

PROJECT INTENSION & CONCEPT

“Design can be defined...as the hinge that connects culture and nature through the exchanges of materials, flow of energy and...land use”

[Guy 2002:228]

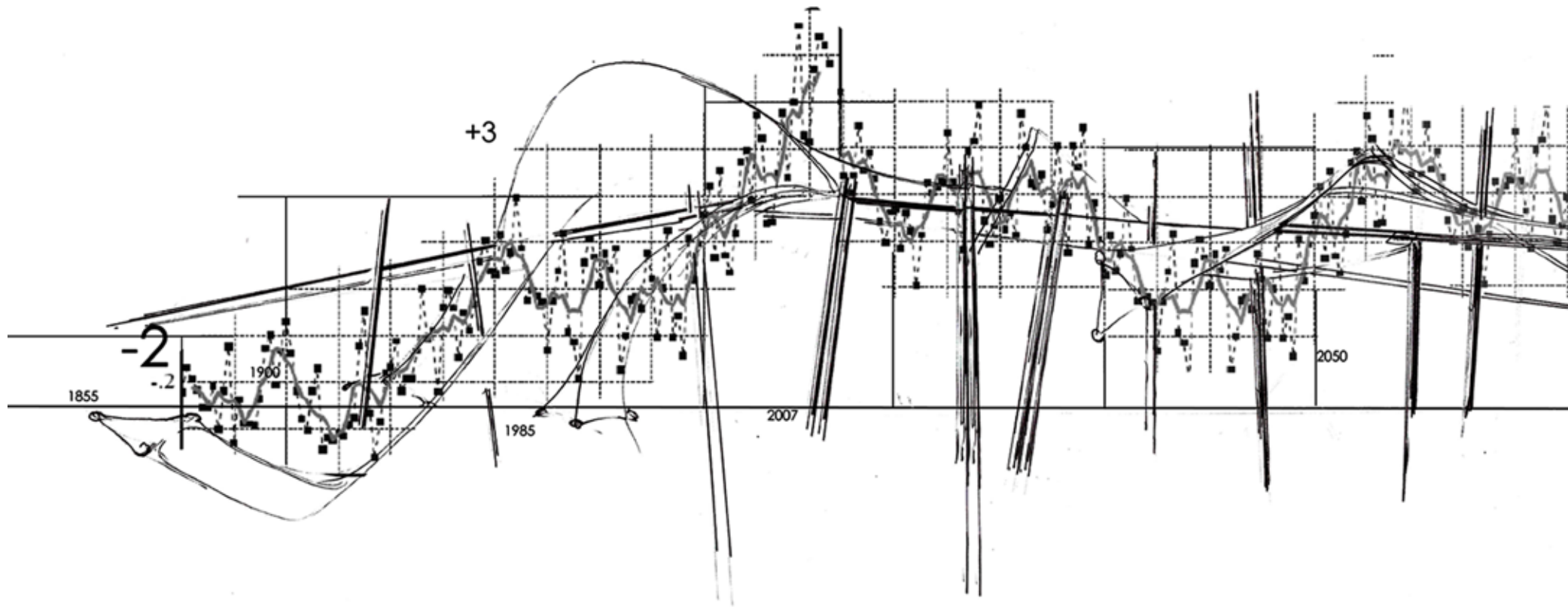


Figure 6-01: Initial intension drawing: movement, carbon and connecting to the site [Source: Author]



## 6.1 DEFINING THE PROJECT AND SITE

### 6.1.1 Project intention

The intention is to design an intervention that responds to the historical context, deals with current cultural and social context and adapts over time.

**The structure aims to become a seam to link Salvokop with the city.** Functions will be placed on the linking structure to ensure that the seam becomes a permeable border.

The pedestrian is important user of the site while the transport systems will adapt to the pedestrian movement patterns.

**It is a structure that not only adapts to climate change but also consciously strives to mitigate it.** The design will aim to minimise its carbon footprint and embodied energy.

**It aims to link, change and integrate the all the transport modes on the site into a coherent whole.**

### 6.1.2 Accommodation and function

The design of a BRT terminal building aims to integrate all the different transport modes. It strives to upgrade the current physical and social condition of the station to ensure that a wider range of users make use of public transport. **Additional functions and programs will be added to the existing to ensure a 24 hour lifecycle is achieved on site.**

The functions for the intervention will be chosen to complement each other, providing diversity and achieving social and economical sustainability. The structure will also need to be able to adapt to changing functions and users ensuring a long productive lifecycle for the building.

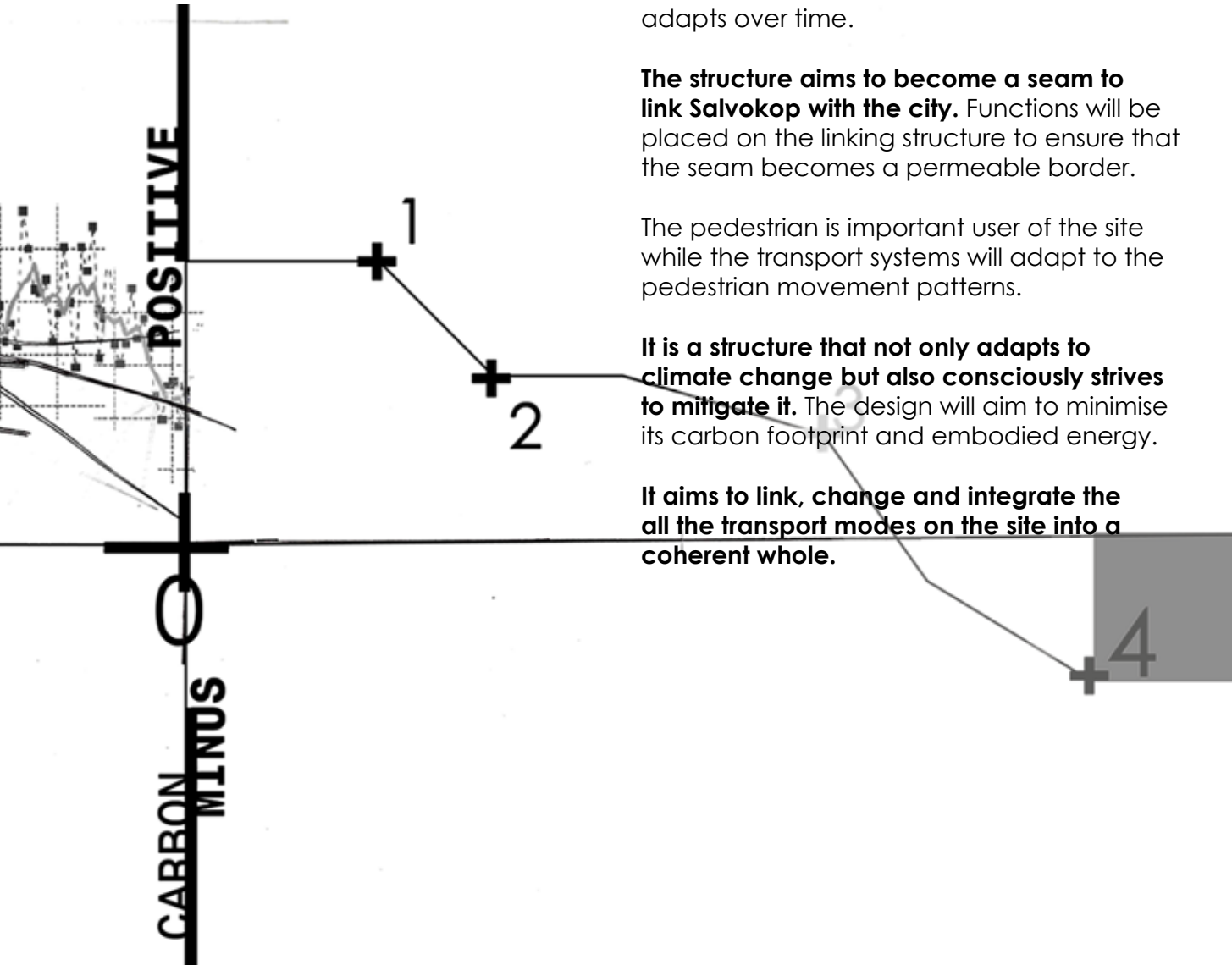
The owners or client for the project are:

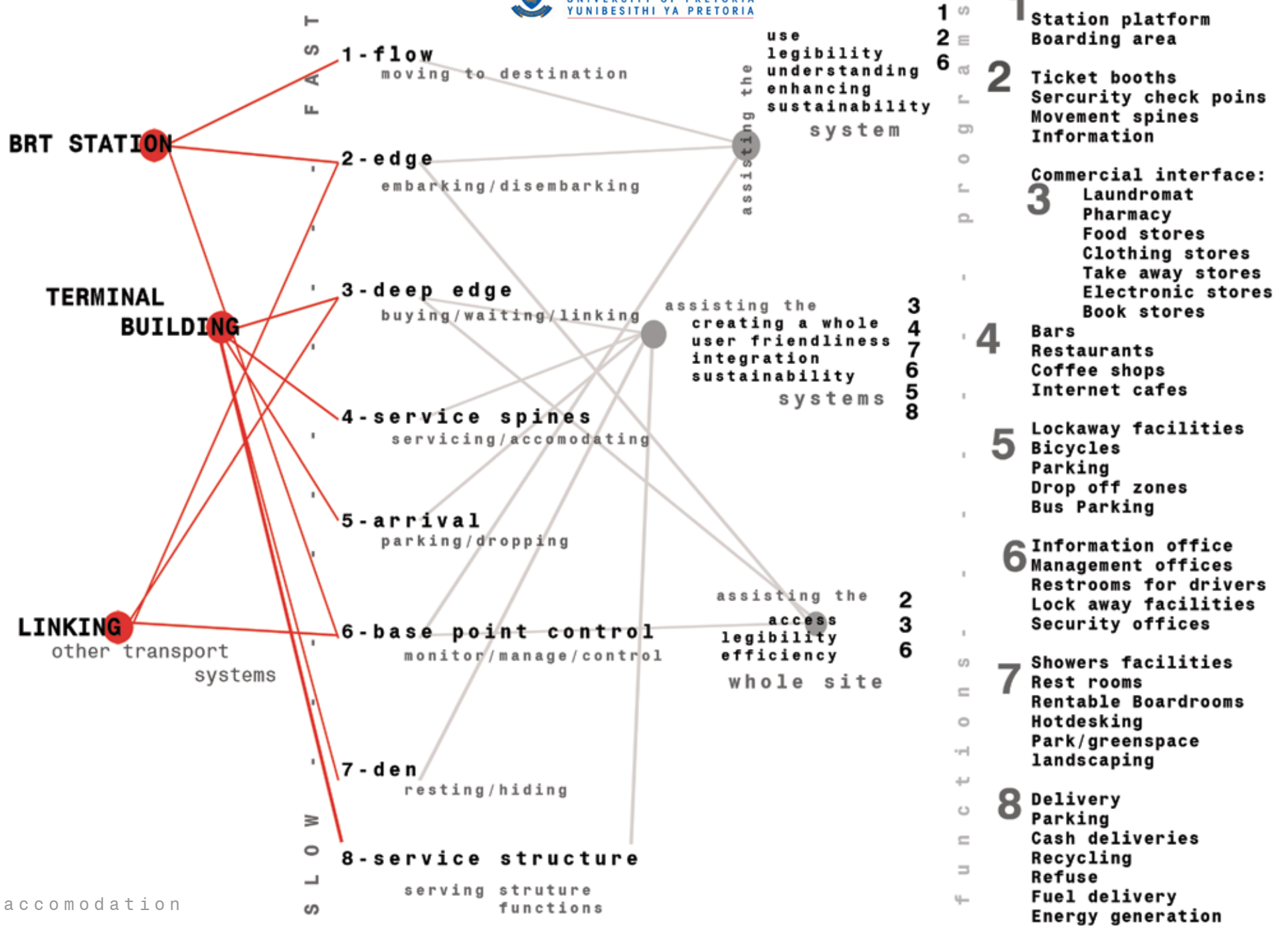
**BRT stations** - City of Tshwane Department of Public works and Infrastructure [Transport Division]

**Terminal Building** - Transnet, Intersite.

**The functions proposed for the structures were divided into core groups referring to the speed and nature of the needed functions.**

The concept will be developed around these functional zones. The structure will adapt to these functions.







