

3

"As you are, so are your buildings; and as your buildings are so are you."

[LOUIS SULLIVAN\_1978:CHICAGO WATER TOWER BUILDING]

# context analysis

# 3.1

## ACADEMIC PRECINCT

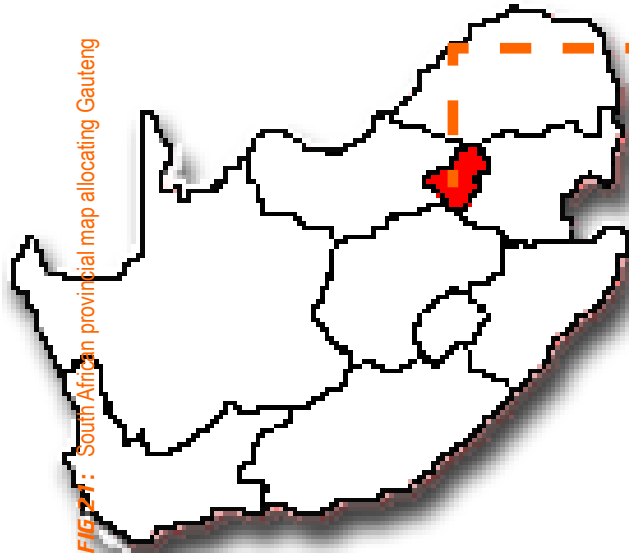


FIG-21: South African provincial map allocating Gauteng

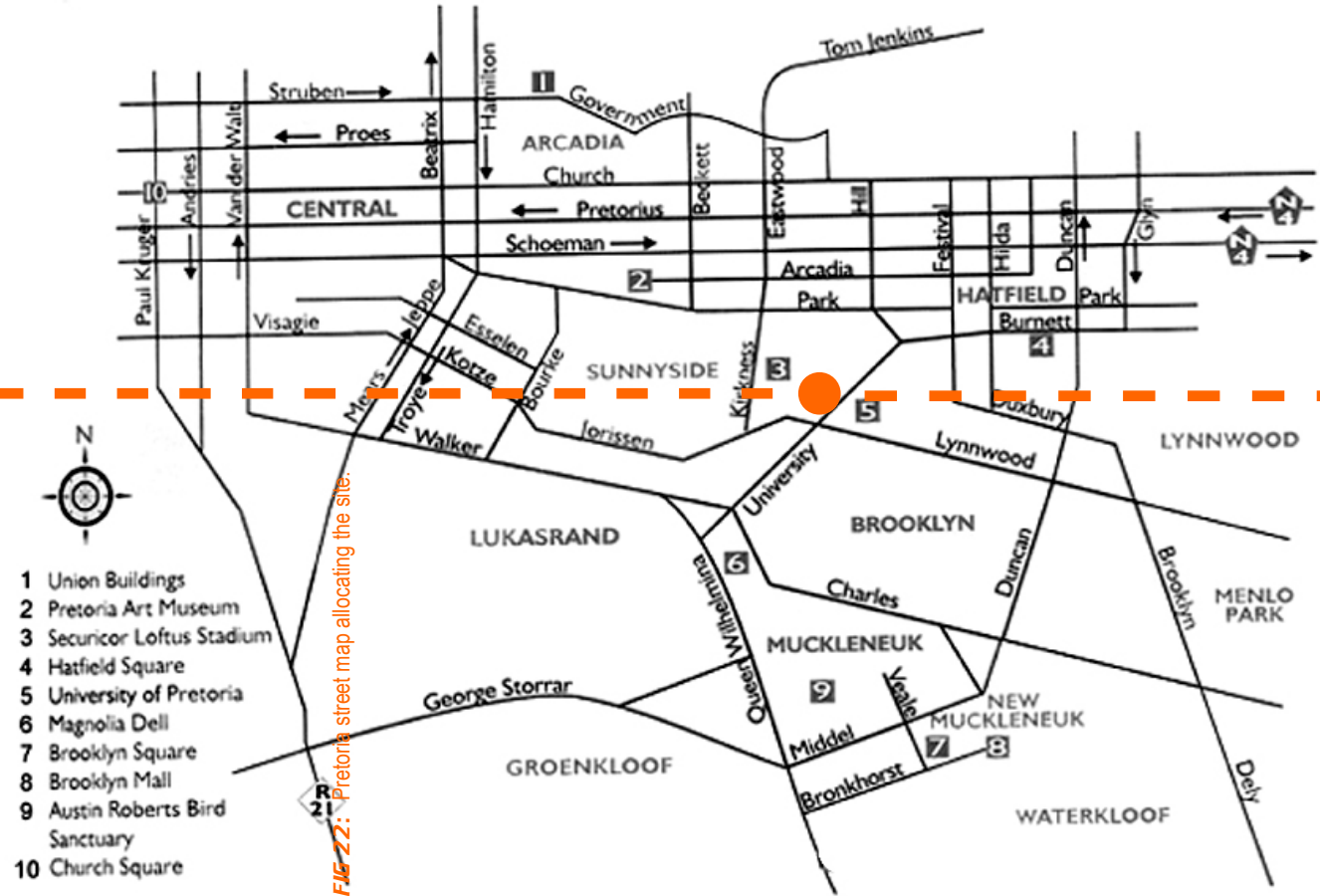


FIG-22: Pretoria street map allocating the site

**3.1.1 SECONDARY EDUCATION:** North and north-east of the triangle bounded by University Road, Queen Wilhelmina and Walker Streets is the academic precinct comprising the Pretoria Boys High School, the Afrikaanse Hoër Seunsskool, the Afrikaanse Hoër Meisieskool, and the Pretoria High School for Girls as well as the University of Pretoria [UP]. According to the Heritage Impact Assessment act [HIA] under paragraph 6.8.2.1

“this clearly defined precinct constitutes one of the city’s most important and well-known cultural landscapes.”



FIG 23: Aerial photograph of site and surroundings

**3.1.2 SENSE OF PLACE:** The academic precinct has a legible layered history of **a century**. UP possesses **a rich architectural heritage**, including buildings designed by Gerhard Moerdijk, Brian Sandrock (the Main Administration Building) and Karel Jooste. The character of the University campus is based on its function as a **place of academic discourse**, research and learning. These functions form the basis of the significant character of the campus: low noise levels, slow moving traffic, pedestrian friendly areas, areas of contemplation, calm working environments, safe surroundings and links to the surrounding residences and places of related academic activity. These aspects contribute to the unique character of the University campus and its sense of place.

