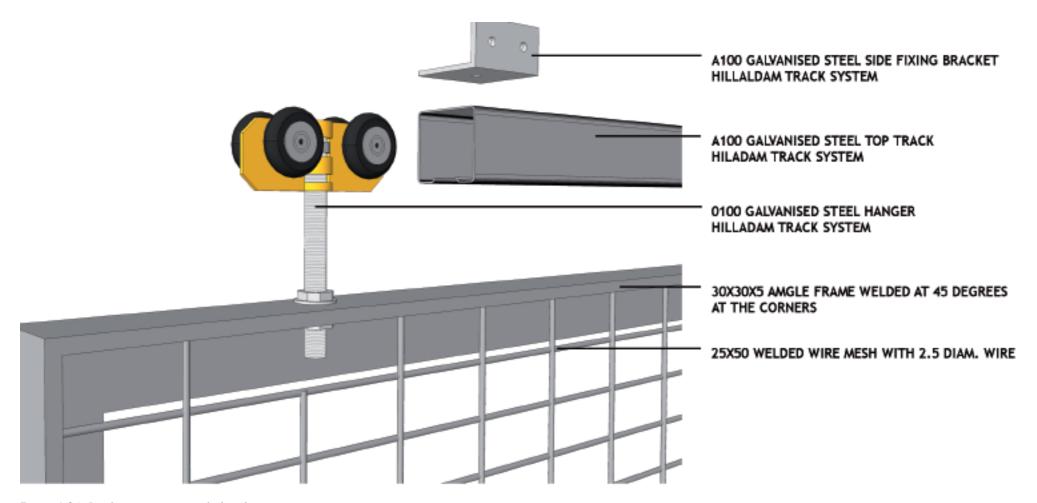


Figure 6.34: Display screen on track detail

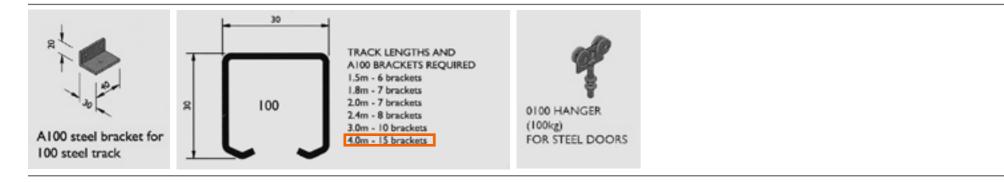


Figure 6.35: Components of the Hillaldam 200 sliding door top track system

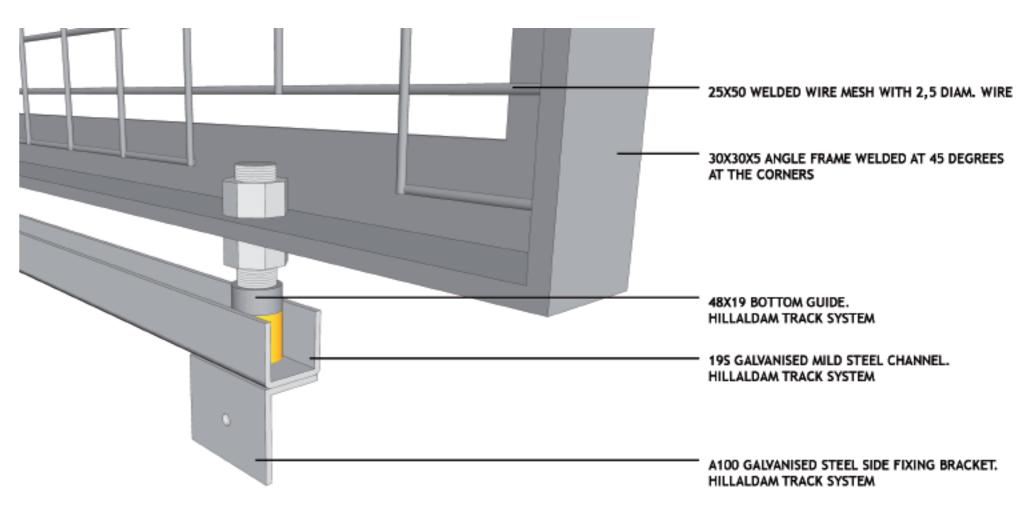
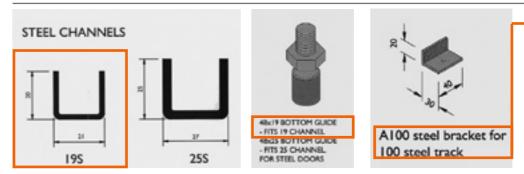


Figure 6.36: Display screen on bottom channel



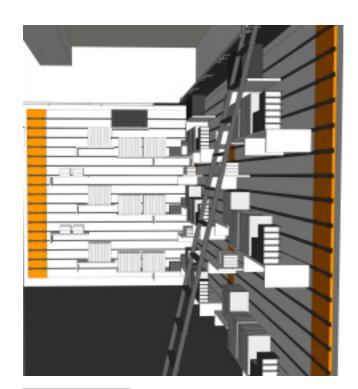
This system is designed for siding doors where the bottom rail is inserted into the floor to preserve a level threshhold. Normally used as a side fixing bracket, it will be used to attach the bottom channel to the wall. The top rail is designed to carry the load so these brackets will be sufficient to simply hold the bottom rail in place.

Although the 19S channel would be sufficient, the slightly larger 25S channel was chosen because the above mentioned bracket's shortest side is 25mm and will result in a neater finish.

Figure 6.37: Components of the Hillaldam sliding door bottom channel system

6.8
Design proposal

Sliding panel display



A standard shop fitting system called Deko-Wall from Hafele was used as a basis for the sliding bookshelf design. The system consists of 986 x 2 542 19 mm-thick panels, which are made of chipboard coated with melamine on both sides. The panels have horizontal grooves (88 mm apart), which are fitted with aluminium or PVC profile to stabilise them and serve to mount the hook-in elements.

