8. Design Development

8.1. Pretorius Square as a Condition Along Paul Kruger Street

8.1.1. The Social Landscape

The proposed strategy for Paul Kruger Street was subdivided into various stages. Each stage having a specific outcome and each adding another layer to the urban condition that eventually resulted in a social structure made up of various conditions that occur along the street, and each with a unique characteristic. The following diagrams give an indication of the urban condition on Pretorius Square. This specific urban condition is made up of a variety of activities, events and temporal conditions that are to be accommodated in the proposed scheme.

An interactive edge condition that allows for human encounters with the street edge. This edge includes street furniture, benches, and facilities for informal traders.

An open public square comprising mainly of hard landscaping.

Paving design is to reflect the the classical elements that were once on the site. The paving is to continue over Paul Kruger Street to the Transvaal Museum.

Trees alongs the street edge. These include existing trees and new trees.
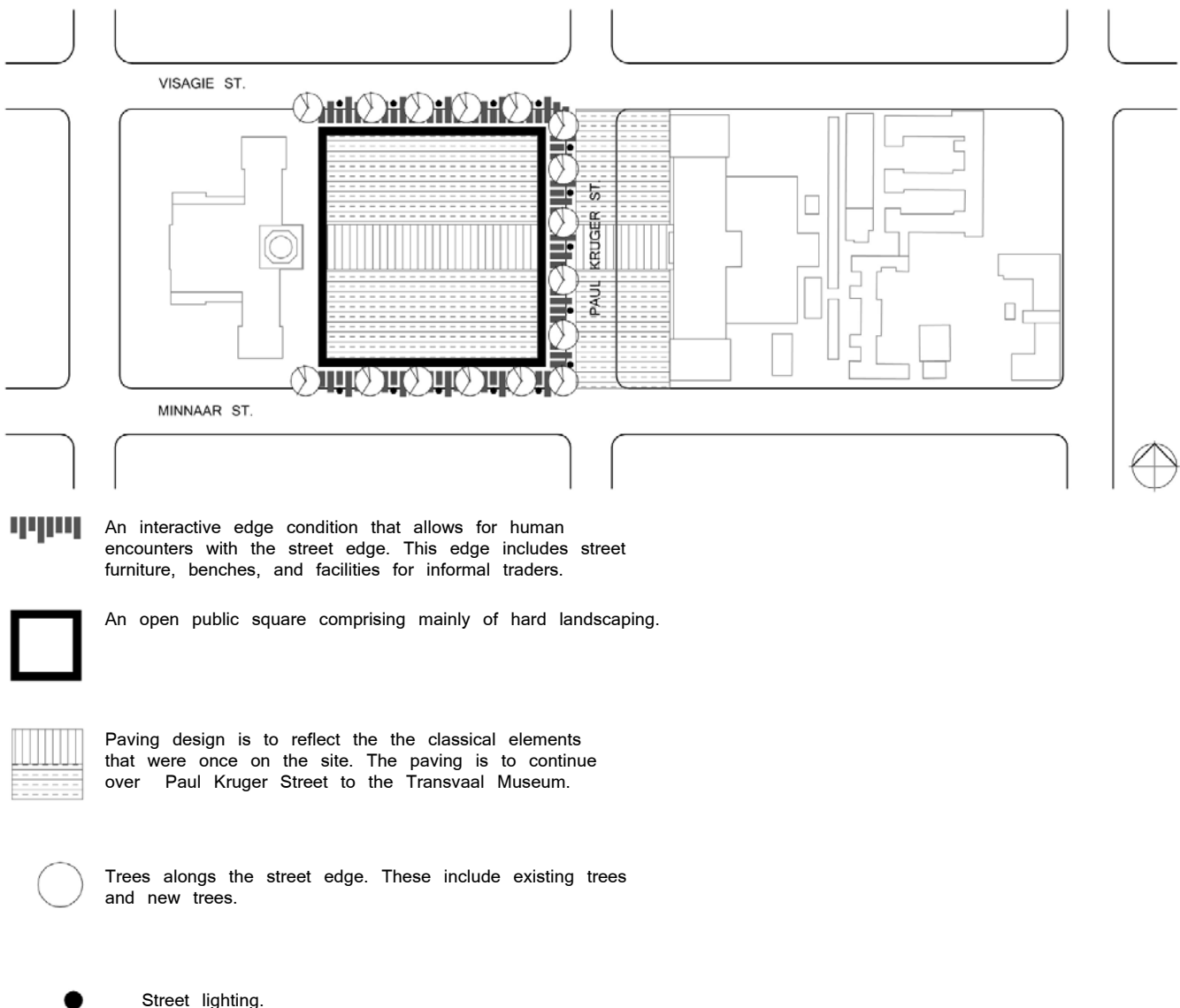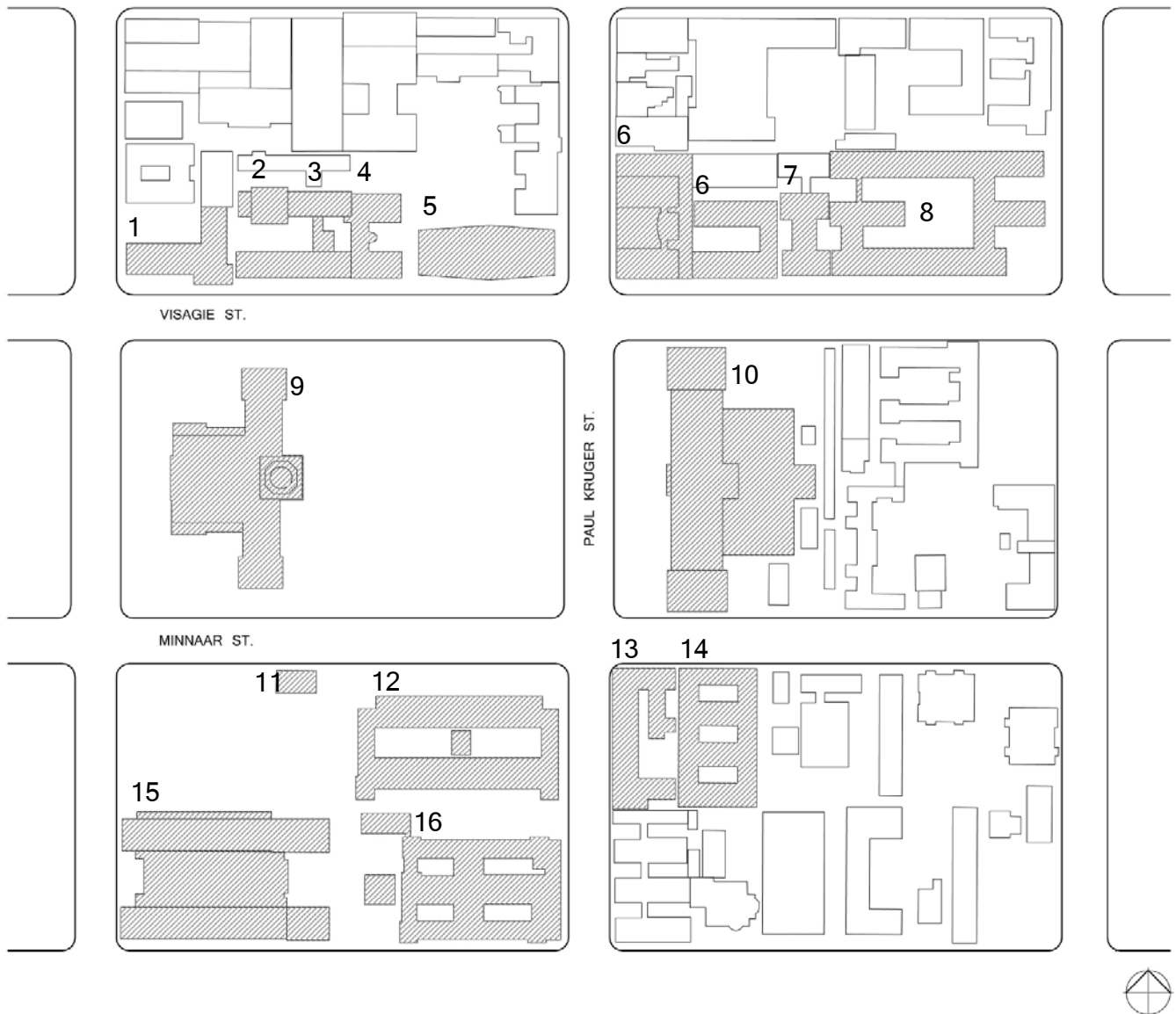
Street lighting.

