



N^o 4

Node, site and surroundings

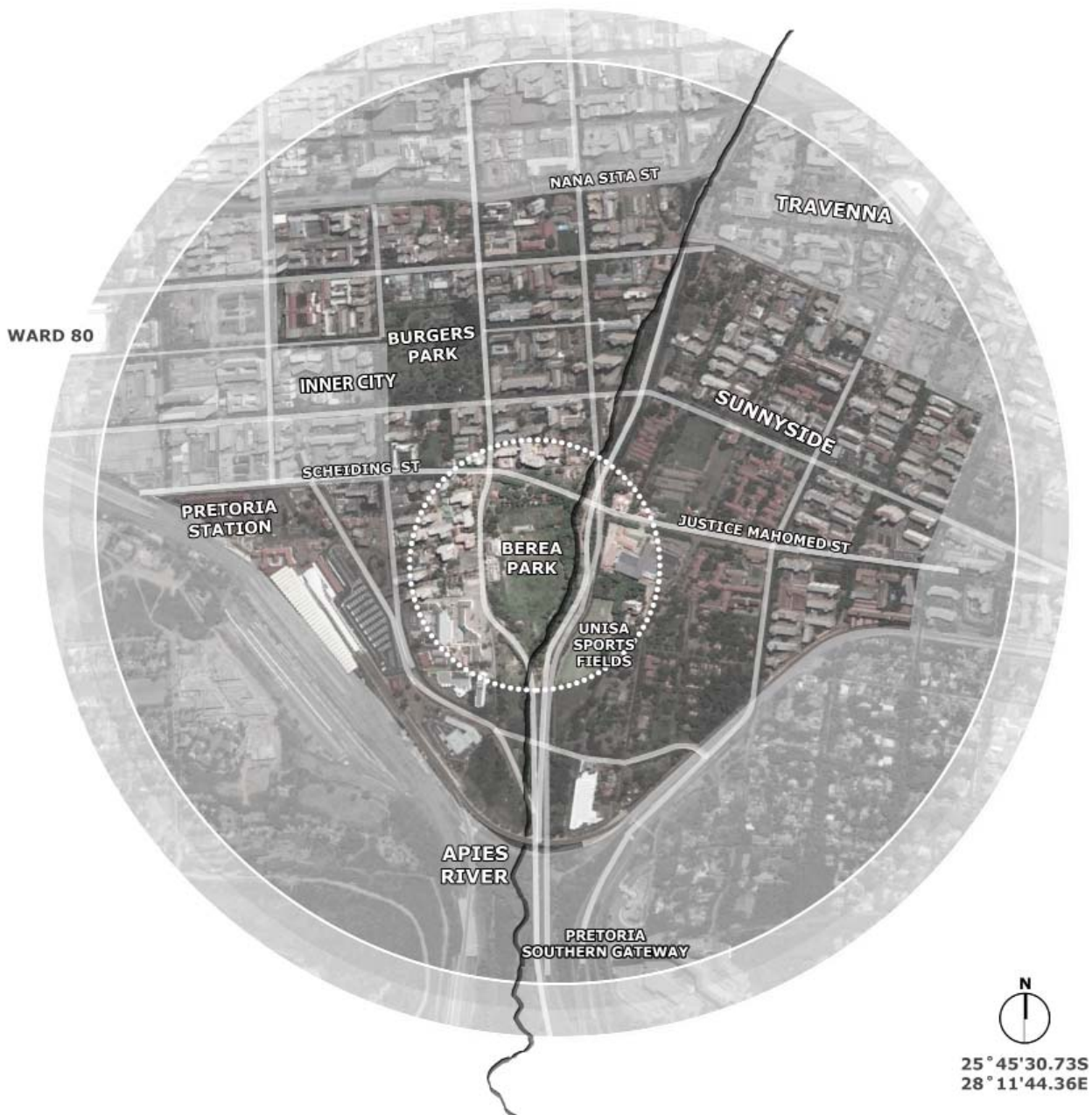


Figure 4.1 ~ Reservoir park node.jpg

Selected urban vision node: Reservoir Park node
Source: Google Earth, amended by author

4.1 Reservoir Park Node

The LU Group Vision intervention node, Reservoir Park, was identified as an intersection point of the natural and urban realms in the city of Pretoria and was therefore selected as the preferred intervention node and precinct for this investigation. Situated at the southern gateway of the inner city, the node includes a portion of the channelised, sunken Apies River and Berea Park, and the city's first sports and recreational park (Le Roux, 1990:156), which has remained largely undeveloped. The Park space is representative of "nature" spilling/growing into the city

(refer to Fig.4.1 and 4.3) from where it continues, subdued, along the Apies River corridor.

The node is located in close proximity to the Pretoria central train and Gautrain stations and consists of a confluence of main transport arterials that link the inner city to the N1 highway to the south and the eastern city suburbs to the east. Although the node is very well connected on an infrastructural scale, the road infrastructure has contributed to the fragmentation of the area and has isolated the park, and the river channel.



Figure 4.2 ~ Berea park and surrounds 2009.jpg

Photograph taken towards the city and Berea Park during the construction of Unisa's Kgorong building in 2009
Source: Lorinthe, amended by auhtor
(<http://www.panoramio.com/photo/29206817>)

Several medium density residential blocks line the north and north-western boundary of the node. The Apies River channel forms the eastern border of Berea Park. Despite a footpath running along Nelson Mandela Drive, the river channel is not accessible and there is also

no visual connection as the channel is sunken 4-5 m below the surrounding ground level.

The grain of the area is varied, with a variety of building typologies and drastic variation of scale and diversity



Figure 4.3 ~ Proximity and context.jpg
Reservoir Park node in relation to surrounding landmarks and urban context
Source: Google Earth, amended by author

4.2 Photographic Overview of the Node and Precinct Context



Figure 4.4 ~ Map key.jpg

Source: Google Earth, amended by author



Figure 4.5 ~ Area 1.jpg

Descriptions of area collages

Collage 1: Area between Scheiding Street & Read Avenue, bordering the Apies river and the Sisulu Street fly over bridge on the east.

[a] Drastic drop in scale towards the river channel as the grain and typology changes to single story dwellings along the river edge

[b] The sunken river channel is cut off on either side by road infrastructure and the presence of the river, or water is completely unnoticed

[c] Berea towers, 13 Read Street

[d] 8 and 9 storey brick and concrete residential apartment blocks from a prominent urban edge condition north of Scheiding Street

[e] a cluster of single story dwellings along the river has been re-appropriated into uses such as day care facilities and internet cafe's

Collage 2: Scheiding Street north of Justice Mahomed Street.

[a] Varied grain and urban fabric A sudden transition in mass and scale highlights the varied grain and typologies within the node

[b] Empty un-programmed spaces line Justice Mahomed street, with some remaining houses from a demolished neighbourhood visible in the background

[c] Prestige park, a modern concrete and glass giant facing Scheiding Street, a popular pedestrian route connecting to the city

[d] Berea Mansions, a double story residential building with art deco characteristics, on the corner of Scheiding St and Lillian Ngoyi St, is a landmark and signifies the original entrance to the inner city of Pretoria.

[e] Justice Mahomed Street, view towards the north

Collage 3: Rhodes Ave, south of Justice Mahomed Street, forming the northern edge of Berea park

[a] Justice Mahomed street as a barrier between the city and Berea park

[b] Walled off area along the eastern edge, south of Justice Mahomed St, close to the river channel

[c] Council owned dwellings with ad-hoc structures, between Justice Mahomed St and

Rhodes Ave, are used for several informal businesses. There are primary accessible from the Rhodes avenue side, therefore contributing to negative spaces along Justice Mahomed St which creates yet another barrier between the city and the park.

[d] The abandonment of Berea park and the use of its facilities has led to an infiltration of informal activity along Rhodes Avenue during the day.