**3.1.3 THE MAIN ADMINISTRATION BUILDING:** Completed in 1969 by architect Brian Sandrock who recommended that the new Administration Building be located in the far south-western corner of the campus, in an area known to students as “Die Gat”. It was thought at first that the Loftus Versveld Stadium would be relocated and the campus **expanded to the west**, which would have placed the new building at **the centre of the enlarged campus**. Due to the railway on the West and Lynnwood Road South, it became clear that the expansion would happen to the east. Nevertheless, the site was retained, on the grounds that it would make the building readily **accessible to the public**.

The windowless western façade is covered with a bas-relief and the building has a distinctive ship-like prow, hence the nickname “Die Skip”. The massive concrete wall on the western side, is structurally suspended on rubber brackets and forms an **acoustic shield** for noise from the railway line across the road: functionality on a monumental scale.

FIG 24: The Main Administration Building.



## 3.2 URBAN LINES OF CONNECTION

**3.2.1 PHYSICAL AXIS:** The cultural landscape is centred on the **University Road axis** extending north-east from the above-mentioned triangle across Lynnwood Road and the western boundary of the UP campus to the area of the north-east corner of the Pretoria High School for Girls.

University Road **gradually inclines to the north**, from Lynnwood Road intersection until it ends at a T-junction on Burnett Street. On adjacent sides of University Road the embankment on west and fence bordering the UP façade on east side, is set back from the street and the resulting **vacuum** is filled with student cars. Issues of entrances and edges to the UP campus need to be addressed both to respond to the different natures of each street and to create legible and safer points of entry. According to the Hatfield Future Developments [ref] the existing entrance to UP on University road are to be relocated, to establish a **pedestrian link with Loftus Versveld**.