Fig. 102 Plan indicating the proposed social landscape for Pretorius Square (Author 2007).

8.1. Pretorius Square as a Condition Along Paul Kruger Street

8.1.2. Existing Services Surrounding Pretorius Square

Fig. 103 Plan indicating buildings surrounding Pretorius Square (Author 2007).

1. The Continental National Department of Public Works

2. SATU: Tshwane Metroploitan Police Department

3. Rondalia Building (housing)

4. Lisa's Place (housing)

5. The Land Bank

6. The Bank of Lisbon and the South African National Defense Force

6. General Piet Joubert Building (offices)

8. George Building: SAS Immortelle Navy Office

9. The City Hall

10. The Transvaal Museum

11. An old railway building (vacant)

12. ZASM Building (Spoornet)

13. Paulhof (retail & housing)

14. New block of flats under construction.

15. The Department of Home Affairs

16. The Department of Land Affairs.

8.1. Pretorius Square as a Condition Along Paul Kruger Street

8.1.3. Reactivated & Reprogrammed Services Surrounding Pretorius Square

VISAGIE ST.
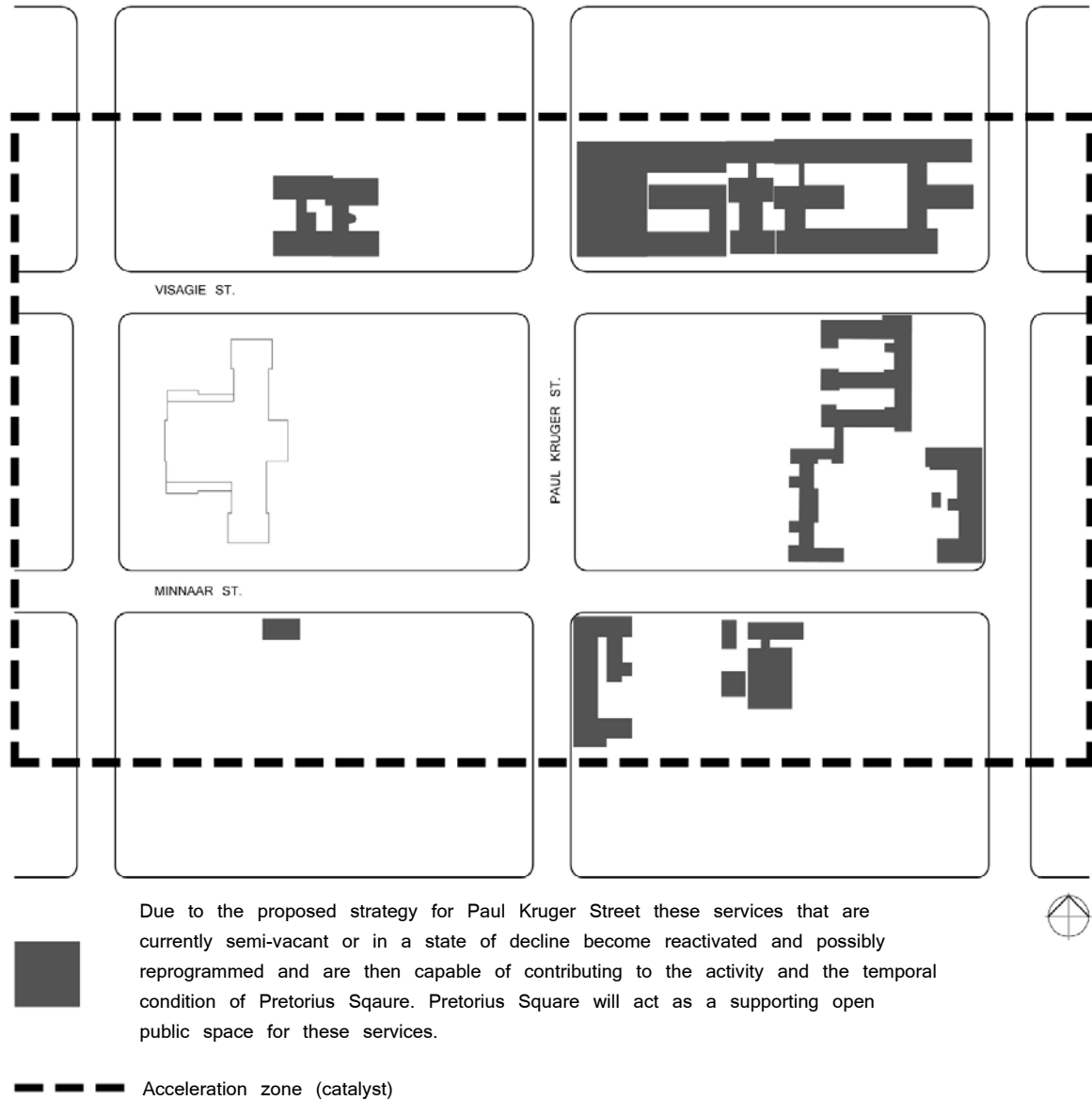
PAUL KRUGER ST.

MINNAAR ST.

Due to the proposed strategy for Paul Kruger Street these services that are currently semi-vacant or in a state of decline become reactivated and possibly reprogrammed and are then capable of contributing to the activity and the temporal condition of Pretorius Sqaure. Pretorius Square will act as a supporting open public space for these services.

Acceleration zone (catalyst)

Fig. 104 Plan indicating reactivated services and buildings surrounding Pretorius Square (Author 2007).

8.1. Pretorius Square as a Condition Along Paul Kruger Street

8.1.4. Strategies Proposed by the City of Tshwane
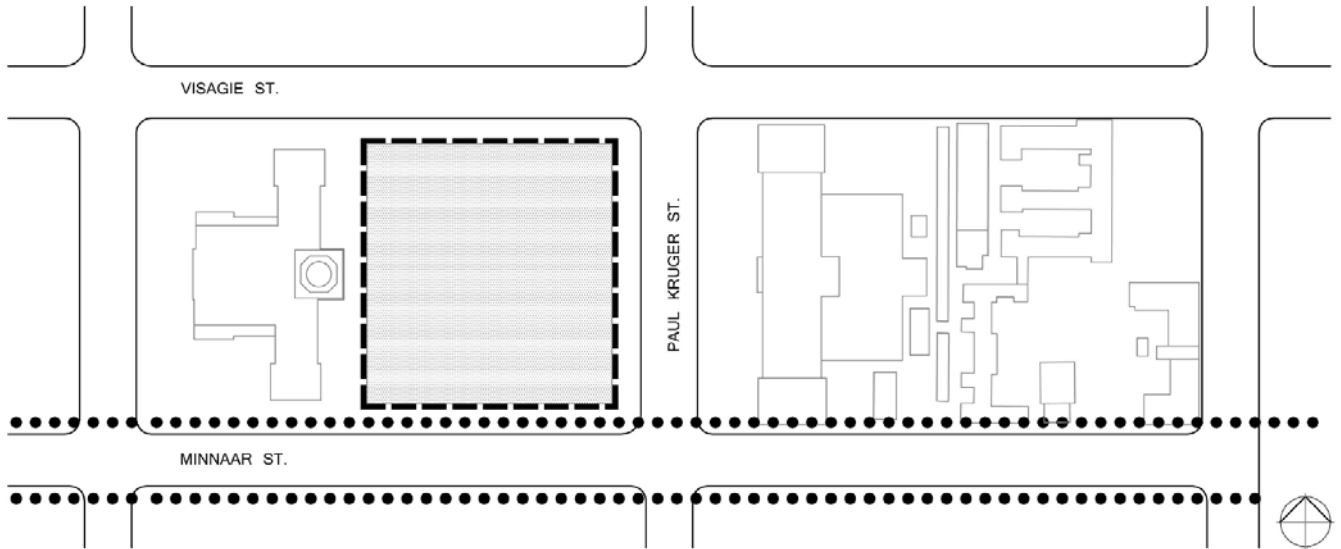
A three-level underground parking garage proposed by ReKgabisa Tshwane Inner City Spatial Development Framework. Tests were conducted by the city to determine that the geological conditions would allow for such a structure. (The Department of Public Works and The Department of Public Service and Administration, 2006)

●●●●● Minnaar Street was upgraded in 1999 to become an important pedestrian route through the Museum Park Precinct.

