



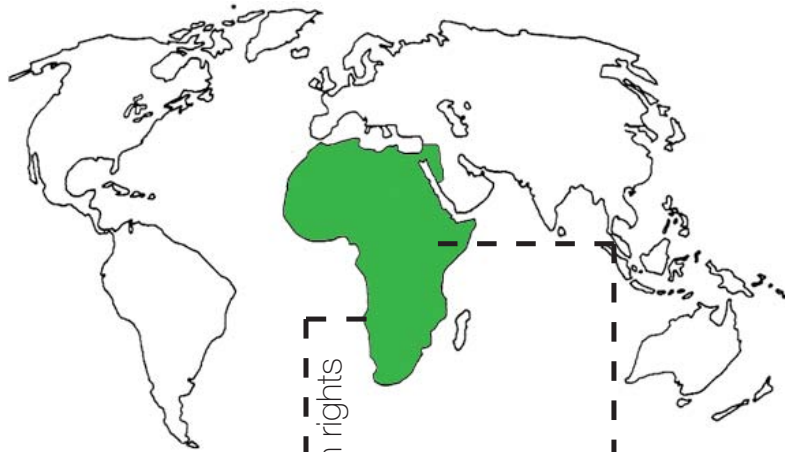
Dissertation Objectives

The aims of this dissertation are by nature firstly **Architectural**, then focussed towards the challenges of **Housing**, to **South Africa**, **Sustainability** and then finally **Community**.

2 Context & Analysis

Location
Site & History
Aerial history of Salvokop
Site Analysis
Movement Analysis
SWOT Analysis
Statistics

Setting the scene and defining the context and situation of the dissertation. Historical and visual contributants and informants of the design and proposal are established. Relevant analyses and statistics are also revealed.



National Debt

Poverty

51% of Sub-Saharan Africans are forced to survive on less than \$1.25 a day. (Hunger Notes, 2011)

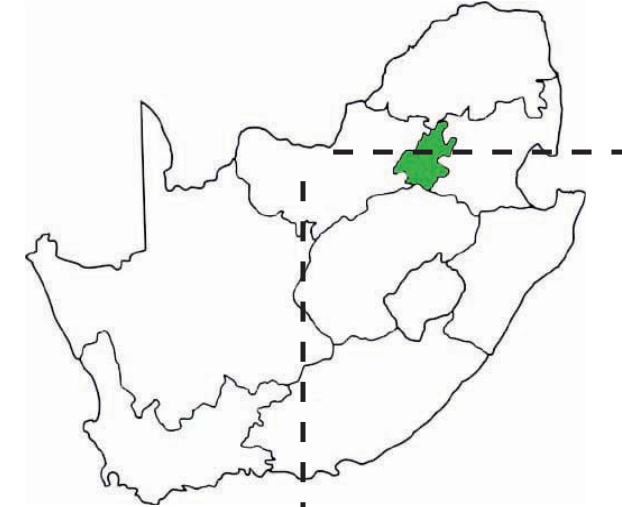
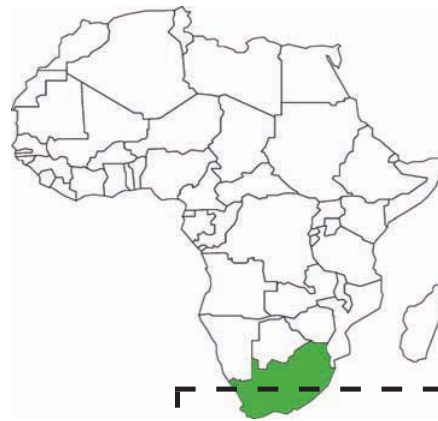
Human rights

Unemployment

HIV/AIDS

Approximately 18% of South African adults have contracted the HIV/AIDS infection with 29% of pregnant women estimated to have the virus (Africaw, 2011)

Housing



Service Delivery

Crime

Recent crime stats show that 50% of South Africa's crime occurs in Gauteng, making it (South African Government information, 2011)