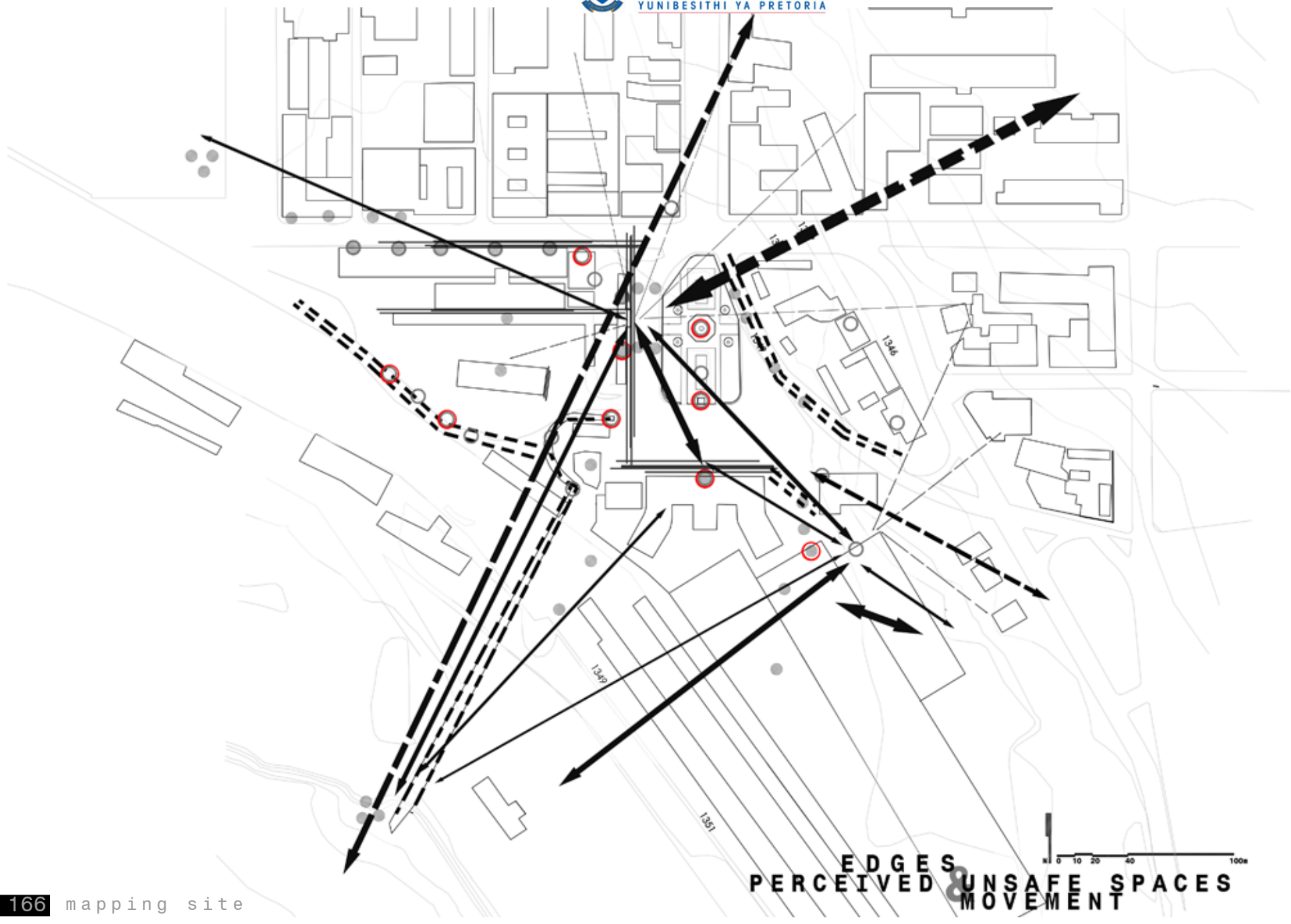


Figure 6-04: Mapping edges, movement and perceived safety [Source: Author]



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Figure 6-05: Mapping views and important current and historic points [Source: Author]