[e] Carwash on a vacant lot where the property has been demolished

[f] The northern edge of the derelict Berea park, bordering Rhodes ave. View towards the south, with the ruins of the original bowling clubhouse in the foreground

Collage 4: Lillian Ngoyi Street, western edge along Berea park, images taken north and south of Rhodes avenue [a] Corner of Rhodes Avenue and Lillian Ngoyi Street towards Berea mansions and Burgers park

[b] Derelict and abandoned Berea park clubhouse facilities

[c] Medium density apartment buildings along the western edge of Lillian Ngoyi St

[d] Vacant stand across from the clubhouse, originally allocated and used as parking facility for Berea park is now used a trucker resting area

[e] Change in scale along the western edge of Berea Park,

Collage 5: Berea park and Apies river channel adjacent to the park. [a] Views from the Berea park sports fields towards the city

[b] The landscape and old clubhouse facilities are in poor condition

[c] The river channel, completely isolated and not accessible

Source: Author



Figure 4.6 ~ Area 2.jpg



Figure 4.7 ~ Area 3 a.jpg



Figure 4.8 ~ Area 3 b.jpg

[b]



[c]



[d]



[e]



Figure 4.9 ~ Area 4.jpg

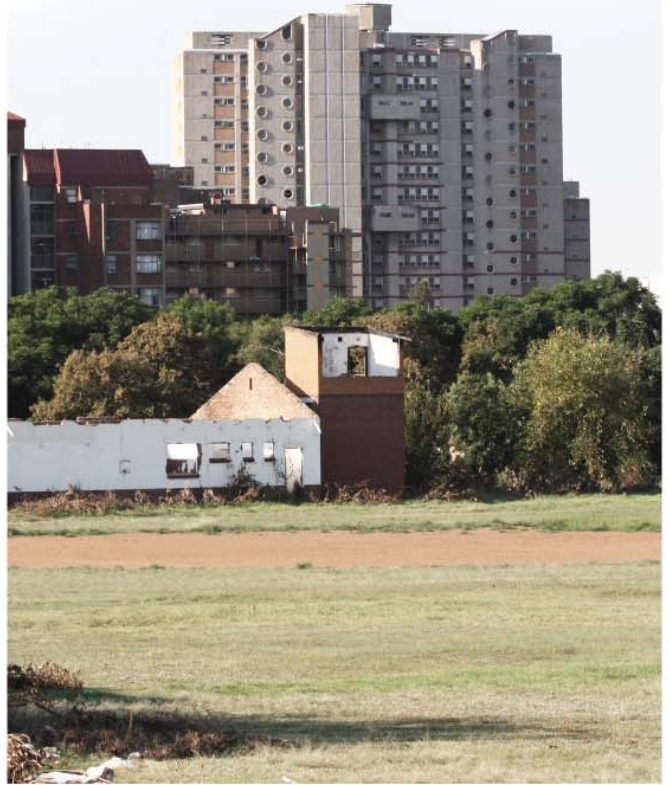


Figure 4.10 ~ Area 5.jpg

4.3 The Berea Park landscape

Berea Park was Pretoria's first recreational and cultural public events arena and has been in use since the late 1890s, with the first clubhouse erected in 1907 and the hall in 1926 (Le Roux, 1990:156). The park hosted numerous sports as well as cultural events as the park facilities included a library, music room and bar. The park and clubhouse facilities were later mostly used for functions and as conference space, and it remained operational until the late 1990s, when it was abandoned and has since been left vacant. The City of Tshwane is the current owner of the park including many of the adjacent lots and structures (UP Able Wiki, 2012).

The abandonment of the park and its facilities, and the failure to maintain the historically significant clubhouse buildings have left the park and buildings in a derelict state of decay.

Like the river, Berea Park, as a natural and cultural landscape, has also lost its significance. The current condition of the park creates an additional barrier between the park, its landscape and the city. This has seemingly also affected areas surrounding the park, with further disintegration visible, especially in the single story dwellings located to its north (refer to Fig 4.8 and 4.9).

It is proposed that the park, as a prominent public amenity and a symbol of urban "nature" in the city of Pretoria, be revitalised. Re-appropriation of the park and clubhouse facilities to create a new sports and recreational centre is proposed as part of the nodal vision and strategy derived from the LU Group Vision. Partial implementation of Marisa de Swardt's 2013 M.Arch(Prof) dissertation, "Regenerating Berea Park", which utilised adaptive re-use concepts, is assumed to have been implemented.

4.4 Changed Context over time

For the park to have played such a prominent role throughout Pretoria's history, it had to be accessible and integrated into the city fabric and city life. The current isolated condition of Berea Park motivated a study of the context over time.

Historical maps, drawings and aerial photos (refer to Fig 4.11-4.13), which indicate the early settlement patterns of Pretoria and the spatial structure of the city fabric, reveal that residential neighbourhoods, consisting of single level dwellings, provided a stable edge to the park's northern and western boundaries. The dwellings were

characteristic of the typical 1920-1930 house typology (Le Roux, 1990:148). As many other examples of these dwellings exist in other areas of the inner city and other parts of the city such as Arcadia, these dwellings are not unique or perceived to have specific heritage value, but the neighbourhood played an important social and urban role (Le Roux, 1990:148). The character and scale of the dwellings also complemented the park and the river edge. The park had always bordered the Apies River along its eastern edge, even prior to the river's channelisation and reconfiguration (UP Able Wiki, 2012).

Studies of available documentation,

THE URBAN LANDSCAPE OVER TIME

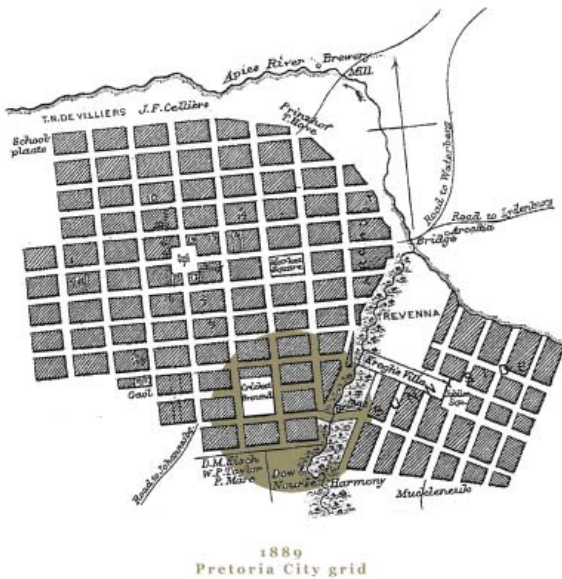


Figure 4.11 ~ Grid over time.jpg

The urban landscape over time

Sequence of drawings, map and images documenting the Pretoria and node context. Refer to grid and lot configuration of Berea park and its surroundings.

Source: Archive drawings and photo's, adapted by author

which include a 1993 drawing of the inner city by S. le Roux and N. Botes, Google earth images from 2001 and Tshwane zoning maps, indicate that the northern neighbourhood situated between Rhodes Avenue and Scheiding Street was demolished in the latter part of the 1990s (between 1993 and 2001) to allow for infrastructural changes. The M11 generally known as Justice Mahomed Street (then Walker Street) was extended diagonally across the original neighbourhood site to connect directly with Scheiding Street, which leads to the main entrance of the Pretoria central train station. This blatantly disregarded the historical city grid, the character of the neighbourhood and the spatial disintegration that would follow due to the changes.

The infrastructural changes, which included road changes to the south that disconnected the southern edge of the park and the demolition of the northern neighbourhood, isolated the park and detached it from the Pretoria city. These changes ultimately resulted in the park's gradual disintegration and created a series of barrier and unprogrammed spaces. These spaces (refer to Fig 4.16 and 4.17) further exacerbate fragmentation and impede possible connections between the surrounding neighbourhood and the city of Pretoria with Berea Park and the adjacent Apies River channel.



