4.1 Site proposal

The site is situated against one of the Magaliesberg’s southern ridges within a valley, in the city of Tshwane. Encircled with rich environmental landscapes, institutional buildings and recreational spaces are characteristic of the surrounds of this site. These institutional buildings include the South African Bureau of Standards, the South African National Parks Board, the University of South Africa and the University of Pretoria Groenkloof Campus (The old Normaal Kollege Pretoria). Recreational spaces include the Harlequins Sports Club, Groenkloof Virgin Active gym and Groenkloof Nature reserve. It is further bordered by finer grids of residential dwellings on the northern side of both sides of the valley’s ridges.

The site is placed on the property of Groenkloof Campus and edging the recreational green spaces to the west and the built up heart of the campus to the east. The analysis will indicate the current problems associated with the campus and propose possible solutions.

4.2 Historical context

Imbedded in the site is a rich historical presence and cultural heritage. The valley is surrounded by “koppies” representing the struggles of the past and illustrating the militaristic function of the landscape as a vantage point during war.
Over the past decade the site has gradually changed its functions and users. It started with the early traditional cultures which inhabited the area and particularly the San people who lived along the hills up until the 1800’s. Throughout the colonial times these hills were used for battle forts and block houses. During 1887 one of the pioneers of Pretoria, John Johnston Kirkness started quarrying the clay in the valleys which was to be used for the Kirkness clay bricks. After the clay ran out in 1960, large excavated areas had to be filled and the quickest and simplest solution was to use the site as a dumping terrain.

As the city developed and the threat of wars subsided, proper planning of the city became the primary objective of the state. This included proper urban development plans for future developments within the city. These proposals included social institutions and public facilities which would further the education of the general public.

In 1902 The Educational College of Pretoria started in Sunnyside but by the 1970’s new highways through the Sunnyside area, increasing student numbers and the lack of infra-structure emphasized the need for larger educational premises. The required property for the NKP (Normaal Kollege Pretoria) was permitted by the Government in 1975 and was allocated between the University of South Africa (UNISA) and the Bureau of Standards (SABS). It was the current Groenkloof campus premises which were to be utilized to accommodate the new campus, and the campus was built during 1980.
-1989. Large portions of the overall project were never completed due to financial shortcomings. Due to this, fragments of the campus were left with no response to each other. The proposed heart of campus never realised, and the end result is an undefined space overwhelmed by the surrounding environment.

4.3 site analysis_

“In our context “identification” means to become “friends” with a particular environment.” (NESBIT 1996:424)

_plan and section_

The campus has a rich diversity of functions with residential, educational and sports facilities already found on the premises. Owing to this high diversity of functions, various social spaces exist on the premises. The spaces range from privacy of a room to the public space of the sport field. Unfortunately the campus has never had any specific relation to other campuses and more particularly to its existing context. This is greatly due the fact that the primary function of the campus has lost its importance in the South-African context. Currently some of the activities that were based at L.C. De Villiers Sports Campus have been moved to Groenkloof.
due to a lack of space. Primarily these activities include dancing and hockey, but some of the other athletes have also moved to Groenkloof based upon their own preference. Overall this move is as a result of the High Performance centre that was established at L.C. De Villiers. The problem with this is that L.C. De Villiers has grown so much recently that the current facilities are over utilized and overcrowded.

The lack of access to the site and the surrounding institutional property, created an environment of inclusive spaces at the Groenkloof Campus. This can be seen on the northern boundary where the University of South–Africa is located, and to compound the problem, the largest portion of its facilities is parking orientated. Large public transport systems connect these institutions and neighbourhoods.