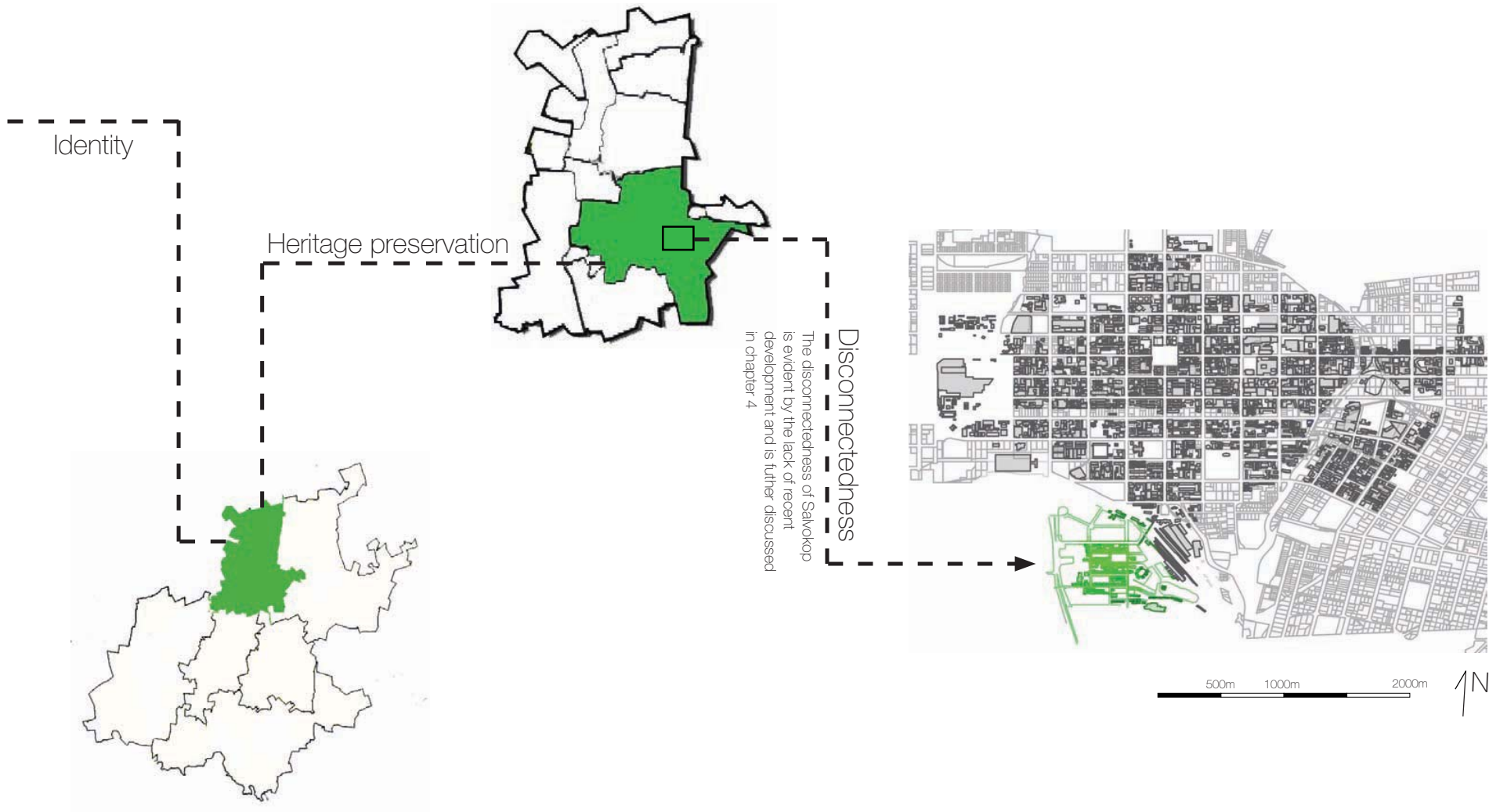
Location specific challenges

Location

Africa

South Africa

Gauteng



Disconnectedness
The disconnectedness of Salvokop is evident by the lack of recent development and is further discussed in chapter 4

Figure 2.1-5: Maps of various scales
Figure 2.6: Figure ground map of Pretoria

----- Tshwane ----- Pretoria ----- → Salvokop

Site & History

Salvokop is located in the south-western quadrant of Pretoria, on the southern side of the railway line. The area where Salvokop is located was originally inhabited by the Ndebele people and came to be known as the Transvaal where in 1855 Pretoria was proclaimed as the capital. Development was centred around Market square, spreading to the east and west as north/south development was restricted by the Magaliesberge to the north and Bronberge to the south.

During the First Anglo-Boer War in 1880 the site of Salvokop was known as Time Ball Hill from which the delivery of different types of mail could be signalled to interested citizens in the town. It was in 1886 however, only after the discovery of the main gold reef on the Witwatersrand, that there were enough funds to establish a railway line. With the building of a station being proposed between Market Square and Time-ball Hill. The Nederlandsche Zuid-Afrikaansche Spoorweg-Maatschappij (NZASM) was established the following year and commissioned the majority of development in the area, including the first station buildings (Illustration 2.7). (de Jong, 2003: 4)

During the New Year's weekend of 1895-6 the Jameson Raid took place south of Pretoria, as the British Colonies attempted to take control of The Zuid-Afrikaansche Republiek (ZAR) which had taken control of NZASM. The outcome of these actions severely compromised British-ZAR relations, eventually leading to the Second Anglo-Boer War of 1899

- 1902, during which time the central workshops of Salvokop were used for cannon maintenance and ammunition production. (de Jong, 2003: 6)

After the war ended in 1902, focus returned to providing a national rail network and NZASM was reinvented as the Central South African Railways (CSAR). As a consequence of this economic activity a residential suburb was established in Salvokop through the construction of a workers compound and a "whites only" railway camp in 1904 (Illustrations 2.8&2.10). (de Jong, 2003: 7)

In 1910 the Union of South Africa was formed and the Cape and Natal railway administrations merged with the CSAR to form the South African Railways and Harbours Administration (SAR [& H]). That same year the corner-stone for the new railway station (Illustration 2.9), designed by Herbert Baker, was laid, marking the beginning of an era of development in the area. (de Jong, 2003: 8)

In 1921, after a number of audits and reports had been submitted to the Union government concerning the inadequate state of housing in the area for railway workers, a new typology of accommodation was developed, allowing residents to construct their own dwellings within a set of predefined guidelines. (de Jong, 2003: 8)

After the general elections of 1948 the legal policy of racial segregation,



Illustration 2.7: The station building with Time-Ball hill in the background to the left

