



1. Introduction _ 2. Global Context _ 3. Surrounding Urban Context _ 4. The Building _
5. The Building's Response to Climate _ 6. S.W.O.T. Analysis



FIGURE 4.1 Photograph of the Standard Bank Centre from Church Street, looking West.

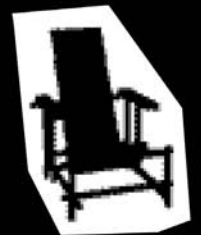


FIGURE 4.2 World map indicating position of South Africa, Gauteng Province and the City of Tshwane. FIGURE 4.3 Figure-ground study of Pretoria CBD indicating the position of the site.



FIGURE 4.2

4.1. Introduction

Interior architecture does not exist within a vacuum. It is determined by the architecture of the building in which it is positioned and on a larger scale it is influenced by the context in which the building is located. It is therefore important for the interior architect to understand the functioning of the city and to be familiar with the urban fabric. For the interior architect to adequately deal with the transition between interior and exterior and the interaction between old and new, the history and context of the specific site have to be investigated.

This chapter addresses the location and surroundings of the selected site for the design intervention. The description of site starts on a global scale and provides an analysis of the urban environment. The building and its function within the urban context are described, followed by an analysis of the interior qualities of the building.

4.2. Global Context

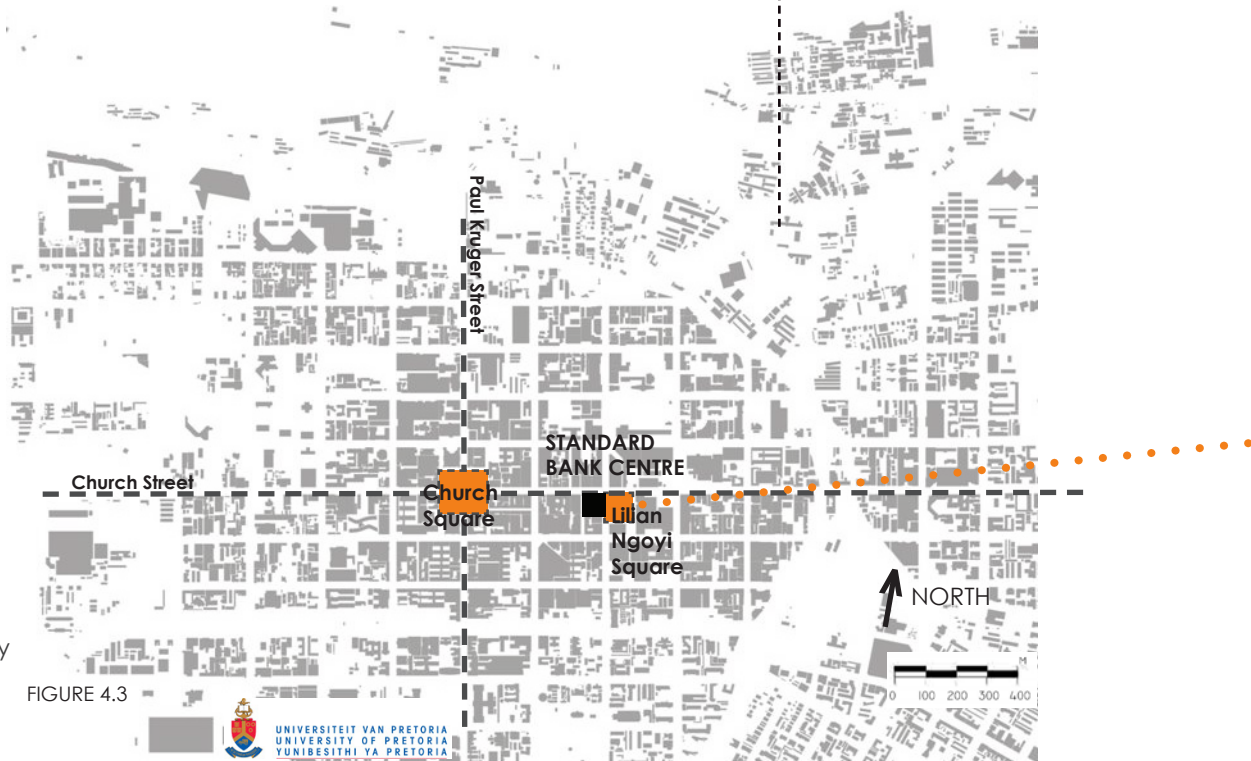


FIGURE 4.3

4.3 Surrounding Urban Context

4.3.1 Site Selection and Location

In order to give rise to the museum as an integral part of people's daily lives, an existing building situated next to a public square is chosen as location for the design intervention. This allows the museum to be in service of society and to further the museum's social role (Kreps, 2003:122).

The Standard Bank Centre on the South-western corner of Church Street and Van der Walt Street is the site for the design intervention.

The Standard Bank Centre is not situated in an exclusive museum precinct where someone on a purpose visit would expect to find a museum. Rather, the site proves to be an ideal location for a surprising museum encounter that adds excitement to a person's daily activities in the city. The building is positioned on the corner of two major pedestrian streets. The abundance of informal trading activities on these routes ensures that a large volume of pedestrian traffic moves into and through the building. The Lilian Ngoyi Square is across the street from the Standard Bank Centre, allowing activities and exhibitions of the New Satellite Museum to overflow onto the square.

FIGURE 4.4 Aerial photograph indicating the location of the Standard Bank Centre and surrounding street names.

“Museums need not be sterilised in cultural centres isolated in cultural parks,”

- Michael Brawne (1964:9)



FIGURE 4.4

FIGURE 4.5 Three-dimensional digital image looking South-West towards the site, giving an indication of height and position of surrounding buildings.

FIGURE 4.6 Arial photograph with street names and names of surrounding buildings. FIGURE 4.7 View of Standard Bank Centre from Church Street looking East. FIGURE 4.8 View of Standard Bank Centre from Central Street looking North.

FIGURE 4.9 View of Standard Bank Centre from Pretorius Street looking North.

Though not perceived from the outside, the atrium space gives the building its identity and plays an important role in the spatial organization and orientation inside the building (Bednar, 1986:70). The building functions efficiently both as a place where people rush through and also where others linger while doing window shopping or waiting for friends and colleagues.

4.3.2 Surrounding Buildings

The Standard Bank Centre is surrounded by buildings functioning as offices, retail spaces and residential units. The target market of the new satellite museum is the existing users of the area surrounding the Standard Bank Centre and Lilian Ngoyi public square.