1993
The residential neighbourhood, between Rhodes avenue (south) and Scheiding Street (north) provided a stable edge along the northern boundary of Berea Park

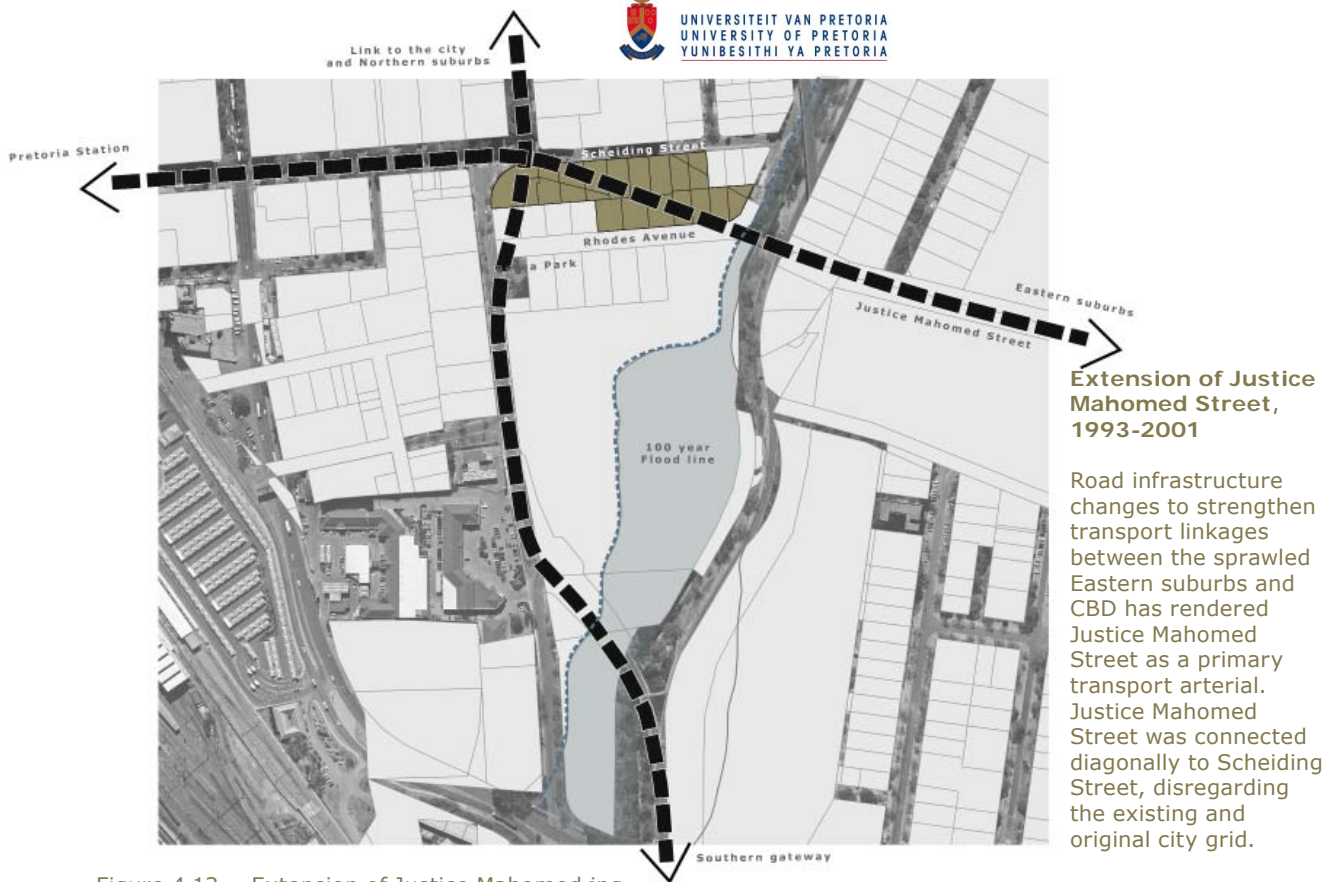


Figure 4.12 ~ Extension of Justice Mahomed.jpg

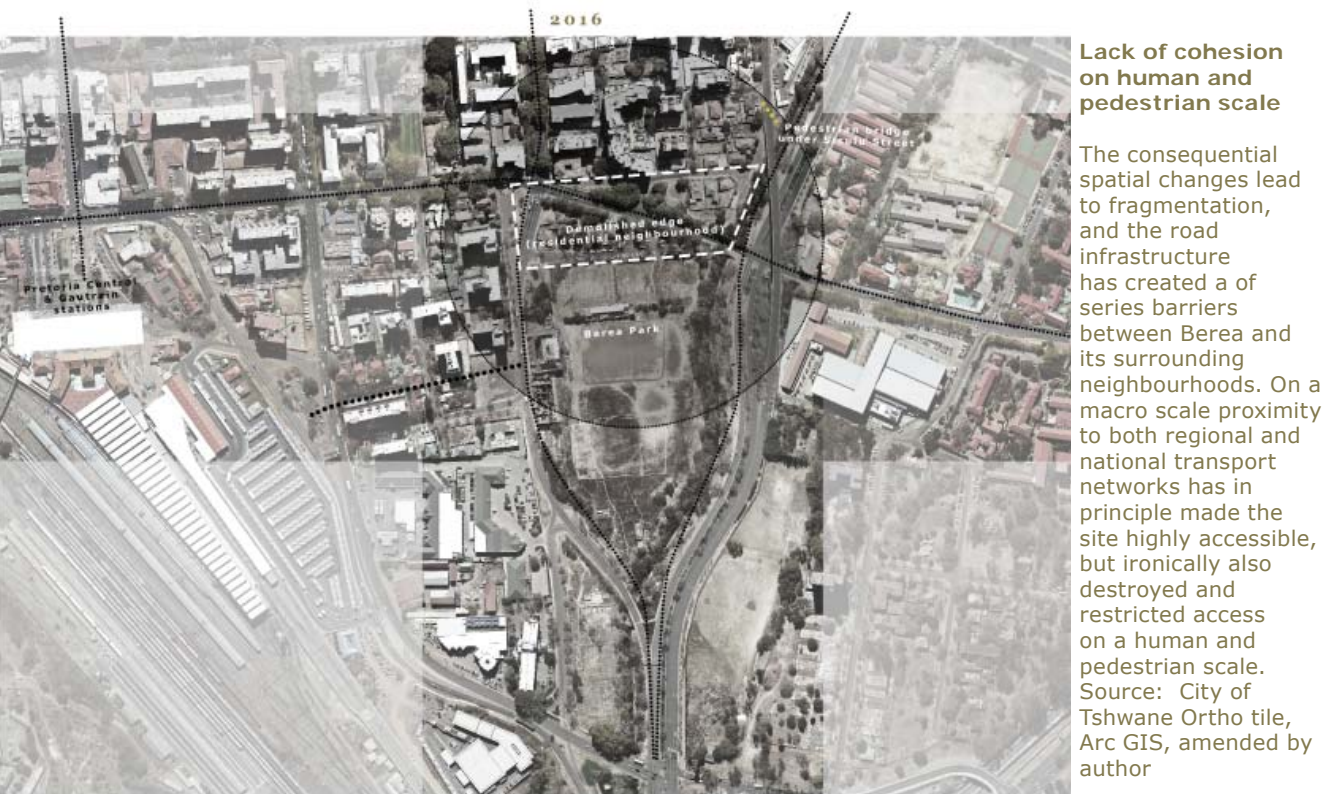


Figure 4.13 ~ Extension of Justice Mahomed b.jpg



Photo of context model, indicating the neighbourhood north of Berea Park, representative of the conditions in 1947