Fig. 105 Plan indicating strategies proposed by the City of Tshwane (Author 2007).

8.1.5. An Activity Node: The Accommodation of Temporary & Mobile Services

VISAGIE ST.

A
- Police surveillance
- Mobile medical clinic

- Plaground
- Refreshments kiosks
- Bandstand for outdoor
  performances
C - Big-screen televisions

B
- Seminar rooms

D
- Day care centre
- Information kiosk
- Internet hotspot

PAUL KRUGER ST.

MINNAAR ST.

E
- Storage for informal traders

F
- Let the flats as low-cost
accommodation for visitors
and tourist.

Buildings and spaces that are to accommodate temporary and mobile services and equipment.

Fig. 106 Plan indicating proposed services to be accomodated in existing buildings (Author 2007).

8.1. Pretorius Square as a Condition Along Paul Kruger Street

8.1.6. Movement Vectors Activating Pretorius Square

Movement vectors as result of the overall proposed strategy for Paul Kruger Street. These will activate the space.
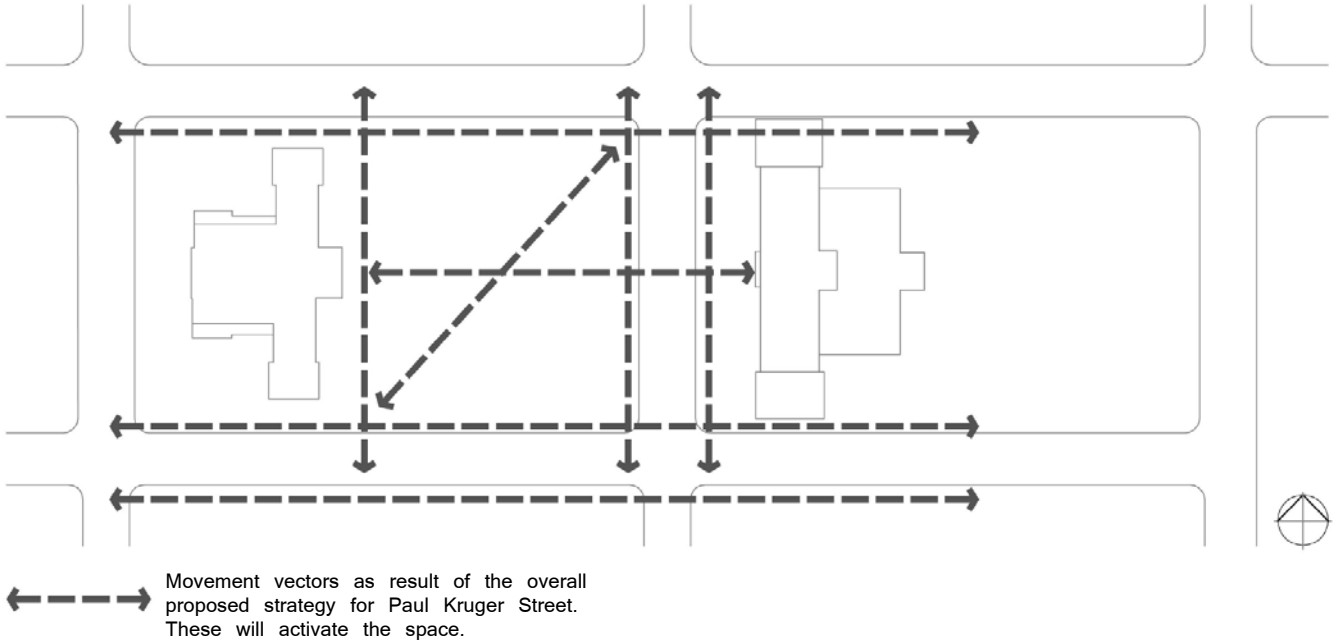
Fig. 107 Plan indicating movement patterns on Pretorius Square (Author 2007).

8. Design Development

8.2. A Valid African Public Space

8.2.1. Design Influence: Maputo, Mozambique

Two public spaces in Maputo will be used to illustrate the notions of a valid African public space. The first being *Bem Vindo* the market in the centre of Maputo and the other being the beachfront on the edge of the city centre. They both may have two different locations, but they share similarities in terms of the contribution they make to the social life of the city. They are both good examples of public infrastructure.

A significant trait that they both share is that they are both outdoor open spaces that are supported by an informal infrastructure system. In the case of the market, it is merely an open space that is protected by a large yet simple steel roof structure. Services, such as water and electricity are available, allowing traders to occupy the space and bring there goods to sell. On weekends and holidays when all the covered space is occupied the activities spill out onto the surrounding streets and in turn the sidewalk becomes an informal market as well. It does not require large financial resources to keep it running and suitably maintained.

The beachfront is similar to the market in that it is also an open space which has been embedded with informal infrastructure that allows for the inhabitants of the city to occupy the space without restriction. A strip of retail facilities with verandas border the beach front therefore the activity that this commercial strip generates also spills out onto the beach front. Along the beach front is a continuous row of trees and a low wall that runs the entire distance of the main road, these together with the rocks, along the edge of the water, allow for informal gatherings and often parties on weekends. Due to the large crowds of people the place has also attracted a large number of informal traders to the area. It has become an important meeting place for the people of Maputo.

Both of these open spaces not only prove that a public space does not require formal and costly infrastructure systems, but also that an open space with no predetermined function does play an important role in the city. The key to making a valid public space in the African urban condition is one that has maximum result due to minimum contribution.

Fig. 108 Bem Vindo Market in Maputo (Author 2006).

Fig. 109 Bem Vindo Market in Maputo (Author 2006).

Fig. 110 The sidewalks outside the market (Author 2006)
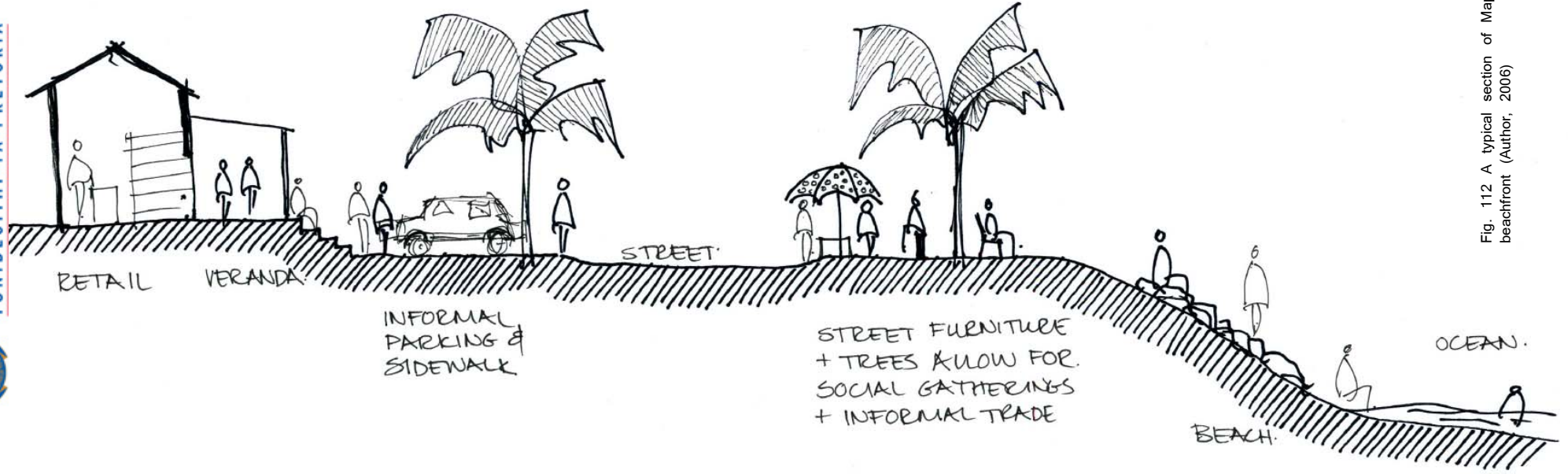

Fig. 111 Maputo's beachfront (Author 2006).