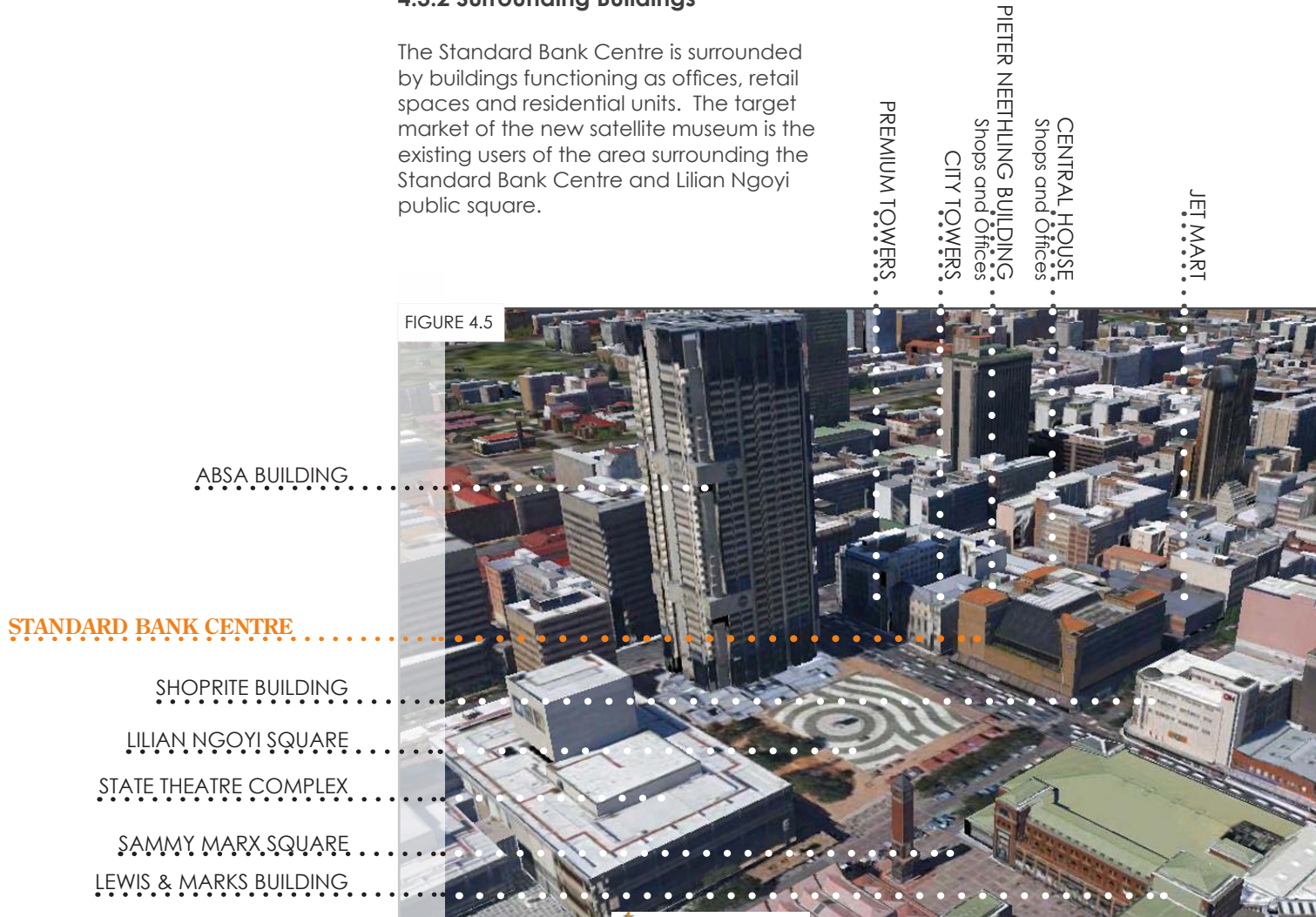
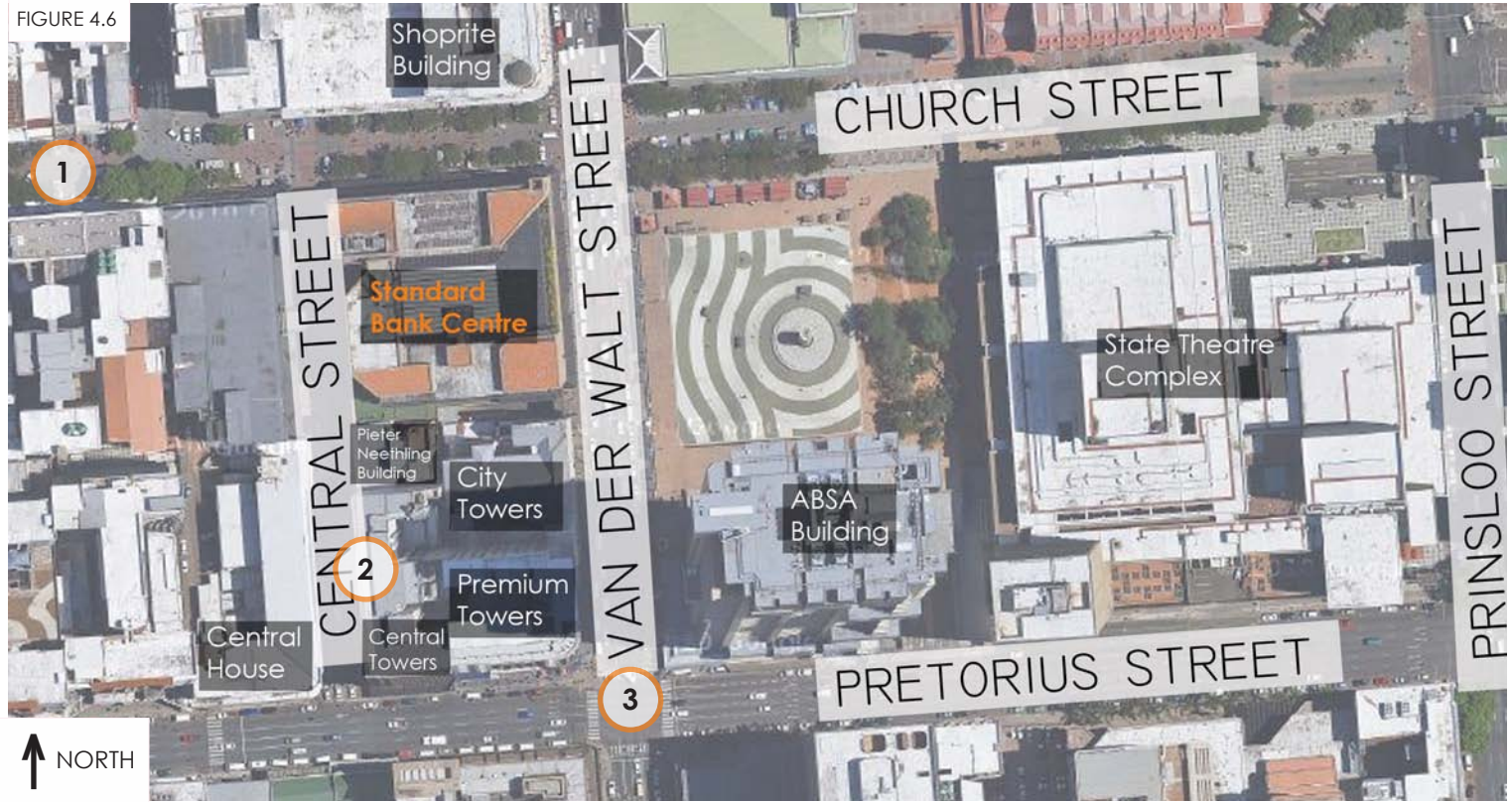


