



1. INTRODUCTION

Landscape Architecture is a diverse field of study. From literature it seems that the dominant perception of the role of landscape architecture is to create meaningful landscapes for the pleasurable experience of humans. These landscapes can serve a function in many human environments ranging from large nature reserves to densely populated cities.

According to the World Urbanisation Prospects 2007 revision, 29 Million South Africans are urbanised. With an estimated population of 49 Million, 59.1% of our population live in cities. It is therefore of paramount importance that a landscape architect understands the relationships between the individuals, and how they interact with places within the urban fabric. This will enable the landscape architect to create places for the pleasurable experience of its users and with the potential of becoming meaningful to the individual. In this study a regenerative development for the Hospital Hill Precinct is proposed, based on these relationships.



1.1 Site description

The Hospital Hill Precinct is located in a peripheral urban context. It forms a node that is bordered by a variety of land use precincts that form part of the urban character of Pretoria. The Hospital Hill Precinct owes its name to the variety of health institutions and educational facilities for health practitioners and the physically impaired that are located within the area. The precinct is characterised by three dominant institutions:

- Pretoria Academic Hospital (P.A.H) on the northern boundary;
- The Tshwane District Hospital and ancillary buildings bordering the northern side of Dr. Savage Road; and
- The Faculty of Health Sciences of the University of Pretoria. (The faculty of Health Sciences consists of the Prinshof Campus for Dentistry and Basic Medical Sciences on the southern boundary of Dr. Savage Road, and the Medical Campus that is located in-between buildings of the Tshwane District Hospital).