Figure 6.38: Book corner in Maano

chandise. In order to give the system a unique branding, custom-made connecting panels and shelves were designed.

The shelf design was based on a traditional fabric still worn in Ghana by royalty, because of its easily recognisable 'African' character. As the pattern is broken down to its most basic component, one is left with an 'L'-shaped building

The shape and proportion of this building block dictated the form of the shelves. The shelves are fitted with hook-in elements and can slide into the desired composition. The composition may take the shape of the textile pattern or disintegrate into a less formal arrangement.

This system will support shelves that will display books, therefore the aluminium profile is chosen

for its higher maximum load-bearing capacity of 20 kg. White melamine was chosen because its

neutral character will not distract from the mer-

The connecting panels are designed as the entry point for the shelves' hook-in elements and will finish off the edges of the panels. They will be of similar construction to the panels, being made of chipboard coated with melamine on both sides. The branding image these connecting panels create is strengthened by colouring them the orange colour that dominates the textiles which inspired this design.



Figure 6.39: Patern found on textiles from Ghana.

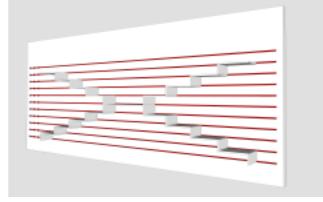


Figure 6.40: Concept model indicating shelves in pattern

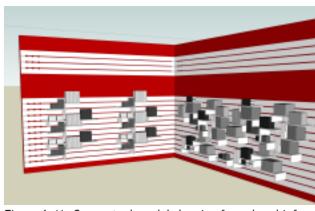


Figure 6.41: Conceptual model showing formal and infor mal shelf configurations.

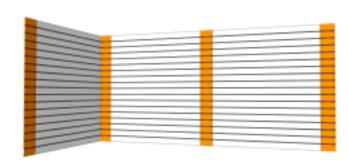


Figure 6.42: Diagram showing the Hafele Deco-wall with custom-made connector pannels

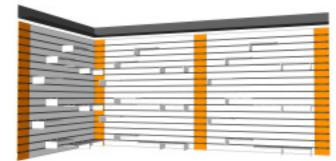


Figure 6.43: Custom made top shelf and slidding shelves.

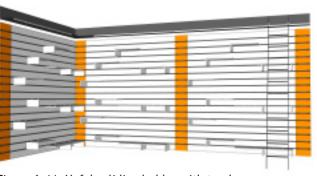
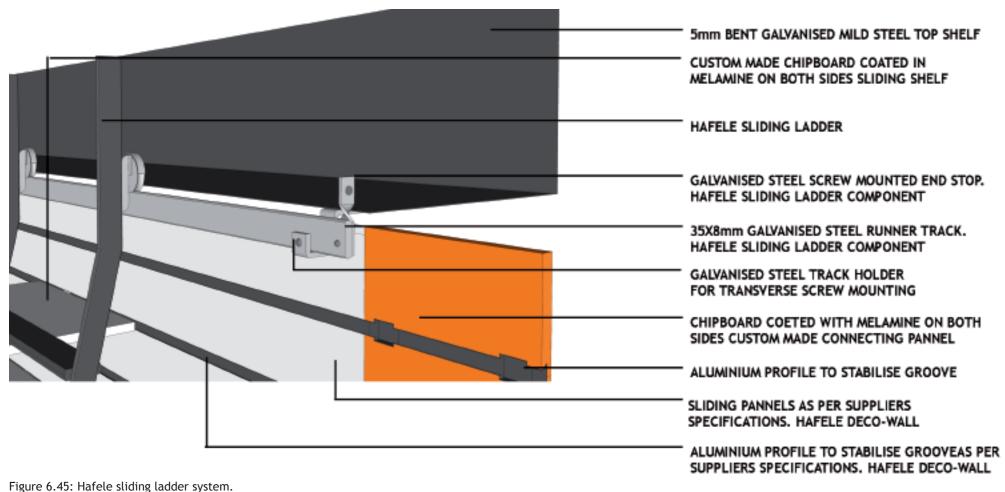


Figure 6.44: Hafele sliding ladder with track



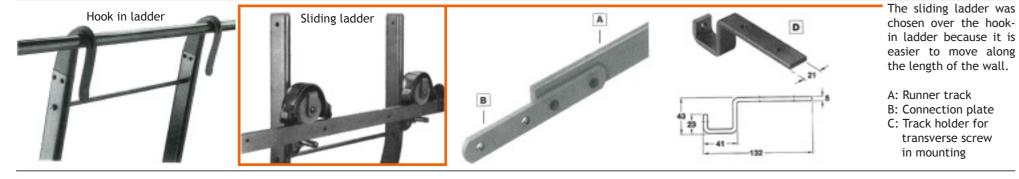


Figure 6.46: Components of the Hafele sliding ladder system.

6.9 Design proposal

Technical drawings



1:500

Figure 6.47: Section A-A



Chapter 7

Conclusion



The urban context has dictated that a pedestrian spine is appropriate for development on Paul Kruger Street which will encourage commercial activities along this urban spine. The response to the physical context is guided by the buildings architecture. The front facade has been restored to its original appearance to preserve its distinctive architectural style and use of local material. The remaining structure is of little architectural value which has allowed more freedom changes.

Steel and aluminium track systems are used for the display and lighting systems respectively. The result is that maximum flexibility has been achieved and a clear distinction between the old and the new has been established. The sliding screens cover the walls, creating a new layer on the building envelope. Lighting tracks emphasise the repetition of the trusses and luminaries can be directed where additional light is required.