FIGURE 4.5

FIGURE 4.6



1



FIGURE 4.7

2



FIGURE 4.8

3



FIGURE 4.9

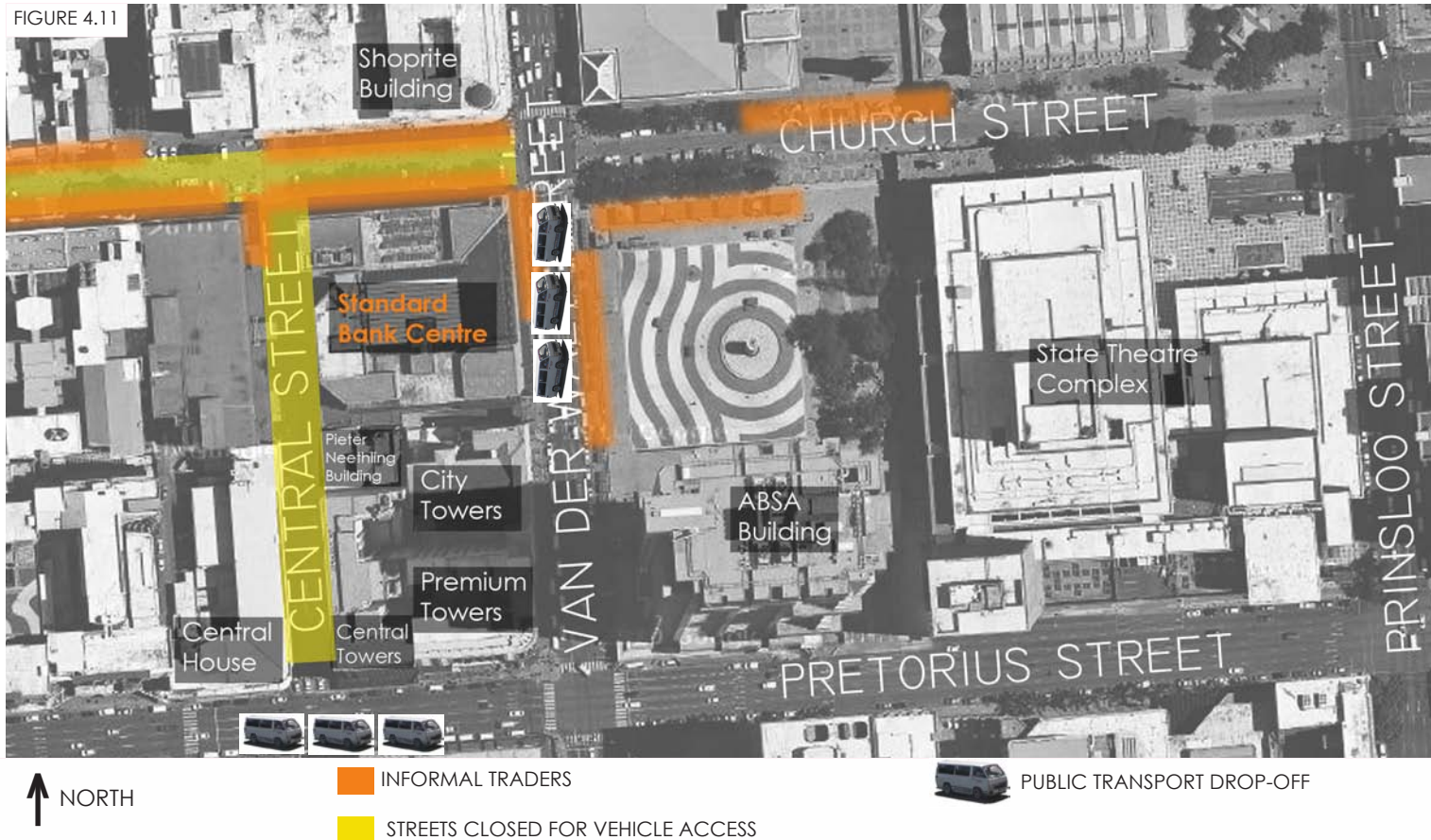
FIGURE 4.10 Digitally modified photograph of the Eastern facade of the Standard Bank Centre with informal trade stands next to the Lilian Ngoyi Square. FIGURE 4.11 Aerial photograph indicating elements that contribute to pedestrian activity around the building. FIGURE 4.12 Photograph of informal traders in Church Street with the Standard Bank Centre in the background.

FIGURE 4.10



4.3.3 The building in the urban context

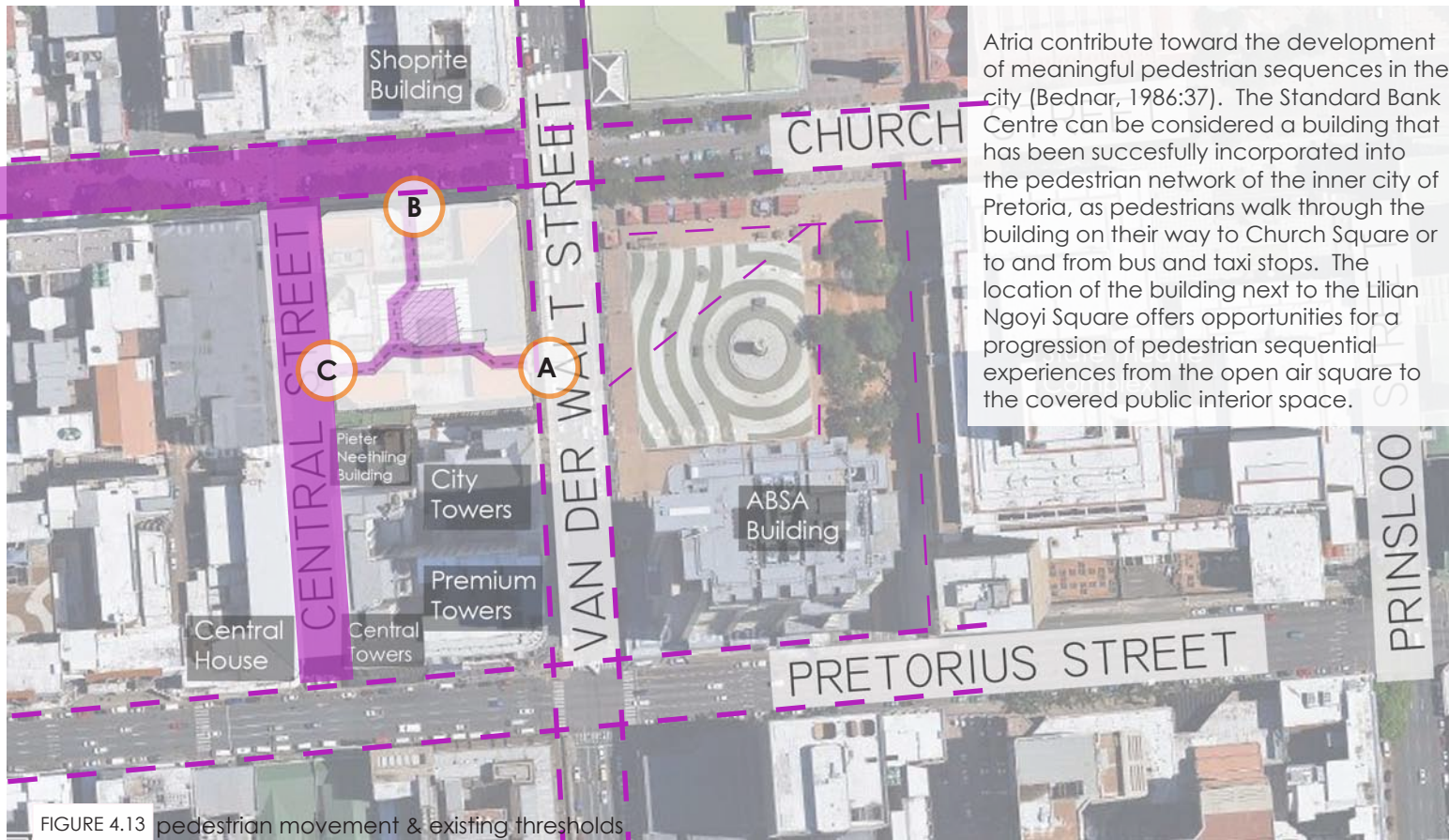
FIGURE 4.11





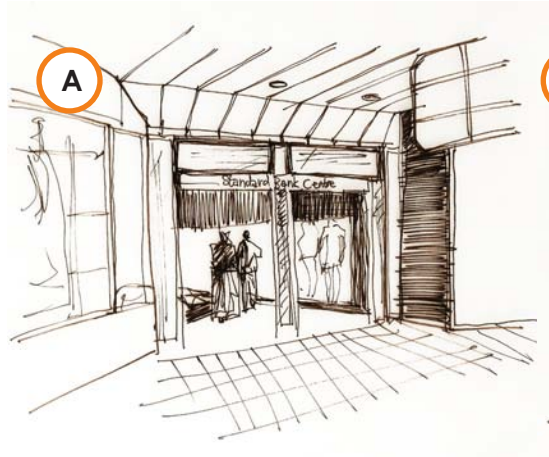
“Apart from formal exhibitions there are all kinds of exhibition-making going on. Exhibition-making is an innate activity: everyone’s home is an exhibit in some way, and people display objects to inform themselves and others about their lives and needs. People are instinctively adept at public display: arrangements of personal possessions, clothes and gestures constantly declare a set of values, attitudes and aspirations. A market stall or street trader’s cart is habitually organized to communicate vividly in order simply to make a living. Here decisions about structure, placement, colour and light are not designed as such, but are rather learned as part of a trade. These are casual exhibitions which happen as part of the textures of every day life. In contrast, what museums do is highly constructed: they clear space and make comments on objects - which all of a sudden take on a new value because of this ‘construct’ - because of how they are contextualized.”

(Dernie, 2006:6)



Atria contribute toward the development of meaningful pedestrian sequences in the city (Bednar, 1986:37). The Standard Bank Centre can be considered a building that has been successfully incorporated into the pedestrian network of the inner city of Pretoria, as pedestrians walk through the building on their way to Church Square or to and from bus and taxi stops. The location of the building next to the Lilian Ngoyi Square offers opportunities for a progression of pedestrian sequential experiences from the open air square to the covered public interior space.