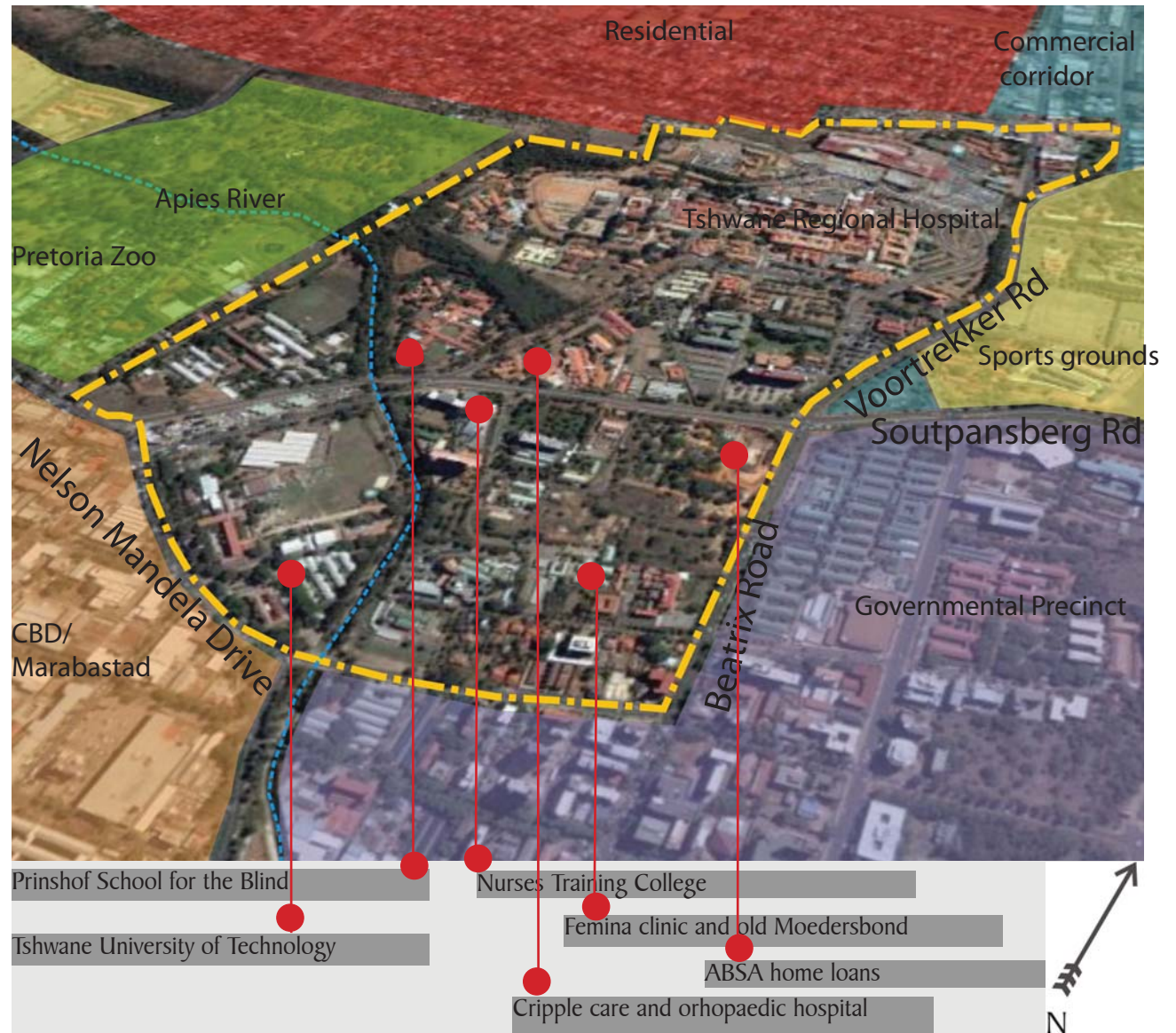


Fig. 1.1: Contextual map

Other facilities include:

- *Educational facilities in close proximity.* Prinshof School for the visually impaired; Riviera Primary School; Pretoria Hospital School; DAMsa; Tshwane University of Technology - Department of Arts; Nurses Training College; several crèches.
- *Healthcare facilities.* Femina Clinic; Orthopaedic Hospital, Old Moedersbond Hospital; Cripple care
- *Government.* Pension's Building, State Mortuary.
- *Commercial:* ABSA Home Loans.

Even though almost all the land uses within the precinct are conceptually related, fences spatially separate institutions that share facilities and staff. Furthermore, four major roads define the area:

- In an East- West direction, Dr. Savage Rd and Soutpansberg Drive, and;
- in a North-South direction, Voortrekkers Rd and Beatrix Rd leading towards the CBD.

The area is not clearly defined s 'hospital hill' due to a lack of identifiable character and entrance definition. Unsafe areas bordering the Apies River and under-utilisation of space adds to the general lack of maintenance. The built form results in a fragmented urban fabric that is inaccessible. The development of an urban development framework (UDF) could provide objectives to guide future development in the area.

Refer to the site character collage on the next page for a general description of the area.