RETAIL   VERANDA

INFORMAL
PARKING &
SIDEWALK

STREET

STREET FURNITURE
+ TREES ALLOW FOR.
SOCIAL GATHERINGS
+ INFORMAL TRADE

BEACH.

OCEAN.

Fig. 112 A typical section of Maputo's beachfront (Author, 2006)

8. Deign Development

8.3. The Intention for Pretorius Square

The proposal for Pretorius Square is to contribute to the urban dynamic of Paul Kruger Street by means of reflecting the intentions of the proposed strategies for the entire street that were dealt with previously. This proposal is to serve as a platform in order to illustrate what can be done along the rest of the street in order to achieve the previously proposed conceptual strategies for Paul Kruger Street.

The objective is to design a *building*, on Pretorius Square, that serves as a condition that is to be a social and collective space. The challenge begins with questioning what open space and architecture should be within the African City and then aims to connect Pretorius Square as a public space to the rest of the city as Berrizbeita (1999:189) would describe "as just another of the city's multiple productive operations."

This proposed social construct is to be an engaging and interactive space that makes allowances for a variety of uses therefore creating an identity that is determined by a temporal quality. It is not so much about what the place *is*, but more about what the place *does*.

At present Pretorius Square is defined by its expansivity and its lack of modulated spaces. Therefore on an urban scale the design aims to define the space more and create a hierarchy of spaces in which more intimate spaces are present. The intention is not only to magnify the City Hall's presence in the city, by transforming it into a social magnet, but in addition to that expand the City Hall into a public space.

At present the identity of site is primarily formed by the colonial past, and reflects notions of rationality and power. For that reason the intention is to add another layer to the site that deconstructs programme in order to comment on the colonial layer. The aim of this new layer, in the form of a programmed landscape, is not to challenge the architectural powers of the older structures but rather construct a new symbol or image of contemporary governance, that of visibility and accessibility, which does not encourage nor permit social exclusivity.

In order to *reconceptualise* space that opens itself to future possibilities, the idea of deconstruction is not to be understood as the "dislocation of structures", that has so frequently been associated with deconstruction, but rather the "dislocation of space and time" (Massey, 2005:54).

Therefore the notion of deconstruction will be used merely as a conceptual tool, in which programme will be deconstructed in order to create programmatic indeterminacy in which differences may be comfortably negotiated. This public space is to be a neutral one that can be transformed according to specific programmatic needs and allows for the cohabitation of a vast number of human activities (Tschumi, 2000: 34, 57).

The aim of this, is to reject the idea of introducing another mass or container onto the site, and rather provide a context that will still be able to create a dialogue between the City Hall and The Transvaal Museum. This social construct will be in the form of a programmed landscape in which a new synthesis of building and landscape is generated. The new spaces and their activities are not to rely on the existing buildings, but rather support them.

This newly embedded urban surface with its services and equipment and ability to modify itself in order to accommodate changing circumstances is now capable of igniting the City Hall and the open spaces surrounding it, therefore not only reactivating but possibly reprogramming it to accommodate both contemporary and future civic needs.

8. Design Development

8.4. Architectural Strategies

8.4.1. Movement Vectors Connecting Voids & Solids

There are various methods that employ the concept of cross-programming, on an architectural scale. One of these being voids and solids, which involves cutting out of solids so as to define voids that serve as public spaces, and it is where the void becomes the potential place of events (Tschumi, 2000:12).

The unprogrammed void is a space for appropriation, an in-between place that is defined by the edges of the programmatic solid. The unprogrammed voids are activated by movement vectors along which people move between the solids, hence resulting in the activation of the void which in turn are open to all possibilities. These vectors go through the voids and link the programmed solids in order to intensify the density of movement. The solids should accommodate more public activities and the vector links the solids resulting in it becoming an organising device as well (Tschumi, 2000:12).
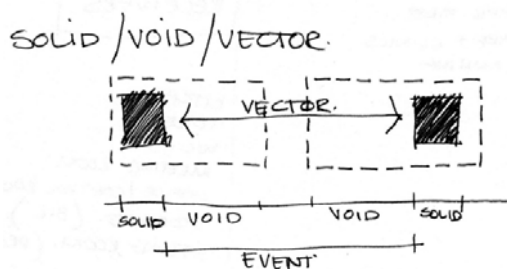
Fig. 113 A Diagram illustrating the concept of solids, voids and activating movement vectors (Author, 2007)
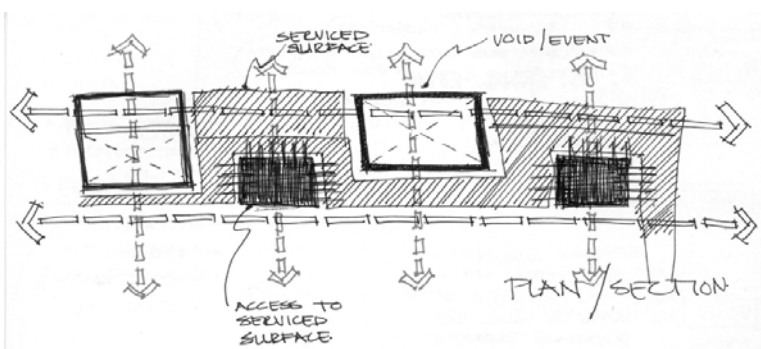
Fig. 114 A Diagram illustrating the concept of solids, voids and activating movement vectors (Author, 2007)

8.4.2. Building as a Landscape

An architectural expression that initiates a social and collective space by means of the materialisation of a condition opposing the materialisation of form is well suited in the African urban condition (Tschumi, 2000:11). The scheme therefore investigates the possibility of taking programmed solids and unprogrammed voids, with linking movement vectors, and allowing them to manifest themselves within a programmed landscape, that is a manipulation of a large urban surface (Wall, 1999:233, 244). This landscape is not informed by the sole purpose of creating the visual and the formal but rather creating a place for the human condition to evolve within the urban condition. Its intention is to tolerate the city as an open and self-organising system, enforcing the notion of temporality.

This form of architectural expression is characterised by the rejection of the assumption that a building ought to be an enclosed object. It is embodied as a discontinuous building and an unbounded landscape rather than an over-coded, delimited place. This proposed architectural expression will stimulate unbounded activity and movement that will permeate throughout the city.

Fig. 115 & 116. Yokohama International Port Terminal (www.foa.net 16 July 2007).

8.4.2.1. Design Influence: The Yokohama International Port Terminal, Yokohama, Japan

The Yokohama International Port Terminal, in Yokohama Japan, designed by Foreign Office Architects, is a clear example of an attempt to shift the architectural landscape, by way of utilising a programmed landscape to suggest what a contemporary public space could be.