The combination of activities is suited to the collaboration of people with various skills within the same genre of industry and a support structure is in place for individuals to develop their skills and businesses.

Appendix A

Educational institutions

Educational institutions are listed according to street address, numbered in correlation to the map of educational institutions found in Chapter 2.1 and colour-coded in accordance with the type of institution.

	BUILDING	FUNCTION	ADDITIONAL INFORMATION				
Vis	Visagie						
1	Hamilton Primary School	Primary Education	Gr 1-7 (6-13yrs), girl's school				
Ski	nner						
2	UNISA: South African association of Political Science & African Futures Institute	Tertiary Education	Government				
3	Tshwane University of Technology: Institute for Economic Research on Innovation,	Tertiary Education	Government				
Н	Black Beauty Hair Salon	Informal Training	Hair				
S	Edcon Business College	Tertiary Education	PC Training & Business College				
Sch	oeman	•					
6	Tshwane South College, Citicol Twin Palms Training	Tertiary Education					
7	Lyceum College of Higher Education	Tertiary Education					
8	TICBS for Computer and Business Studies	Tertiary Education	PC Training & Business College				
9	Damlin Tshwane city campus	Tertiary Education					
10	Credo College: Training Academy	Tertiary Education	(mon-sat) Dressmaking, Fashion Design, Executive Secreterial with computer training, Business Manager with computer training				
11	Ebenzer Computer & Business College	Tertiary Education	PC Training & Business College				
12	Procomputrain	Tertiary Education	PC Training & Business College				
Pre	torius						
13	Rosebank College Pretoria Campus	Tertiary Education					
14	Sasol School of Music						
15	Jacaranda Pre-Primary School	-6yrs					
Chı	ırch	-					
16	Greenwood College	Tertiary Education					
17	Pretoria Technical College	Tertiary Education					
Chu	ırch Square	_					
32	Platinum: Graduate School of Business	Tertiary Education	PC Training & Business College				

Ver	meulen		
26	Tekkies	3 months-Grade 0 (creche)	Meals, Bilingual, Grass play area, Extra mural activities
Pro	es		
30	Meridian College	Tertiary Education	
31	Confidence College	Primary and Secondary Education	Grades 1-12
38	Pretoria Institute for Information Technology	Tertiary Education	
37	SA College	Tertiary Education	
Stru	uben		
35	PEN After-care and Development Center	Primary and Secondary Education	Grades 1-12, Private
34	National SA War College	Government	
33	Presererance College	Tertiary Education	
Boo	om		
32	Tshwane University	Tertiary Education	
36	Prinshoff School	School for the visually impaired	
43	Credo Primary School	Primary Education	Grades 1-7
Pot	gieter		
27	Tshwane South College Inner City Campus: Early childhood development center	Creche, Pre-primary, Gr R, Gr 1-3	Daycare, aftercare, speech and occupational therapy, gymnasium, karate, computer
Sch	ubart		
Н	Hair Training	Informal trade	Hair
Bos	man		
28	Eendracht Laerskool	Primary Education	Grades 1-7 (6-13 yrs)
4	Molem Building (Target High School)	Secondary Education	Grades 8-12, Private
Pau	l Kruger		
29	Princess Park College	Primary and Secondary Education	Grades 1-12
44	Langehoven	Secondary Education	Grades 8-12

And	dries		
22	El Shadai	Pre-primary school, creche, aftercare	0-6 yrs
25	A.T. computer Schools	Tertiary Education	PC training and business college
Н	School of hair and skills development	Informal training	Hair
39	Progress College	Primary Education	Primary
var	n der Walt		
23	Educan Business College	Tertiary Education	
24	Academy International: Computer and commercial training institute	Tertiary Education	
Н	Hair and skin salon managment	Informal training	Hair
Н	Hair	Informal training	Hair
Pri	nsloo		
20	Free computer training	Tertiary Education	Small admin fee
du	Toit		
18	Tshane North Cmpus	Tertiary Education	Snowflake bake for profit community project, Bon Appetit training restaurant, Office training
19	Kid's Corner: Early learning canter	Pre-primary Education	6mth-6yrs (7h15-17h15)
Gei	rard Moerdyk Street		
41	Learskool Oosteind	Primary Education	Grades 1-7, aftercare
40	Laerskool Presda Mea Vota	Primary Education	Grades 1-7
Jac	ob Mare Street		
42	ED-u-college	Secondary Education	Grades 8-12

Appendix B

Existing building analysis

This appendix lists only the existing building materials found onsite according to structure, building and interior space.

	WHERE	MATERIAL	DESCRIPTION
Substructure			
Foundation wall	Main building (figure 1 & 2)	Stone	780x170 elev.
	Closed in verandah (figure 3)	Red brick	220x105x75
Superstructure			
Stone cladding (figure 2)	Northern Building: Northern & Western Facades	Stone	Stone cladding is applied to the wall where the stone plinth is not of a satisfactory visual standard. 780x170 elev.
Pavement	Northern building (figure 4)	Blue slate	Traces of original Slate pavement is found infrount of doors and windows.
	Padestrian walkway (figure 5)	precast concrete slabs	various sizes
Brick walls	All Builings on property (figures 1, 3 & 6)	Red Brick	Standard 220x105x75
Venestration	Western facade: Ground Floor (figure 7)	Timber Frame	
	First Floor (figure 8)	Aluminium frame (not original)	Brown
Doors	Western facade (figure 9& 10)	Timber frame	
Column	Southern building ground floor. (figure 11)	Reinforced concrete	
Pillar	Western facade (figure 9)	Base painted brown	
Brackets		Timber	
Cornice profiles	Fond on western facade and partly on northern and outhern facades,	Concrete	
Roof	All Builings on property	S-profile corrugated sheets	



