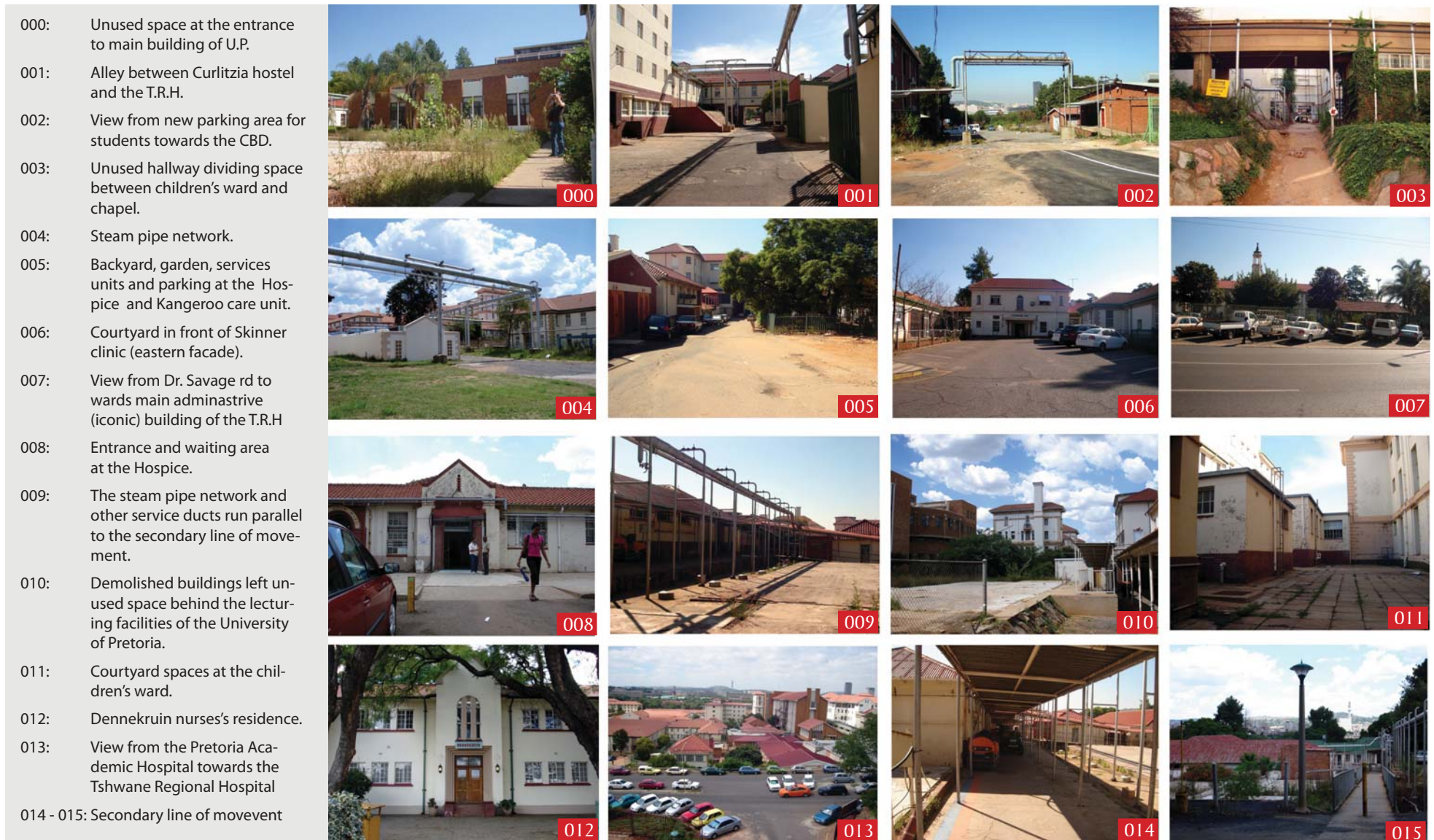
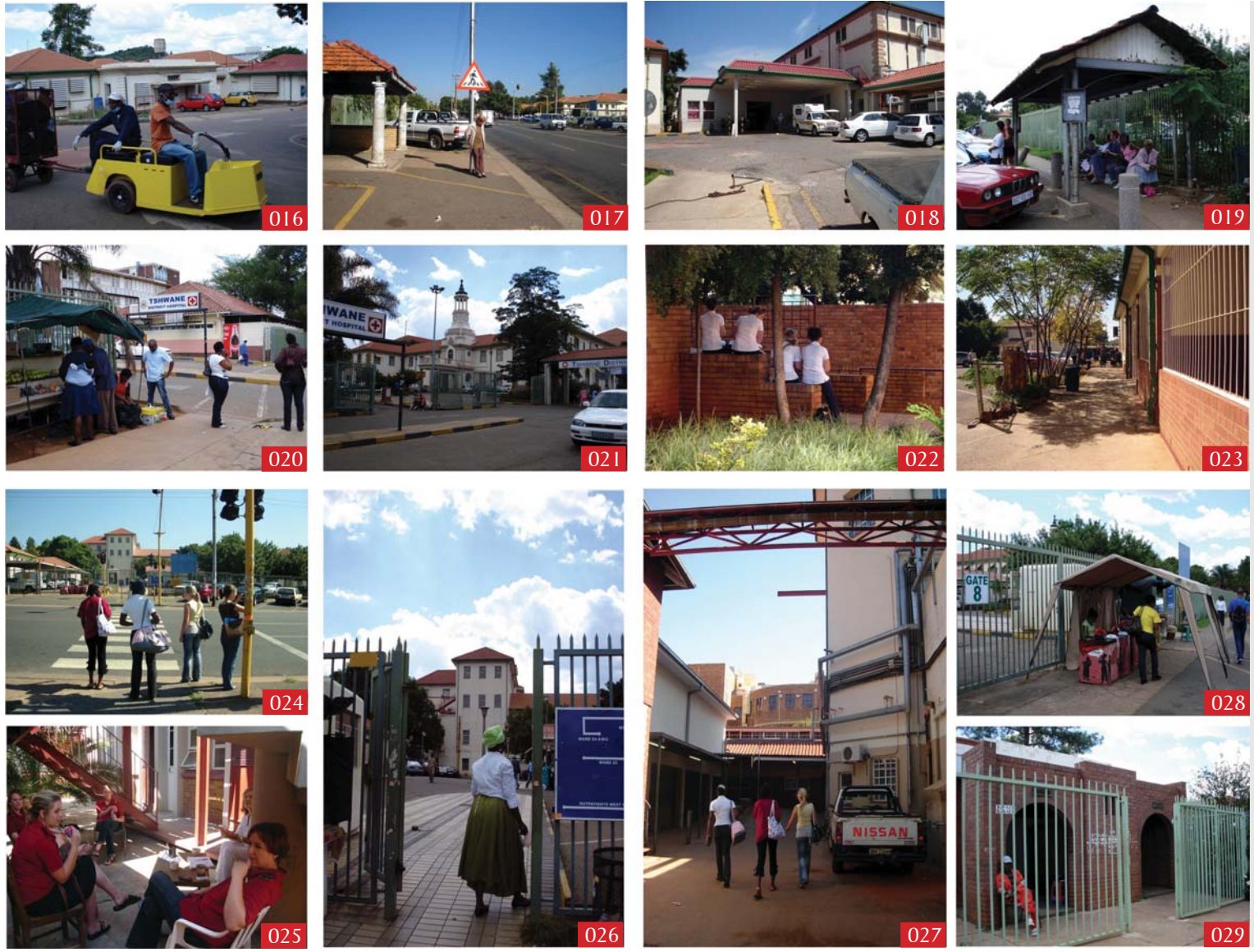