FIGURE 4.13 pedestrian movement & existing thresholds



VAN DER WALT STREET ENTRANCE



CHURCH STREET ENTRANCE



CENTRAL STREET ENTRANCE

Atrium buildings are useful and versatile urban design elements in the sense that they add covered areas to the pedestrian space of the city. Atrium buildings can be routes and destinations (Saxon, 1983:49). The Standard Bank Centre functions as a route for pedestrians walking through the building on the way to and from work, while being a destination point for shoppers or people making use of the banking facilities. The atrium can be thought of as a public plaza (Bednar, 1986:34). The Standard Bank Centre provides mid-block passages that revive the intricacy of the city, fulfilling the same purpose as arcades. Atriums contribute to the urban scene by connecting the interior with the exterior (Bednar, 1986:34).

The street is often considered the most important urban space and the wide form of the Standard Bank Centre gives a definitive character to the street facade (Bednar, 1986:34). Church Street, busy with formal and informal commercial activities benefits from this as commercial districts often depend upon the continuity of street shop frontages to maintain vitality.

The lower ground floor and ground floor of the Standard Bank Centre is integrated into the commercial fabric of Church Street and Van der Walt Street, being comprised of shops or spaces providing services such as internet cafes or hairdressers. The Standard Bank Centre atrium provides a safe, comfortable shopping area that gives shopping a recreational air (Bednar, 1986:x).

FIGURE 4.13 Aerial photograph and sketches indicating pedestrian movement and building entrances.
 FIGURE 4.14 Pedestrians walking in Church Street in front of the Standard Bank Centre.
 FIGURE 4.15 Pedestrians walking in Central Street.
 FIGURE 4.16 Eastern elevation of the Standard Bank Centre in context, not to scale.

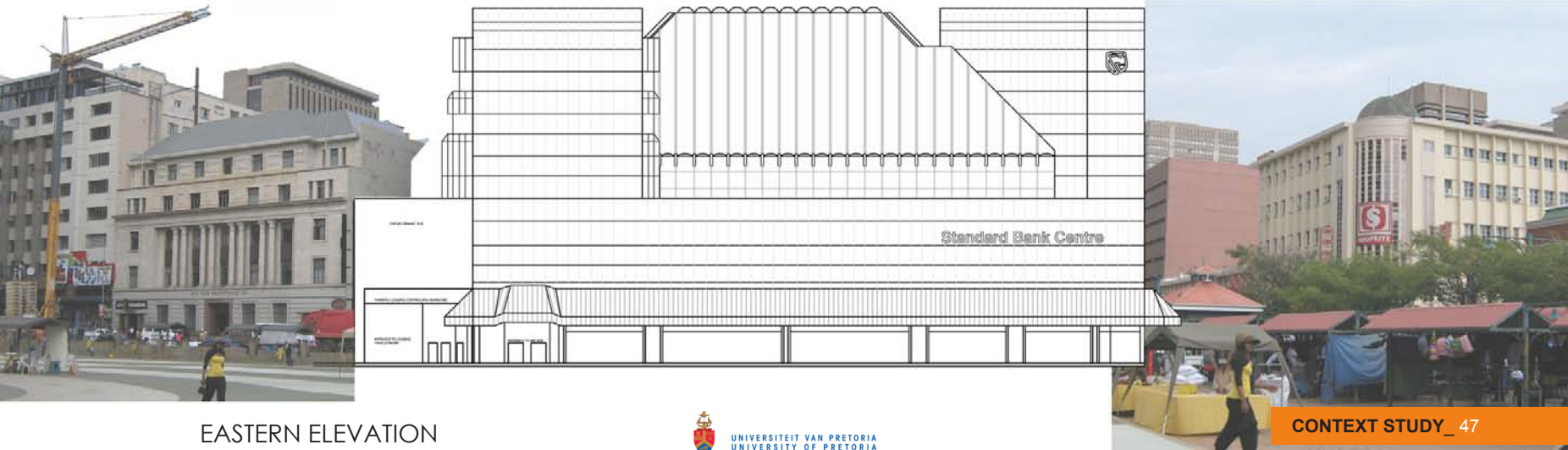


FIGURE 4.15



FIGURE 4.14

FIGURE 4.16



EASTERN ELEVATION

FIGURE 4.17, 4.18 Edge of building to Van der Walt Street. FIGURE 4.19 Edge of building to Church Street. FIGURE 4.20 Corner edge Van der Walt Street and Central Street. FIGURE 4.21, 4.22 Building edge to Central Street. FIGURE 4.23 Section through Van der Walt Street (not to scale). FIGURE 4.24 Section through Church Street (not to scale). FIGURE 4.25 Section through Central Street (not to scale).