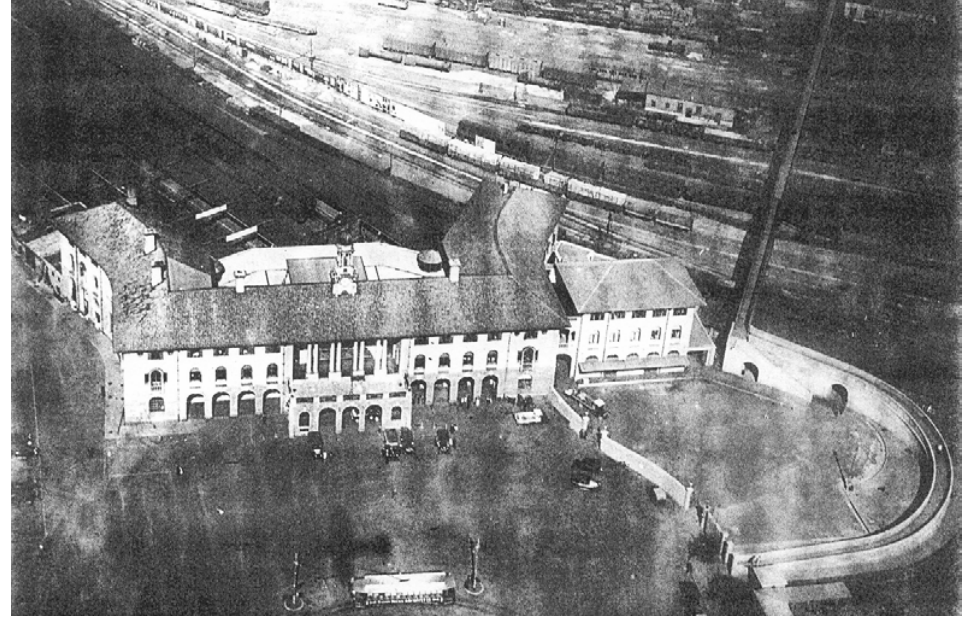


Illustration 2.9: Aerial view of the new Pretoria Railway Station

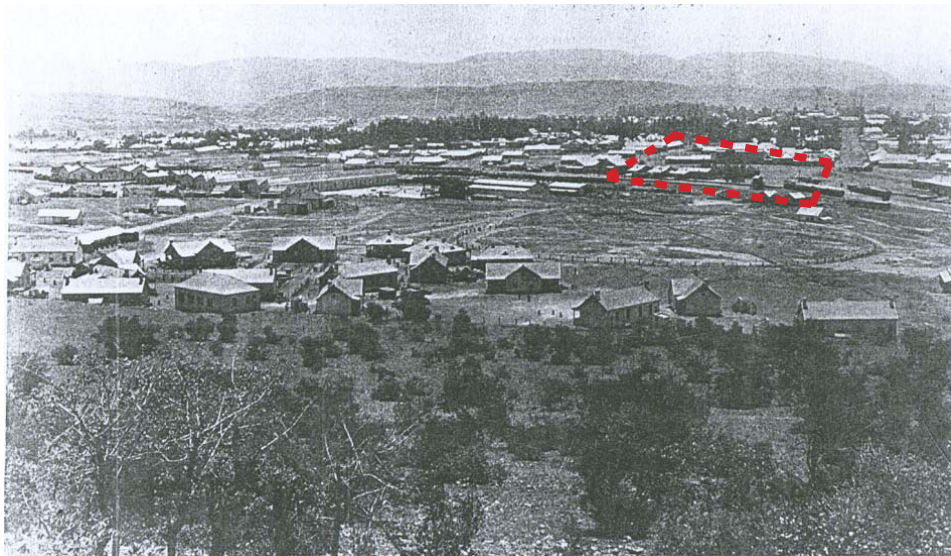


Illustration 2.8: The first NZASM houses with the station in the background



Illustration 2.10: The row-houses of the "White" railway camp

known later as **Apartheid**, was introduced. This resulted in the relocation of all non-white residents of Salvokop, mostly to the township of Mamelodi, approximately 20km away. During the 1960s the last new houses were built in the area, and in 1975 the Minister of Transport approved the upgrading of Salvokop, which resulted in many of the houses being renovated and restored. Only three years later the semi-detached row houses that characterised the centre of the suburb were demolished and the resultant empty site was left undeveloped for over 35 years. (de Jong, 2003: 9)

After President FW de Klerk became State President in 1990 negotiations to end **Apartheid** and its legislative restrictions began. Soon many black workers began to return to Salvokop, significantly increasing the levels of activity in the area. In 2001 angry commuters set fire to Pretoria Station, significantly damaging the roof of the structure (Illustration 2.13). The following year repair work to the station roof commenced. At the same time, the area of Salvokop once again became the focus of development, as Freedom Park was proposed on top of the hill, overlooking the residential suburb which was ear-marked for the re-establishment of an urban precinct. (de Jong, 2003: 10)

Six years after the Pretoria Station fire the line for the newly operational high-speed rail service, the Gautrain, was proposed to run through Salvokop. The proposal was later rejected due to heritage and

environmental reasons. With the area still part of an urban regeneration scheme at least one extra vehicular access road was also proposed into Salvokop, from the north-east to create better accessibility to the suburb.