**VIEWS & POINTS**  
**IMPORTANT HISTORIC + CURRENT**

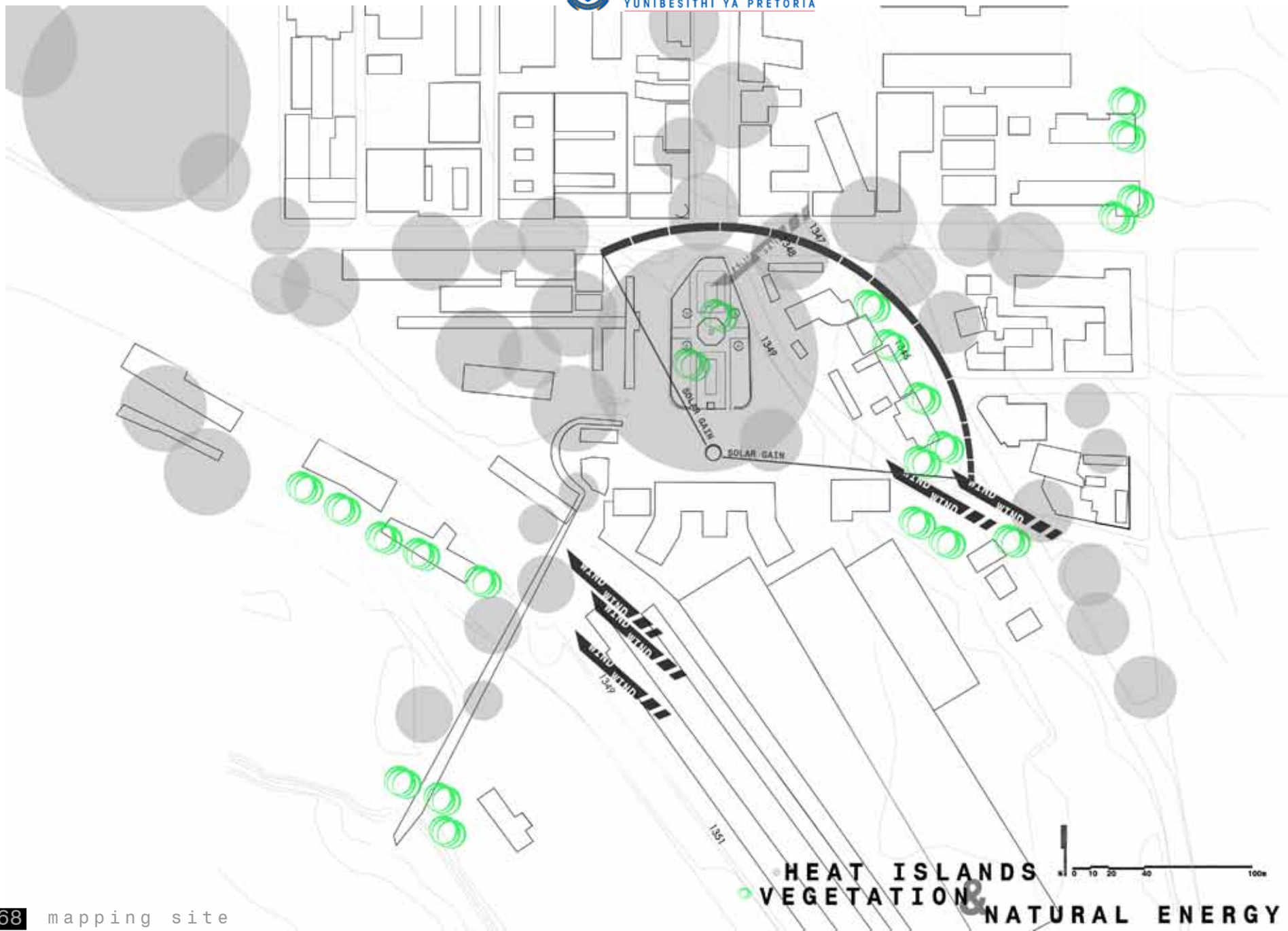


Figure 6-06: Mapping Vegetation, Heat Islands and Natural Energy [Source: Author].



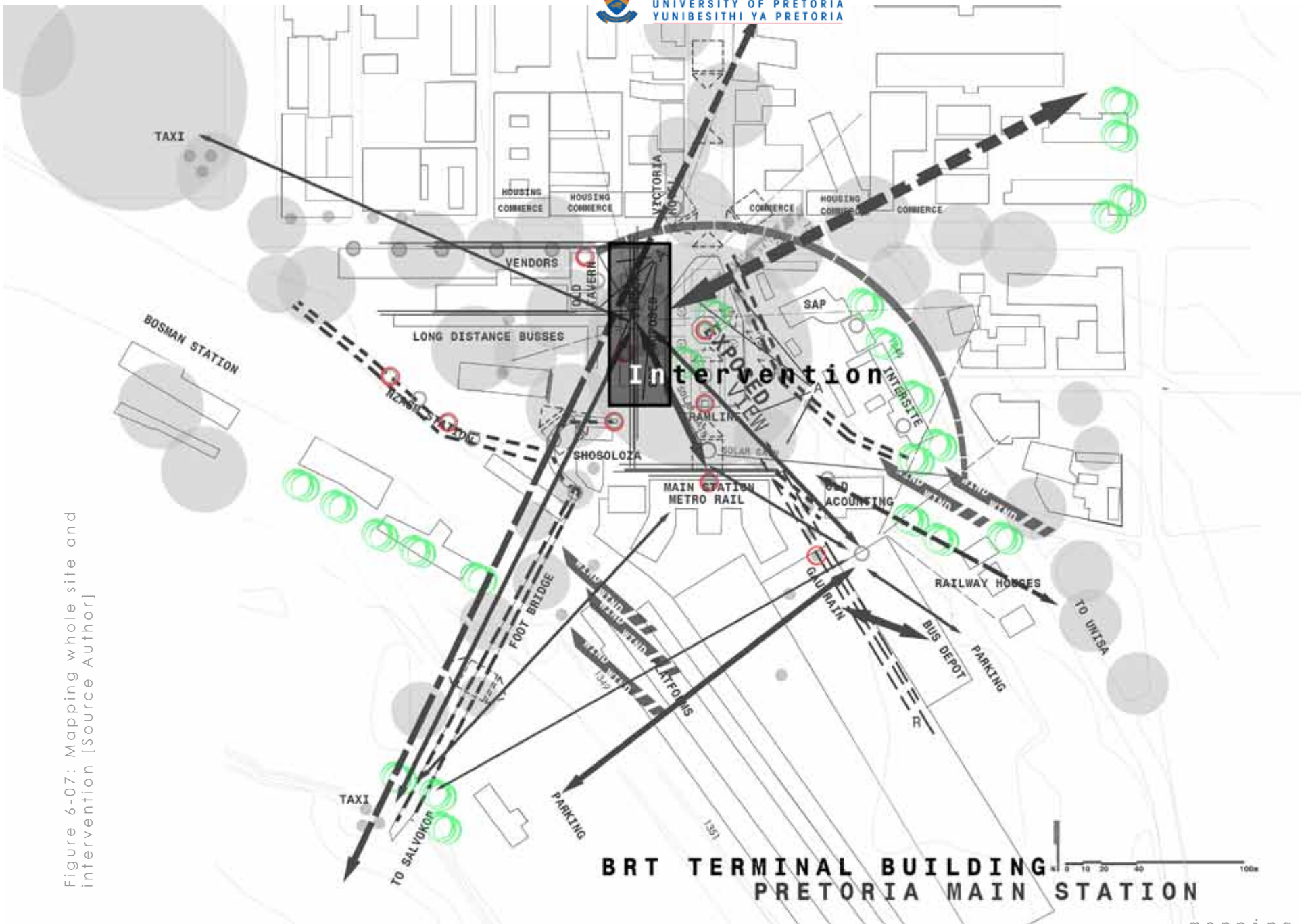
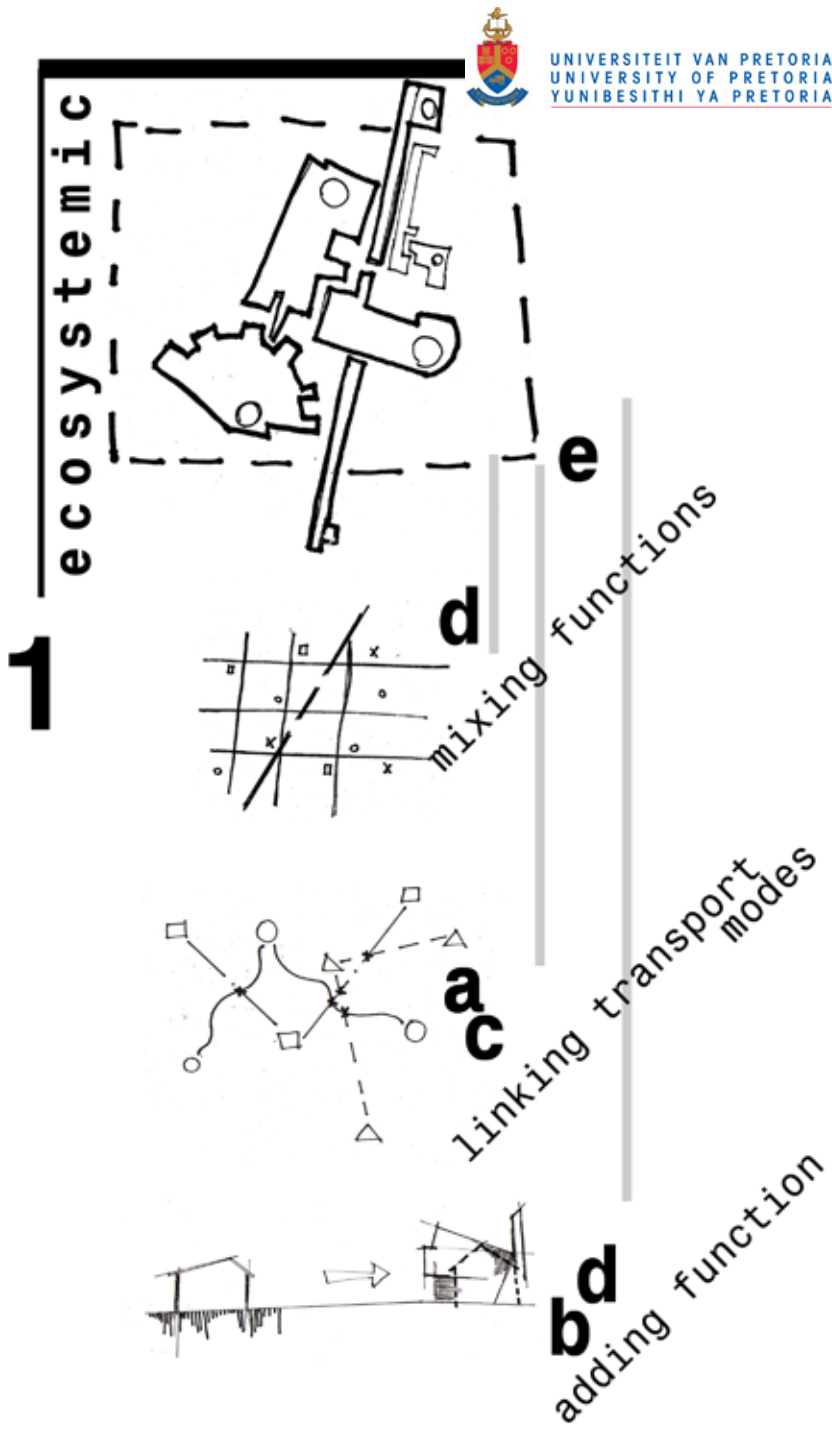


