





03

context analysis

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03 context analysis

*"My world it moves so fast today
The past it seems so far away
And I squeeze it so tight, I can't breathe
And every time I try to be
What someone has thought of me
So caught up, I wasn't able to achieve
But deep in my heart the answer it was in me
And I made up my mind to find my own destiny*

*I look at my environment
And wonder where the fire went
What happened to everything we used to be
I hear so many cry for help
Searching outside of themselves
Now I know His strength is within me
And deep in my heart the answer it was in me
And I made up my mind to find my own destiny*

*And deep in my heart the answer it was in me
And I made up my mind to find my own destiny"*

Lauryn Hill musician

3.06

Introduction

The investigation into the context in which unutilized, left-over space in an urban environment will be translated into sensory stimulating social spaces will present useful indicators in order to develop the architectural language of the building. As a point of departure for this process to commence, levels of scale will be introduced to produce an understanding for the milieu in which the building will be designed.

Macro scale – Cultural context Social convergence

"The concept of culture leapt fully armed from the head of Johann Gottfried Herder in the mid-eighteenth century, and has been embroiled in battles ever since. *Kultur*, for Herder, is the life-blood of a people, the flow of moral energy that holds society intact, *Zivilisation*, by contrast, is the veneer of manners, law and technical know-how. Nations may share a civilization; but they will always be distinct in their culture, since culture defines what they are."
Roger Scruton (Fletcher, 2001: p.14)

Societies around the world are concerned with pressing issues like global warming, environmental conservation, airport security, international financial markets, political rivalry, Skype, Facebook and off course what celebrities are getting up to. Because South Africa forms part of this global village, societies within the country share the concern for the above aspects as well. South Africa is the host nation for the 2010 Soccer World Cup. This brings additional issues to the table including: the Gautrain Project, economic growth, electricity load shedding, unemployment statistics, and off course bribery and corruption.

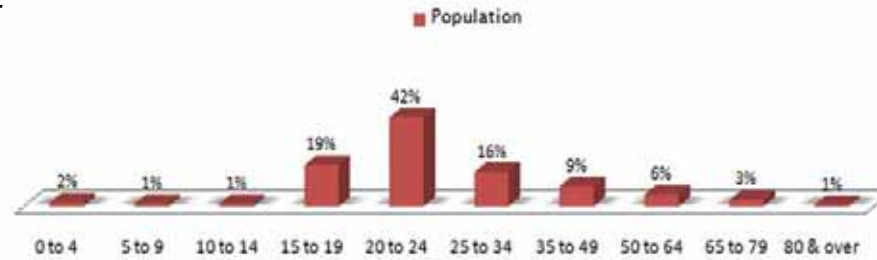
- 3.01 Comic strip of a debate between McCain and Obama by Mike Luckovich.
- 3.02 Social commentary comic strip of the Gautrain project as in Madame & Eve.
- 3.03 Comic strip of airport security by Mark Parisi.
- 3.04 Social commentary comic strip of bribery and corruption as in Madame & Eve.
- 3.05 Social commentary comic strip of global warming as in Madame & Eve.
- 3.06 Lyrics form the album *The Miseducation Of Lauryn Hill*, 1998 by Lauryn Hill.

Social

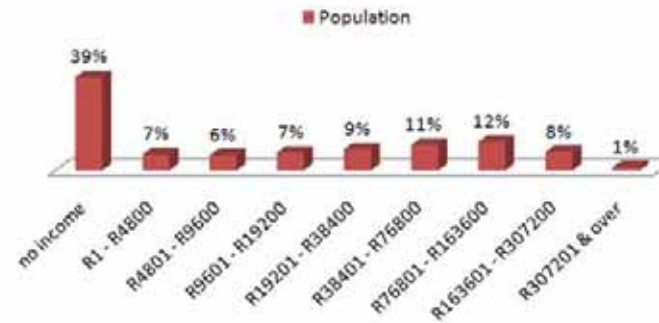
Problems identified in social context:

- High unemployment rate
- Expensive healthcare
- Lack of housing delivery
- Insufficient security
- Lack of intellectual interaction
- Lack of social spaces
- No 'platform' for self expression
- Segregated public and private spaces
- Lack of cultural expression
- Communication Void

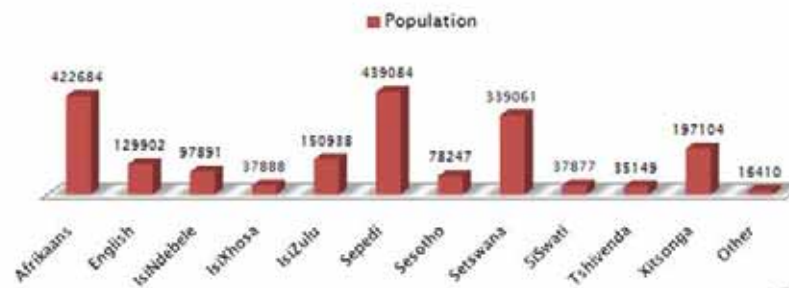
Age in years of resident Hatfield population



Household Income in Hatfield Precinct



Home Languages in Tshwane Metropolitan Area



3.07

The South African Census of 2001 indicates that the majority of the resident population in the study area which include Hatfield, Arcadia, and Hillcrest precincts is between 20 and 24 years of *age*. This is due to the amount of students living in the areas that are studying at the university. Due to the amount of secondary schools in the area, the second largest resident population is aged between 15 and 19 years.