The role it plays in the city is not only of a transport interchange but that of a civic space as well. The architects describe it as "a civic space, a town square or a park thrown across the water, an artificial beach where people can promenade, sunbathe, canoodle, picnic, attend festivals and watch fireworks" (Moore, 2002:74). It is a non-orientated space that is

One could place this scheme into the same category as that of Frank Gehry's Guggenheim in Bilbao, the reason being for its transformative effect on the image of the city. But it is too simple to label Foreign Office Architects' scheme as yet another icon as it resists the temptation to become a mere postcard view. It is a building in which one would only truly experience and discover all its qualities by penetrating it, unlike that of the Guggenheim Bilbao, that is merely there to seduce and please the eye.

The scheme can be best described as "both infrastructure and prestige project, and neither. It's a monument, and not. While it has a monument's distinctiveness, it is experienced as a network of sequences rather than a single iconic icon." (Moore, 2002:74)

Fig. 117-119 Yokohama International Port Terminal (www.foa.net 16 July 2007).

8. Design Devlopment

8.5. Indeterminate Programme

A:The Social Condition on Pretorius Square to be Accommodated

- Information
- Communication
- Discussion
- Debate
- Expression

B:Enabling Infrastructure

- Underground parking garage

C:Scenarios

Mixing 1

Exhibition 2

Orientation 3
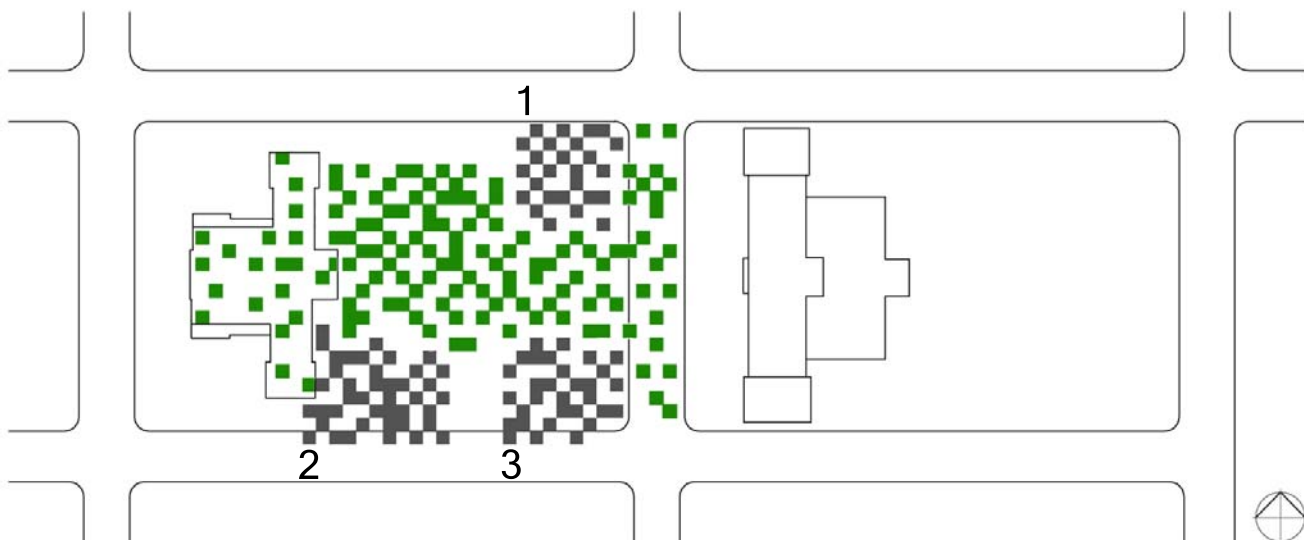
Expression

Fig. 120 Events on Pretorius Square as a result of cross-programming (Author 2007).

D:The Urban Surface
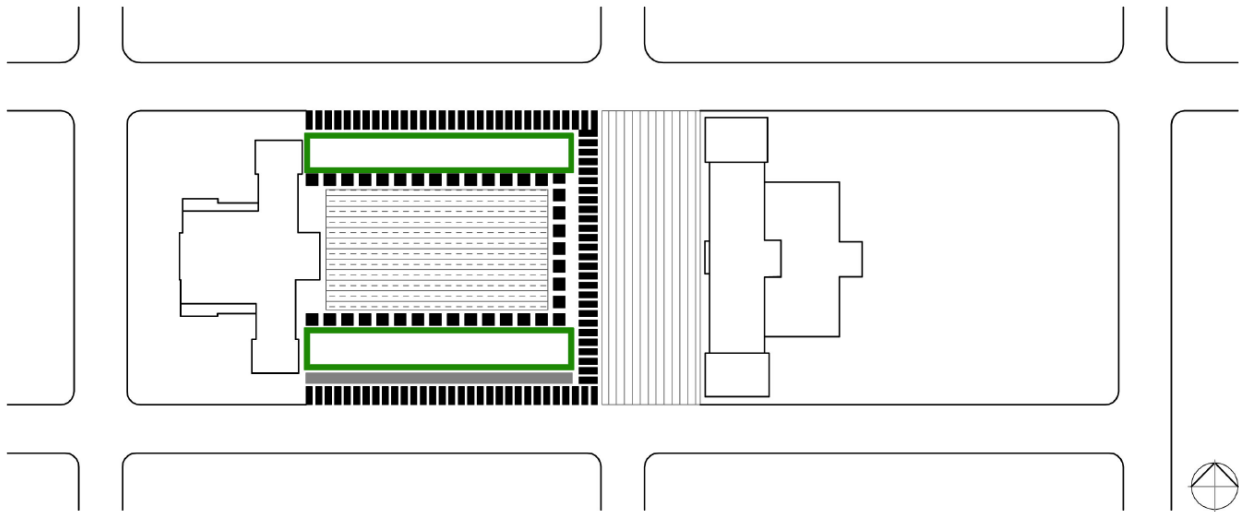
Scenarios:
- Mixing
- Exhibition
- Orientation

An interactive and comfortable street edge:
- Street furniture
- Street trees
- Seating / Stairs

Informal traders access to water and electricity.

An interactive and conformatable edge to the public square:
- Mobile planters
- Benches

A raised floor to accommodates services:
- Water
- Electricity
- Stormwater drainage

A connecting surface.

Fig. 121   Diagram indicating a concept of the proposed landscape design for Pretorius Square (Author 2007).

E:Movement Vectors Connecting Solids & Activating Voids
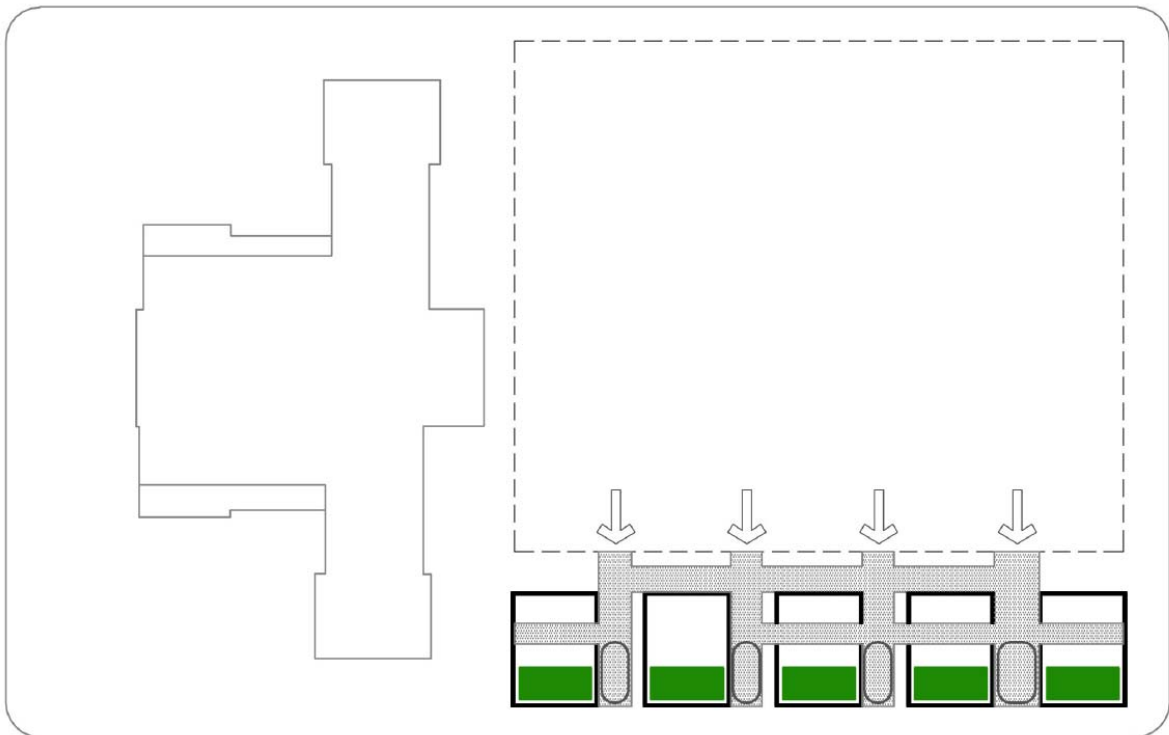
Fig. 122 A diagram indicating the proposed solids as a serviced surface, each with a void that is activated by the connecting circulation route (Author 2007).