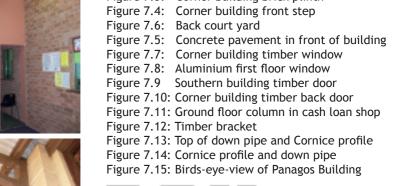












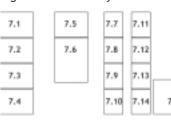


Figure 7.1: Corner building down pipe Figure 7.2: Corner building stone plinth Figure 7.3: Corner building brick plinth



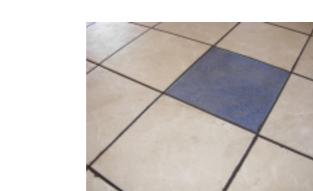


	WHERE	MATERIAL	DESCRIPTION
Interior Finishes:	Ground floor		
Mzintho's Kitchen (Corner building)	Floor (figure 19)	Ceramic tiles	300x300 Light grey & dark blue
	Wall (figure 16)	Painted plasterd	peach
		Wall tiles	Yellow with green leaf motif
	Skirting	Painted timber	200x18, Dark blue
	Ceiling (Figure 17)	Painted Oregon pine boards	white
	Decorative ceiling center (figure 17)	Painted pressed steel	Dark Blue
	Cornice	Painted timber	A water based white paint









	WHERE	MATERIAL	DESCRIPTION
Muti shop (Southern building)	Floor	Vinyl floor tiles	Blue, yellow & green
	Wall	Plastered and painted brick	Light green
	Skirting	None	N/A
	Pillar	Plastered and painted brick	Light green
	Ceiling	Gypsum board	A water based white paint



figure 20



figure 21



figure 22

		7
e Calibra	741	5000000000
With Court		<u> </u>
	建建筑	
	G STATE OF	12.27

Figure 7.16: Counter with mosaic finish and pendant lights
Figure 7.17: Painted Oregon Pine ceiling with pressed steel decorative ceiling center
Figure 7.18: Cornice detail
Figure 7.19: 300 x 300 light grey and blue ceramic tiles

Figure 7.20: Two beams and gypsum ceiling in Muti shop
Figure 7.21: Vinyl floor and wall detail
Figure 7.22: Cornice detail

	WHERE	MATERIAL	DESCRIPTION
Cash loans (Southern building)	Floor	Carpet tiles	Dark grey
	Wall	Plastered and painted brick	Peach
		Brick	later addition
	Skirting	Painted timber	108x18, peach
	Pillar	Plastered and painted reinforced concrete	Peach
	Ceiling	Gypsum board	A water based white paint











	WHERE	MATERIAL	DESCRIPTION
Storage (Southern building)	Floor	Wall-to wall carpet	Damaged Grey brown carpet
	Wall	Painted plaster	A water based peach coloured paint
	Skirting	none	n.a.
	Pillar	Painted Plaster	A water based white paint
	Ceiling	Gypsum board	A water based white paint
	Cornice	Painted timber	Painted with a white water-based paint



figure 27



figure 28



figure 29

Figure 7.23: The Cash loans shop where the original internal wall has been partially removed
Figure 7.24: Detail of gypsum ceiling, original wall and brick curtain wall
Figure 7.25: Tomber window detail
Figure 7.26: Veiw of entrance

7.22

Figure 7.27: Detail of pillar
Figure 7.28: Detail of window and cornice
Figure 7.29: Damaged carpets laid on uneven surface

pg 118 pg 119

	WHERE	MATERIAL	DESCRIPTION
Interior Finishes:	First Floor		
Methodist chuch (Corner Building)	Floor	Carpet tiles layed ontop of Oregon Pine floor boards	Grey-brown
	Wall	Painted plastered	A water based white paint
	Skirting	Painted timber	200x18 An oil based light grey paint
	Ceiling	Gypsum board	A water based white paint
	Cornice	Painted timber	PAinted with a light blue, oil-based paint









Figure 7.30: Church Hall on first floor of corner building
Figure 7.31: Gypsum ceiling with trap door and fluorescent tube light fixture
Figure 7.32: Skirting detail
Figure 7.33: Dry wall and carpet detail

	WHERE	MATERIAL	DESCRIPTION
Appartments (Southern building)	Bedrooms and living area foors	Wall-to-wall carpets	various
	Kitchen floor	Ceramicfloor tiles	150x150, White
	Wall: Living area : Bedroom	Water based paint	: White : Yellow
	Skirting	Painted timber	200x18, Pale blue
	Ceiling	Gypsum board	Painted with a white waterbased paint
	Cornice	Painted Timber	Painted with an oil-based light blue paint







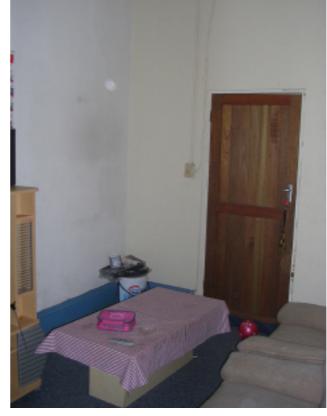


Figure 7.34: Living area of pastors apartment
Figure 7.35: Detail of where two carpets meet
Figure 7.36: Oregon Pine ceiling in bathroom
Figure 7.37: Kitchen in apartment