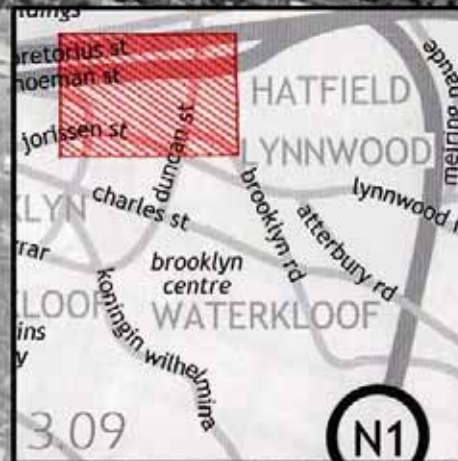
The majority of the resident population within the Hatfield Business District has no household *income*. This is again due to the amount of students living in the areas that are studying at the university and at secondary schools.

Sepedi is the most commonly spoken *home language* in the Tshwane Metropolitan Area (22%), followed by Afrikaans (21%) and Setswana (17%). (*Census 2001* on www.statssa.gov.za)

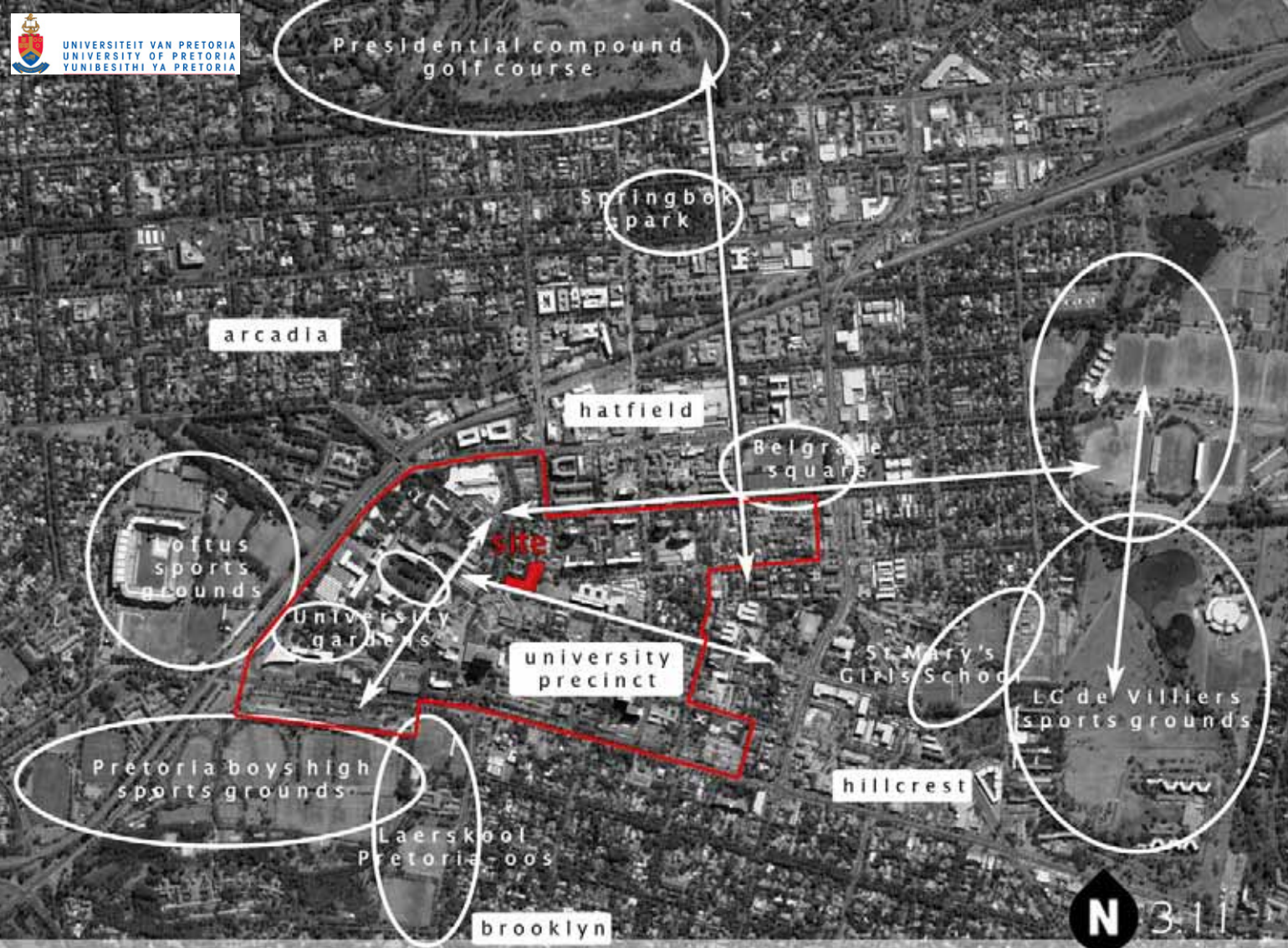
Urban
 Micro scale - Local
 University's main campus & Hatfield precinct