Source: Author
Figure 4.14 ~ Context model 1947.jpg

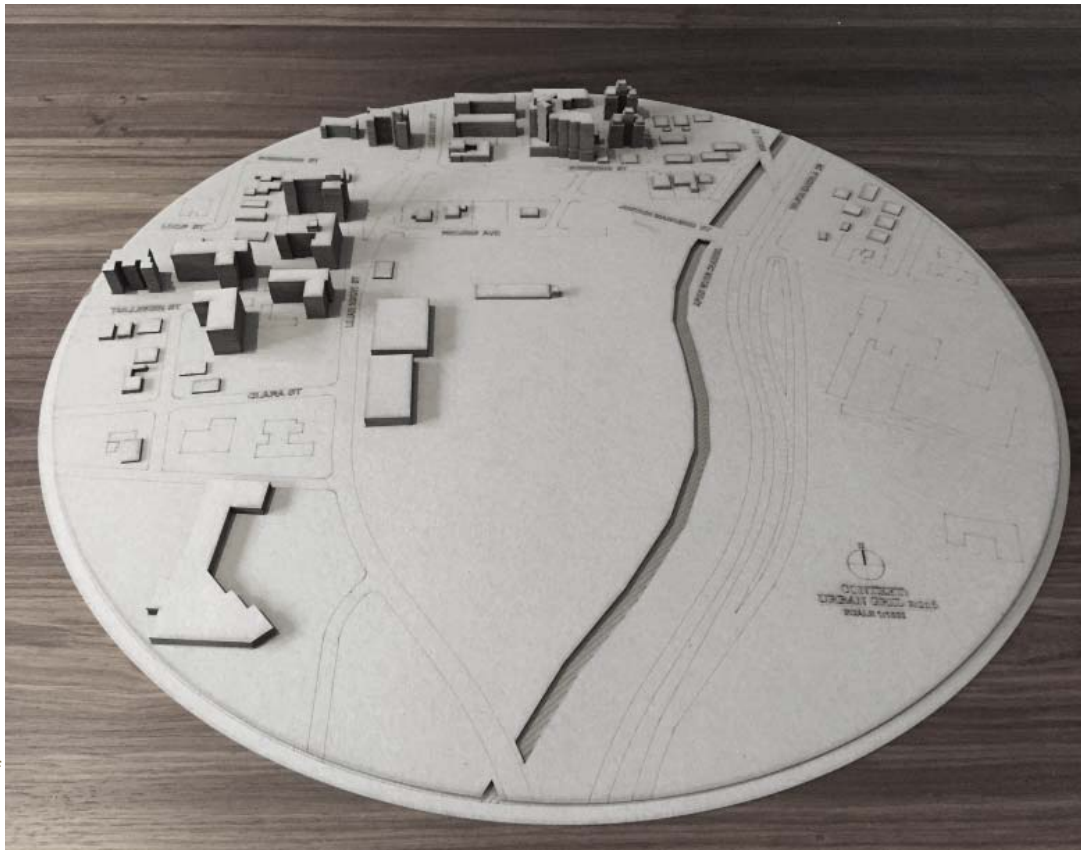


Photo of context model, indicating the fragmented buffer areas north of Berea Park, varied scale and grain representative of the conditions in 2016

Source: Author
Figure 4.15 ~ Context model 2016.jpg



Figure 4.16 ~ Lack of cohesion.jpg

Lack of cohesion on human and pedestrian scale

The consequential spatial changes lead to fragmentation, and the road infrastructure has created a series of barriers between Berea and its surrounding neighbourhoods. On a macro scale proximity to both regional and national transport networks has in principle made the site highly accessible, but ironically also destroyed and restricted access on a human and pedestrian scale.