In 2008 Intersite (the property owning and management arm of the previous administration's SAR&H) proposed an iconic new transport terminal (Illustration 2.12) which would include a Station Deck, Gautrain station, Bus Rapid Transport station, taxi and bus stop as well as shopping and parking, and would greatly increase accessibility to and from Salvokop.

Despite the radical proposals to regenerate the area little has come to fruition, with most frameworks never advancing past the proposal phase, due possibly to their "blanket" nature, treating seemingly similar areas with a generic solution. Considering the slow pace of development over the last two decades it would appear that this area would probably not benefit from extensive sudden development, but instead a slowly expanding progression of local activities focussed on the creation and growth of community would appear to be more appropriate. A nodular development along the intersection of important circulation axes, as proposed in this document, could encourage development in the precinct, as members of the community begin to take ownership of their surroundings, thus creating a positive environment for living and working.



Figure 2.11: The Proposed GAPP framework for Salvokop with author's site highlighted, 2003

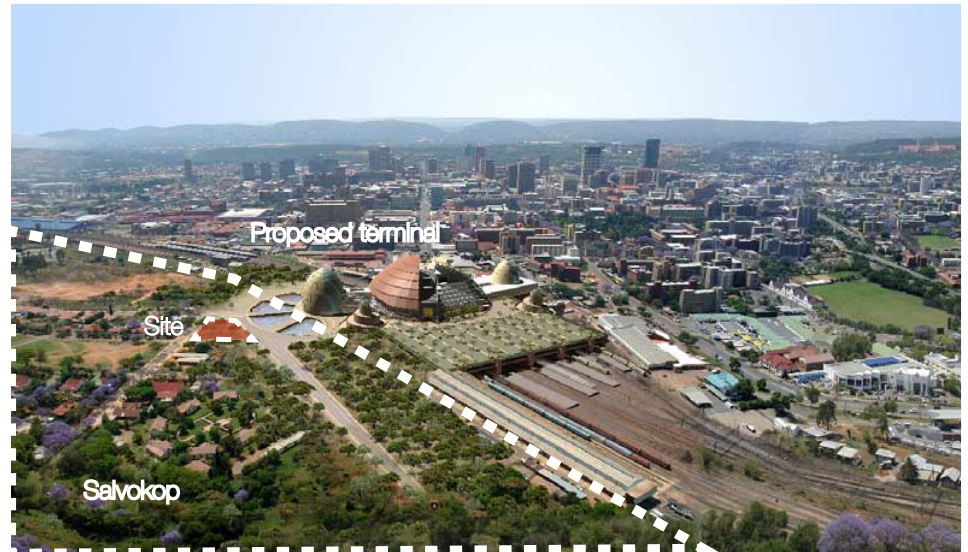


Illustration 2.12: The proposed Intersite Terminal with Salvokop in the left foreground, 2008



Illustration 2.13: The Pretoria Station shortly after the blaze that destroyed the roof in 2001

Aerial history of Salvokop

Changes

Earliest records show the fine residential grain that Salvokop still exhibits in the present day. The maintenance yard north of the suburb is still fully operational.

Pedestrian paths in the south become more pronounced as the suburb is steadily growing.

Additional housing is established in the south-eastern corner of the suburb as more of the area is cleared for development.

Drastic changes to the area are seen due mostly to the large jump in time. The extent of the maintenance yard was reduced severely and the light industrial zone has all but disappeared. The row houses in Salvokop have been demolished and the station has been upgraded.

Maps



1937



1939



1947



1991



Figures 2.14-17 (1937, 1939, 1947 & 1991) Sourced from electronic folder, K Bakker, accessed 5 April 2011

The light industrial zone is now a forgotten landscape with the old Chief Engineers office (now social upliftment project, POP-UP building) the final functioning remnant of the previous era. Vacant sites within the residential area are used extensively as short-cuts with movements paths clearly visible.

The construction of Freedom Park in the south prompts development in the suburb along the main entrance road to the Park. Pedestrian movements have turned vacant sites into wastelands.

The vacant land in the north of Salvokop deteriorates rapidly as scars in the landscape begin to form.

Parking lots for Metro-rail users are implemented on vacant sites as Freedom Park expands, proposing a new main entrance to the east of the existing entrance to protect the frail nature of the suburb.



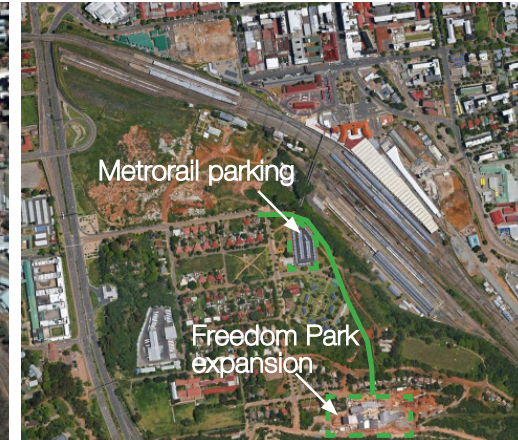
2001



2005



2007



2009

Figures 2.18-21 (2001, 2005, 2007 & 2009 Sourced from electronic Google Earth, accessed 7 April 2011

2009 Aerial photo Site

Location of:






- Photo 
- Panorama 
- Horizontal texture 
- Site boundary 
- Fence line of new parking lot 



Figure 2.22: Site map



Informal traders
Unaccommodated

Over accommodated
Parking lot for metrorail users



Routes intended for vehicular transport
Underutilised



Routes intended for pedestrians
Overutilised

Illustrations 2.23-30: Site photos by Author

Site Analysis

Site as seen from Koch Street Panorama



Illustration 2.31: Site elevation

A site analysis reveals that the suburb of Salvokop is characterised by the predominance of one storey buildings. Disorderly, overgrown areas (Figures G & H) contrast with the formal and structured environment created along Koch Street (E & F), leading up to the existing entrance of Freedom Park. Up to three independent Informal traders have established themselves along a high traffic pedestrian route (A & B) selling fruit. These small kiosks are totally unaccounted for despite operating consistently.