"Surveyor WR Lanham laid out the suburb of Hatfield on the farm Koedoespoort for the Wesleyan (Methodist) Society in 1905. The suburb was named after Hatfield House in Hatfield, Hertfordshire, England, the residence of William Waldegrave Palmer, second Earl of Selborne (1859–1942), who became Governor of the Transvaal (1905) and High Commissioner in 1909. The name Hatfield has its origin from Old English heap field, meaning "heather-covered field". The **Hatfield** township was incorporated into the Pretoria municipality in 1916. Most of the residential houses remaining in the Hatfield - Hillcrest area date back to the early 1900's." (www.tshwane.gov.za)

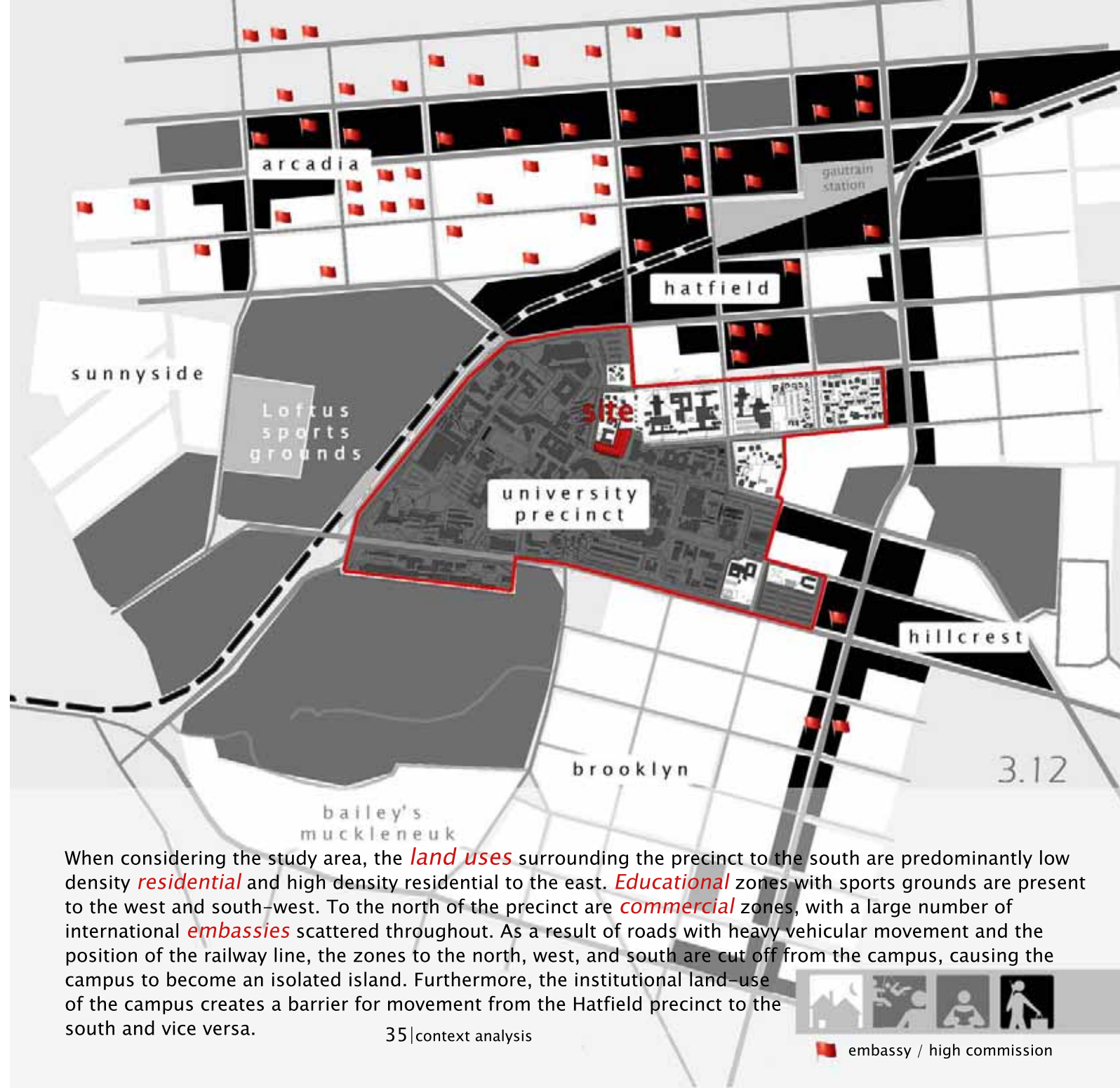
The **University of Pretoria** was re-located in September 1911 from the residence in Skinner Street to the Hatfield precinct where it is currently situated. As a **landmark** within this precinct the main campus functions as a research and education hub, from which the surrounding precincts benefit.