Appendix C

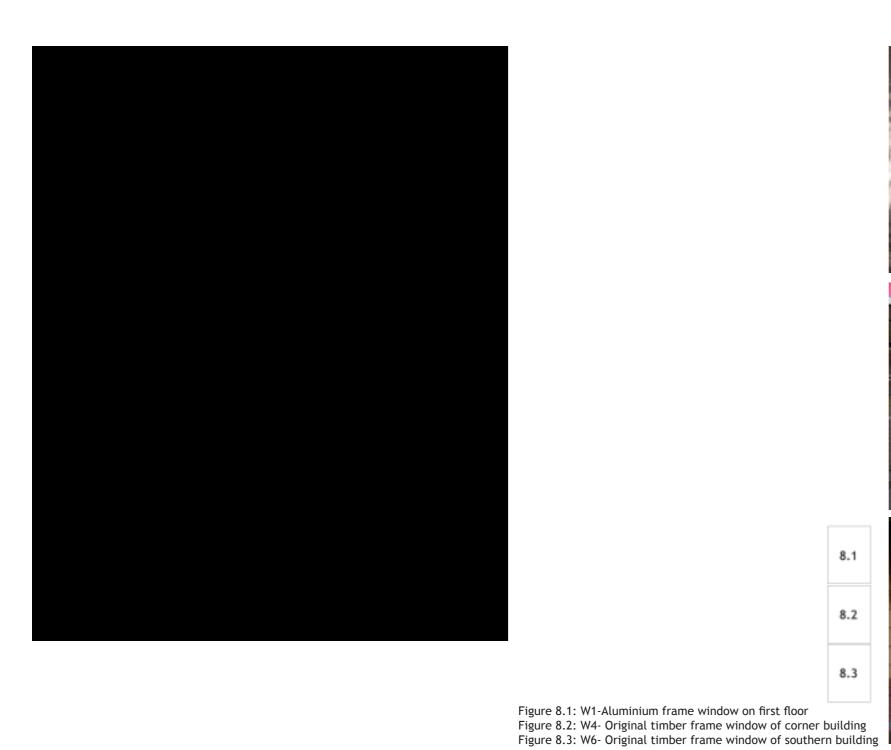
Maano website

The mini disk contains a simulation of the Maano website that was discussed in Chapter 6.4.



pg 125 Appendix D

Schedules









8.1

8.3









Figure 8.4: D7- Original timber double door Figure 8.5: D4- Original timber door and window Figure 8.6: D1- Aluminium folding doors

'	-1	Ю	Ю	П	
ルビ		_	.7		

Chapter 1

List of illustrations

Figure 1.1:	*Pretoria CBD. 2007. Pretoria, South Africa.
Figure 1.2:	*View of Union Buildings from Struben Street. 2007. Pretoria, South Africa
Figure 1.3:	Women making grass baskets. www.africanhome.co.za. (20/05/2007)
Figure 1.4:	*Men making wire ornaments. 2007. Eighteenth Avenue, Pretoria
Figure 1.5:	*Site plan of educational institutions in the immediate context of the Panagos Building. 2007. Pretoria, South Africa
Figure 1.6:	Panagos, D. 1939. Corner view of Panagos Building. Pretoria, South Africa
_	
Chapter 2	
Figure 2.1:	*Educational institutions in Pretoria CBD. 2007. Pretoria, South Africa
Figure 2.2:	*SA War College on Struben Street. 2007. Pretoria, South Africa
Figure 2.3:	*Panagos Building with Telkom Towers behind. 2007. Pretoira South Africa.
Figure 2.4:	*Heritage buildings in the immediate context of the Panagos Building. 2007. Pretoria, South Africa
Figure 2.5:	*Old Jewish Synagogue on Paul Kruger Street. 2007. Pretoria, South Africa
Figure 2.6:	*Jansen House. 2007. Pretoria, South Africa
Figure 2.7:	National Library Head office. (Le Roux 1991:19)
Figure 2.8:	*Use of buildings in the immediate context of the Panagos Building. 2007. Pretoria, South Africa
Figure 2.9:	James Hall Transport Museum. 1922. Tram on Paul Kruger Street. Johannesburg
Figure 2.10:	*Urban proposal for immediate context of Panagos Building, Pretoria, South Africa. 2007
Figure 2.11:	*Timeline illustrating the life of the Panagos Building. 2007
Figure 2.12:	*Redrawn plans from Tshwane City Council for renovations on erf 102. 4628/40 approved on 19 June 1940
Figure 2.13:	*Redrawn plans from Tshwane City Council for renovations on erf 102. 7995/46 approved on 28 August 1946.
5	

- Figure 2.14: *Redrawn plans from Tshwane City Council for the building of a cold room on erf 102. 3243/52 approved on 1 July 1952 *Evaluation of existing Panagos Building. 2007. Pretoria, South Africa *Collage of eastern, ground floor elevation of existing southern building. 2007. Pretoria, South Africa
- Figure 2.17: *South building column base. 2007. Pretoria, South Africa
 Figure 2.18: *Corner building column base. 2007. Pretoria, South Africa
- Figure 2.19: Bray, S. *Panagos Building*. 1900s. Pretoria, South Africa
- Figure 2.20: *Collage of eastern, ground floor elevation of existing corner building. 2007. Pretoria, South Africa
- Chapter 3
- Figure 3.1: *Site plan. *Panagos Building's immediate surroundings*
- Chapter 4
- Figure 4.1: *Glass bead and wire aloe. 2007. Eighteenth Avenue, Pretoria
- Figure 4.2: *Men making wire ornaments. 2007. Eighteenth Avenue, Pretoria
- Figure 4.3: Glass bead bowl. www.africanhome.co.za. (21/06/2007)
- Figure 4.4: Wire protea candle holder. www.africanhome.co.za. (21/06/2007)
- Figure 4.5: Wire and bead baobab. www.africanhome.co.za. (21/06/2007)
- Figure 4.6: African craft20: wire table. www.pingmag.net. (04/08/2007)
- Figure 4.7: African craft08: buckskin handbag. www.pingmag.net. (04/08/2007)
- Figure 4.8: **Scoobi and bead bracelet**. www.usisicraft.co.za. (22/04/2007)
- Figure 4.9: **Scoobi and recycled record handbag.** www.usisicraft.co.za. (22/04/2007)
- Figure 4.10: *Imiso ceramics: earring 1.* www.imisoceramics.co.za. (25/04/2007)
- Figure 4.11: *Imiso ceramics: earring 2.* www.imisoceramics.co.za. (25/04/2007)
- Figure 4.12: **NHD jewellery: twin round on chocolate suede choker.** www.nhd?. (10/08/2007)
- Figure 4.13: **NHD jewellery: round/one.** www.nhd?. (10/08/2007)
- Figure 4.14: Beads Entwined. *Bead board*. 2007. Pretoria
- Figure 4.15: **NHD bathroom: soap dish.** www.nhd? . (10/08/2007)
- Figure 4.16: *Imiso ceramics: tea set*. www.imisoceramics.co.za. (25/04/2007)
- Figure 4.17: *NHD sundry: piggy bank*. www.nhd? . (10/08/2007)
- Figure 4.18: *Egg and teaspoon holder*. www.africanhome.co.za. (20/05/2007)
- Figure 4.19: NHD jewellery: round/two. www.nhd? . (10/08/2007)
- Figure 4.20: NHD jewellery: square/six. www.nhd? . (10/08/2007)
- Figure 4.21: NHD jewellery: one square on black suede choker. www.nhd? . (10/08/2007)
- Figure 4.22: *Imiso ceramics: once off 8.* www.imisoceramics.co.za. (25/04/2007)
- Figure 4.23: *The Underberg Studio: vase 3.* www.underbergstudio.co.za. (10/08/2007)
- Figure 4.24: *The Underberg Studio: vase 4.* www.underbergstudio.co.za. (10/08/2007)
- Figure 4.25: African craft 18b: vase. www.pingmag.net. (04/08/2007)
- Figure 4.26: Nettleton. Umgexo (medicine necklace) of glass beads and test tubes 9 cm x 66 cm. 2003:52