It is the opinion of the author that the little development which the area has experienced is almost completely as a result of the construction of Freedom Park to the south of the suburb, and is development which has not benefitted the community to any great extent. A formal entrance to the Park was proposed and established along Koch Street, which provided the impetus to upgrade the roadway and establish a formal pedestrian boulevard. This overly dramatic axis does not seem to be used as intended, (it was to encourage public activity and development along a well-defined and constructed vehicular route) but instead sees very low levels of traffic, with temporary construction vehicles making up the majority of users.

In dramatic contrast, the long-established, informal pedestrian paths across the vacant sites in the area are in fact the high traffic axes. The high number of regular users (G&F) result in the permanent nature of these paths. No external effort has been made to formalise these routes. Instead, parking lots for businessmen and woman (users of the Metrorail) have been provided for, severely impacting on the nature of the spaces. Although a need for parking does exist, the manner in which parking has been created on this site (D), is, in the opinion of the author, an inappropriate response to a predominantly pedestrian environment. The high fences around the parking lots (C) create boundaries which perpetuate the separation between pedestrian and vehicular transport modes and inhibit the free-flow of pedestrian movement through the area. The latest parking lot, with fences completely surrounding it, has been built on the vacant site in the heart of the suburb (Figure 25). This is yet another illustration of the dominance of the need for parking which is provided at the expense of what is essentially a pedestrian scaled and focussed suburb.

Urban furniture Unutilised, damaged or inappropriate

The street scene (people and activities) is often largely determined by the character of the street furniture (Levy, 1998: 59). In the instance of Salvokop the contribution of the urban fittings is substantially negative as the more formal routes have alienated pedestrians who prefer the more informal routes. Formal seating is left unused whilst dustbins are damaged with parts removed. Furthermore, the placement of bollards which is intended to create a safe walking environment are more accommodating of cars than they are of pedestrians.

An attractive and functional public route is achieved through a coherent interaction of the environment with design. (Levy, 1998: 59). This means that even street furniture needs to be incorporated into a public route in a manner that combines aesthetics and function. Due to the severely neglected nature of the Salvokop street furniture, as evidenced along the main road (Koch street) leading up to the existing Freedom Park entrance, it would be fair to say that these fittings did not contribute positively to the street's aesthetics nor its users' experiences of it.



Illustration 2.32-34: Site photos by Author

During a study of pedestrian movement on the site the eight

benches installed in the area where used only once, suggesting an over-supply of seating facilities in the area. Alternatively it could be reasoned that there is no need for people to sit down in this area as most users of the pedestrian walkway are travelling between the station and their homes or places of work. However, it is the view of the author that this pedestrian thoroughfare is an appropriate route for redevelopment into one which encourages stop-start movement or “space integrators”, as described by Dewar and Louw (2008: 20). As opposed to “space bridges”, which merely move people from one place to the next, space integrators provide reasons for people to stop and interact. This provides opportunities for growth of the community around transport, economic and retail nodes. Given the current state of the physical area and the nature of activities here, these opportunities are non-existent.

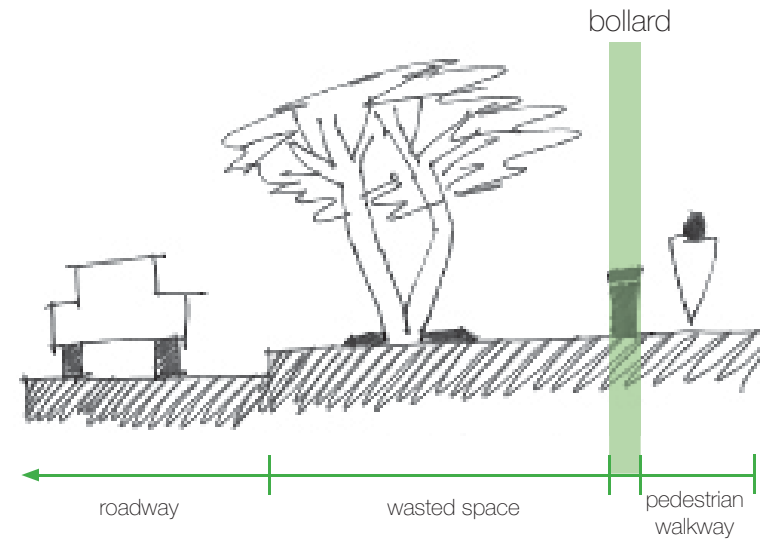


Figure 2.35. Existing section of Koch Street demonstrating the wasted space due to bollard placement

Movement Analysis

An analysis conducted on the movement across the selected site revealed the high levels of activity occurring in that area. People using the footpaths could be broadly classified into five groups:

- Men and woman walking in small groups of one to five
- Uniformed workers ie nurses, security guards, police officers
- Parents taking their children to school or day-care facilities
- Children in uniform walking alone to school
- Cyclists

The two groups that contributed most substantially to those returning to Salvokop from the station were the uniformed workers who had just finished their night shift work, and school children travelling to attend the Jopie Fourie school in the South-West of Salvokop. The group of working adults came from all areas of the Salvokop walking towards the station. Cyclists originated solely from the western regions of the suburb. Some of the workers who use the footpaths are not residents of Salvokop but are instead Metrorail users from other areas of Tshwane who park in the formalised parking lot and walk to the station to catch the “business train” that travels to Centurion and

Johannesburg. These users are however active strictly between 4:00am and 6:30am, they were therefore largely excluded from the analysis.

Other than the two or three small stalls (number dependent on the time of day) selling food and snacks that can be found along the route no other economic activities are presently utilising this opportunity.

Over a morning period of 2.5 hours from 5:55 to 8:25 more than 1000 people crossed the site in either direction, resulting in an average of

1 person every 8 seconds

These results show that area is currently under-utilised as an opportunity for development along a popular pedestrian passage. A formalised route could be established and equipped with local-based economic activities.

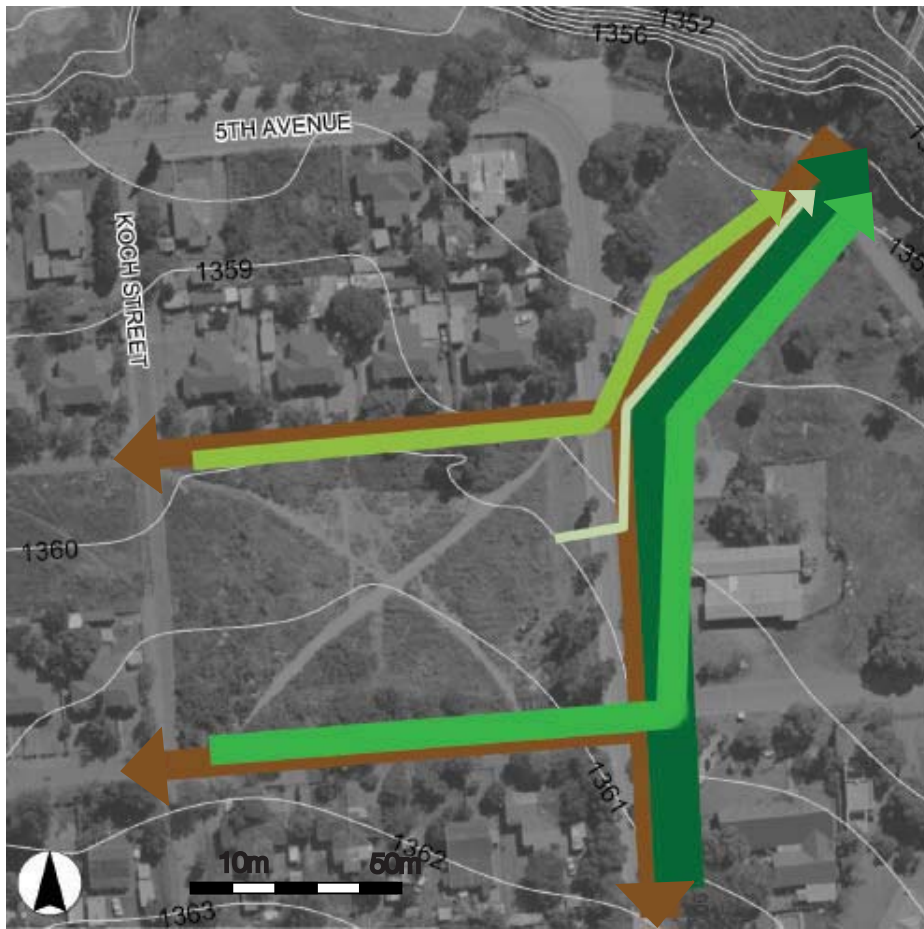