Surrounding the precinct are *green open spaces*, consisting of private sports grounds, a public park, and the private presidential compound and golf course. Most of these green spaces are inaccessible for the public. Inside the precinct are semi-private gardens scattered throughout with connected green pedestrian routes. A number of green open spaces in the study area are *connected with green corridors*, but the green spaces are far apart and the corridors are along fast-moving vehicular routes, making it dangerous for pedestrians to use.



When considering the study area, the *land uses* surrounding the precinct to the south are predominantly low density *residential* and high density residential to the east. *Educational* zones with sports grounds are present to the west and south-west. To the north of the precinct are *commercial* zones, with a large number of international *embassies* scattered throughout. As a result of roads with heavy vehicular movement and the position of the railway line, the zones to the north, west, and south are cut off from the campus, causing the campus to become an isolated island. Furthermore, the institutional land-use of the campus creates a barrier for movement from the Hatfield precinct to the south and vice versa.

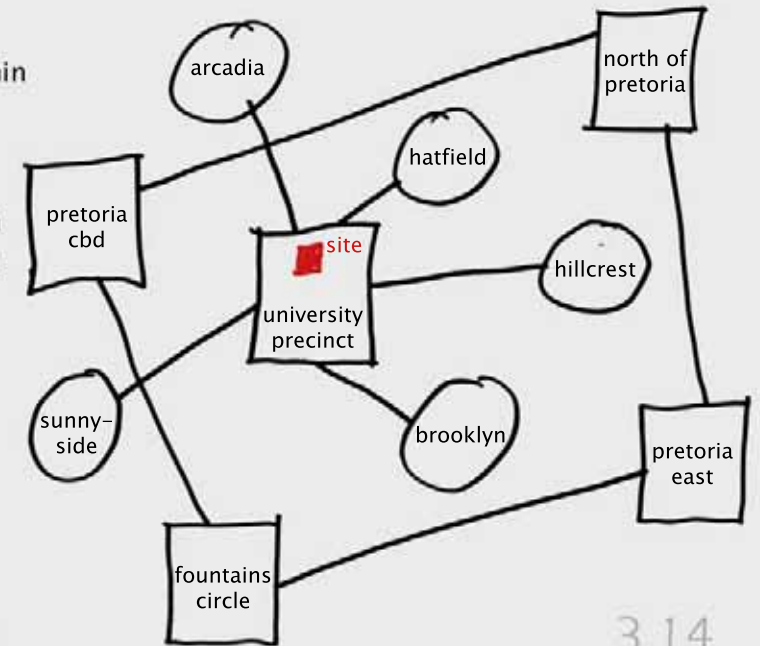


- vehicular movement
- pedestrian movement
- main bus route
- railway line
- transport node
- activity node

The Hatfield precinct being largely a mixed use commercial hub is an important *activity node* within the city. It will be the last station on the Gautrain route to the north, and will provide the community with a variety of entrepreneurial opportunities. The precinct is currently functioning separately from the university campus, which generates the problem of public and private spaces not being integrated. Urban place-making is needed in order to fill these voids between the different realms. There is a need for a safe formalized *public transport system* with facilities that will integrate different transport modes, linking regional activity nodes together.

Linking the activity nodes within the area, are primarily by enhancing the flow of pedestrian and vehicular *movement patterns*. When considering the study area, primary vehicular movement occurs in Schoeman – and Pretorius Street. Both these streets are four-lane one-way streets; one leading traffic out of the city, and the other bringing traffic from the N4 highway into the city. Church Street also provides east-west access into the city. Secondary movement occurs in Duncan Street which connects suburbs in a north-south direction, and Lynnwood Road which is an east-west connector. Both these streets form part of the primary bus route, but have little pedestrian activity on the side-walk, due to the faster vehicular movement. The tertiary *vehicular route* is Burnett Street to the north of the precinct, and University Road to the west. Both streets are single-lane streets with slower vehicular traffic and higher levels of pedestrian movement with some side-walk activities.

Public pedestrian movement through the campus is discouraged by security access into the compound, while the *pedestrian paths* along the streets can generate *linear urban edges*, but are not utilized to its maximum commercial potential. These urban edges are not designed and therefore prohibit the development of day - and night time activities along the side-walks. If implemented correctly these activities will ensure *passive surveillance* within the area, and will contribute to the general safety within the precinct.



Climate Data

Zone

Pretoria falls into the Northern Transvaal climatic zone, which is characterized by distinct rainy and dry seasons, with large daily temperature variations and strong solar radiation, and moderate humidity levels.

Temperature

Temperate climate with:

- average day temperature – summer 29°C
- average night temperature – summer 17°C
- average day temperature – winter 20°C
- average night temperature – winter 5°C

Rainfall

380mm–700mm

Rainy season is from November – March, and peaks in January with late afternoon thunderstorms.

Wind

Summer: direction is predominantly east–north–easterly to east–south–easterly.

Winter: direction is predominantly south–westerly with occasional wind from the north–east.