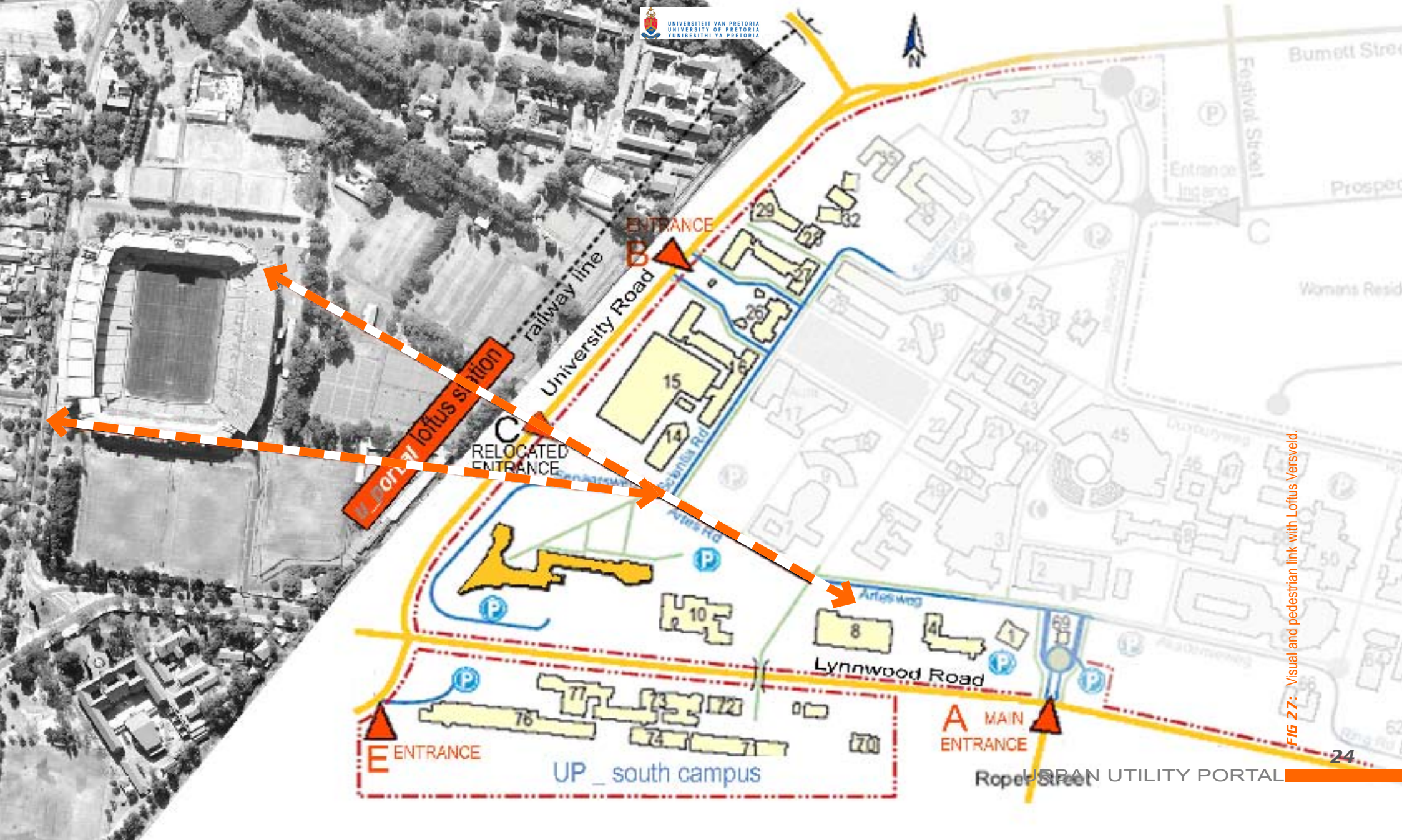


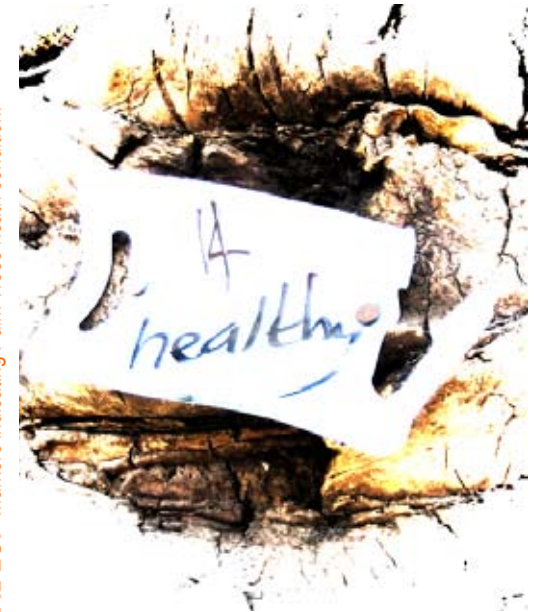
FIG 27: Visual and pedestrian link with Loftus Versveld.



**3.2.2 VISUAL AXIS\_END OF AN ERA:** The palm trees lining **both sides** of University Road date from the 1920's and have been maintained by the Tshwane City Council. The rows of trees used to continue directly parallel to the existing railway line until the construction of a grade separation between the latter and Lynnwood Road necessitated the diversion of University road. From an application of the NHRA assessment criteria, the trees are of cultural significance and **collectively constitute a heritage resource.**

The palm trees are but an element of many that contribute to the historical based **spatial and visual** qualities of the University Road axis. The following comes from the Heritage Chapter of the draft EIA

“University Road spine – The main significance is for its vista and connecting visual character towards the University of Pretoria and Loftus from Magnolia Dell and from the University’s western entrance in University Road towards Magnolia Dell. This road is more than a mere connecting link for motor vehicles and has since its construction been a scenic deviant and walkway for students and residents using this route to the University of Pretoria. This character has been enhanced by old and tall pine and bluegum trees inside the Pretoria Boys High School Grounds.”