Fig. 1.2: Site character collage (Author, 2008)





- 016: Collection and removal of medical waste.
- 017: Waiting areas in Dr. Savage Road.
- 018: The trauma unit - patients, family and ambulances waiting in the sun.
- 019: Overcrowded bus shelter - many people make use of public transport.
- 020: Informal trading at the main entrance of the Tshwane Regional Hospital.
- 021: The historic imageability of the T.R.H.
- 022: Dentistry students on a lunch break
- 023: Patients waiting to be treated at the Skinner clinic.
- 024: Students and patients waiting to cross Dr. Savage Rd.
- 025: Lunch break at Radiotherapy.
- 026: Too many access points to the hospital.
- 027: The students on their way to lecturing facilities.
- 028: Telephone stalls.
- 029: Public toilets.

Fig. 1.3: User character collage (Author, 2008)

1.2 Problem identification

Specifically focusing on the spatial relationship between the Faculty of Health Sciences of the University of Pretoria, Tshwane District Hospital and the Pretoria Academic Hospital; the general problems of the Precinct can be divided into a set of sub-problems which can generally be traced back to illegibility; circulation control and under-utilised space as summarised below.

Illegibility

- Incoherent building patterns.
- Buildings from different eras and additions from all styles.
- Lack of maintenance.
- Functions of building not evident from its architecture.
- Too many entrances and points of access.
- Lack of signage or obscured signage.
- Relationships between parking-journey-arrival not clear.
- Taxi, bus, vehicle interface causes confusion and anarchy.
- Lack of actual movement between institutions that could share facilities.

Circulation

- Pedestrian movement in north-south direction between Campus- T.D.H (Tshwane District Hospital) and P.A (Pretoria Academic hospital) is unsafe and not legible.
- No provision for safe movement of pedestrians and bicycles across busy intersections.
- Lack of legible hierarchy between vehicles, buses and taxis.
- Insufficient parking.
- Access congestion during peak hours.

Under-utilised space

The site is densely built-up due to previous development pressure, which results in:

- Fire hazard.
- Poor maintenance.
- Illogical arrangement of function, leading to congested areas with insufficient parking, derelict areas with empty buildings as well as large areas that are open and under-used.

1.2 Aim of Study

The aim of the study is to investigate the relationship which exists between the application of the experiential landscape theory and restorative benefit, and to apply it within an open space system to alleviate the identified problems.