Altitude

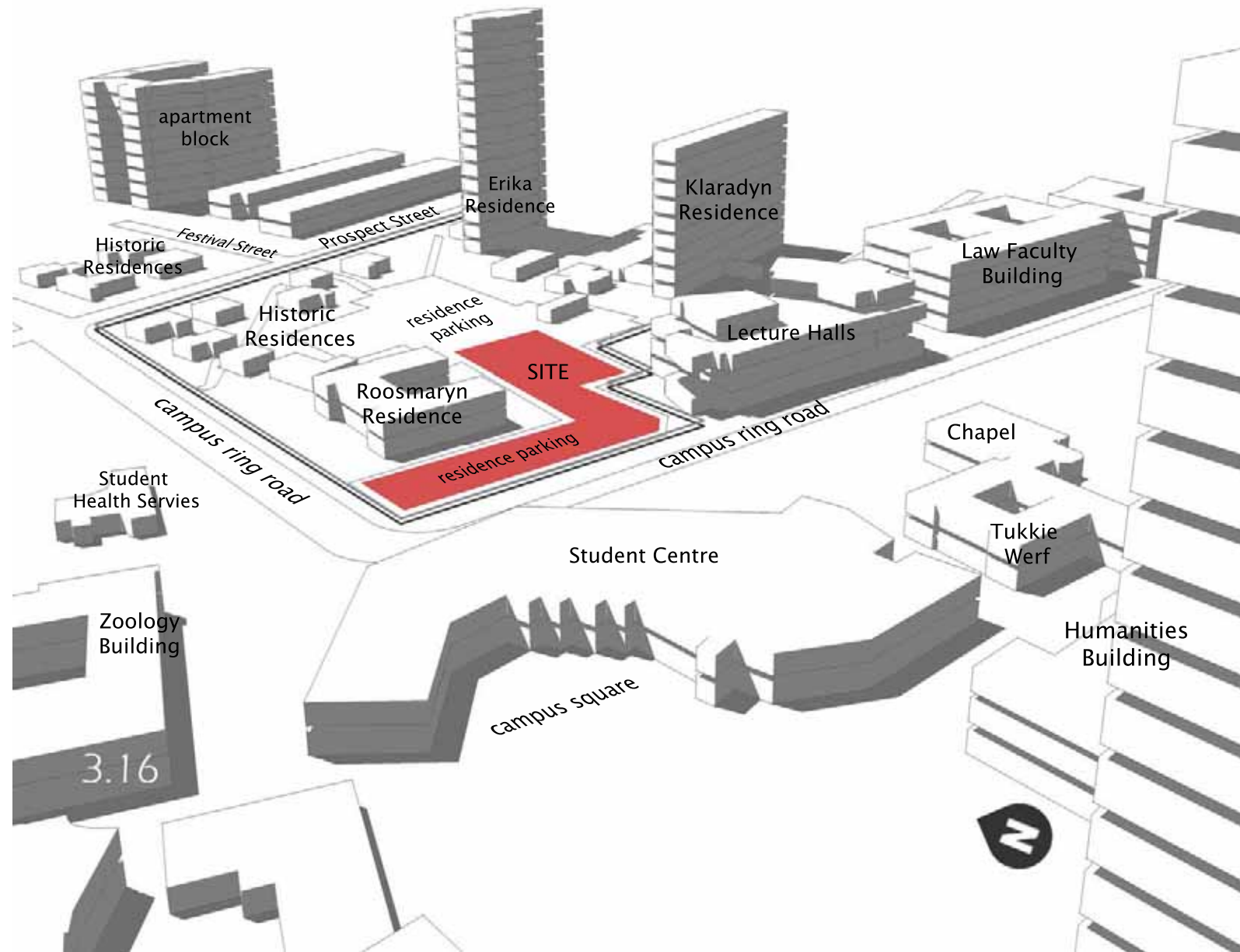
1372m above sea level

(Holm, 1996. p. 69)



Site description

The client made it possible to select an appropriate site for the language learning centre to be built on any of the properties owned by the university. Site *selection* needs to be considered on the main campus, due to easy accessibility for students and members of the public. The selected site needs to be easily integrated with the Hatfield Urban Development Framework, and will be considered for its ability to enable the opportunity for social interaction and design exploration.