**FIG 28:** Markers indicating Palm Trees health condition.



**FIG 29:** Palm Trees on University Road axis removed.



## 3.3

### GAUTRAIN DEVELOPMENT

**3.3.1 GAUTRAIN RAPID RAIL LINK:** The Gautrain Rapid Rail Link [GRRL] is a rail connection comprised of two links, the first between Tshwane and Johannesburg, and another link between OR Tambo International Airport and Sandton. This GRRL service brings Gauteng in line with the global domain, **linking cities by rail to international airports**. The GRRL is aimed at providing an alternative public transport mode to vehicular transport and therefore to attract private car-users to the train. This service's intention is to alleviate the congestion on the roads between Johannesburg and Tshwane. The modern train will offer international standards of public transport with high levels of safety, reliability, predictability and comfort

**3.3.2 HATFIELD STATION:** Hatfield is the last station on the primary north-south axis of the Gautrain system. A critical element of the Gautrain Station at Hatfield is the connection to the existing Hartebeetspruit railway station where passengers will be able to **transfer from the Metro rail commuter rail service to the Gautrain**. It is anticipated that Gautrain passengers will make use of walking, cycling, private vehicles, as well as the feeder-and-distribution services that form part of the Gautrain system. Also incorporated are the existing commuter rail service provided by Metrorail and the existing public transport services on the road network surrounding the stations precinct.