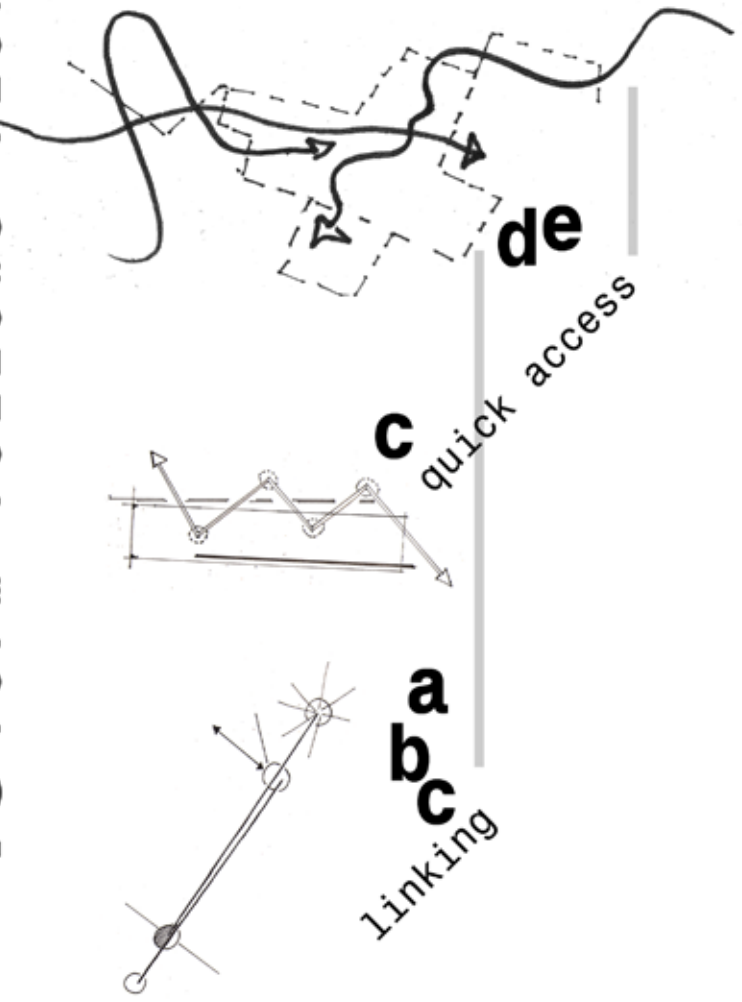
Figure 6-07: Mapping whole site and intervention [Source Author]

# INFORMANTS

- a- Framework + cultural
- b- Historical
- c- Programmatic
- d- Energy efficient
- e- Low carbon