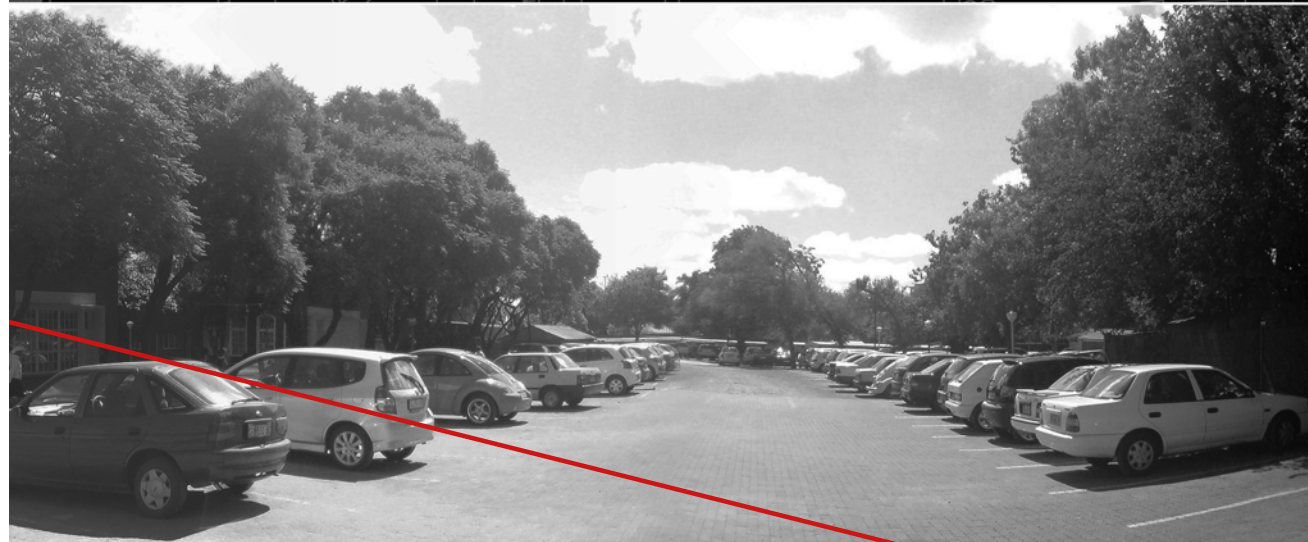


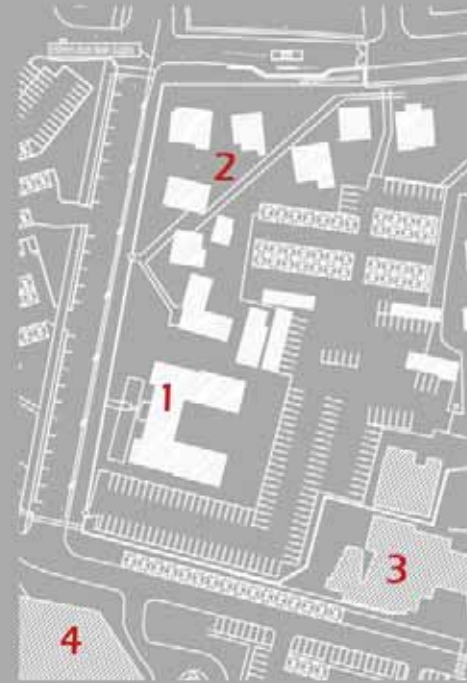
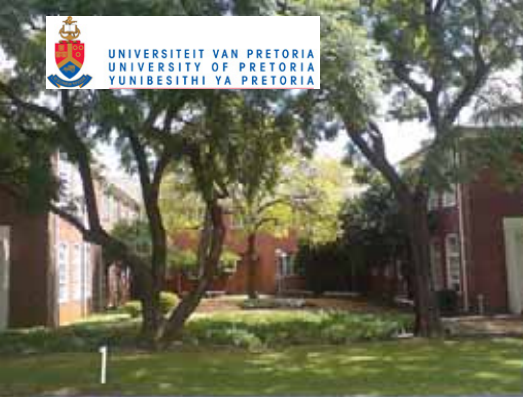


3.19



The site is therefore *located* on main campus, and significantly situated at a point where two major urban grid patterns meet. This convergence of the urban fabric enhances the concept of intercultural chance encounters and the celebration of converging cultures. Positioned between the Roosmaryn Residence and the newly constructed lecture halls, this fenced-off hard desolate space functions as a semi-paved parking area for the vivacious residents of the surrounding residences. A space that seems to be displaced somewhere between the private bustling of the main campus and the public hustling of commerce in the distance.