- Figure 4.27: Nettleton. Tsonga-Shangana, South Africa nceka (shoulder wrap-over cloth) textile and safety pins. 2003:53
- Figure 4.28: Button wall light. www.usisicraft.co.za. (22/04/2007)
- Figure 4.29: African craft09: handbag. www.pingmag.net. (04/08/2007)
- Figure 4.30: African craft07: recycled plastic bag ottoman. www.pingmag.net. (04/08/2007)
- Figure 4.31: Nettleton. Xhosa (fringo), South Africa textile with beads, buttons and embroidery. 2003:55

Chapter 5

- Figure 5.1: *Kim Sacks. 2007. *Grass baskets*. Johannesburg
- Figure 5.2: *Kim Sacks. 2007. *Kim Sacks's white ceramics*. Johannesburg
- Figure 5.3: *Kim Sacks. 2007. *Headrest and bead necklace*. Johannesburg
- Figure 5.4: *Kim Sacks. 2007. *Ceramics, mirrors and wall hanging*. Johannesburg
- Figure 5.5: *Kim Sacks. 2007. **Shelley Mailsel ceramics on glass shelf**. Johannesburg
- Figure 5.6: *Kim Sacks. 2007. *Shelf display*. Johannesburg
- Figure 5.7: *Kim Sacks. 2007. *Ivory bangles*. Johannesburg
- Figure 5.8: *Kim Sacks. 2007. *Ivory bangles*. Johannesburg
- Figure 5.9: *Kim Sacks. 2007. Artvark cutlery display. Johannesburg
- Figure 5.10: *Kim Sacks. 2007. Kim Sacks's white ceramics in glass display case. Johannesburg
- Figure 5.11: *Kim Sacks. 2007. *Bead baskets*. Johannesburg
- Figure 5.12: *Kim Sacks. 2007. *Beads*. Johannesburg
- Figure 5.13: *Kim Sacks. 2007. Katherine Glenday ceramic display. Johannesburg
- Figure 5.14: *Delogoa. 2007. Stacking display tables on castor wheels. Pretoria
- Figure 5.15: *Delogoa. 2007. *Pay counter*. Pretoria
- Figure 5.16: *Delogoa. 2007. Various bowls. Pretoria
- Figure 5.17: *Delogoa. 2007. Ceiling display. Pretoria
- Figure 5.18: *Earth, Fire and Ice. 2007. *Crystal balls*. Johannesburg: Monte Casino
- Figure 5.19: *Earth, Fire and Ice. 2007. Lockable cabinets. Johannesburg: Monte Casino
- Figure 5.20: *Earth, Fire and Ice. 2007. *Cantilever shelves*. Johannesburg: Monte Casino
- Figure 5.21: *Earth, Fire and Ice. 2007. Built-in display. Johannesburg: Monte Casino
- Figure 5.22: *Earth, Fire and Ice. 2007. *Display table*. Johannesburg: Monte Casino
- Figure 5.23: *Earth, Fire and Ice. 2007. *Diagram showing the shop layout*. Johannesburg: Monte Casino
- Figure 5.24: *Sally Buttons. 2007. *Display window*. Pretoria: Woodlands Mall
- Figure 5.25: *Various mannequins*. www.thecoolhunter.net. (19/07/2007)
- Figure 5.26: *Accessorize. 2007. *Foam dog head*. Pretoria: Woodlands Mall
- Figure 5.27: *Beads entwined. 2007. *Indonesian hand mannequin*. Pretoria
- Figure 5.28: *Beads entwined. 2007. *Indonesian bust mannequin*. Pretoria
- Figure 5.29: *Big Blue. 2007. *Glass display counter*. Johannesburg: Monte Casino
- Figure 5.30: *Big Blue. 2007. *Glass display counter*. Johannesburg: Monte Casino
- Figure 5.31: *Big Blue. 2007. *Laser cut, powder coated, steel tree*. Johannesburg: Monte Casino *Big Blue. 2007. *Plastic hand mannequins*. Johannesburg: Monte Casino
- Figure 5.33: Wire clothes hanger. www.shelving 2000.co.za. (02/06/2007)