5.3.4 Edges of the building



5.3.5 Street Sections

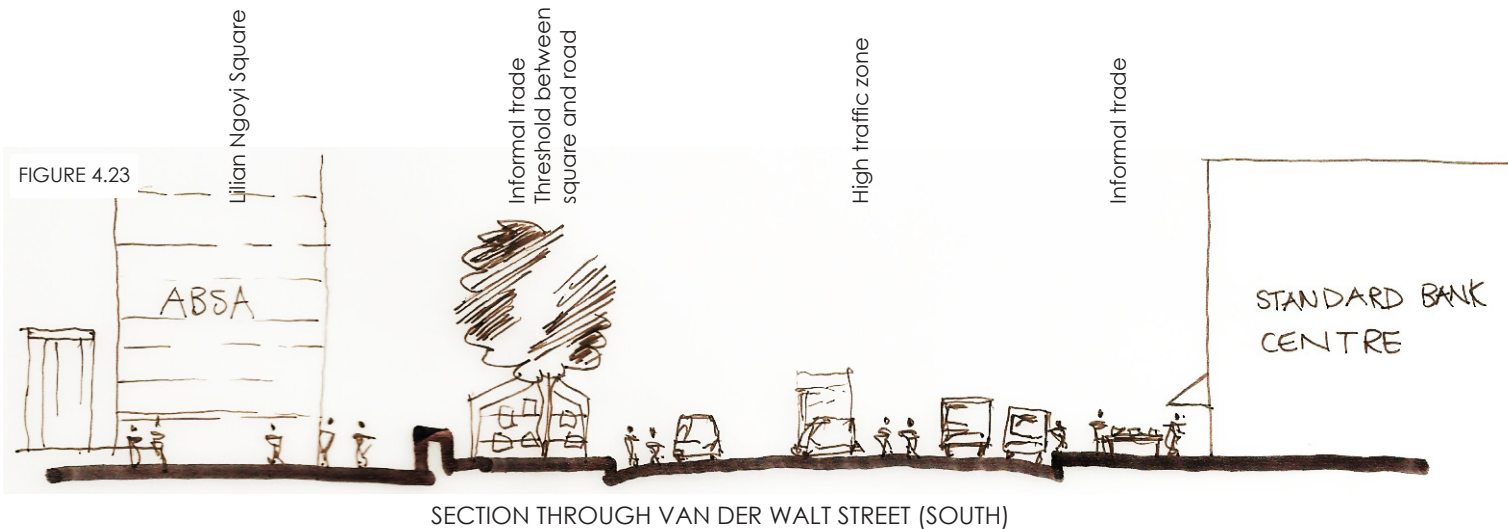


FIGURE 4.20



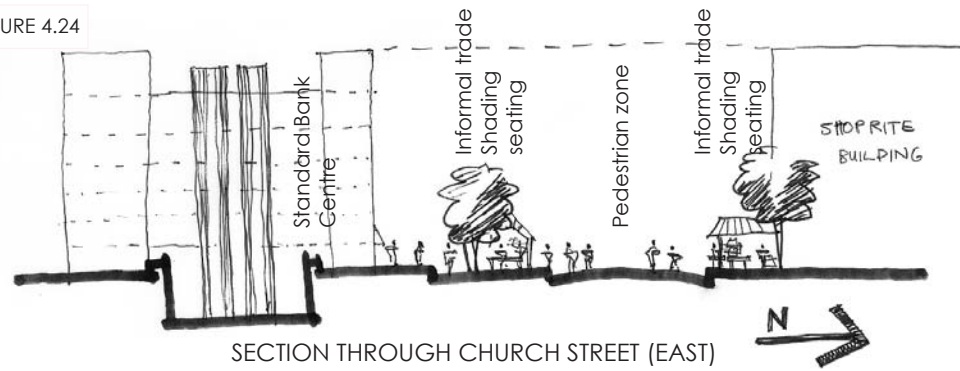
FIGURE 4.21



FIGURE 4.22

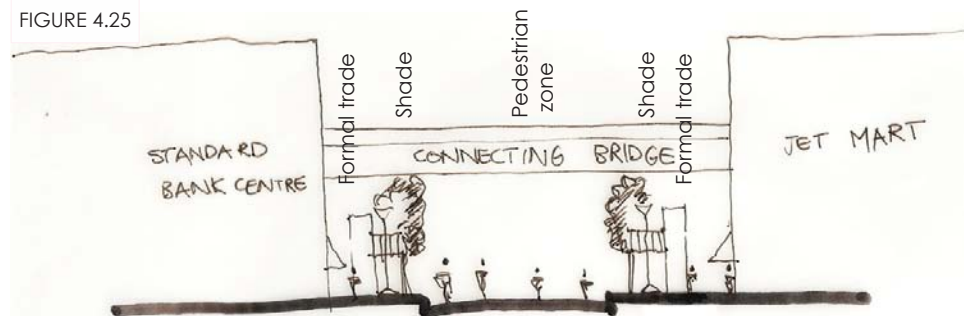


FIGURE 4.24



SECTION THROUGH CHURCH STREET (EAST)

FIGURE 4.25



SECTION THROUGH CENTRAL STREET (SOUTH)

FIGURE 4.26 A planter on the Lilian Ngoyi square where pedestrians find shade and seating. FIGURE 4.27 People walking across the square. FIGURE 4.28 View of the square from the ABSA building. FIGURE 4.29 The square as seen from the third floor of the Standard Bank Centre.



FIGURE 4.26



FIGURE 4.27



FIGURE 4.28

4.3.6 The Lilian Ngoyi Square

The square across the street from the Standard Bank Centre has a remarkable history that connects it to the Ditsong: National Museum of Cultural History. In 1889 a market building was erected on the square, giving it the name 'Markt Plein'. The Market hall was used for market activities, exhibitions, receptions, political gatherings and court hearings and was the location of Pretoria's first museum, the *Staatmuseum* (Cloete, 2009:3).

The museum contained anthropological, archaeological and natural history collections and exhibitions. The hall soon became too small for the museum and in 1904 the Museum was moved to a new building in Boom Street, with a new name: the Transvaal Museum. After years of collection, historical objects of cultural significance were recognised as a separate category and in 1993 the old

Mint building in Visagie Street was allocated as the new museum of culture (The Story of the National Cultural History Museum, 2001).

In 1966 the Market hall on 'Markt Plein' was demolished to create space for the State Theatre and an underground parking garage. This parking lot is currently also used by the Standard Bank Centre. A head office building for the Volkskas bank (now the ABSA building) was commissioned on the South-western corner of the same city block as the Lilian Ngoyi Square around the time of the commission of the State Theatre (Cloete, 2009:3).

The bust sculpture of J.G. Strijdom (the so-called architect of the Republic of South Africa) was unveiled on 31 May 1972, Republic Day. The sculpture was on display in the square underneath a dome structure until 2001. People described the square as being cold and uninviting; the



FIGURE 4.29

opposite of what a public square should be. On 31 May 2001, ironically, on the fortieth anniversary of the Republic of South Africa, the structure collapsed, taking down with it the so-called monument of apartheid. Some people believed that this was a sign from God, indicating that times have changed in the country.

In November 1988, the 'Wit Wolf' Barend Strydom arrived on the square and fired gunshots at black people, killing twelve and harming eighteen others. The square became an altar for the 'Afrikanerdom'.

Pedestrians walk across the square, but it is an uncomfortable area to linger or spend time in, due to the lack of shade and seating. Some informal traders use the square as additional space to set up stalls and market goods.

4.3.7 The Lilian Ngoyi Story

Lillian Masediba Ngoyi was born in 1911 in the city of Pretoria. Her life was a battle of hardship and poverty: she was one of six children and was forced to leave the Kilnerton Institution where she was educated in order to help support her family financially. She worked as a nurse in the City Mine Hospital and as a machinist in a clothing factory. She married and had three children (Bernstein, 1982).

In 1942 Lilian Ngoyi joined the African National Congress (ANC) and was the first female member of their national executive committee. The ANC was dedicated to ending apartheid. Ngoyi founded the Women's League of the ANC, (along with Helen Suzman, Helen Joseph, Ida Mtwana and Charlotte Mxeke) and served as president.

On 9 August 1964 Ngoyi, together with Helen Joseph, Rahima Moosa and Sophie Williams, led 20,000 women in a protest against the inclusion of women in the pass laws that controlled the movements of black people. The women marched towards the Union Building offices of the prime-minister, J.G. Strijdom where the leaders delivered petitions signed by women throughout South Africa (Bernstein, 1982). The women sang freedom songs such as Nkosi sikeleli Afrika, however, the song that became the anthem of the march was "Wathint' abafazi, Strijdom! When you strike the women, you strike a rock, you will be crushed!" Women's day commemorates this march.

Ngoyi was arrested and tried for treason, because of this action, but she was later acquitted. She was declared a "banned person" in the mid-1960s by the then South African government, meaning that her movements and contact with people were restricted and she could not be quoted in the press. Ngoyi lived under the banning order for 16 years. The "mother of the black resistance" in South Africa died in 1980 at the age of 68 (Mkhize, 2006).

FIGURE 4.30 Photograph of Lilian Ngoyi (Bernstein, 1982). FIGURE 4.31 Lilian Ngoyi leading the march on the Union Buildings (Bernstein, 1982).



FIGURE 4.30



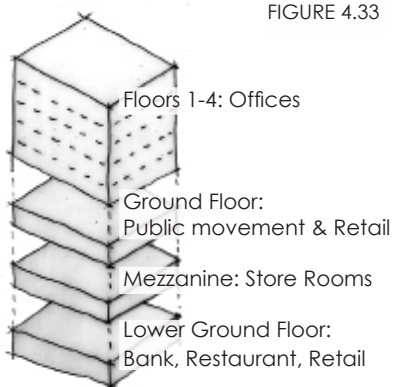
FIGURE 4.31

FIGURE 4.32 Photograph of the Van der Walt/ Church Street corner.

FIGURE 4.33 Diagram indicating current use of the building. FIGURE 4.34 View of the Standard Bank Centre from the Lilian Ngoyi public square.



FIGURE 4.32



4.4. The Building

4.4.1. Historical Context

The building was designed and built in 1977, during unstable political times, because of Apartheid. At the time, the Ponte City skyscraper in Hillbrow was also under construction and the Afrikaans Language Museum and Monument opened in the Paarl.

The Standard Bank Centre was an unusual building for its time, because of the atrium space with the skylight roof. During the time the building was built, Skyscrapers were erected across the world: the Water Tower Place in Chicago and Tower 42 in London are examples. As opposed to exploring the same narrow space as the skyscrapers, this building is built around a core of space; deep space is explored.

Other unusual attributes for a building constructed in Pretoria at that stage are the planting boxes surrounding the atrium as well as the arcade on the lower ground floor that runs underneath the street to the parking lot.

Everything in the building is co-ordinated according to the interior and exterior cladding. For example, the dimensions of the three lifts in the atrium are determined by the size of the mosaic tiles it is covered with. The concrete structure was subordinate to the covering of the concrete panels.