Source: City of Tshwane Ortho tile, Arc GIS, amended by author

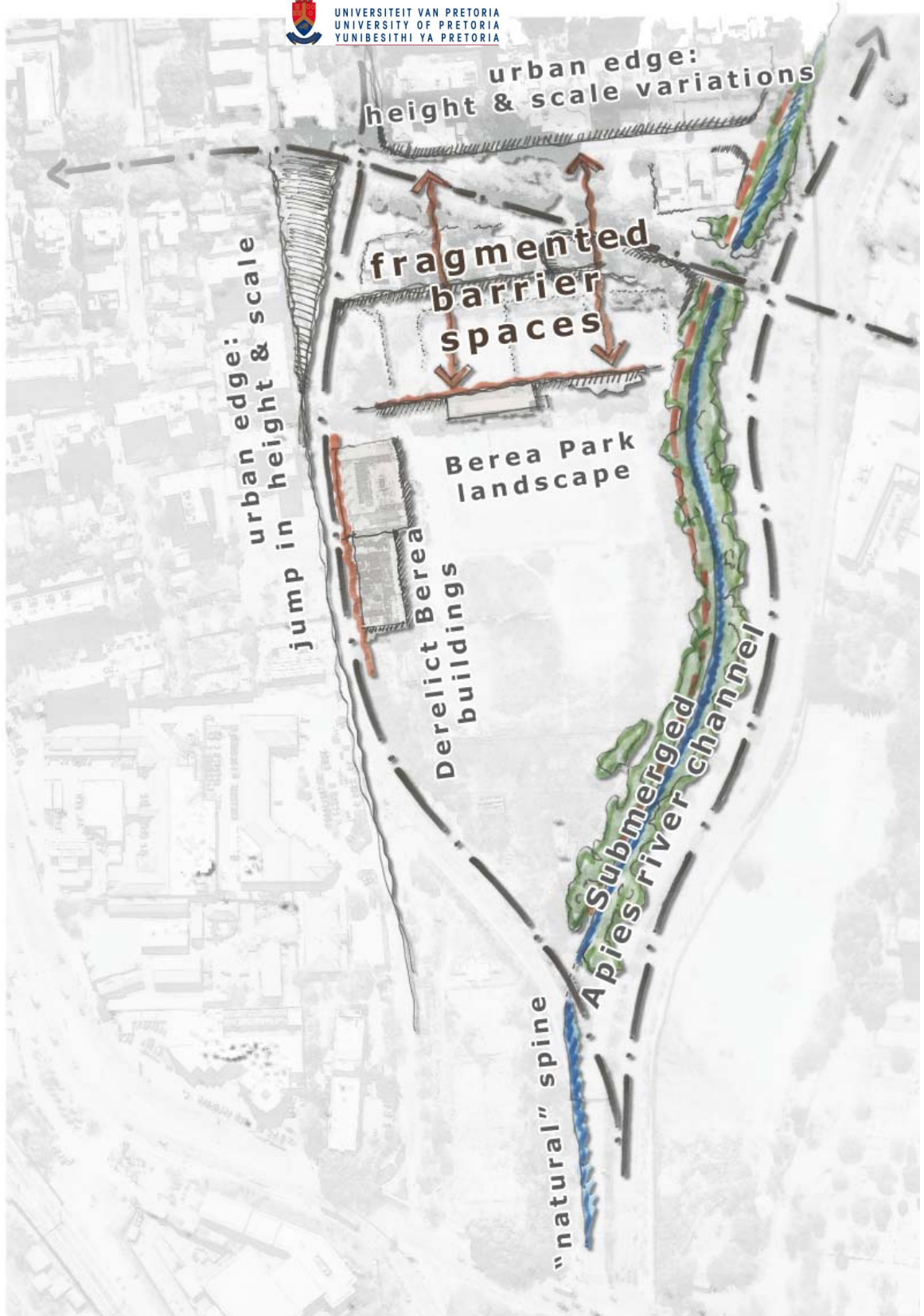


Figure 4.17 ~ Fragmented barrier spaces.jpg

Identified zone of disconnection
Source: Author

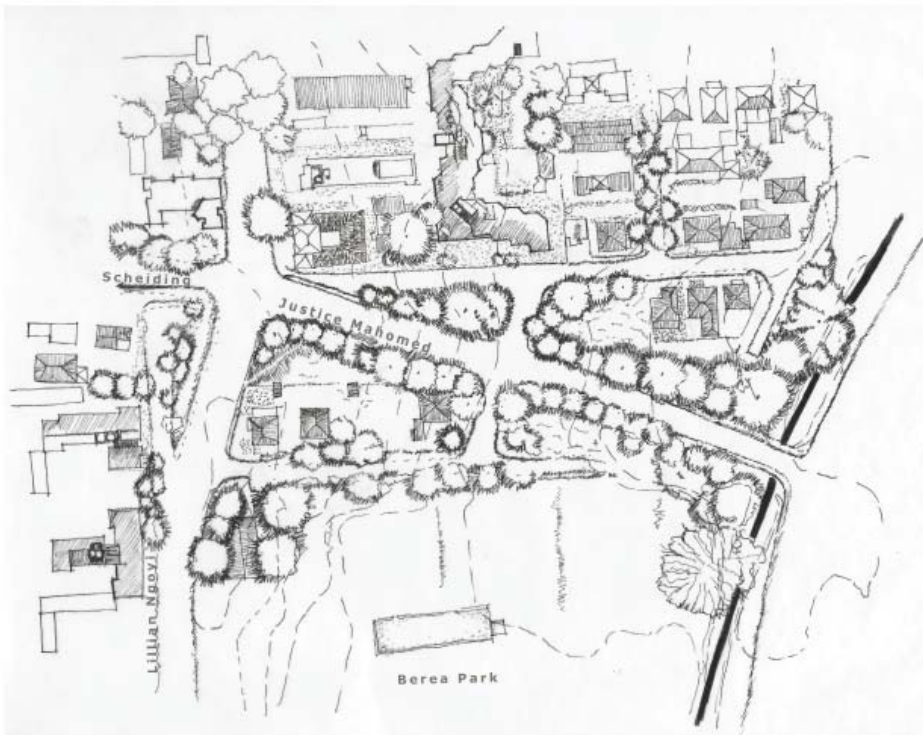
4.5 Terrain for Response

The identified fragmented and disjointed pockets of vacant space and remaining fabric form an accumulated series of barriers that disconnect man and nature: the city of Pretoria, the Berea Park landscape and the Apies River channel, and as such these have to be addressed, generating the terrain for response.

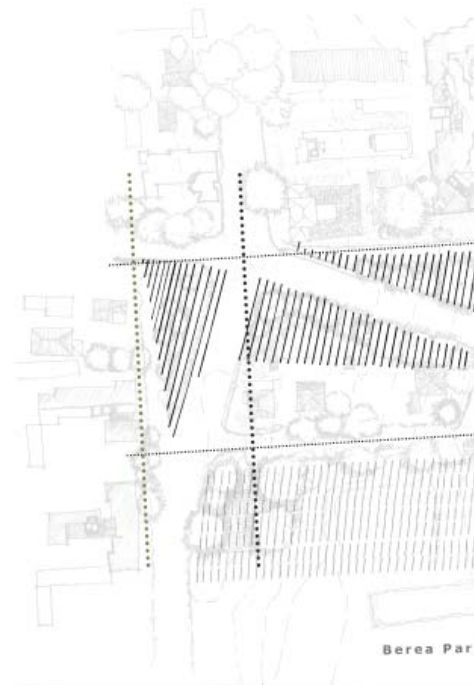
The current configuration of Justice Mahomed Street, a main arterial with single direction traffic flow, and planning regulations such as building-line restrictions and road servitudes, limit the possibility of viable development within the remaining land parcels. Therefore consolidation of the indicated land parcels

and the reconfiguration of Justice Mahomed Street (refer to Fig 4.18) are proposed. The reconfiguration was designed in compliance with Table 7.12 contained in the Roads Geometric Design and Layout Planning section of the CSIR's Guidelines for Human Settlement Planning and Design (2000:2.7-14).

The new terrain becomes the selected macro site and area of focus in which contextual issues could be addressed and a new link and interface between the city of Pretoria, the Berea Park landscape and river channel could be created.



Terrain sketch, Author



Identifying the lost barrier

Drawing sequence to determine site and area of intervention

Source: Author

Figure 4.18 ~ Area for intervention.jpg

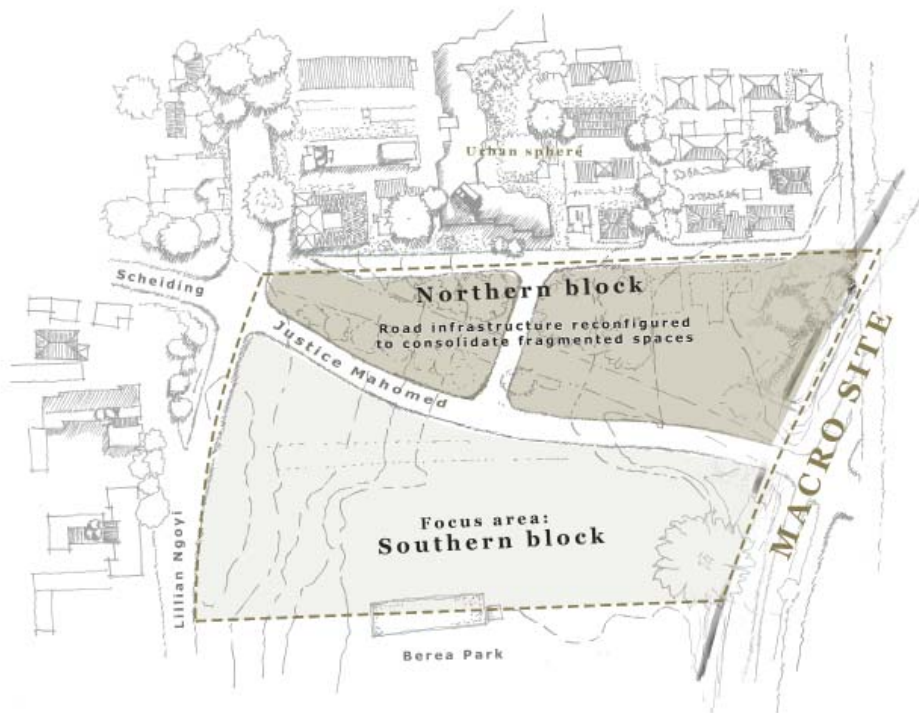
4.6 Site Attributes

Situated at the intersection point of the city and “nature”, the northern edge of the site is distinctly urban in character, while the southern edge with views towards the ridges Klapperkop and Schanskop, Freedom Park and over Berea Park is in the main more “natural” as depicted in Fig 4.27.

The macro site consists of two primary land parcels, north and south divided by Justice Mahomed Street. The following description serves to provide an understanding of site conditions and potential design informants.



spaces, Author



Proposed spatial reconfiguration to consolidate and reclaim lost space, Author



Figure 4.19 ~ Macro site.jpg

Macro site with Southern block as focus area. Source: Author

4.6.1 City

Scheiding Street as the northern border of the macro site, is a quiet neighbourhood street active with pedestrian movement, particularly at the eastern corner where it meets Justice Mahomed Street and Lilian Ngoyi Street. This energy point (in front of the landmark Berea Mansions building) signifies the original entrance to the inner city of Pretoria (Le Roux, 1990:147). From here pedestrian and vehicular movement to the north connects to Burgers Park and its active residential surroundings. Towards the west it connects to the main entrance of the Pretoria Central Train and Gautrain stations. The northern edge consists primarily of medium density apartment blocks (refer to Fig 4.5 and 4.6).

The southern boundary of the site is defined by the Berea Park sports fields and the building ruins of the original bowling clubhouse. The dissertation will focus specifically on this edge and the southern block of the macro site, as it is identified as the threshold space between urban and landscape/natural conditions.

A few remaining and isolated single story dwellings, owned by the City of Tshwane are situated within the macro site along Rhodes Avenue, and three privately owned dwellings are located south of Scheiding Street in the north-east corner of the site, adjacent to the river channel (refer to Fig 4.19). Le Roux's 1990 survey of the area, in *Plekke en geboue van Pretoria*, stated that these houses, especially those located along Rhodes Avenue, are in a poor condition and generally do not justify physical conservation (Le Roux, 1990:148). As these dwellings, in terms of their location, condition and programme,

prohibit cohesion (as discussed in Section 4.5), it is recommended that they are digitally preserved, documented and photographed as per the National Heritage Resources Act (NHRA) policies, and demolished to allow new facilities and programmes in line with the LU Group Vision and dissertation vision to occupy the site.