- Figure 5.34: *Pearl clothes hanger*. www.tassels.co.za. (18/07/2007) Figure 5.35: Laser-cut cityscape clothes hanger. www.thecoolhunter.net. (19/07/2007) Figure 5.36: Russell. Reichstag parliament building, Germany. Graffiti of Russian soldiers. 1999:104 Figure 5.37: Russell. Reichstag parliament building, Germany. After World War II. 1999:103 Figure 5.38: Reichstag parliament building, Germany. Glass dome ans skylight. www.voyages-photos.fr/berlin/eberlin2.htm. (06/05/2007) Figure 5.39: Reichstag parliament building, Germany. *Entrance*. www.jpgmag.com. (06/05/2007) Figure 5.40: Reichstag parliament building, Germany. *Glass dome at night*. www.jpgmag.com. (06/05/2007) Chapter 6 *Site plan of Panagos Building. 2007 Figure 6.1: *Plan of Panagos Building. 2007 Figure 6.2: *Demolision plan. 2007 Figure 6.3: Figure 6.4: *Experimentations with wire. 2007 *Various font styles. 2007 Figure 6.5: Figure 6.6: *First branding concept: Post card hand out. 2007 *Second branding concept: Business card hand out and fashion label. 2007 Figure 6.7: Figure 6.8: *Final branding concept. 2007 *Merchandise label cut out with fold and cut lines. 2007 Figure 6.9: *Final Business card and handout card design. 2007 Figure 6.10: Figure 6.11: *Maano website. 2007 *Hanger on truss detail. 2007
- Figure 6.12: *Track system detail. 2007 Figure 6.13: Figure 6.14: Components. 1998. Hillaldam sliding door system's catalogue. Figure 6.15: *Hillaldam 400 sliding door track attached to channel beam. 2007 Figure 6.16: *Travelling column on Hillaldam 400 sliding door track system. 2007 Figure 6.17: Components of the LTS low-voltage pendant and track lights. 2001. LTS catalogue. p.17 & 33 Figure 6.18: *Clothing rail light on hangers. 2007 Figure 6.19: Components of the Hafele rail light. 2000. Hafele catalogue. p.1688 Figure 6.20: LTS fastener 2. 2001. LTS catalogue. p.30 Figure 6.21: *Concept wire coat hangers. 2007 *Corner detail of one of the first wire and bead clothes hanger model's. 2007 Figure 6.22: Figure 6.23: *Joint detail of one of the first wire and beads clothes hanger model's. 2007 *Wire coat hangers for fashion display with coloured glass beads corrulating with merchandise labels *Elongated wire coat hangers on track system. 2007 Figure 6.25: Figure 6.26: *Electrical plan. 2007 *Various backboards used to best display merchandise. 2007 Figure 6.27: *Concept sketches of th use of light with the display screens. 2007 Figure 6.28:

*Display screen infront of window from inside the building and from the street. 2007

*Accessories for the display screen that hook onto the wire mesh. 2007

*Technical drawings for the construction of the sliding screens. 2007

Figure 6.29:

Figure 6.31:

Figure 6.32:	*Screen detail of backboard being fixed into place. 2007
Figure 6.33:	Hafele M4 screw and sleeve. 2000. Hafele catalogue. p.11
Figure 6.34:	*Display screen on track detail. 2007
Figure 6.35:	Components of the Hillaldam 200 sliding door top track system. 1998. Hillaldam sliding door system's catalogue.
Figure 6.36:	*Display screen on bottom channel. 2007
Figure 6.37:	Components of the Hillaldam sliding door bottom channel system. 1998. Hillaldam sliding door system's catalogue.
Figure 6.38:	*Book corner in Maano. 2007
Figure 6.39:	*Pattern found on textiles from Ghana. 2007
Figure 6.40:	*Concept model indicating shelves in pattern. 2007
Figure 6.41:	*Conceptual model showing formal and informal shelf configurations. 2007
Figure 6.42:	*Diagram showing the Hafele Deco-wall with custom-made connector pannels. 2007
Figure 6.43:	*Custom made top shelf and slidding shelves. 2007
Figure 6.44:	*Hafele sliding ladder with track. 2007
Figure 6.45:	*Hafele sliding ladder system. 2007
Figure 6.46:	Components of the Hafele sliding ladder system. 2000. Hafele catalogue. p.1565.
Figure 6.47:	*Section A-A
Figure 6.48:	*New ground floor plan
Figure 6.49:	*New first floor plan
Appendix A	
Figure 7.1:	*Panagos Building. 2007. Corner building's down pipe. Pretoria
Figure 7.2:	*Panagos Building. 2007. Corner building's stone plinth. Pretoria
Figure 7.3:	*Panagos Building. 2007. Corner building's brick plinth. Pretoria
Figure 7.4:	*Panagos Building. 2007. Corner building's front step. Pretoria
Figure 7.6:	*Panagos Building. 2007. Court yard behind the building. Pretoria
Figure 7.5:	*Panagos Building. 2007. Concrete pavement in front of building. Pretoria
Figure 7.7:	*Panagos Building. 2007. Timber window of corner building. Pretoria
Figure 7.8:	*Panagos Building. 2007. Aluminium first floor window. Pretoria
Figure 7.9:	*Panagos Building. 2007. Southern building timber door. Pretoria
Figure 7.10:	*Panagos Building. 2007. Corner building timber back door. Pretoria
Figure 7.11:	*Panagos Building. 2007. Ground floor column in cash loan shop . Pretoria
Figure 7.12:	*Panagos Building. 2007. <i>Timber bracket</i> . Pretoria
Figure 7.13:	*Panagos Building. 2007. Top of down pipe and Cornice profile. Pretoria
Figure 7.14:	*Panagos Building. 2007. Cornice profile and down pipe. Pretoria
Figure 7.15:	*Panagos Building. 2007. Birds-eye-view of Panagos Building. Pretoria
Figure 7.16:	*Panagos Building. 2007. Counter with mosaic finish and pendant lights. Pretoria
Figure 7.17:	*Panagos Building. 2007. Painted Oregon Pine ceiling with pressed steel decorative ceiling center. Pretoria

pg 133

Figure 7.18: *Panagos Building. 2007. Cornice detail. Pretoria

Figure 7.19: *Panagos Building. 2007. 300 x 300 light grey and blue ceramic tiles. Pretoria