Solid / Services

Void / Unprogrammed space

Circulation route as the movement vector.

Foyer space

Underground parking garage

Access from underground parking which initiates the movement vector.

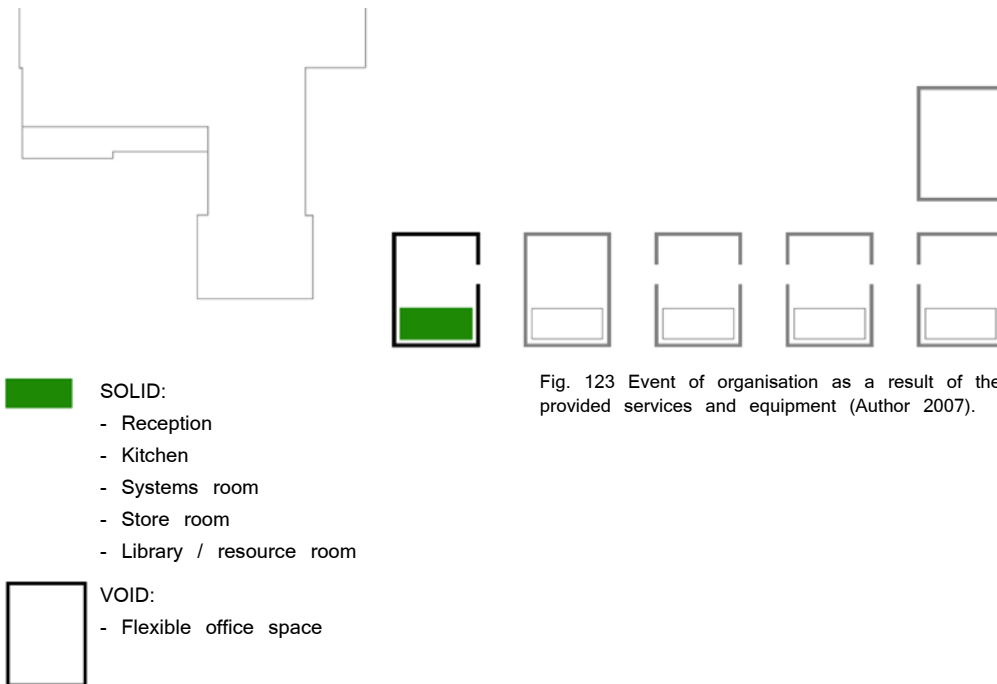F: Programmed Solids Servicing the Unprogrammed Voids

- Solid & Void 1: Organisation / Office

Fig. 123 Event of organisation as a result of the provided services and equipment (Author 2007).
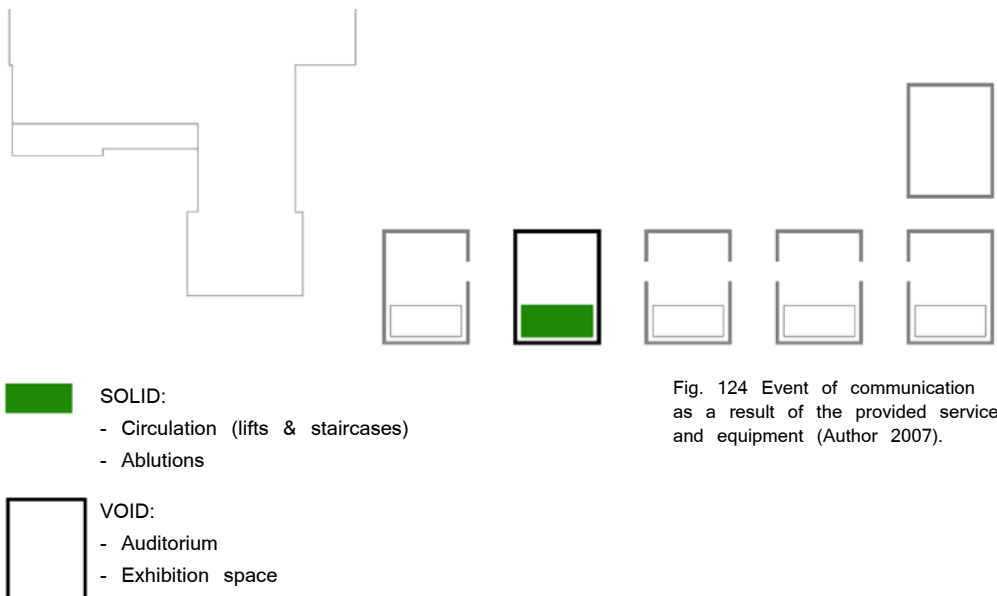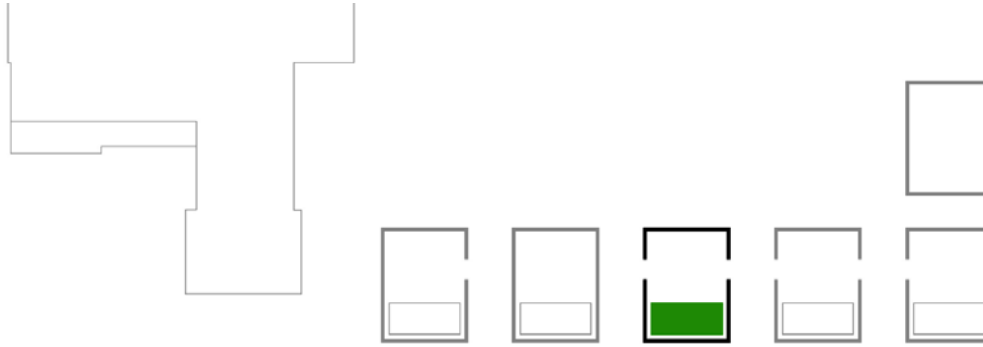
SOLID:
- Reception
- Kitchen
- Systems room
- Store room
- Library / resource room

VOID:
- Flexible office space

- Solid & Void 2: Communication

Fig. 124 Event of communication as a result of the provided services and equipment (Author 2007).

SOLID:
- Circulation (lifts & staircases)
- Ablutions

VOID:
- Auditorium
- Exhibition space

- Solid & Void 3: Exhibition

SOLID:
- Kitchen
- Bar & food kiosk
- Service lift & staircase
- Refuse removal
- Furniture storage
- Store room
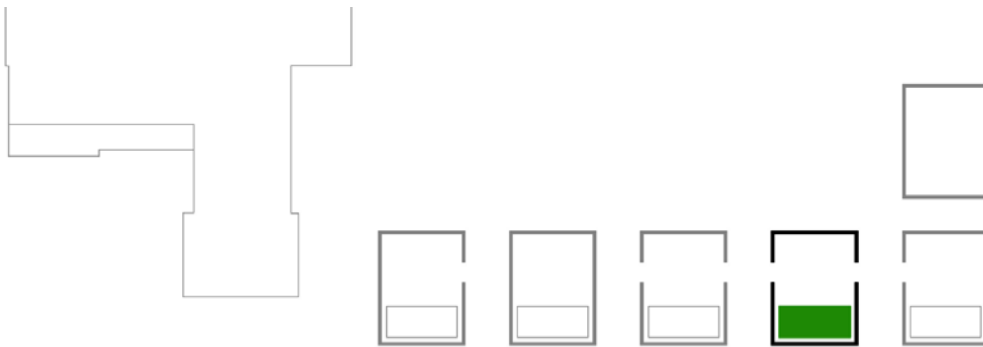- Office
- Archive
- Workshop
- Studio
- Ablutions

VOID:
- Exhibition space
- Seminar rooms
- Multi-purpose halls

Fig. 125 Event of exhibition as a result of the provided services and equipment (Author 2007).