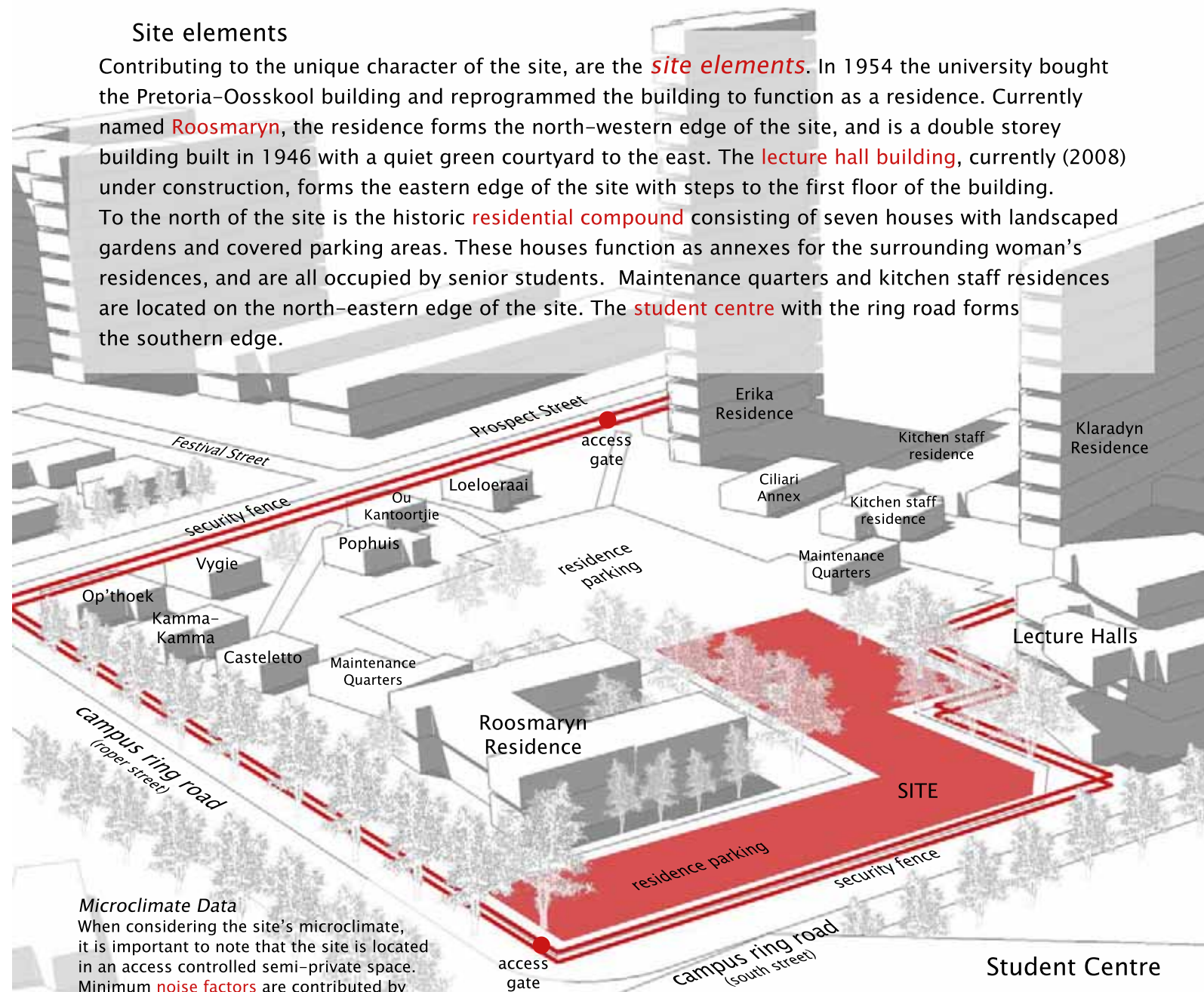
1. Roosmaryn Residence
2. Residential Compound
3. New Lecture Halls
4. Student Centre

3.20

Photos illustrating the surrounding site elements.

Site elements

Contributing to the unique character of the site, are the *site elements*. In 1954 the university bought the Pretoria-Ooskool building and reprogrammed the building to function as a residence. Currently named **Roosmaryn**, the residence forms the north-western edge of the site, and is a double storey building built in 1946 with a quiet green courtyard to the east. The **lecture hall building**, currently (2008) under construction, forms the eastern edge of the site with steps to the first floor of the building. To the north of the site is the historic **residential compound** consisting of seven houses with landscaped gardens and covered parking areas. These houses function as annexes for the surrounding woman's residences, and are all occupied by senior students. Maintenance quarters and kitchen staff residences are located on the north-eastern edge of the site. The **student centre** with the ring road forms the southern edge.