1.3 Methodology

Identification of problems and analysis of the study area will define the problem and inform the conceptual design indicators. The design motivation will be developed from the problem statement. Critical evaluation of literature as well as local and international precedents will then be used to formulate design objectives for the development framework. Synthesis of all the above will lead to the selection of a design proposal, which will be applied to the site and technically evaluated.

urban regeneration

restorative benefit

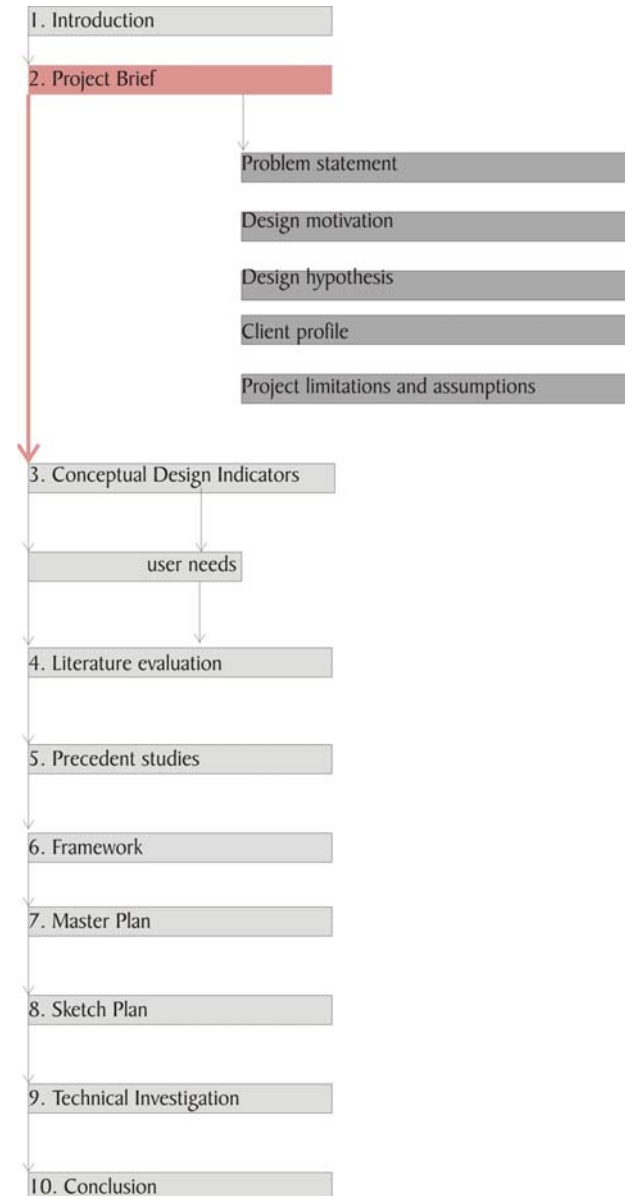
experiential landscapes

reclaim under-utilised space

integrated open space network

individual placemaking







2. PROJECT BRIEF

2.1 Problem statement

The Hospital Hill Precinct is characterised by inaccessibility and illegibility. The incoherent way by which the area was developed led to a multitude of buildings, each with different functions and users, scattered across the area. The result is poor legibility and illogical circulation patterns. A primary point of destination and orientation is needed. From communication with students, medical practitioners and pedestrians it was evident that there is continued movement of individuals and vehicles between different institutions, campuses and buildings within the Precinct.

Movement patterns between sub-complexes are strongly influenced by building arrangement. The Tshwane District Hospital is currently being upgraded to a Regional Hospital. The demolition of various buildings during this upgrade will increase the amount of under-utilised spaces between buildings and has profound implications on the functional arrangement and existing movement patterns on the site. This study investigates and proposes how the above problems can be addressed.

2.2 Design motivation

Analysis of circulation patterns, land use and users in the proposed master plan for the Tshwane Regional Hospital and its relationship with adjacent amenities will identify optimal axial lines of movement. The aim of this study is to design a hierarchy of directional, transitional and locational spaces along optimal axial lines of movement. Careful arrangement of such spaces will make optimal use of under-utilised space defined by the figure-ground. This will result in a more legible, accessible and safer passage through, and experience of, the Hospital Hill for all users.

2.3 Design hypothesis

The fragmented nature of the Hospital Hill precinct can be unified through the development and application of a network of hierarchical open spaces consisting of directional, transitional and locational restorative spaces. This will result in improved circulation, leading to a more legible experience for all users.