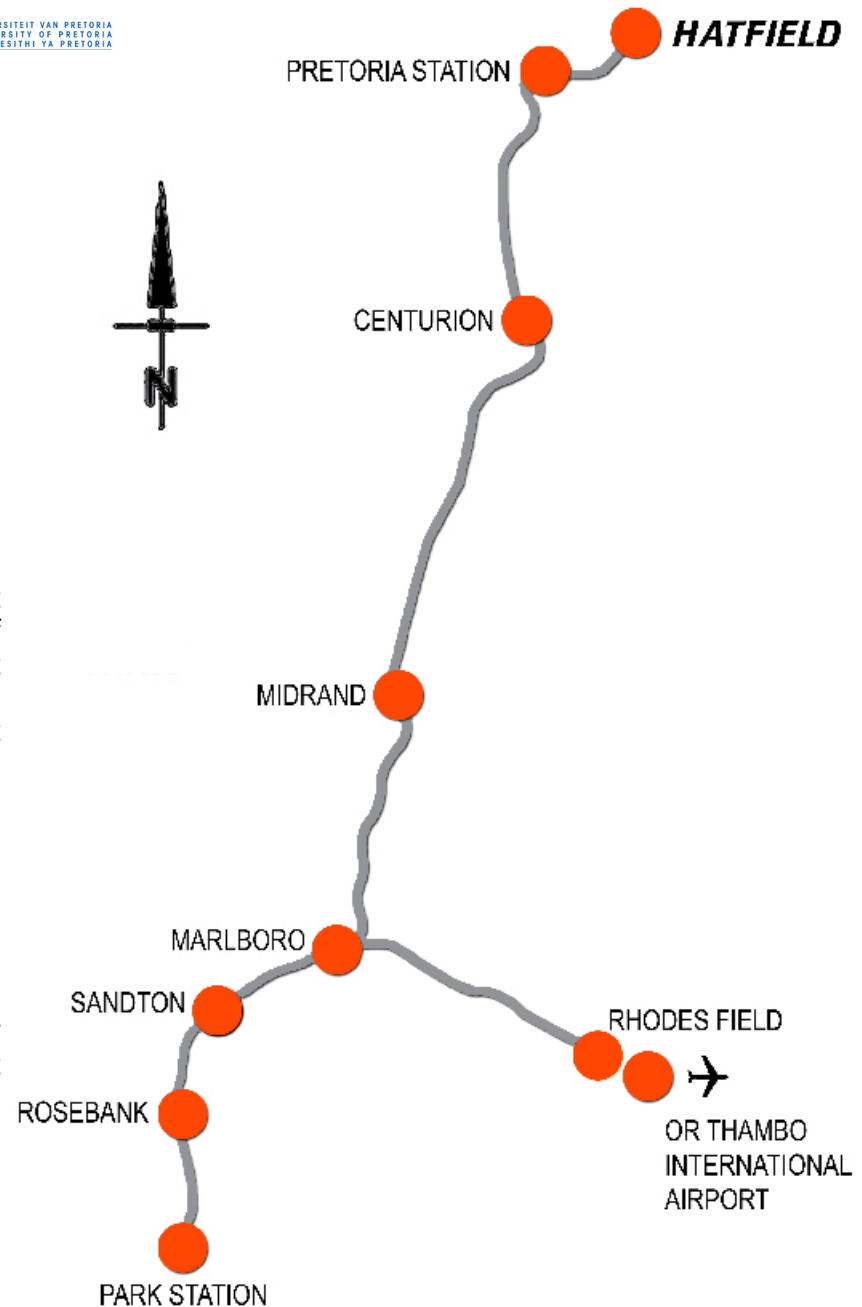


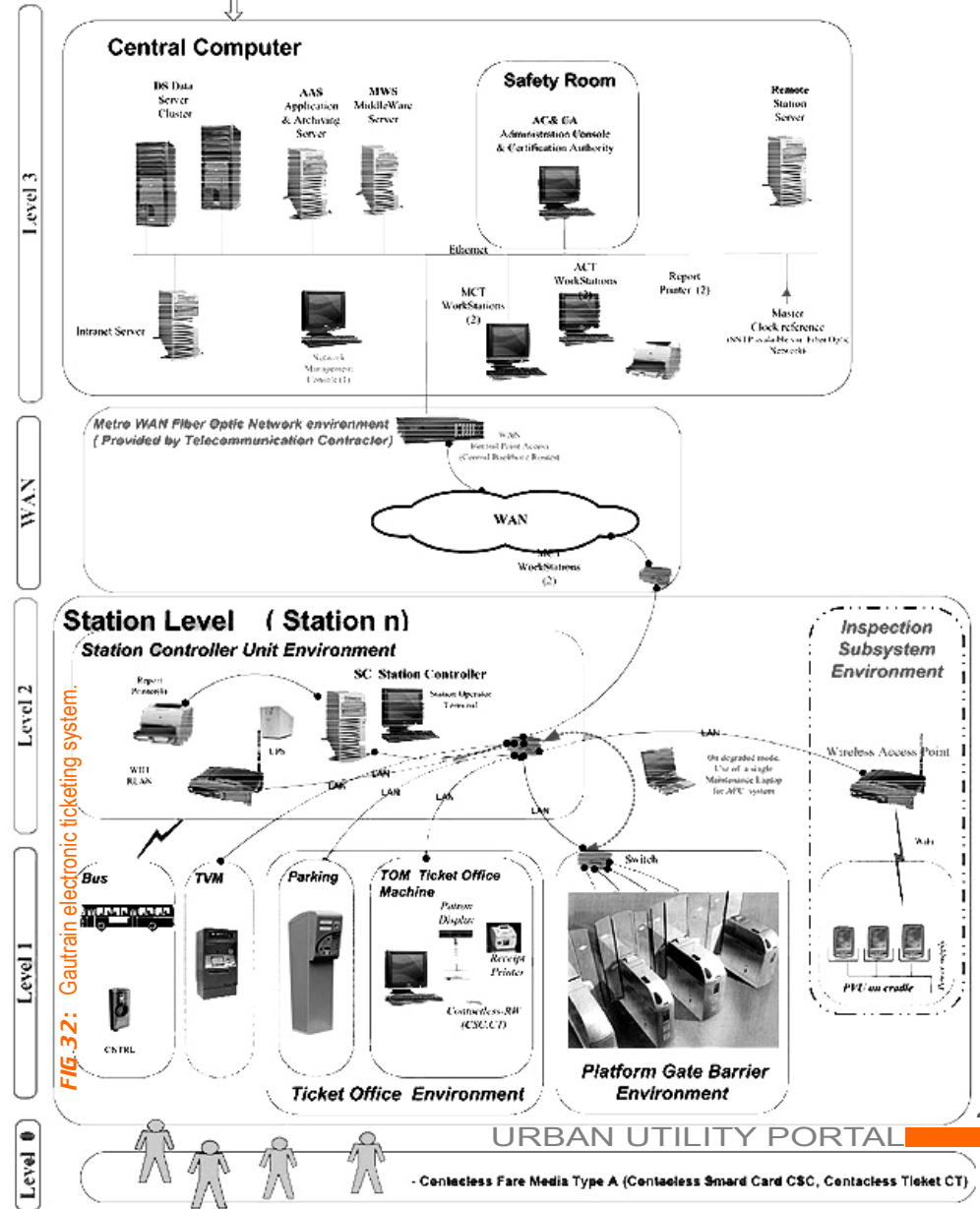
FIG 30: Gautrain rapid rail Link route.

**3.3.3 ELECTRONIC TICKETING:** The use of electronic **smart cards** is a proven technology in modern public transport systems throughout the world. The dissertation accepts that this automated ticketing system will form part of a single ticketing system for all modes of public transport across Gauteng.