4.6.2 Landscape

The site slopes from west (higher) to east (lower), towards the river channel with a general fall of 4.6% across the entire width of the site. With the exception of the slope next to the river channel, the western edge adjacent to Lilian Ngoyi Street is the steepest part of the site with an 11% fall. From there the slope then flattens and evens out substantially towards the eastern and river channel edge (refer to Fig 4.25)

The site geology consists of a combination of three geological formations: the first is the Timeball hill formation, a shale subgroup that underlies the majority of the southern and central part of Pretoria. Other formations include Hekpoort andesite, as well as Syenite, of which a dyke of approximately 100 metres wide runs in a north-south direction across central Pretoria (Purnell, 1994:22-23) (refer to Fig 4.24). Inflows of water in and around the Syenite should be anticipated in deep excavations as Syenite is a well-known aquifer (Purnell, 1994:22-23). [Syenite is not to be confused with the chemical compound cyanide.]

For the most, both land parcels (north and south) are predominantly vacant and covered with veld grasses, weeds, ferns and scrubs, with scattered trees and a lush canopy of trees lining the Apies River on both sides of the channel.



Apies River edge at the intersection of Nelson Mandela Drive and Justice Mahomed Street. Source: Author
 Figure 4.20 ~ Apies river edge.jpg

2

Scheiding Street; typologies and grain

The majority of single story dwellings between Scheiding Street and Rhodes Avenue was destroyed with the diagonal extension of Justice Mahomed Street through the neighbourhood to meet Scheiding Street west of Lillian Ngoyi (van der Walt) Street.
 The character of the area was drastically altered and disconnected clusters of the single dwelling homes remain, among Modern high rise apartment blocks, vacant land and the channelised Apies river edge to the east.



Scheiding Street character and typologies. Source: Author
 Figure 4.21 ~ Scheiding street.jpg



Justice Mahomed Street, view towards the east

Justice Mahomed is a main infrastructure arterial into inner city, but it is also a barrier that cuts Berea Park off from the city

Road infrastructure amendments between 1993 and 2001 destroyed the original edges along the north and west of Berea Park, creating a series of infrastructural barriers, which combined with the resulting fragmented vacant and unprogrammed spaces have contributed to the degradation and decay of the area.



Justice Mahomed Street, view towards the east. Source: Author
Figure 4.22 ~ Justice Mohamed edge.jpg

4

Corner of Lillian Ngoyi & Justice Mahomed Streets,

Several Medium density residential units are located along the western side of Lillian Ngoyi Street. Across the street 3 remaining single dwellings (in poor condition, connected to informal activity along Rhodes ave), create a drastic drop in scale and a change in neighbourhood character and perception.



Corner of Lillian Ngoyi & Justice Mahomed Street. Source: Author
Figure 4.23 ~ Lillian Ngoyi.jpg



General height of surrounding flats 6-8 Stories

Berea Park buildings
2-3 Stories

Site slopes from West to East
general fall @ 4.6%, steeper section along western border @ 11%

Sunken 5m below NGL

Source: Author
Figure 4.25 ~ Site gradient.jpg



Figure 4.24 ~ Geological site map.jpg
Geological map of Central Pretoria.
Source: D.G Purnell, adapted by Author

4.6.3 River

The Apies River is transformed from its natural condition to its channelised urban state just south of Berea Park. The concrete channel profile along the bottom and the southern part of the park is slightly shallower than along the northern parts, and deeper into the city, which affects the 100 year flood line. The park area and sports fields located south of the original bowling clubhouse are therefore vulnerable to floods, but the area north of the bowling clubhouse is less exposed.

The river channel is, however, cut off from the park due to its sunken state, which is emphasised by the site topography and steep slope at the channel bank (refer to Fig 4.26). The trees lining the river channel are the only beacon and an indication of the river's presence, apart from occasional floods over the south eastern part of the park.

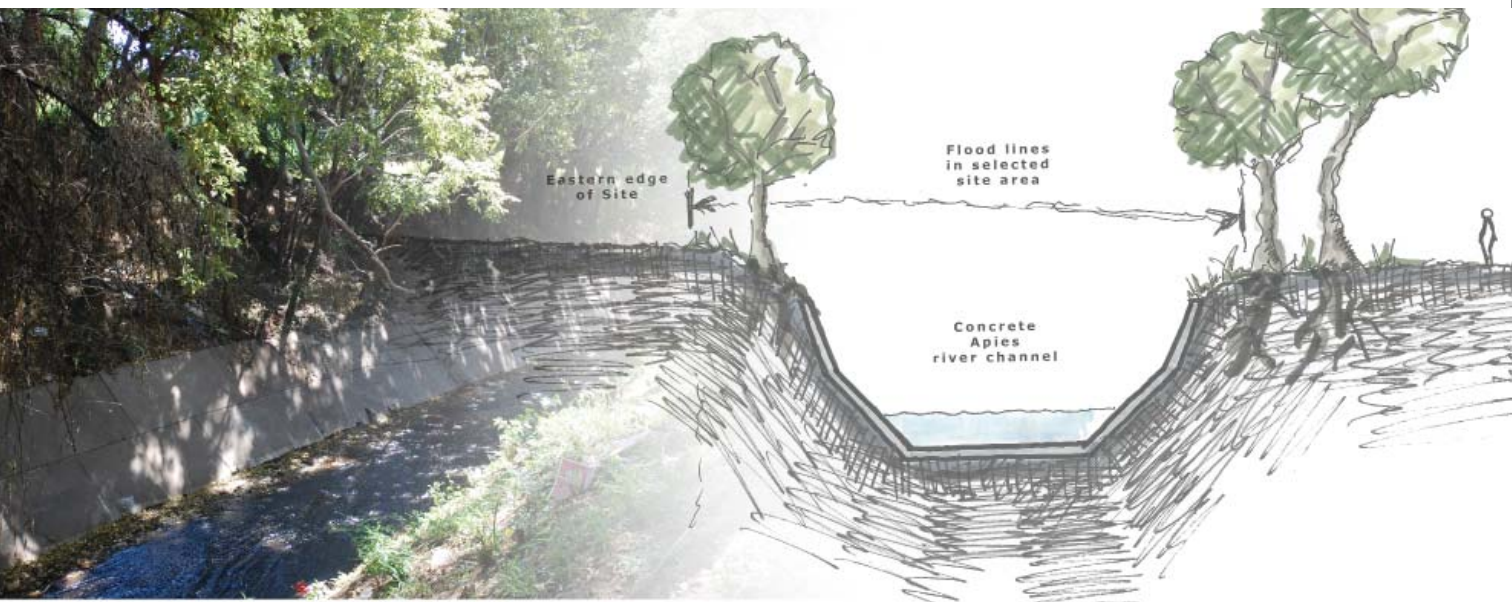
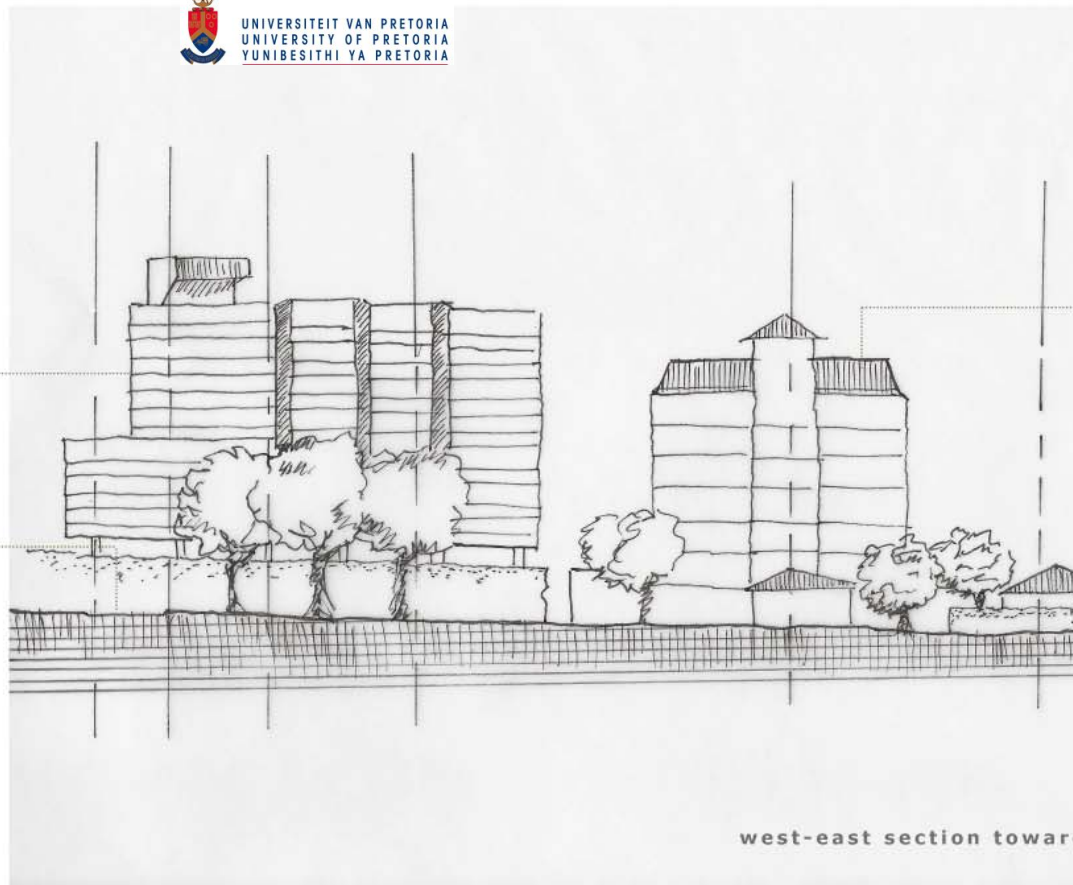