Figure 7.20: *Panagos Building. 2007. Two beams and gypsum ceiling in Muti shop. Pretoria

Figure 7.21: *Panagos Building. 2007. Vinyl floor and wall detail. Pretoria *Panagos Building. 2007. Cornice detail. Pretoria Figure 7.22: *Panagos Building. 2007. The Cash loans shop where the original internal wall has been partially removed. Pretoria Figure 7.24: *Panagos Building. 2007. Detail of gypsum ceiling, original wall and brick curtain wall. Pretoria *Panagos Building. 2007. *Timber window detail*. Pretoria *Panagos Building. 2007. Veiw of entrance. Pretoria *Panagos Building. 2007. *Detail of pillar*. Pretoria *Panagos Building. 2007. Detail of window and cornice. Pretoria Figure 7.29: *Panagos Building. 2007. Damaged carpets laid on uneven surface. Pretoria *Panagos Building. 2007. Church Hall on first floor of corner building. Pretoria Figure 7.31: *Panagos Building. 2007. Gypsum ceiling with trap door and fluorescent tube light fixture. Pretoria Figure 7.32: *Panagos Building. 2007. *Timber skirting detail*. Pretoria *Panagos Building. 2007. Dry wall and carpet detail. Pretoria Figure 7.34: *Panagos Building. 2007. Living area of pastors apartment. Pretoria *Panagos Building. 2007. Detail of the joint where two carpets meet. Pretoria *Panagos Building. 2007. Oregon Pine ceiling in first floor bathroom of southern builing. Pretoria *Panagos Building. 2007. Kitchen in first floor apartment. Pretoria Figure 7.37: Appendix D *Panagos Building. 2007. W1-Aluminium frame window on first floor. Pretoria Figure 8.1: *Panagos Building. 2007. W4- Original timber frame window of corner building. Pretoria Figure 8.2: *Panagos Building. 2007. W6- Original timber frame window of southern building. Pretoria Figure 8.3: *Panagos Building. 2007. **D7- Original timber double door**. Pretoria Figure 8.4:

*All photo's, illustrations and renderings in this dissertation are original work by the author unless otherwise specified.

*Panagos Building. 2007. D4- Original timber door and window. Pretoria

*Panagos Building. 2007. D1- Aluminium folding doors. Pretoria

pg 134

Figure 8.5:

Figure 8.6:

pg 135

References

Chapter 1

- 1.1 Anonymous. *Personal interview with taxi driver*. March 2007
- 1.2 Anonymous. *Personal interview with vendor*. March 2007
- 1.3 Cairncross, B. 2001. First Field Guide to Gemstones of Southern Africa. Struik Publishers: South Africa.
- .4 D'angelo, A. SA to polish up on jewellery production. http://www.busrep.co.za. (12/03/2007)
- 1.5 Dinallo, N & Squire, L. (Editors) Frampton, K. 2005. *Globalization and Equity: Perspective from the Developing World*. Cheltenham, UK, North Hampton, MA, USA, Edward Elgar Publishing, Inc.

Chapter 2

- 2.1 Diamini, N. *Mobile fresh produce market in Diepsloot*. http://www.joburg.org.za/2005/jul/jul6_market.stm. (19/04/2007)
- Le Roux, S. 1991. Plekke en Geboue van Pretoria: n Oorsig van hulle argitektonies en stedelike belang. Edited by N.Botes. 2nd ed. Pretoria: City Council of Pretoria
- ..3 Ligthelm. 2005. *Informal Markets in Tshwane: Entrepreneurial Incubators or Survivalist Reservoirs?* Bureau of Market Research
- 4 Ligthelm. 2004. Size, Structure and Profile of the Informal Retail Sector in South Africa. Bureau of Market Research
- 2.5 Meiring, H. 1980. *Pretoria 125*. Translated by W. de Kock. Pretoria: Human and Rousseau

Chapter 3

3.1 **Zoning certificate: Remainder and portion of erf 102 Pretoria Central, Pretoria town planning scheme, 1974.** 2007. Tshwane city council: Department of Housing, City Planning and Environmental Management

Chapter 4

- .1 Fisher, A. 1992. Africa Adorn. Collins Harvill: London
- 4.2 African crafts. www.pingmag.net. (04/08/2007)

- 4.3 African home: background information. www.africanhome.co.za. (17/03/2007)
- 4.4 Nettleton, A., Charlton, J. & Rankin-Smith, F. 2003. *Engaging Modernities: Tranformations of the common place*. Johannesburg: The University of the Witwatersrand

Chapter 5

5.1 Russell, J.S. 1999. With his sleek, ecological design, Lord Norman Foster imbues the Reichstag with Germany's new self-image.

Architectural Record. July 1999: vol. 187: no. 7: 102 - 113

Chapter 6

- 6.1 Fisher, A. 1992. *Africa Adorn*. Collins Harvill: London
- 6.2 Hafele catalogue. 2000. University of Pretoria: Department of Engineering, Built Environment and Information Technology
- 6.3 *Hillaldam sliding door systems catalogue*. 1998. University of Pretoria: Department of Engineering, Built Environment and Information technology
- 6.4 LTS catalogue. 2001. University of Pretoria: Department of Engineering, Built Environment and Information Technology