Seamless transfer between different transport modes will be enabled by physical integration of routes and stops, similar quality of service, and co-ordinated timetables. Commuters will be able to plan their trips accurately and **conveniently switch between Metrorail trains, municipal busses, Rapid Bus Transit, taxis, bicycle sharing-rentals and the Gautrain.**



Transport smart cards enable passengers to use the same device to pay for a variety of **transport and information services**. Commuters will be able to use a pre-loaded smart card at self-service, computerised ticket vending machines in order to pay for multi-modal trips, or parking (cars or bicycle). Money can be loaded on to the smart card via cash, debit cards or credit cards. Contact-less technology means that smart cards can be scanned electronically when it is swiped past the access gate reader.



## 3.4 FEEDER AND DISTRIBUTION TRANSPORT

The City of Tshwane is faced with a challenge to improve public transport within the city. Currently the image of public transport is poor, but events such as the Soccer World Cup 2010 provide a window of opportunity to address the situation. An attempt to improve the image, quality and utilization of public transport have now been implemented by the City of Tshwane. These include: the construction of three Gautrain stations within the Tshwane area (Centurion, Pretoria and Hatfield).; the taxi recapitalization programme and the Rea Vaya Bus Rapid Transit[BRT].

Commercial nodes, Loftus sport stadium, industrial nodes, dense residential areas and Gautrain stations are critical nodes that will be linked in a fast and effective way.

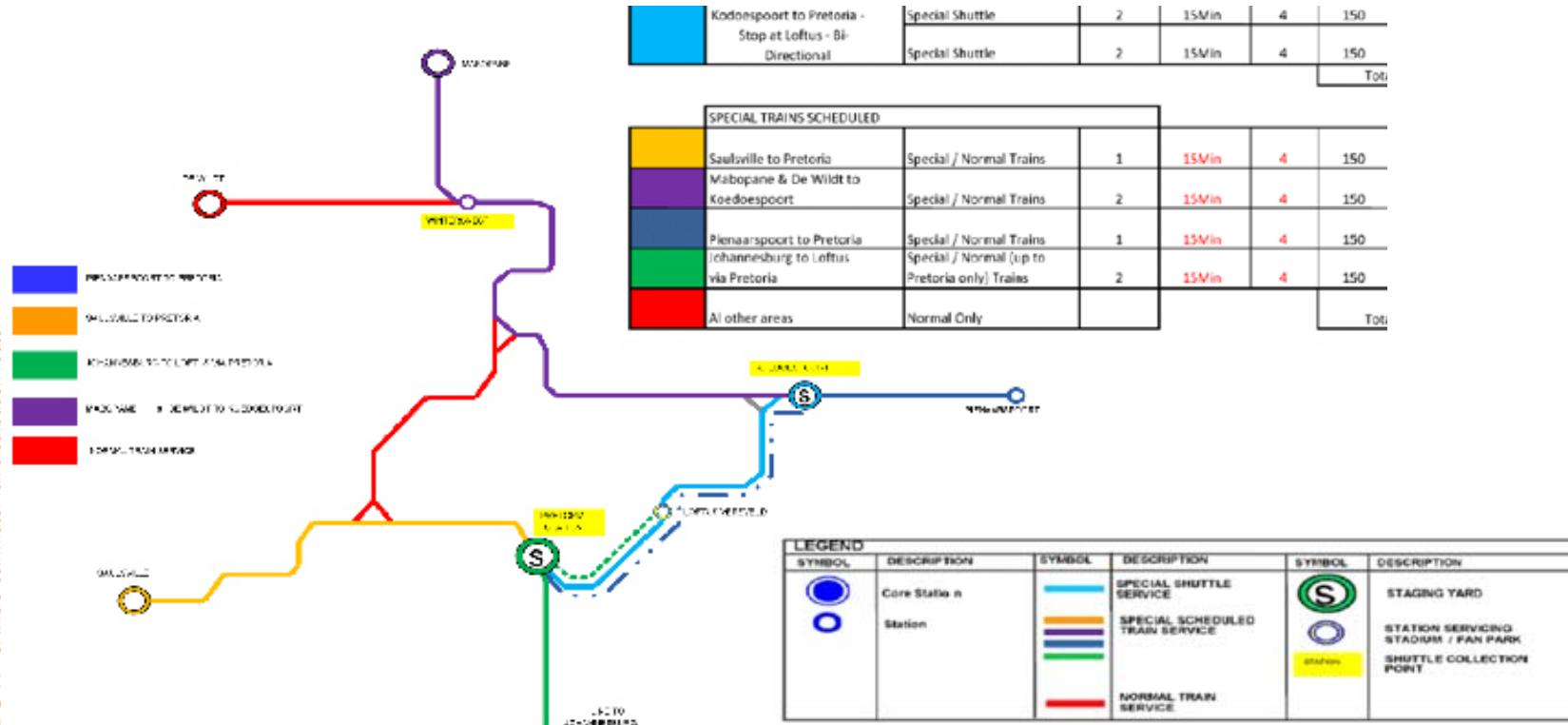
**3.4.1 SARCC:** "SARCC, as a subsidised public organisation, focused on fulfilling the government's social obligation by providing affordable commuter services."