# 2 form follows flow



concept

3 mass vs membrane

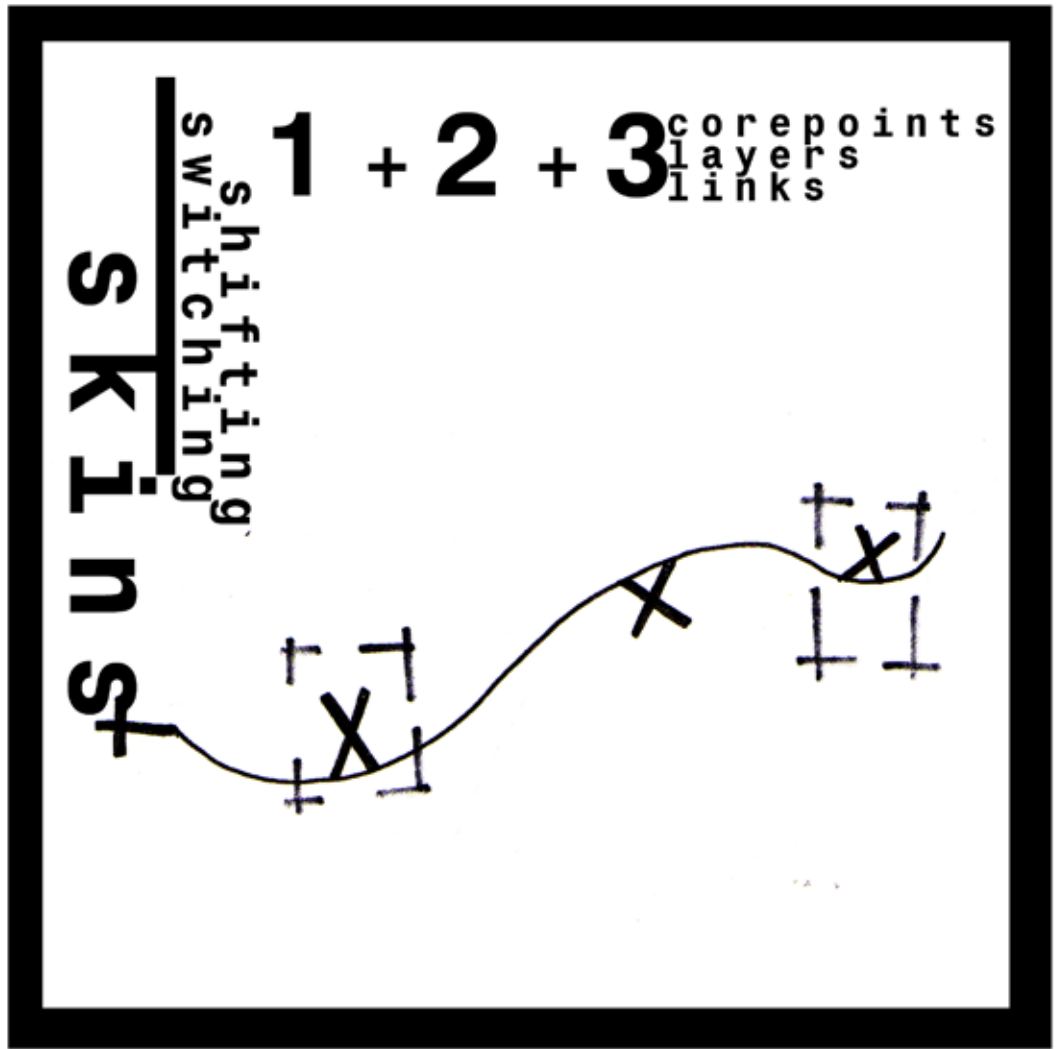
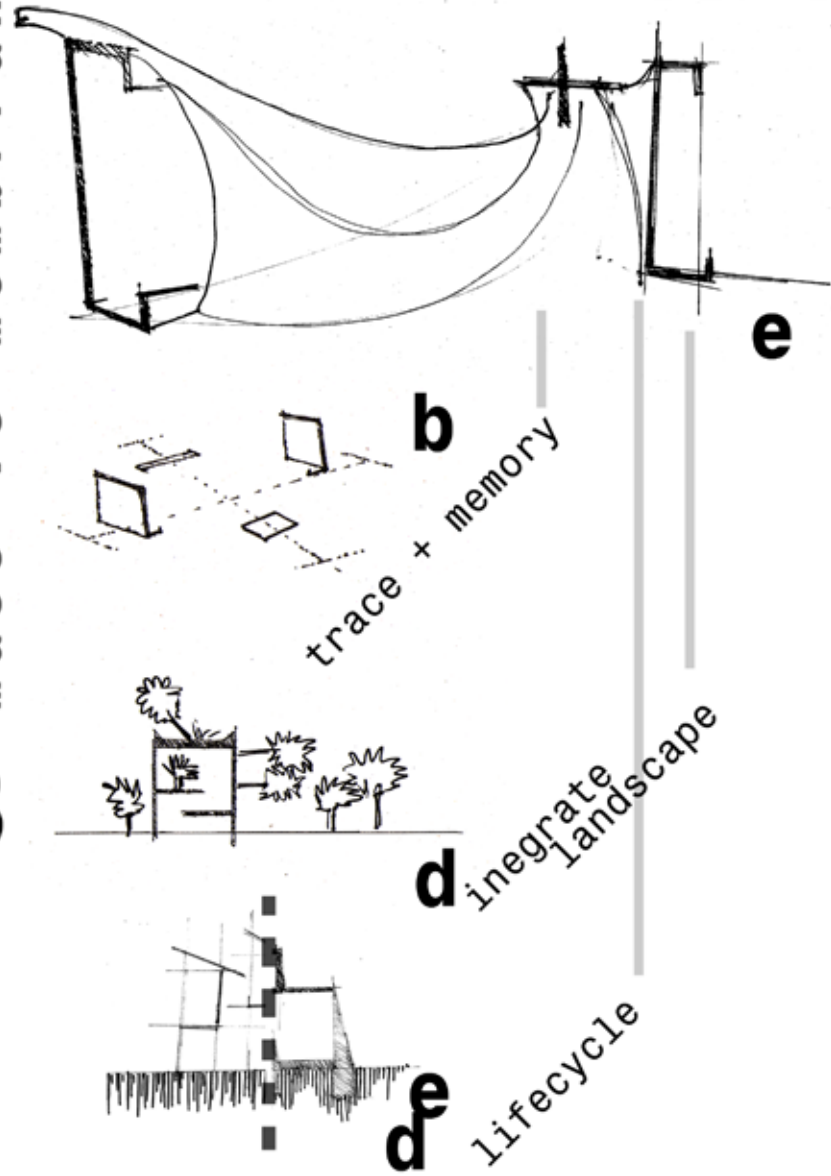


Figure 6-08: Informing the concept and design  
[Source: Author]

## 6.2 INFORMANTS AND CONCEPT

As depicted in Figure 6-08 a range of informants were used to develop a concept. These were combined into three overarching informants:

### Form follows flow

- \_ Accommodating movement of site, people, natural energies.  
*[MOVEMENT]*
- \_ As framework proposes linking Salvokop to accommodate flow.  
*[LINKAGE]*
- \_ Historical components are adapted to the flow of the site.
- \_ Linking the old and new, structure and landscape.