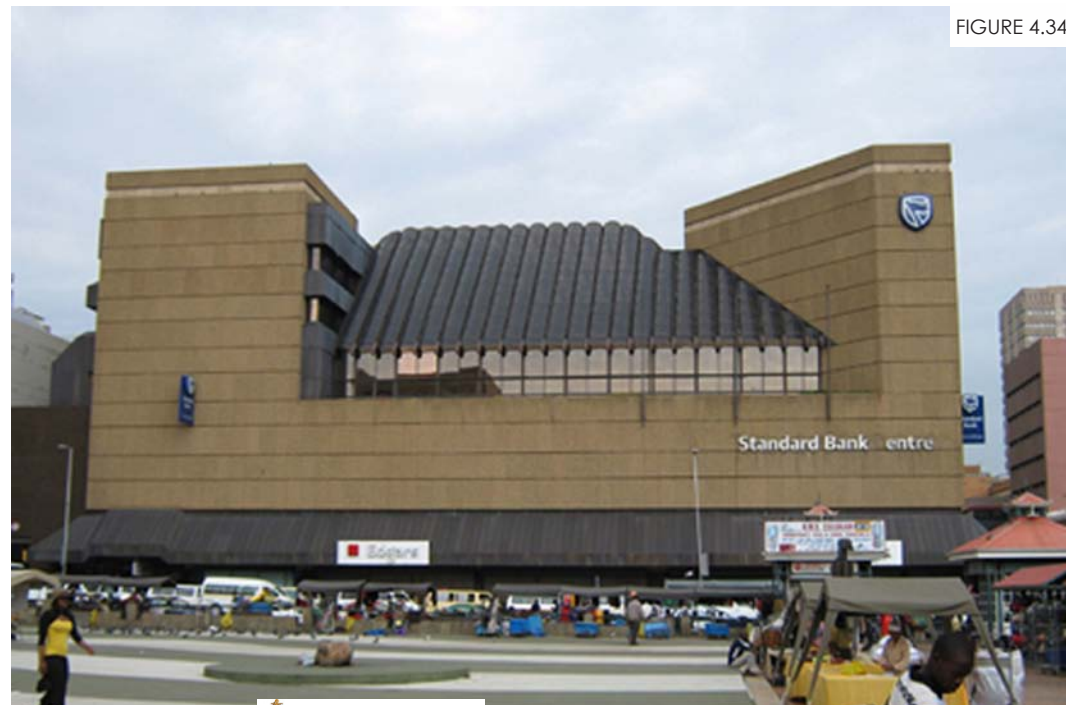


FIGURE 4.34

4.4.2. Physical Features

Ground Floor

Access and circulation determines the success of the atrium space (Bednar, 1986:34). The Standard Bank Centre has three entrances on the ground floor level, each exiting on a different street, allowing access to the building from different directions. From the three entrances, passages lead to the atrium space in the centre of the building. The layout of the building and the width of the hallways encourage circulation to and through the atrium space, giving it value as a public space.

The floor is comprised of retail spaces that border the four meter wide passages. Pedestrians use passages through the building in a similar way that arcades are used; as a shortcut to get from one street to another or for a quick stroll past window displays on the way to a destination. An anchor shop is the large clothing outlet Edgars that takes up retail and storeroom space on four levels of the building. The Edgars store occupies most of the Eastern facade on the ground floor level, but does not make use of the window display opportunities as the windows are covered with roller doors.

The main entrance to the building is the entrance located on Van der Walt Street that people use in order to avoid traffic and informal traders when they are in a hurry. People enter the building on the ground floor to take the escalator down to the lower ground floor where the Standard Bank is situated.

FIGURE 4.35 Existing Ground floor plan of the Standard Bank Centre.

FIGURE 4.36 Escalator between ground floor and lower ground floor.

FIGURE 4.35

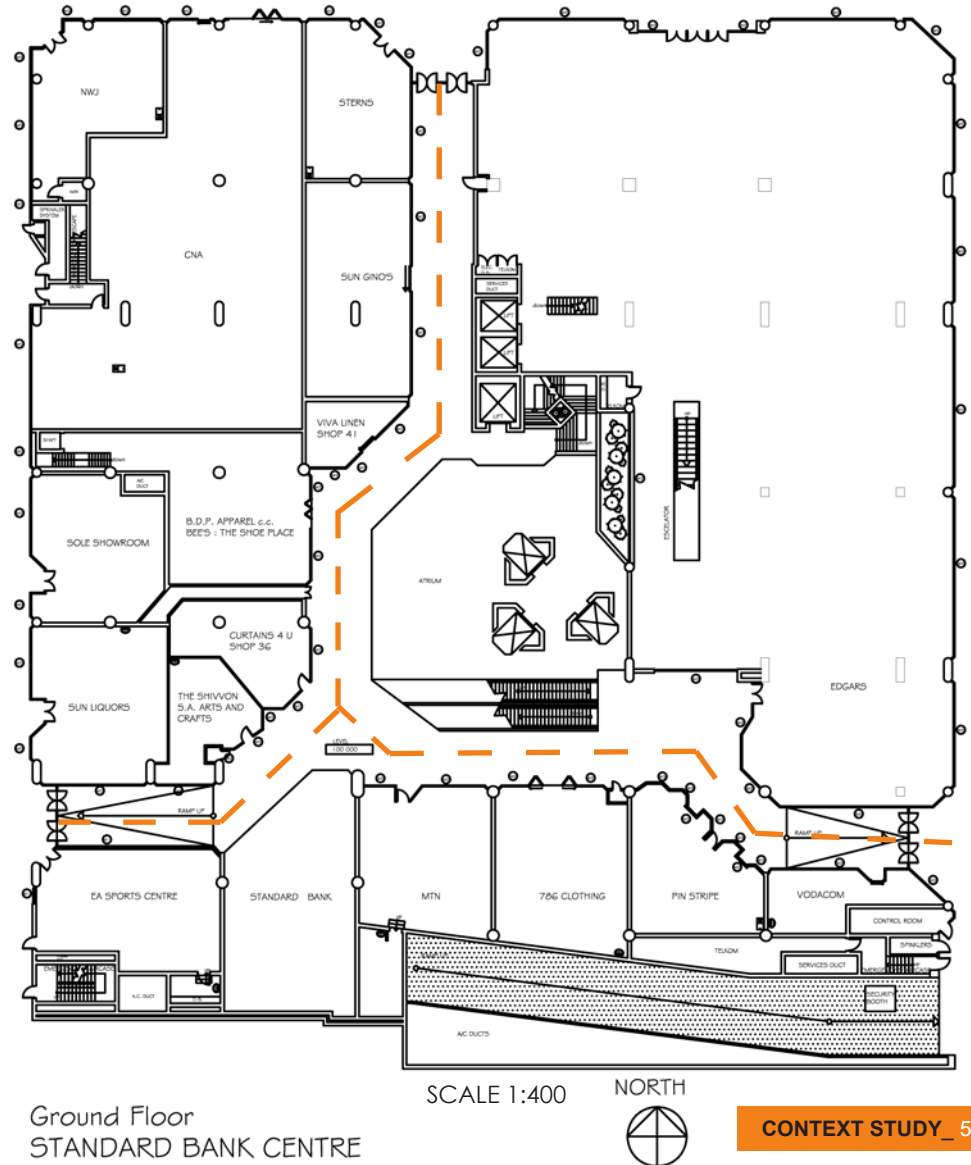


FIGURE 4.37 Photograph showing the staircase that connects the three lowest public levels of the building.

FIGURE 4.38 Existing Lower Ground Floor mezzanine plan of the Standard Bank Centre. FIGURE 4.39 The mezzanine level.

Lower Ground Floor Mezzanine

The general public has no interest in the mezzanine floor as it currently houses storerooms of the shops on the ground floor as well as offices for Edgars and Standard Bank. The mezzanine floor is reached via the staircase on the Northern side of the elevator shafts.