One of the main concerns is the under development of the campus’s facilities and its undefined centres due to the infinite space as the campus opens into the landscape. A lack of management and finances has left large portions of the Groenkloof property in-active. The potential of these areas are undeniable but their use as conservation areas should be considered within the larger context of the area.
1. educational and residential relationship
2. sport and recreation relationship
3. conservation areas
The residential component of the campus consists of hostels which only functions for certain parts of the year. This means that for at least three months of the year the campus are completely under utilized. These residences are occupied by students form main campus and Groenkloof campus, although the majority of students are studying on Groenkloof campus. During the year various head counts (based upon a two hour period over lunch time) were made in the cafeteria in regard of this matter. The results showed a ninety percent decrease over the holidays. For this reason as well as financial concerns, the services within student facilities have not been upgraded.

Auditoriums are currently used by students and occasionally by the general public, but due to the lack of proper infrastructure the public use of the facility is limited to smaller events. Most of the buildings lack sufficient heating and cooling devices and less than eighty percent of the campus can accommodate disabled users.

What was supposed to be the heart of the campus is now an over sized park with undefined edges fronted by dead building facades. The scale of the green space is enlarged by sports fields and conservation areas of the context. The libraries front entrance has been closed off and what remains is a dead edge within the larger green space. Exacerbating the problem is the fenced-off recreational swimming pool next to the sport centre and a bricked up facade of the cafeteria. The cafeteria’s only open facade faces a small courtyard
on the eastern side. A small single storey residence and a club house sits within a green space southwest of the cafeteria. Their limited functions and their private nature can be considered as the under utilization and inappropriate use of the space. For this reason these buildings should be demolished and substituted with higher densities and more diverse functions.

Historical events have left the site’s soil conditions in a fragile state. Deep foundations will be a prerequisite for the property and is more expensive to construct. The site functions as a storm water drainage basin for the surrounding hills and drainage and run-off is problematic. Rich diversity in habitats can be found along the ridges even if they are classified as disturbed habitats. The exotic species that flourish in the disturb spaces is of greater concern to the landscape.

As a result of the land form temperatures fall drastically during the winter months as the cold air accumulates in the valley basin. Temperatures are further lowered by the water mass situated in the basin. The water will cool the air temperature at a much faster rate than usually noticed. These uncomfortable temperatures are mostly experienced during the early mornings and in the late afternoons.

Various parking spaces are allocated on the campus and the warm-up field parking is as result of modern city living in South-Africa. The use of this area is not a prerequisite and there are other

refer to plan on fig. 4.4

figure 4.8
alternative parking solutions available.

It can be interpreted from the sections of the campus and the placement of buildings that it does not respond directly towards the context.

* _photo elevation_

The visual study of the site’s landscape produced a better understanding of how the various components related towards each other. This was done by constantly moving through the surrounding context whilst focusing on Groenkloof campus. Giving a better visual understanding of how the contextual landscape relates toward the site. In the end the same analysis was done on the site itself, where the relationship between the site and the contextual landscape was measured. Whilst moving through the site the architecture responded to the contextual landscape at some points and at others not at all. These studies identified the visual character and functions of the site and the contextual architecture.

“A place is therefore a qualitative, ‘total’ phenomenon, which we cannot reduce to any of its properties, such as spatial relationships, without losing its concrete nature out of sight.” (NESBIT 1996:414)
Figure 4.14 proposes a site for athletic track and sport centre. The proposed site is located near Telkom tower, library, hostels, and the George Storrar Drive view. The SABS is also nearby.
existing concrete palisade wall
under utilised spaces
existing slope and undefined landscape
existing blue gum trees
South-West Guest House

Proposed site

Existing paved road to lower level

Grass embankment

Existing indigenous tree

Gravel parking

Service road to auditorium

Figure 4.16
existing unit to be demolished

existing karee trees

grass embankment

proposed site

east
Figure 4.19

- Telkom Towers
- Proposed site
- Hostels
- Retention dam for storm water
- Educational buildings
- Existing outdoor pool
- Sports centre
- Fenced off areas
- Athletic track

South-east
north-west

- existing water channels
- existing slope and undefined landscape
- blue trees
- existing retention area

figure 4.20