Metro rail was transferred to the SARCC in 2006 to improve service levels, the convenience of commuters and ensure that an effective, safe, and efficient commuter rail service is provided to commuters. The SARCC has since embarked on a programme of upgrading and improving stations, station facilities, communications systems and security at both stations and inside trains. The Metro rail service provides a feeder service to a wide area throughout the City of Tshwane Metropolitan area and **makes the Gautrain service accessible** to a large component of the community that relies on public transport.



**FIG 33:** Metro commuter rail at Loftus Versveld Station.

FIG 34: SARCC commuter rail distribution route.



**3.4.2 RAPID BUS TRANSIT:** Due to the increasing congestion on the city's roads as well as long commuter waiting times for traditional public transport Tshwane will be implementing a mass rapid transit system, a high-quality, customer-orientated bus service that delivers fast, comfortable and low-cost urban mobility, by 2010. The BRT public transport system is the first phase of a four-phase project to develop public transport in the city. It involves busway corridors on segregated lanes and modernized bus technology.

The BRT stations will feature **pedestrian access, bicycle parking, park-and-ride facilities, and rail-road interfaces**

where applicable. The BRT system will stop at the Hatfield and Pretoria Gautrain stations, and the Pretoria Metro-rail station. Commuters will be able to make use of an associated distribution service within the inner city once they step off the main line. Buses will operate at two to four minute intervals during peak periods, and seven to ten minutes during off-peak periods. The system will be operational from five in the morning to midnight. The busses will stop at dedicated stations, placed at 750 m intervals along the route. Tickets will not be issued on the bus, but at the stations a pre-boarding ticketing system to ensure fluidity of migration.



"The new Tshwane Bus Rapid Transit (BRT) System will also service Loftus via a BRT Station in University Road close to Lynnwood Road. Regional bus services, mainly from Johannesburg, will drop off passengers in University Road and then park at peripheral coach park areas."

[PUBLIC TRANSPORT ACT \_ 2006 ]