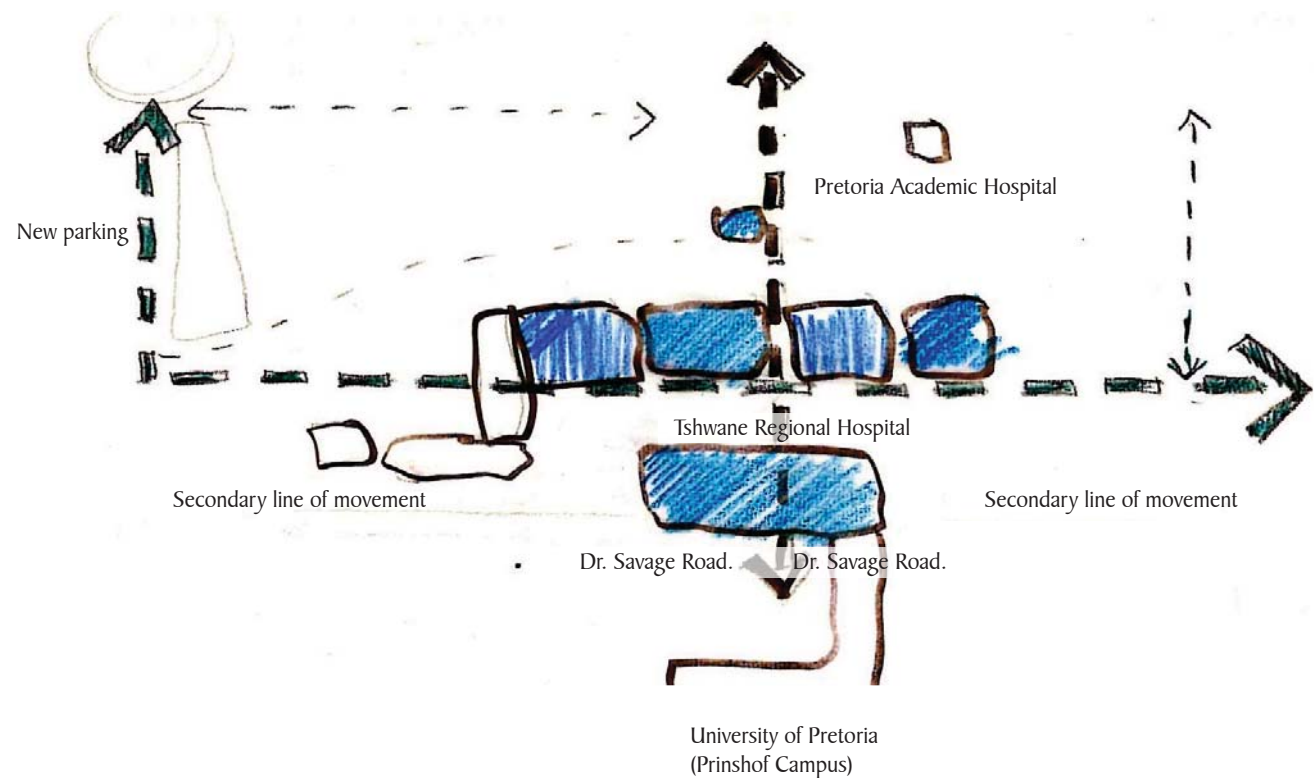


Fig. 2.1: Design hypothesis. (Author, 2008)

2.4 Client profile

The Tshwane District Hospital under the authority of the Department of Public Works is aware of the fact that their plans to upgrade the facilities to a Regional Hospital by 2010 will have an influence on circulation patterns on the premises, as well as on movement between the Hospital and the Faculty of Health Sciences of the University of Pretoria. They regard the upgrading of the hospital as a viable opportunity to integrate and regenerate the relationship between these institutions. This joint venture to improve legibility, the pedestrian-vehicle interface and reclaim under-utilised space will be beneficial to the University of Pretoria, the Tshwane Regional Hospital and all users of the transitional area in between.

Interested and affected parties include:

- Pretoria Academic Hospital
- All institutions on neighbouring properties
- City of Tshwane Metropolitan Municipality

2.5 Project limitations and assumptions

Although it is proposed that a development framework for the entire precinct be drawn up, the focus for design purposes will specifically be on improving the spatial connection between the Faculty of Health Sciences of the University of Pretoria and the Tshwane Regional Hospital. Design objectives will be listed for other parts of the Master Plan.

This study is limited to the figure-ground as delineated in the Tshwane Regional Hospital Master Plan and will not question the validity of the placement of functions or buildings. However, the spaces in between (ground) are subject to review by the author.

According to Mr. Dan Potgieter from the University of Pretoria, Government enforces strict measures regarding the number of students on campus and it is assumed that no future development plans are envisaged.