- Solid & Void 4: Information

SOLID:
- Offices
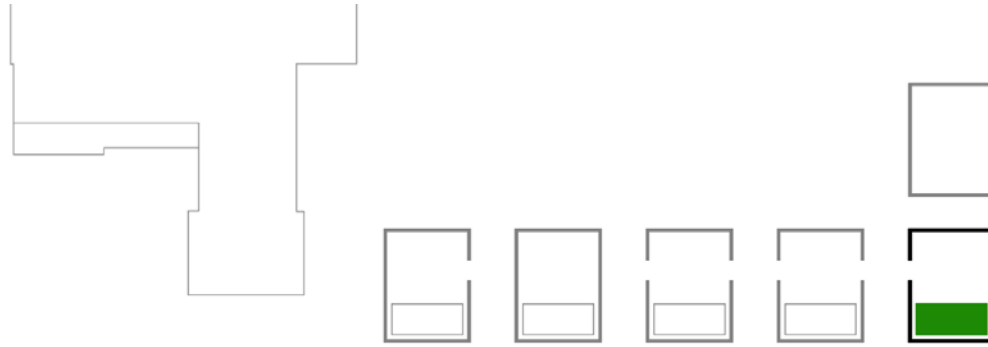- Store room
- Board room
- Strong room
- Kitchen
- Common area

VOID:
- Information & advisory centre

Fig. 126 Event of information as a result of the provided services and equipment (Author 2007).
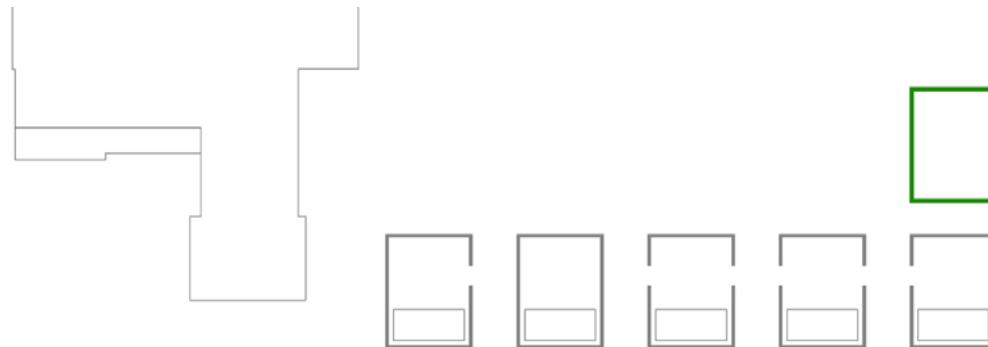
- Solid & Void 5: Orientation

SOLID:

- Circulation (lifts & staircase)
- Stairs to street level (seating & circulation)
- Refuse store
- Plant room
- Kitchen & bar

VOID:

- Foyer
- Concourse

Fig. 127 Event of orientation as a result of the provided services and equipment (Author 2007).

- Service: Public Ablutions

SERVICE:

- Public wc's
- Family wc's
- Laundry facilites
- Public washrooms
- Locker rooms

Fig. 128 Public ablutions, washrooms, laundry facilities and locker rooms to service the entire complex (Author 2007).

8. Design Development

8.6. An Underground Public Space

8.6.1. Design Influence: The Apple Store, Manhattan, New York, USA

The Apple Store on 5th Avenue in Manhattan, designed by Bohlin Cywinski Jackson, is a retail space that occupies the underground concourse of the General Motors Building, with entry from the plaza level above (Gendall, 2006:88).

This retail space is admired not only for its aesthetic achievements but also for it contribution to the urbanity of Manhattan, as it is considered to be a positive public space that has contributed to the civic life of the city. By submerging the store under the plaza, the architects were able to crown it with glass cube that occupies only 8 percent of the plaza and leaves the rest for public use. This glass pavilion has transformed an underused, sunken plaza into a vibrant space, and is said to be "plaza beneath a plaza" (Gendall, 2006:88).

The transparent cube not only serves as an initiation to customers, but allows for natural light to penetrate into this underground public space. The scheme proves that if one implements suitable methods of introducing natural light and ventilation it is possible to have a public space that has been submerged underground and still be a positive contribution to the civic and social life of the city. Moreover this scheme clearly illustrates that the solution to having an underground public space is not only making the public aware of its presence but also being able to draw them in.

Fig. 129-132 The Apple Store on 5th Avenue, New York (Gendall, 2006).

8. Design Development

8.6 An Underground Public Space

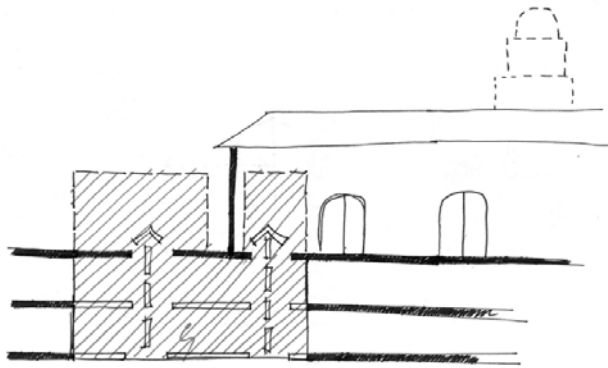## 8.6.2. Conceptual Design

Fig. 133 Concept sketch illustrating an underground public building as part of an underground parking garage (Author, 2007)
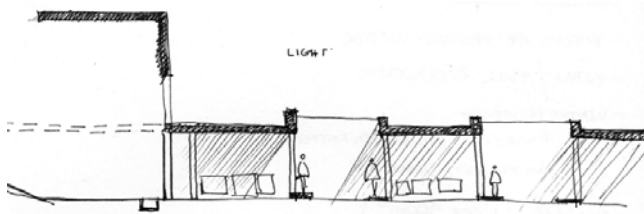

Fig. 134 Concept sketch illustrating the importance of introducing natural light into building (Author, 2007)
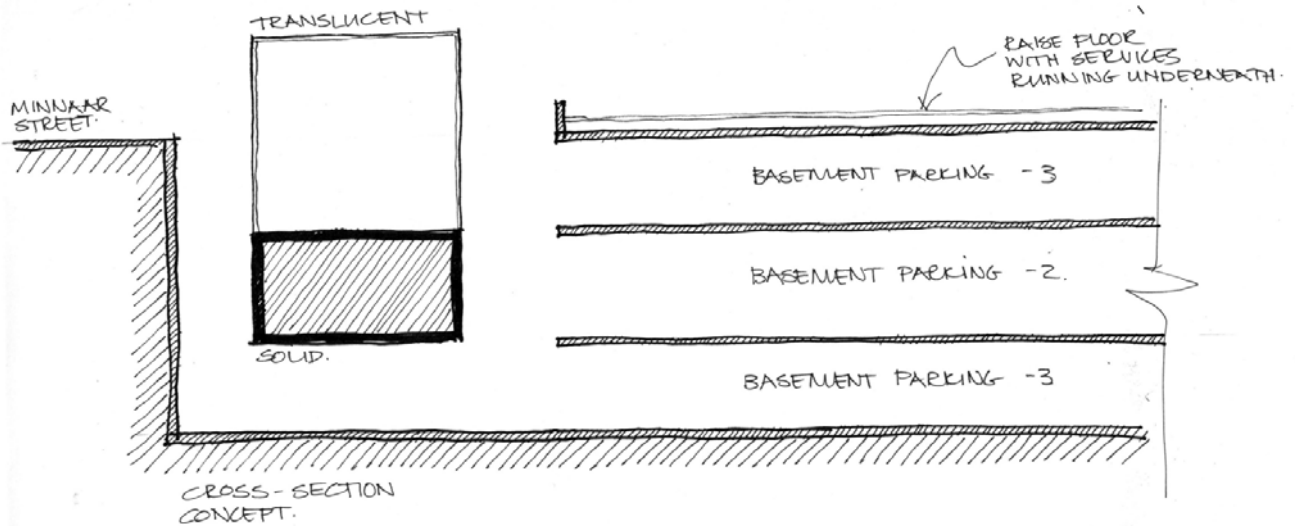