### Ecosystemic whole

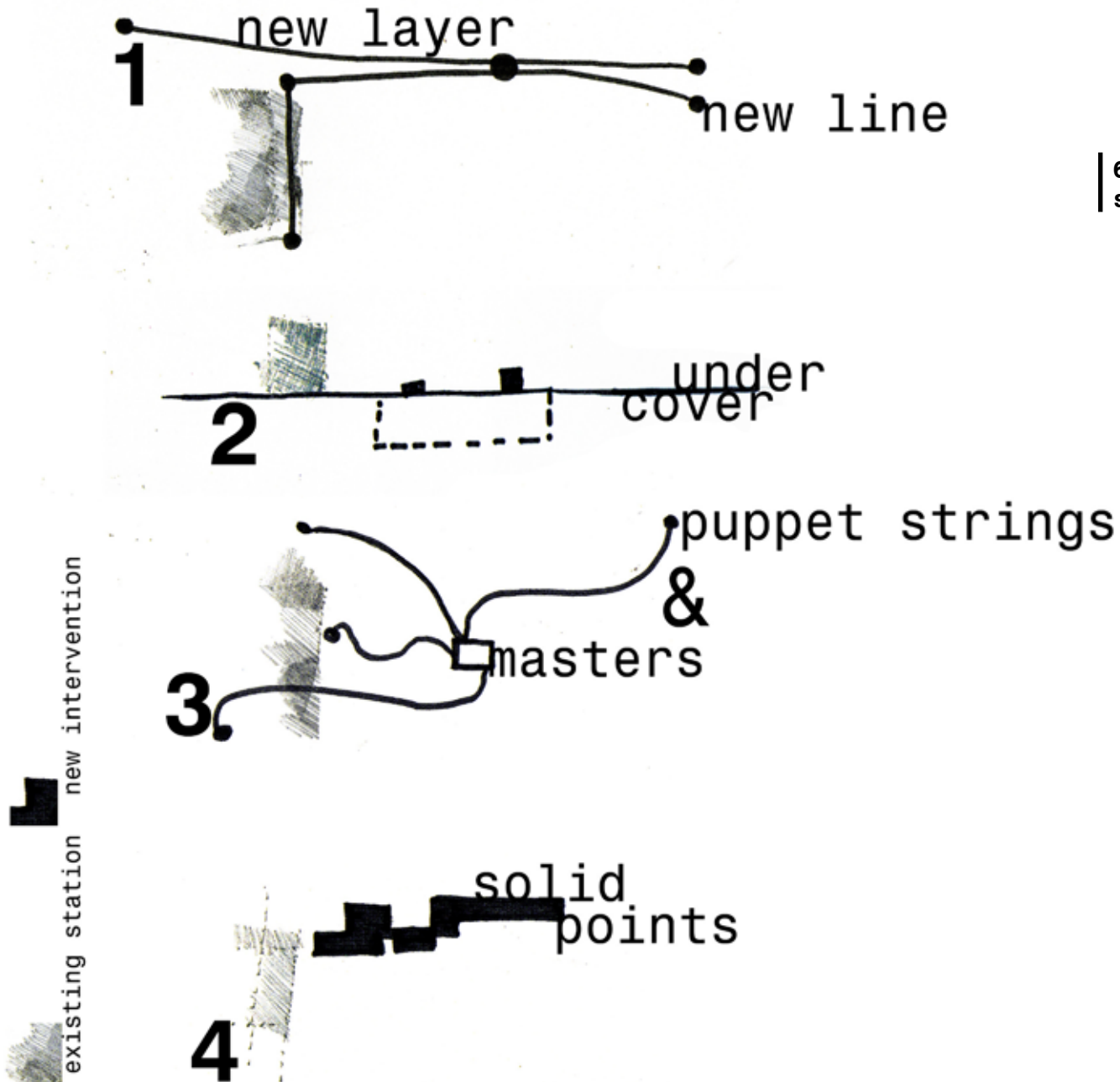
- \_ Add or removing – understanding the whole to achieve diversity .
- \_ Adding new function with the old functions.  
*[Diversity leads to an adaptable & sustainable whole]*
- \_ As the framework proposes – placing function on the border ensures movement and diversity across the border.
- \_ Mixing functions on site – ensuring sustainability.

### Mass vs Membrane

- \_ Layering landscape and structure.
- \_ Layering structure and component
- \_ The layering of life cycles, weight, function and movement.
- \_ Layering adaptable and fixed components.
- \_ Layering the old with new sensitive membrane that covers existing.
- \_ Old landscape is covered by new landscape

Out of this an adaptable, robust and sensitive structure will be developed.

Figure 6-09: [Opposite page]  
Series of conceptual approaches developed and tested.  
[Source: Author]



### 6.2.1 Testing series of concepts.

Four conceptual approaches were tested and adapted to the site.

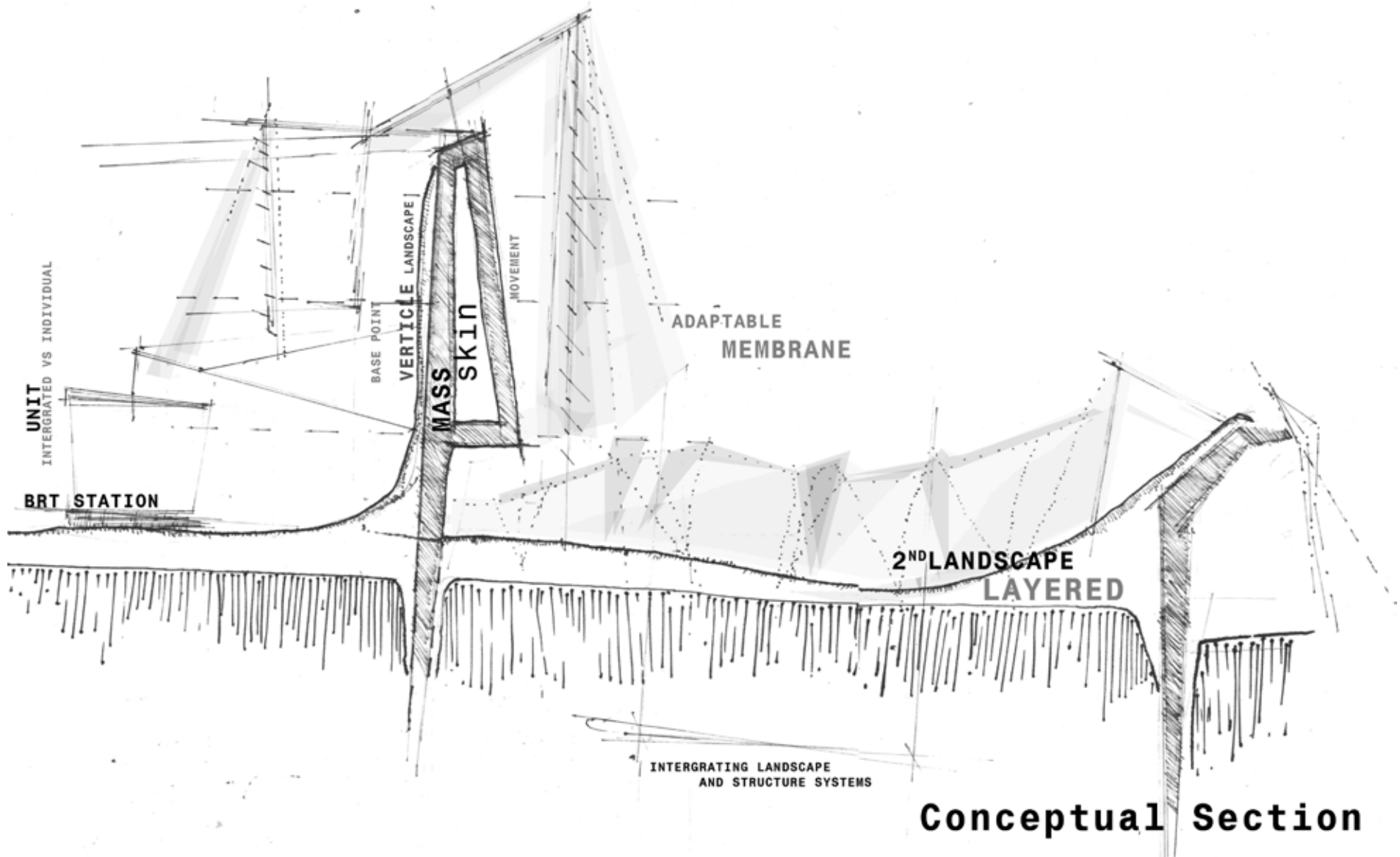
**Concept 1:** An extensive integrating structure and landscape layer was explored, yet it was deemed to be too big and elaborate to layer the whole site.