Figure 2.36 : Map indicating analysed movement routes

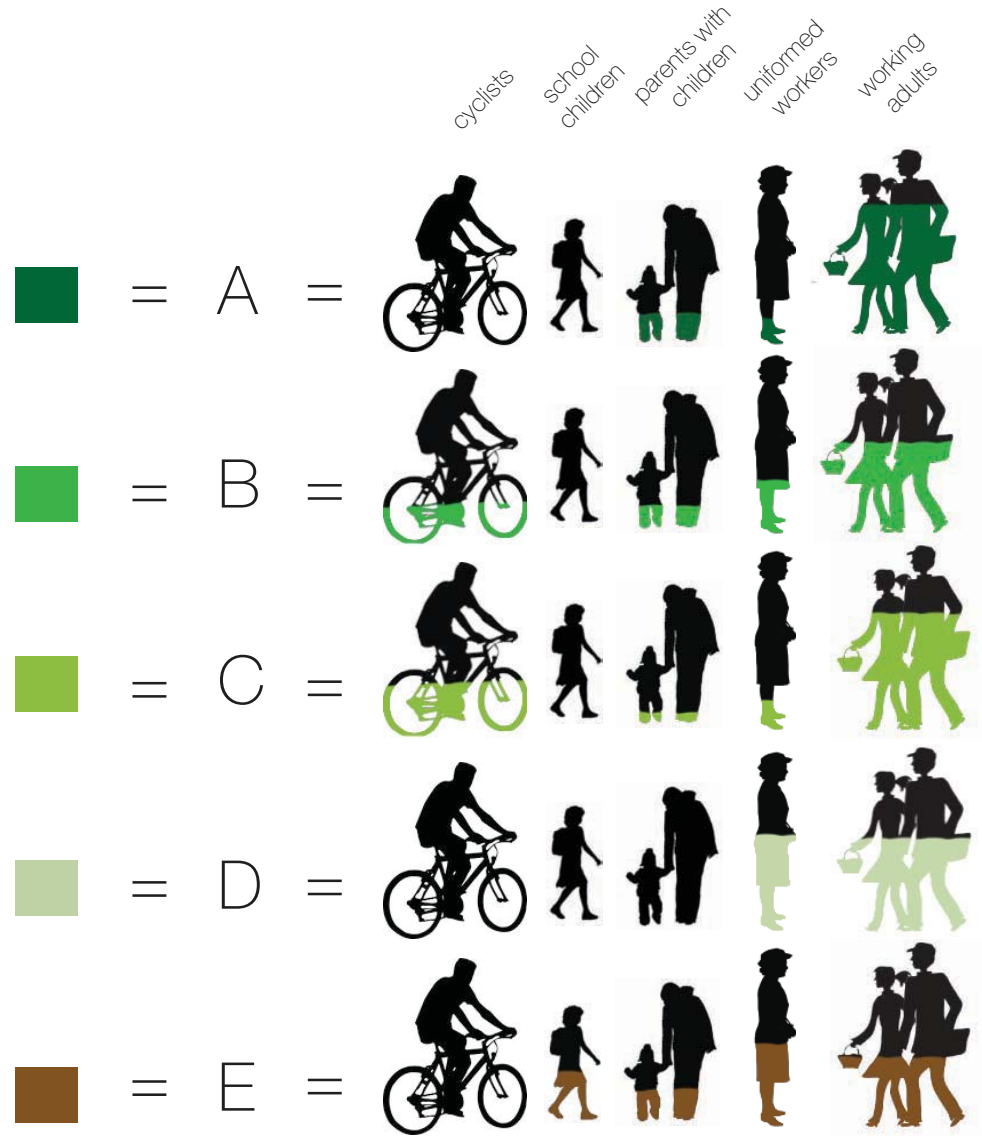


Figure 2.37: Breakdown of users

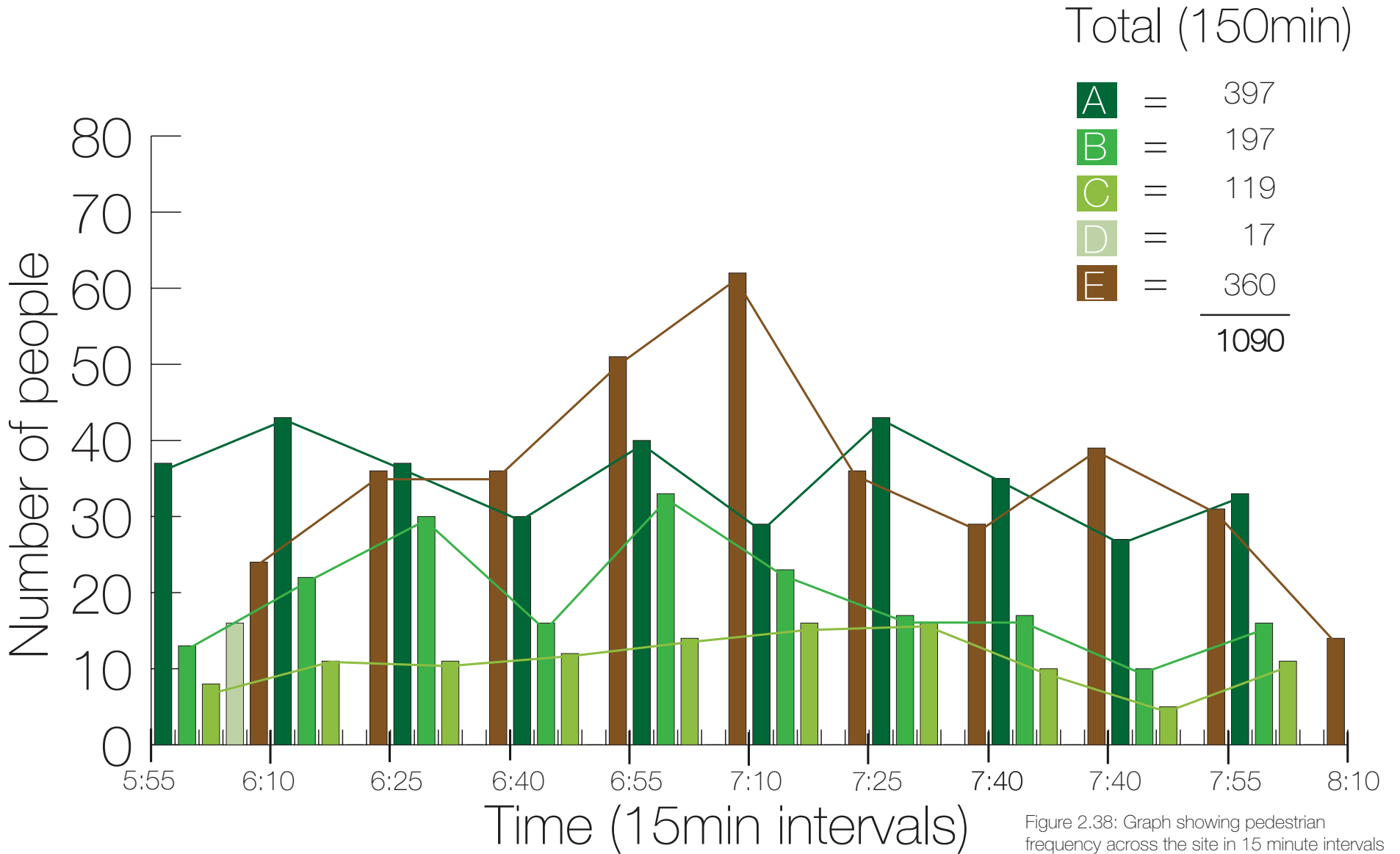


Figure 2.38: Graph showing pedestrian frequency across the site in 15 minute intervals

Relevance of analyses

- The considerable amount of pedestrian activity provides an opportunity for the establishment of a formalised pedestrian orientated route.
- The high level of pedestrian traffic requires an appropriate response regarding surfacing. Pedestrian-friendly, easily maintained surfaces to be considered.
- Although very few cyclists were observed in the area, provision should also be made to encourage this form of transport by providing bike racks and appropriate sloping level changes
- The needs of business men and women who use the park-and-ride facilities can also be catered for through appropriate complementary economic facilities.
- Instead of only providing a surfaced walkway of minimally sufficient width, and with basic street furniture, the opportunity exists to create small nodes thus encouraging development of the informal and micro-economy of the area.
- A wide variety of users utilise this space, with the majority being young working adults. This fact supports the notion that developments in the area should have an economic focus.

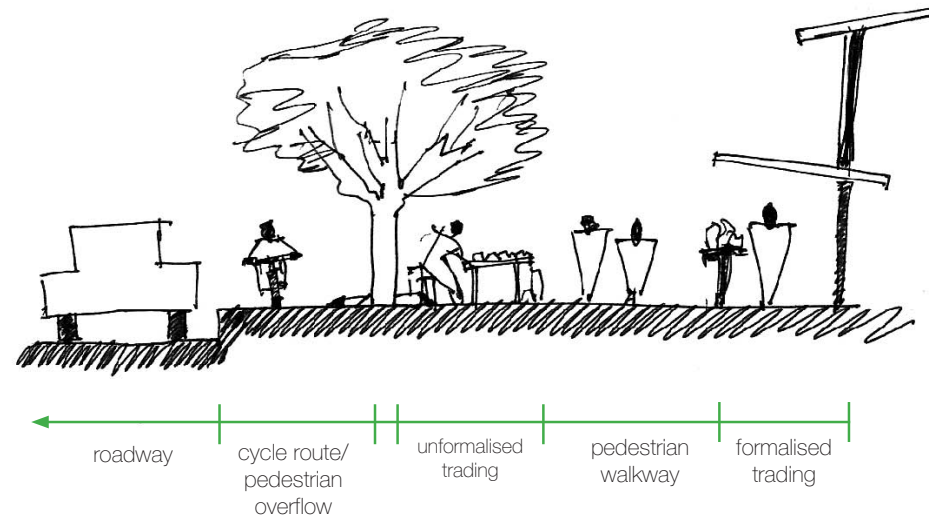


Figure 2.39. Possible use of Koch Street public space

SWOT Analysis

The SWOT analysis reveals the site as having potential as a gateway to connect Salvokop to the city whilst still preserving much of the distinctive identity and heritage of Salvokop as an urban village. A mixed-use development could provide the opportunity for local economies to emerge and flourish whilst simultaneously providing formal housing for those residing in Salvokop in informal accommodation.