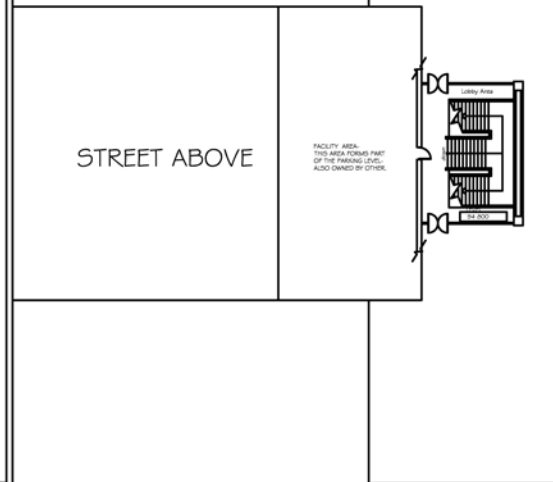
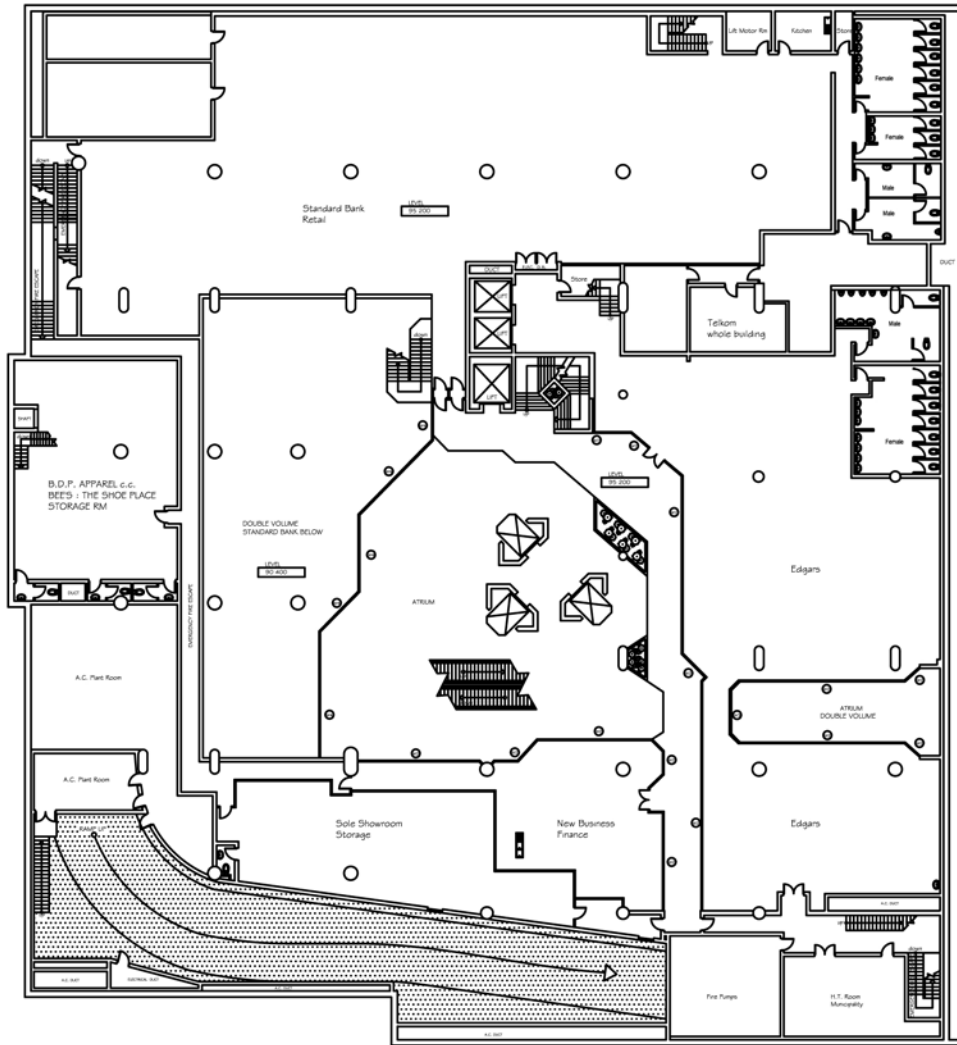
FIGURE 4.38



FIGURE 4.37



FIGURE 4.39



Lower Ground Floor Mezzanine Level

STANDARD BANK CENTRE

NORTH



SCALE 1:400



FIGURE 4.40

Lower Ground Floor

The Lower ground floor of the building contains the Standard Bank entrance, a major attraction for users of the building. To the Eastern side, an arcade leads to an underground parking lot that the Standard Bank Centre shares with the State Theatre.

FIGURE 4.40 People waiting for the bank to open. FIGURE 4.41 Existing Lower Ground floor plan of the Standard Bank Centre. FIGURE 4.42 The arcade leading to the underground parking lot. FIGURE 4.43 The staircase leading to the underground parking lot.

FIGURE 4.41



Lower Ground Floor Level
STANDARD BANK CENTRE



FIGURE 4.42



FIGURE 4.43

FIGURE 4.44 Digital collage of interior atrium space. FIGURE 4.45 Interior view of the skylight. FIGURE 4.46, 4.47 View of the atrium as seen from the third floor. FIGURE 4.48 Elevator shaft that dominates the atrium space. FIGURE 4.49 Ground floor as seen from the atrium. FIGURE 4.50 Lower ground floor of the atrium space.

4.4.3. Interior Space

The atrium space appears visually cluttered because of the change in materials and plants growing in planters in the space. The edges of the atrium are angular and the shape of the space changes between the different floor levels. The three elevator shafts are pertinent elements in the atrium and have an impact on how the space is perceived. The floor levels have a height of approximately three meters between floor slabs.

FIGURE 4.44



FIGURE 4.45

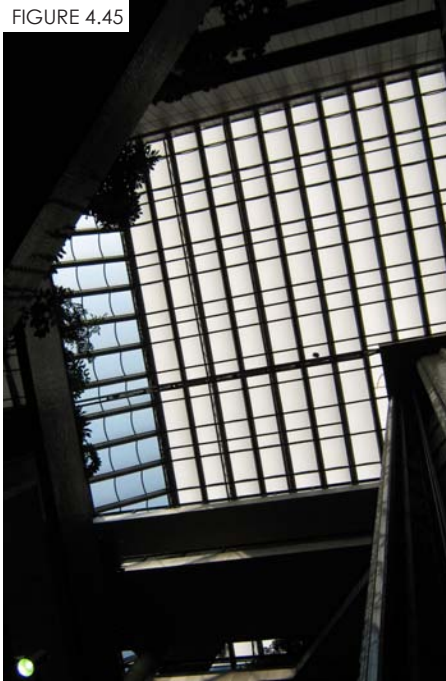


FIGURE 4.46



FIGURE 4.47



FIGURE 4.48



FIGURE 4.49

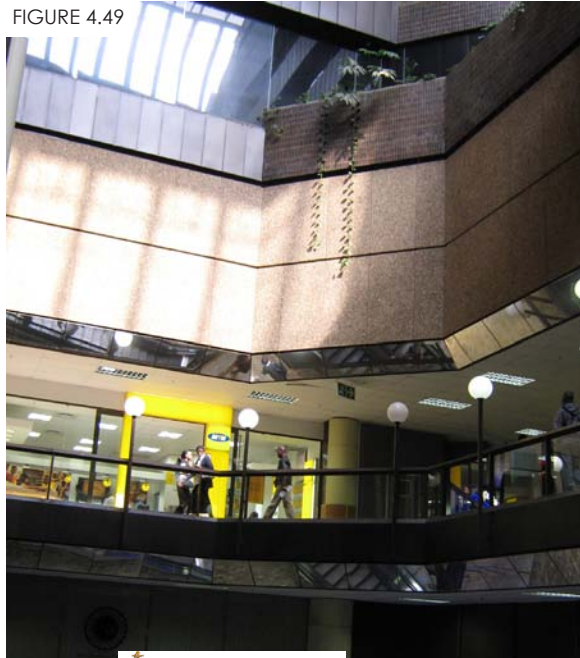


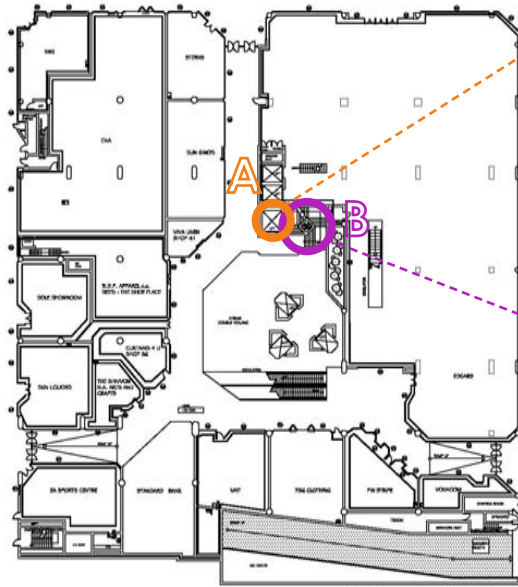
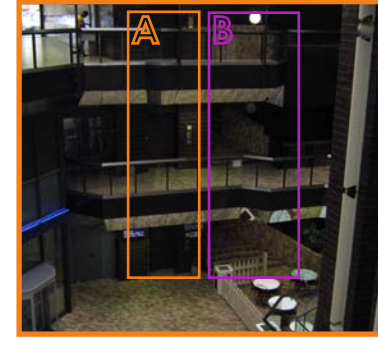
FIGURE 4.50



FIGURE 4.51, 4.52 Diagrams of plans and photographs explaining the circulation through the building.