Fig. 135 Conceptual section illustrating the position of building in relation to the underground parking garage as a seperate compenent to facilitate natural ventilation and lighting (Author, 2007).
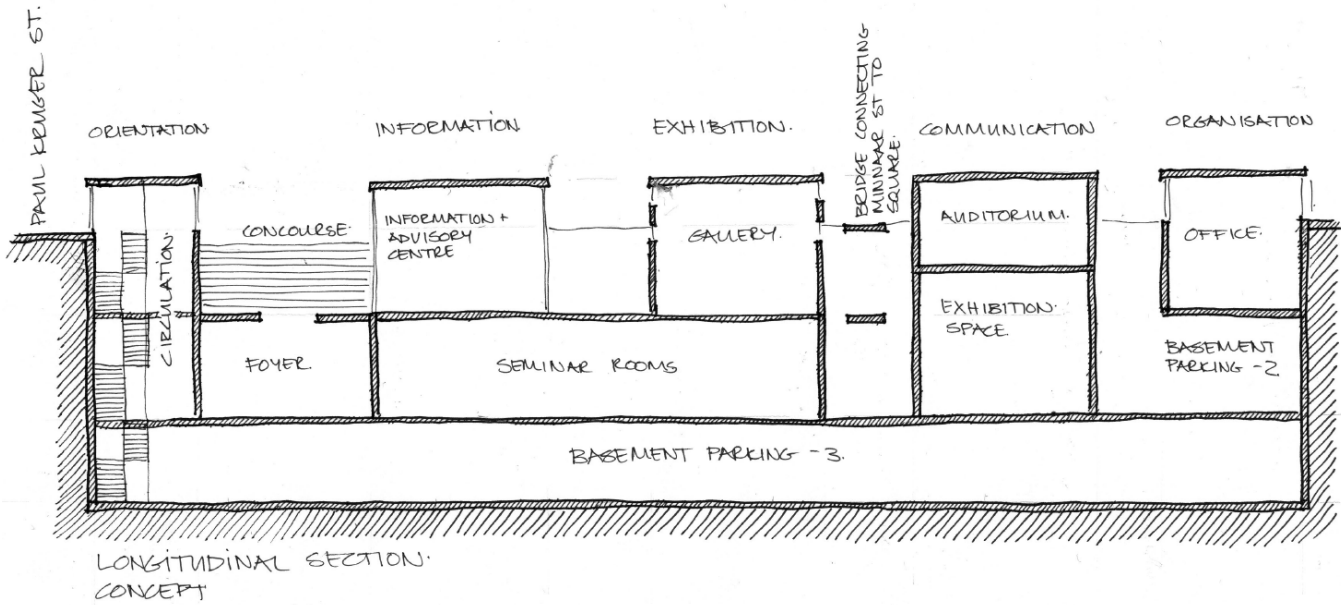
Fig. 136 Conceptual section illustrating the sub-division of the building into five containers each connected by outdoor public spaces. The intention of this sub-division is to assist in bringing in natural light to this underground public space (Author, 2007)
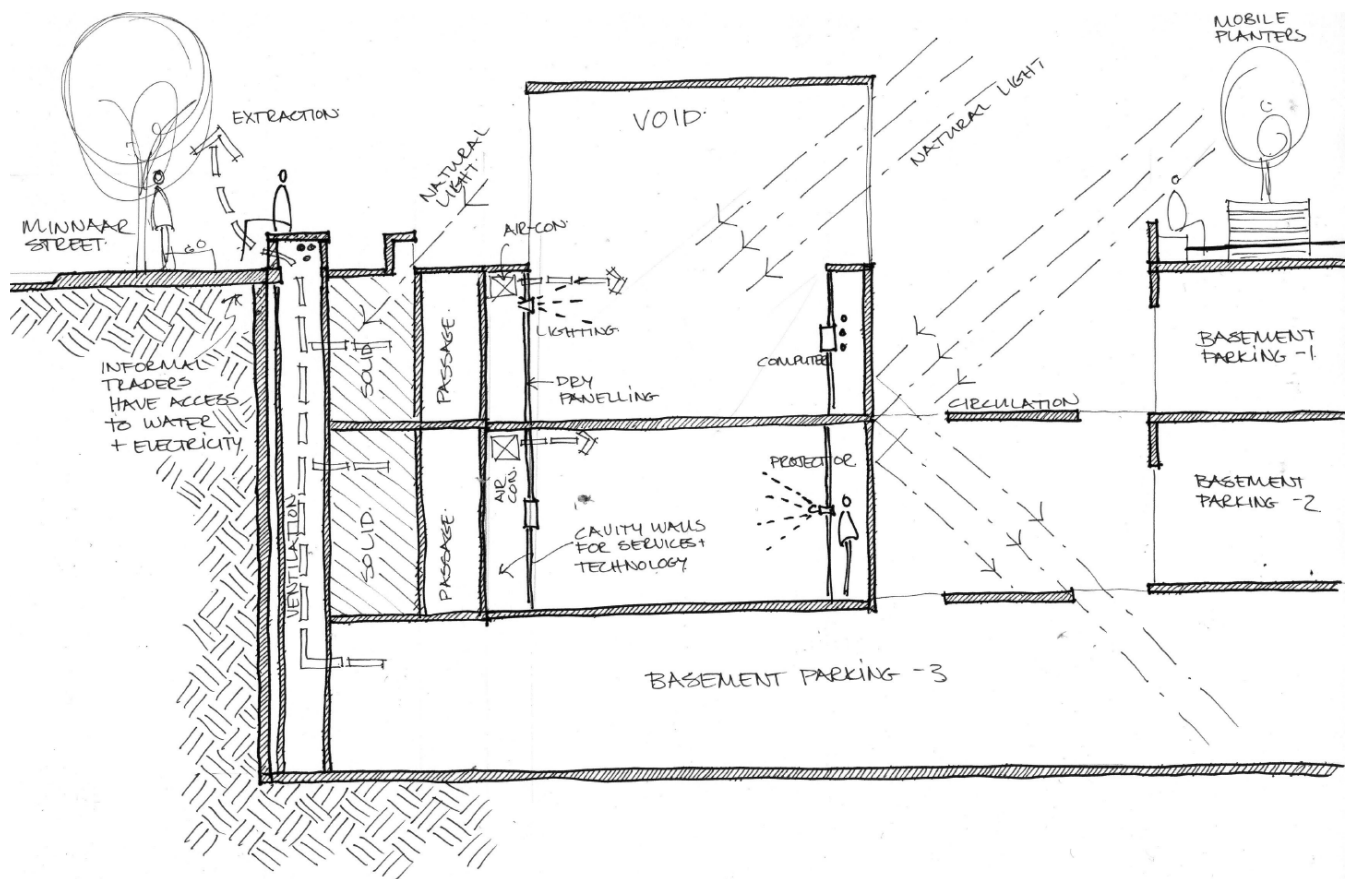

Fig. 137 Conceptual section illustrating ways in which the seperate 'containers or boxes' can be serviced, lit and ventilated. It is important that natural light is also introduced into the parking garage (Author, 2007).