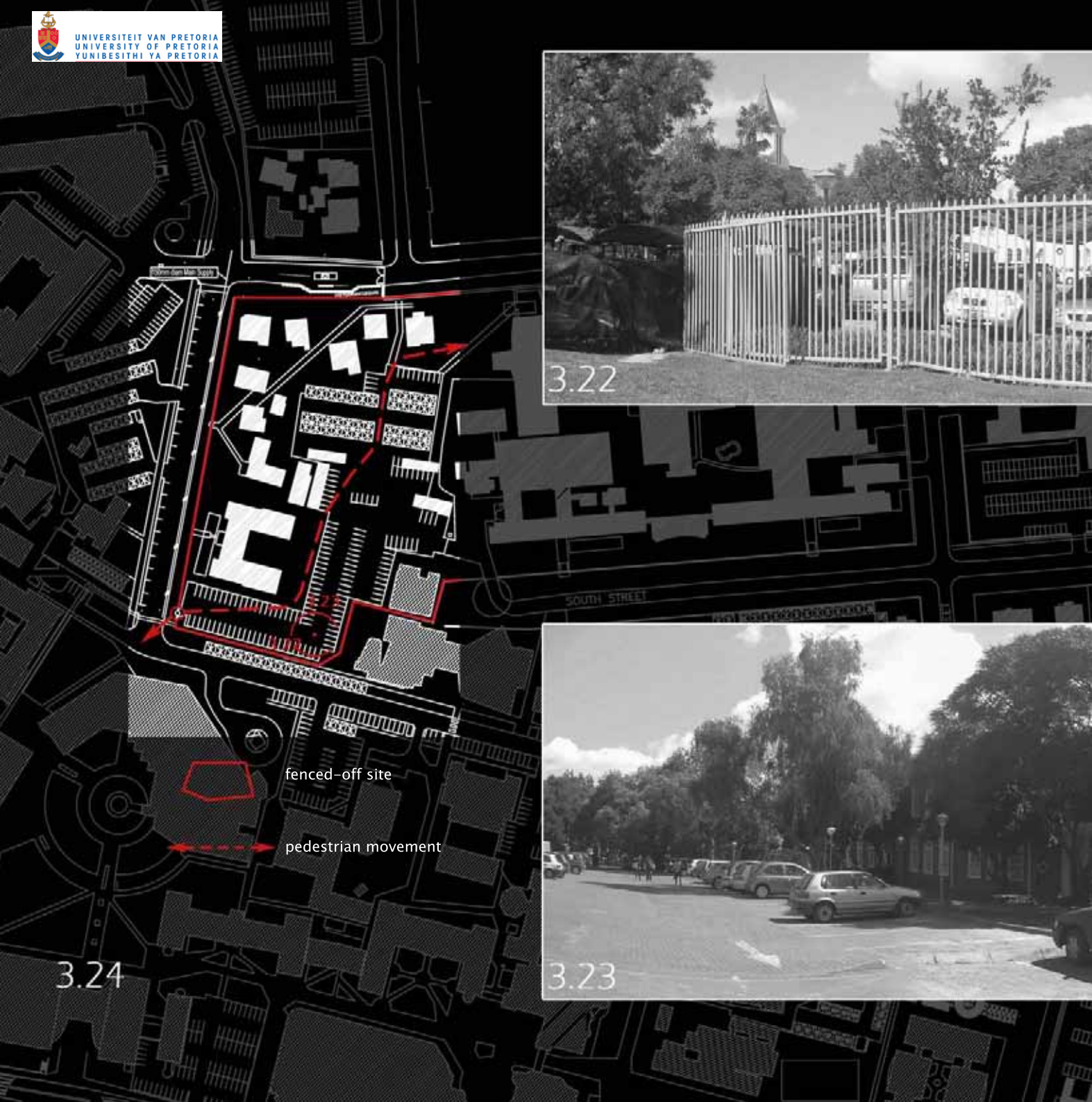
Microclimate Data

When considering the site's microclimate, it is important to note that the site is located in an access controlled semi-private space. Minimum **noise factors** are contributed by pedestrians in conversation while moving through the site, and slow moving vehicles searching for parking places. The **vegetation** comprises of mature trees that are along the periphery of the Roosmaryn residence and between series of parking bays. These trees include: Jacaranda Mimosifolia; Platatus Occidentalis; Bauhinia; Celtis Africana; and Quercus Roburn. According to geological data for the area, the **geology** comprises of Ferruginous shale, Quartzite, and Andesite. (Tshwane Geological Data, Tshwane Municipality, 2008.)

Student Centre

3.21





3.24

fenced-off site

pedestrian movement

3.23



Although situated on the university ring road, the site is fenced-off and only accessible with an access card through a rotating security gate. Pedestrian *movement* is diagonally across the site, originating from a rotating security gate in the fence in the south-west corner towards the residences to the north-east of the site. Vehicular movement occurs across the extent of the site, due to the space functioning as a parking area, with entrance from South Street.



Development

“Hatfield has been identified as one of six Metropolitan Cores in terms of the Tshwane Metropolitan Spatial Development Framework (MSDF). The MSDF contains specific guidelines as to how a Metropolitan Core should develop.” (Hatfield MCUDF, 2007 on www.tshwane.gov.za)

Problems that have been identified of previous development frameworks were: does not address the precinct in its context; proposed before the Gautrain Development; no sufficient level of detail proposals to enable land use management.

Hatfield Metropolitan Core Urban Development Framework

Problems Identified

- Expensive Land Values
- Many conservation worthy buildings
- A large population of students that often have no significant source of income and vacate the area periodically and have no personal interest in the area.
- Lack of parking
- Congested roads
- Car dominated movement
- Lack of open spaces

The major driving forces behind the proposal are:

- Tshwane Metropolitan Spatial Development Framework
- Gautrain Station
- Proposed Bus Rapid Transit (BRT)
- University of Pretoria
- National Sports Facilities
- Movement Linkages
- Inner City and National Government

“Transit Oriented Development is the exciting new fast growing trend in creating vibrant, livable communities. Also known as Transit Oriented Design, or TOD, it is the creation of compact, walkable communities centred around high quality train systems. This makes it possible to live a higher quality life without complete dependence on a car for mobility and survival.” (Hatfield MCUDF, 2007 on www.tshwane.gov.za)

The components of Transit Oriented Design are:

- Walkable design with pedestrian as the highest priority
- Train station as prominent feature of town centre
- A regional node containing a mixture of uses in close proximity including office, residential, retail and civic uses
- High density, high-quality development within 10-minute walking radius surrounding train station
- Collector support transit systems including trolleys, streetcars, light rail and buses
- Designed to include the easy use of bicycles, scooters and walking as daily support transportation systems
- Reduced and managed parking inside 10-minute walking radius around town centre/train station

Critical Requirements

- A clear identity and image
- Intensification of development
- Mixed land use on site level
- Land use and transport integration
- Quality architecture
- The upgrading of the public domain and the integration of private developments with public space
- Linkages for non-motorised transport (pedestrians and cyclists)
- Sound Urban Management
- Service Infrastructure to support development