4.4.4 Circulation

A



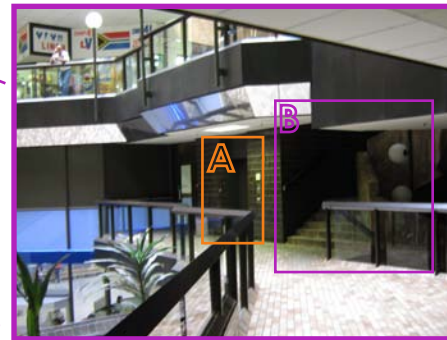
Ground floor
STANDARD BANK CENTRE

FIGURE 4.51

Type	Elevator
Location	Next to the atrium space and staircase B.
Provides circulation	between Lower Ground floor and Ground floor.
Users	Mainly cleaning staff with cleaning equipment.
Usage	Minimal
Visibility of movement	The elevator movement is not visible and does not impact the atrium space.

TABLE 4.1 Description of elevator A.

B



Type	Staircase
Location	Next to the atrium space and elevator A.
Provides circulation	between Lower Ground floor and Ground floor.
Users	Security staff and other people who work inside the building.
Usage	Minimal; on the Lower Ground floor the restaurant imposes on the movement.
Visibility of movement	Movement is visible but because of minimal use it is not significant.

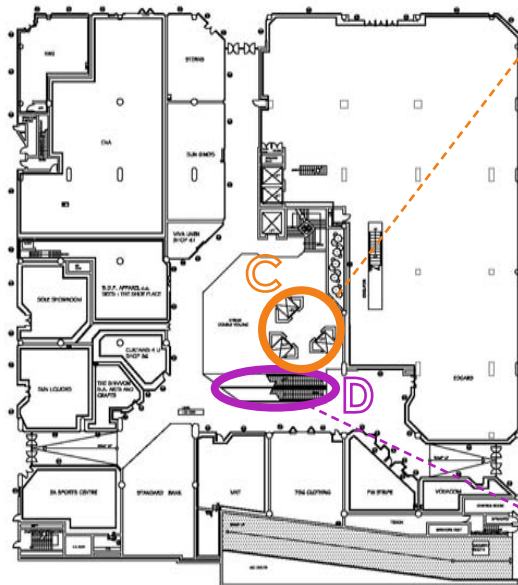
TABLE 4.2 Description of staircase B.

C



Type	Observation Elevator
Location	In atrium space.
Provides circulation	between Basement and Fifth floor, excluding the Ground floor and Mezzanine level.
Users	People working in offices on floors 1 to 4.
Usage	Minimal; not all the offices are occupied.
Visibility of movement	The elevator movement is visible and purveys a dynamic quality to the atrium space. A person in the elevator has a dramatic view of the atrium from above.

TABLE 4.3 Description of elevator C.



Ground Floor
STANDARD BANK CENTRE

FIGURE 4.52

D



Type	Escalator
Location	In atrium space.
Provides circulation	between Lower Ground floor and Ground floor, excluding Mezzanine level.
Users	Customers of Standard Bank, entering the building on Ground floor.
Usage	Maximum usage; the escalator is the main circulation method between the Lower Ground floor and Ground floor.
Visibility of movement	Movement is visible but because of minimal use it is not significant.

TABLE 4.4 Description of escalator.

FIGURE 4.53 View of office floor levels from atrium space. FIGURE 4.54 View of skylight.



FIGURE 4.53



FIGURE 4.54

4.5. The Building's Response to Climate

As an atrium building, the Standard Bank Centre has inherent energy potential that increases the building's ability to enhance the thermal comfort level. The following aspects of the Standard Bank Centre make it an energy efficient building (Bednar, 1986:81):

1. Using Daylight

The skylight provides an effective transmission of daylight that replicates outdoor lighting levels. It also ensures balanced light distribution. Daylighting in atrium buildings is simpler than in other building types and heat loss and gain is reduced (Saxon, 1983:6). The sloping panels of the skylight drain the inevitable condensation that takes place. According to Richard Saxon (1983:20), the transmission loss through glass is minimized by angling the glass panes towards the late morning and early afternoon sun, thus receiving a continuous, strong solar flow for three hours around mid-day. The glass panes of the Standard Bank Centre faces East, meaning the morning sun flows into the building.

2. Passive Cooling

Shading elements (for example canopies on the exterior of the building) protect the building from direct sun. The atrium space of the building serves as a collector of cool night air and a source of shade in the daytime (Bednar, 1986:4).

3. Passive Heating

During winter months the atrium serves as a passive solar collector and wind shelter (Bednar, 1986:4). The thermal mass and heat storage capacity of the building contribute to this aspect.

4. Ventilation

In the atrium space, cross ventilation and vertical ventilation take place naturally.

5. Buffer Space

"A buffer space is a transition space, an intermediary zone between inside and outside," (Bednar, 1986:82). The atrium is a buffer space that shields and filters the full impact of the climate. The contained air mass of the atrium absorbs the impact of weather conditions such as solar radiation, temperature differences and wind (Bednar, 1986:82).

A negative response to the climate is stratification (the overheating of the air at the top of the atrium space), creating uncomfortable conditions during the late afternoon (Bednar, 1986:84).

4.6. S.W.O.T. Analysis

(Strengths, Weaknesses, Opportunities, Threats)

An analysis of the Standard Bank Centre's strengths, weaknesses, opportunities and threats is done in order to determine where opportunity for a design intervention lies.

S

Strengths

- Circulation, public access
- Three Entrances
- Activity around the exterior edges of the building
- Large number of people using the building
- Day/night use of building
- Security
- Atrium space
- Natural light
- Current building elements have low maintenance requirements

O

Opportunities

- Improved use of atrium space
- Intervention that links horizontal levels
- Interface with street
- Circulation routes
- The intervention should respond to the modular construction materials that determined the structure of the building
- The link between the existing pedestrian routes must be utilised
- Public amenities in the form of seating or exhibitions can be provided

W

Weaknesses

- Closed facade
- Access to certain levels are restricted
- Floors 1 to 4 are private floors
- The interior spaces are confined to horizontal layers
- Traffic and noise barrier between building and Lilian Ngoyi Square
- Atrium space is not utilized optimally
- Not enough provision to allow people to experience the atrium space

T

Threats

- Informal traders that make use of the pavement next to the building should be taken into consideration
- The existing users of the building should not be disregarded and should benefit from the design intervention
- Existing plans of the building are rigid and modular
- The building does not function as an enclosed shopping mall, and should not become an exclusive introverted space.

FIGURE 4.55 - 4.58
SWOT Analysis diagrams

FIGURE 4.55

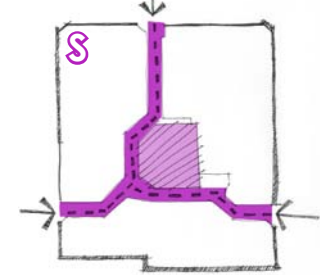


FIGURE 4.56

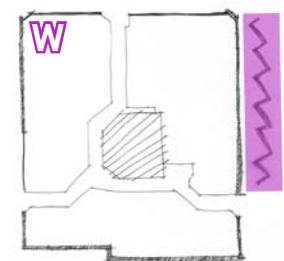


FIGURE 4.57

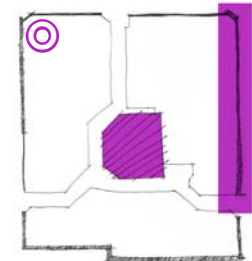


FIGURE 4.58