**Concept 2:** Placing the station underground and removing pedestrians from ground level was established as too expensive and energy intensive. It will also remove needed people movement and energy from the urban realm.

**Concept 3:** The approach of placing structures on axis will be too imposing on heritage, yet linking all the transport systems with an adaptable method can be exploited and used.

**Concept 4:** A more compact approach will be more sustainable and efficient, yet does not integrate the whole site and all transport systems.

From these four conceptual approaches a final integrative concept was developed.



# Conceptual Section

### 6.2.2. Conceptual statement

The concept is developed around **solid points, the link** and **the layering of all**. It integrated the initial concepts one, three and four into a whole.

## Switching/shifting skins.

A structure of **skins** [layers] that **links** [the flow of site, people, energy, movement] and **adapts** [to change, season and time]

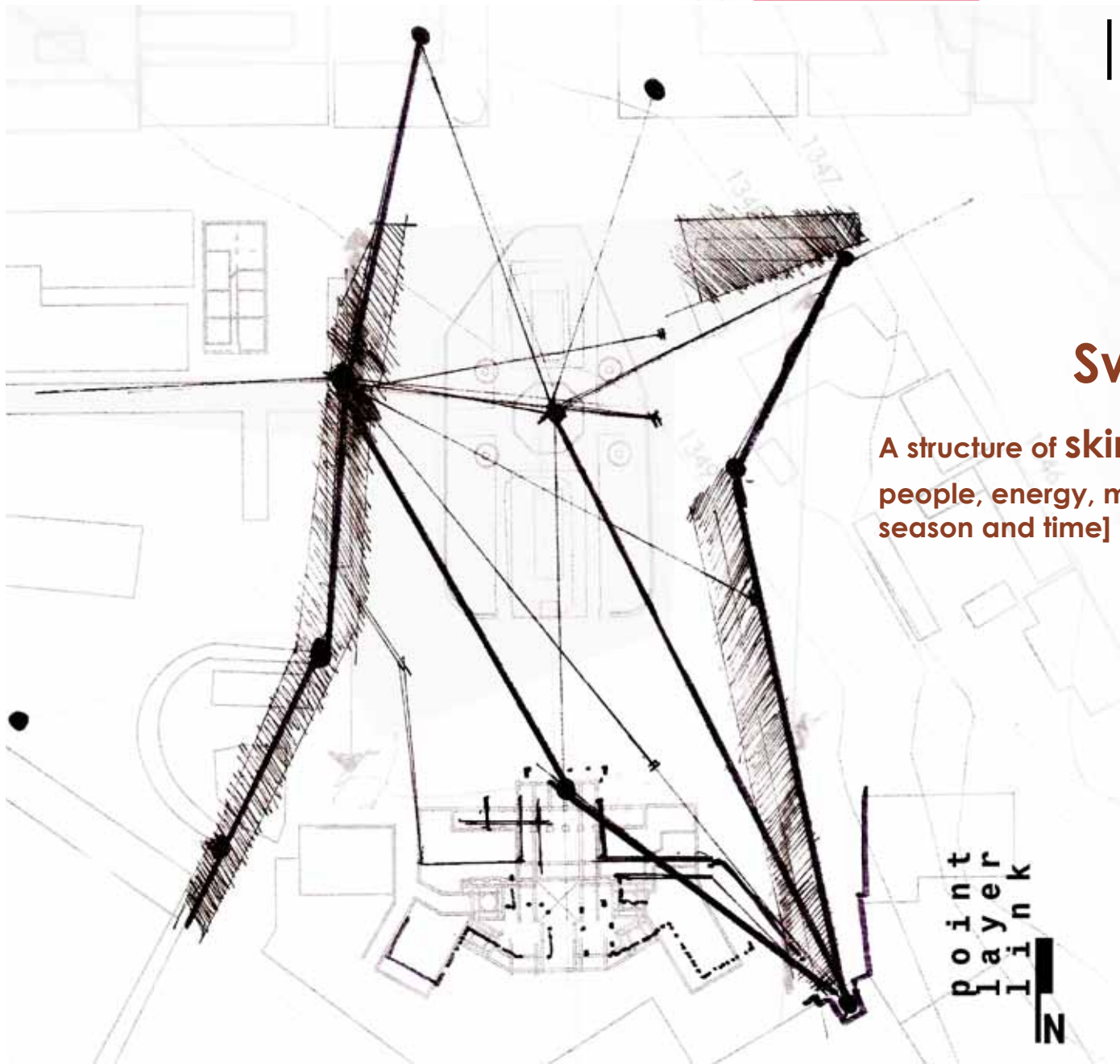


Figure 6-10: [Previous Page] Conceptual section [Source: Author]

Figure 6-11: Conceptual plan and intervention [Source: Author]