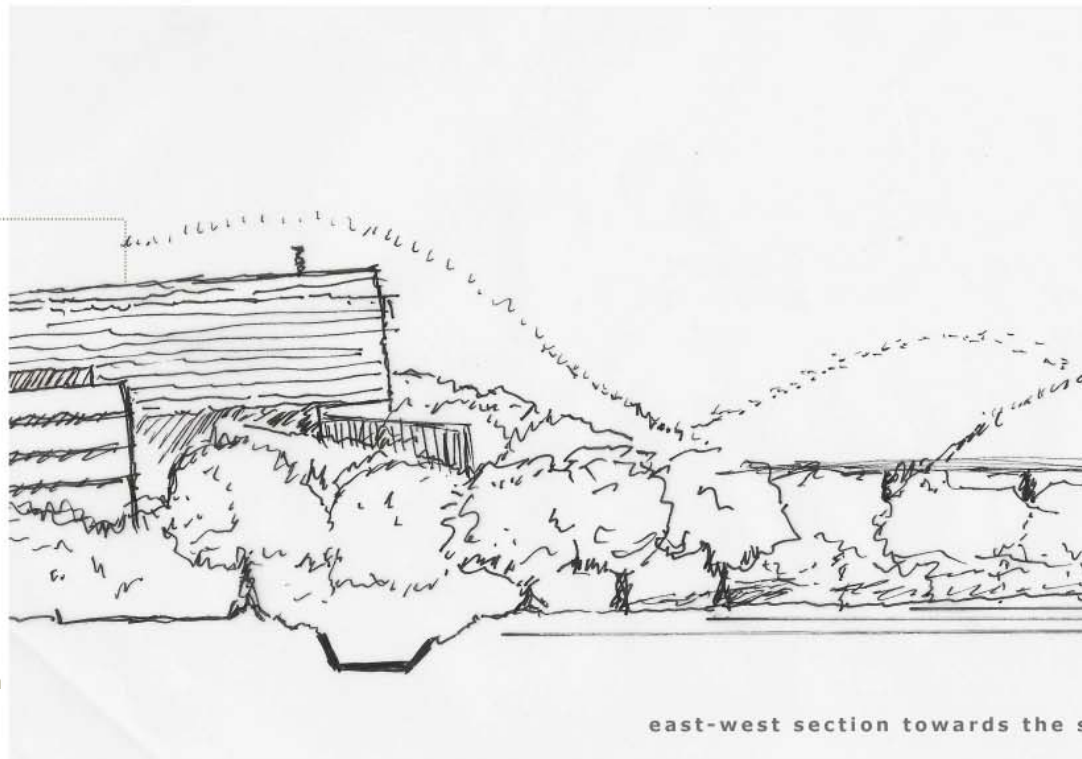
Figure 4.26 ~ River channel section.jpg
Apies river channel section
Source: Author

Prestige park residential block

New Scheiding road connection to Justice Mahomed Street



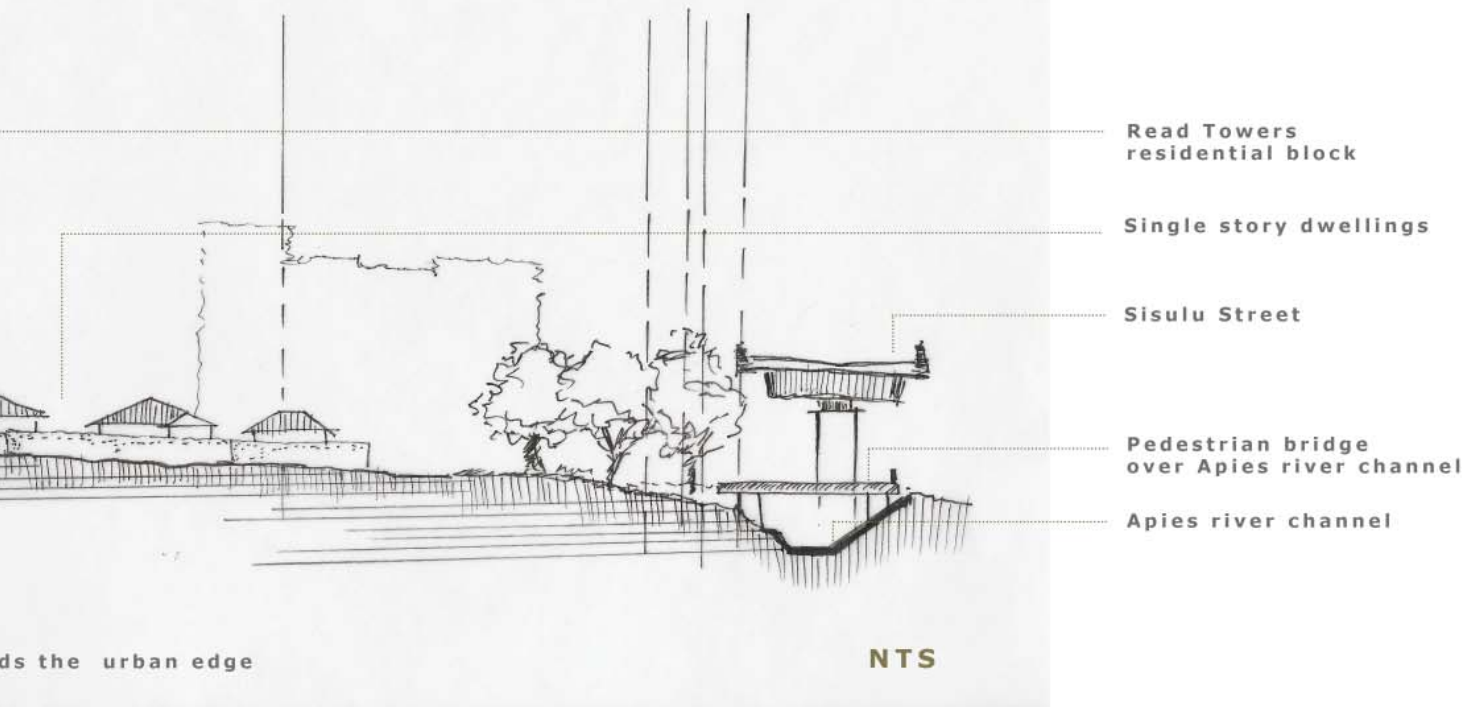
Unisa buildings seen in the back drop



The site lies at an intersection point of two horizon's: the natural landscape of the South and the man-made city to the North