**FIG 36:** Tshwane municipality distribution bus

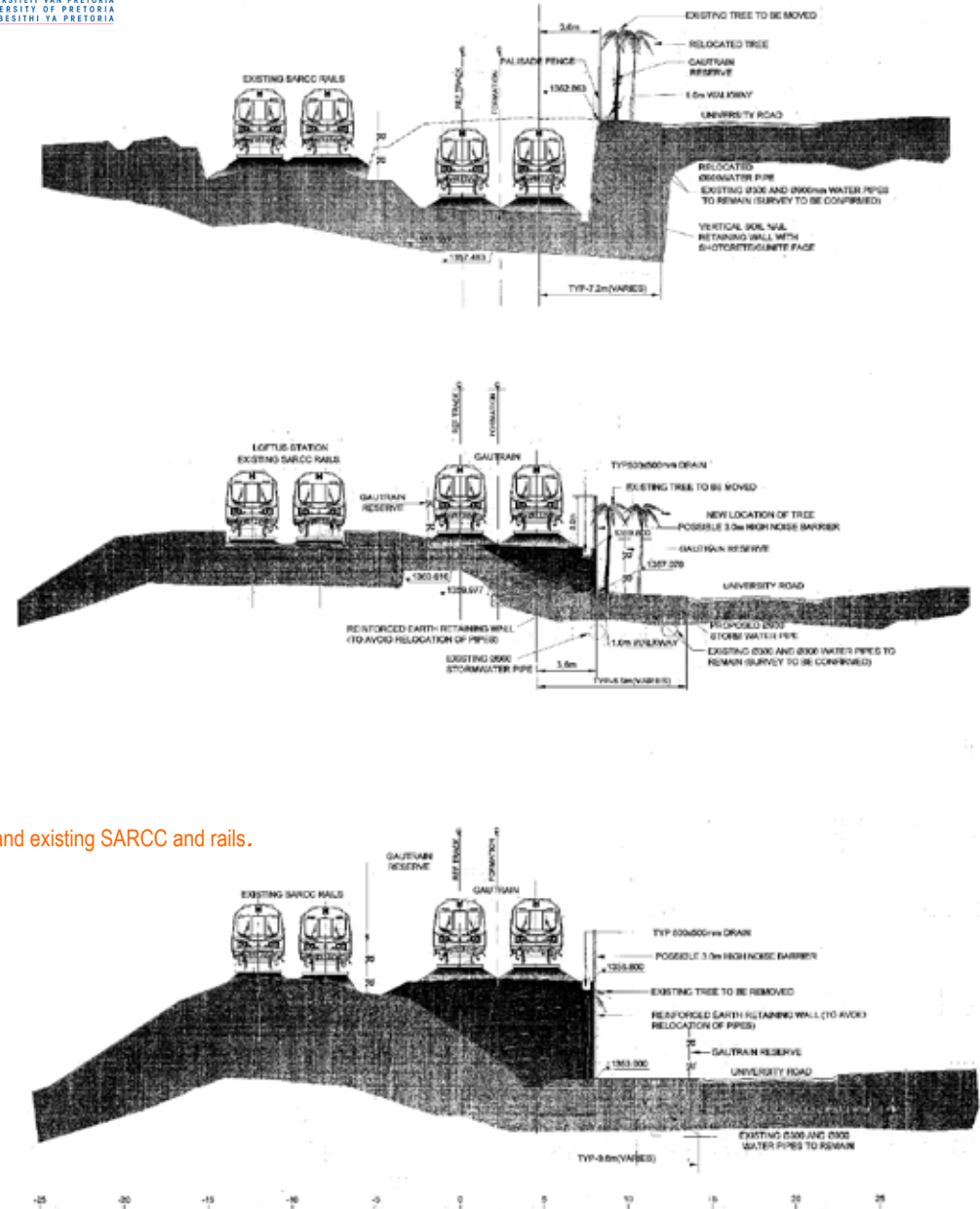




# 3.5

## LOFTUS VERSVELD STATION

**3.5.1 SARCC AND GAUTRAIN RAILS:** Loftus Versveld Station is situated between Pretoria and Hatfield Gautrain substations and serves the **Metro commuter rail**. Two rails from the existing SARCC run parallel with University road. The existing SARCC rails will be aligned to accommodate the Gautrain rails that largely follow, at surface, the existing Metro rail corridor. Two Gautrain tracks sandwiched between University Road and the SARCC are currently under construction. At this time the Gautrain is not planned to stop at the Loftus Versveld Station, although for the nature of the dissertation it is assumed that the Gautrain could potentially stop at the Loftus Versveld Station during peak hours, or on occasion for Loftus Versveld sports events usually over weekends. For the construction of the Gautrain support on University Road axis, the empty space adjacent the embankment will be filled with compressed groundwork. A **concrete retaining wall imprisons an impermeable boundary** on UP western facade, leaving a mere 1m sidewalk for pedestrians; this causes an uncomfortable physical and mental impact on University Road.



**FIG 37:** Alignment of Gautrain and existing SARCC and rails.



FIG 38: Urban frustration: commuters carrying luggage.



FIG 39: Existing entrance: inactive.

**3.5.2 PLATFORM:** Each open air platform on adjacent sides of the existing SARCC rails is fed from the ground level by a flight of concrete stairs. The entrances and underpass below the railway is positioned at a very close proximity with each other, making the use of the secondary entrance unfeasible. As a result only the **main entrance** is currently in use to **access** the trains, with **no alternative for the physically disabled**. Access through the entrance gates are supervised by security officers, but due to the lack of security infrastructure (electronic ticketing) the groundwork revealed that they are not stationed in all operation hours. This in return causes unsupervised access on the metro commuter rail. In an attempt to address the seating and shading needs of commuters waiting on the platform, two ineffective enclosed brickwork structures were constructed one on each platform. A pungent stench fills the air around the entrances to the platform, suggesting the lack of other necessary public infrastructure such as **ablution facilities**.



FIG 40: Main existing entrance: active.



FIG 4.1: Main entrance access gate.

Furthermore, there is a lack of informative resources on or around the platform. Although there is evidence of an information stall on the platform, it is unmanned and partially dismantled. Commuters are forced to **waste large amounts of time waiting** for the train; because no means to gain access to the train schedules exists. Hawkers position themselves at the main entrance gate, right next “to the hawkers will be prosecuted” sign a clear indication of inconsistent supervision. In general, the Loftus Station Platform currently disconnected from other transport systems. There is a **lack of public and informative resources** as well as a concern for commuter’s safety around entering and exiting the platform.



FIG 4.2: Hawkers and insufficient disposal infrastructure.



FIG 4.3: Ticket officer.



FIG 44: Urban frustration: ineffective shelter on platform. /



FIG 45: Ground surface infrastructure: weathered dustbin. /



FIG 46: Dismantled information building on platform. /



FIG 47: Unintelligent damaged signage. /