In “Marketing Strategies” Ferrell (2008: 124) states that SWOT analyses are only useful if utilised effectively. Establishing the causes of certain occurrences, as opposed to merely determining their characteristics, can contribute to successful analyses. Trends are also highlighted as growth and opportunity indicators, and should be identified before action is taken. (Ferrell, 2008, 121)

In the specific case the causes of the site’s characteristics are due largely to its location and its vacant state, allowing unrestricted pedestrian movement to occur across it. Should the site be developed with a non-permeable barrier (as appears likely, as suggested by recent developments of a secure parking lot) the site would not receive any pedestrian activity.

Unique identity	Gautrain
High pedestrian count	Mostly under-developed
Important connectivity node	Prime location relative to city
Economic activity	Parking area
	Positive development nearby
	Freedom Park
	Influx of tourists
	Residential area
Barren site	Isolated from city
Visually disconnected	Metro-rail parking
Lack of history	Relatively Under-developed
Poorly maintained	Low-rise development
	Neighbourhood feel
	South of railway

As far as trends are concerned, the site, has, in the last ten years it been included and/or proposed as a pivotal site in all the major framework proposals (Re Kgabisa, Gapp, Intersite - see chapter 4 for detailed analysis of framework proposals). This confirms the officially perceived importance of the site as a gateway into the suburb.



Tshwane Site