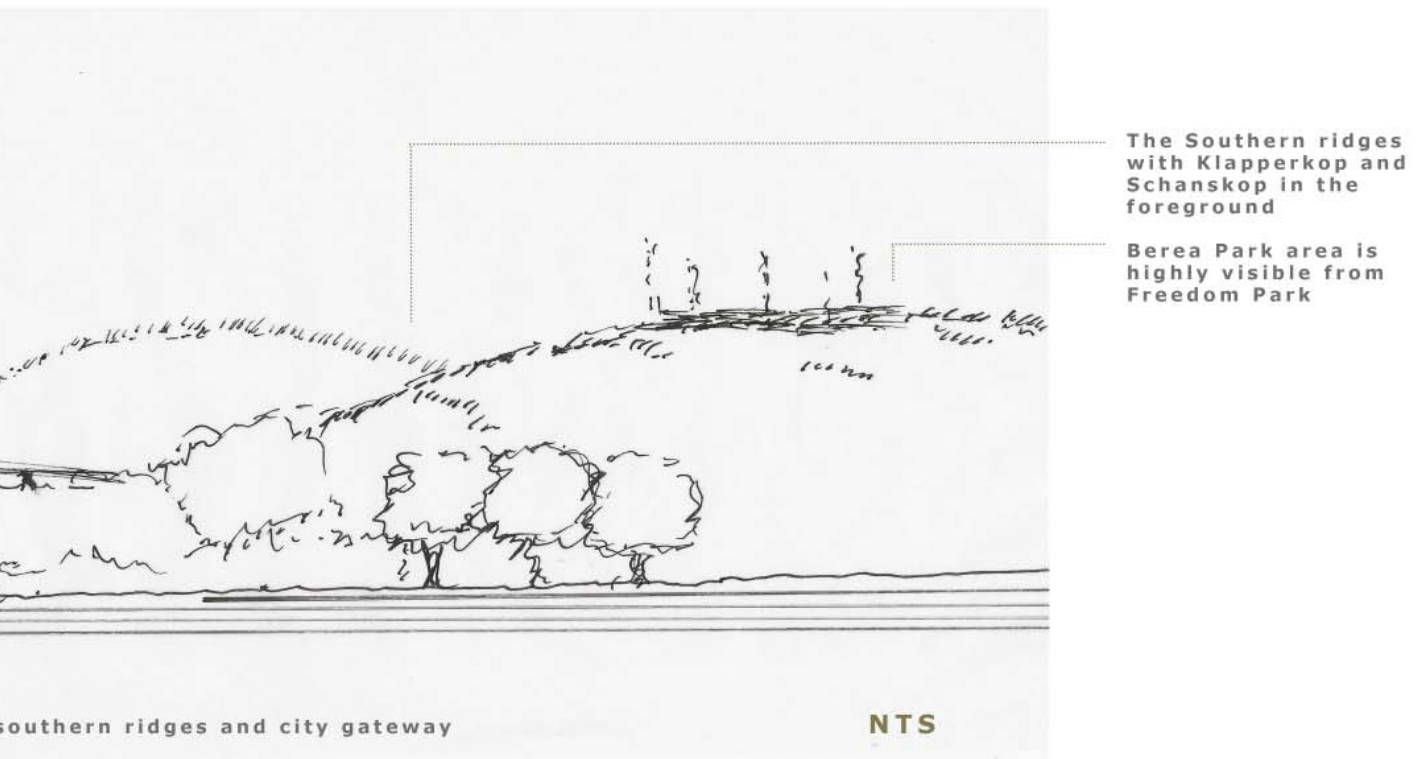
Source: Author

Figure 4.27 ~ Horizons.jpg



ds the urban edge

NTS



southern ridges and city gateway

NTS

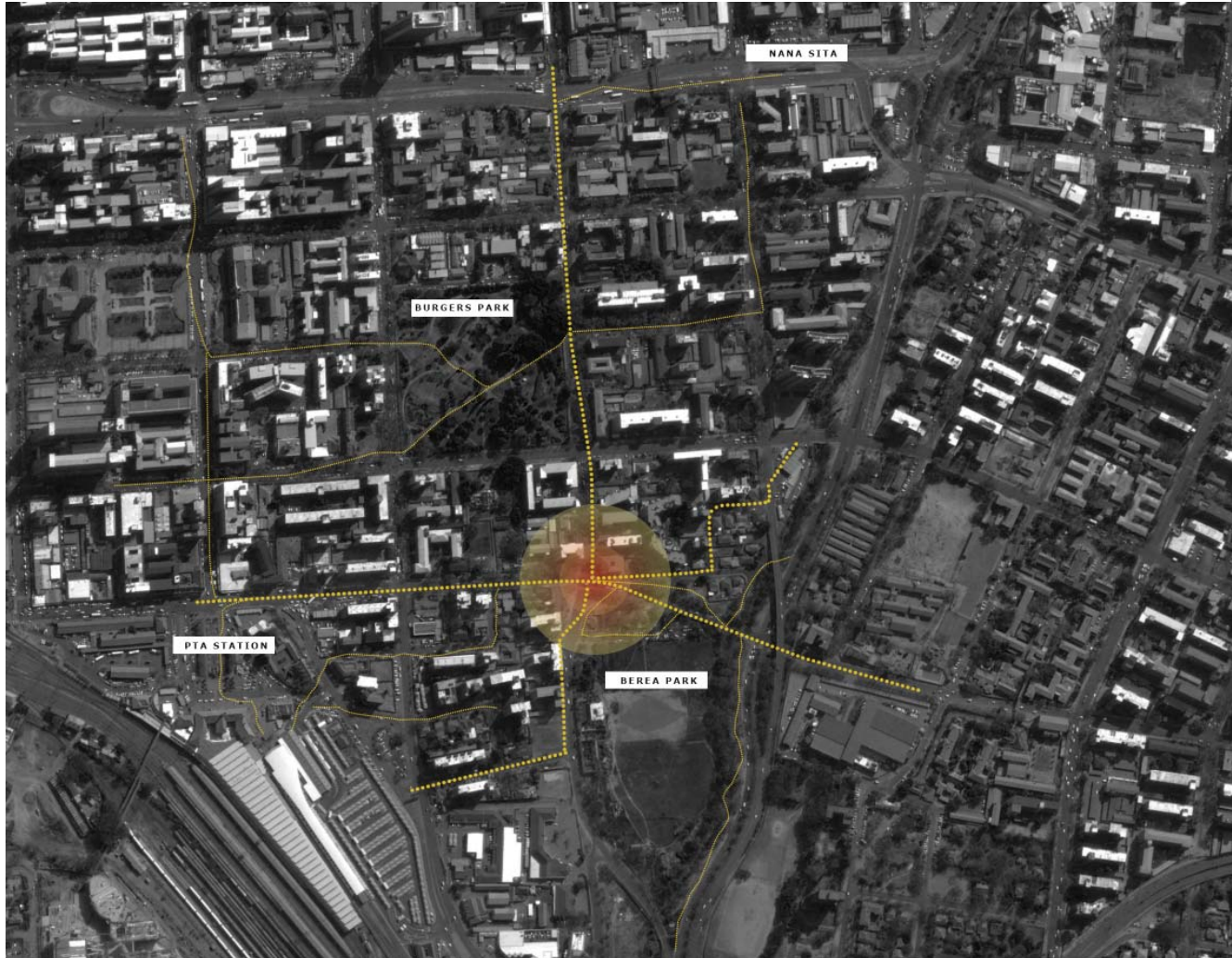


Figure 4.28 ~ Pedestrian movement.jpg Source: Author