

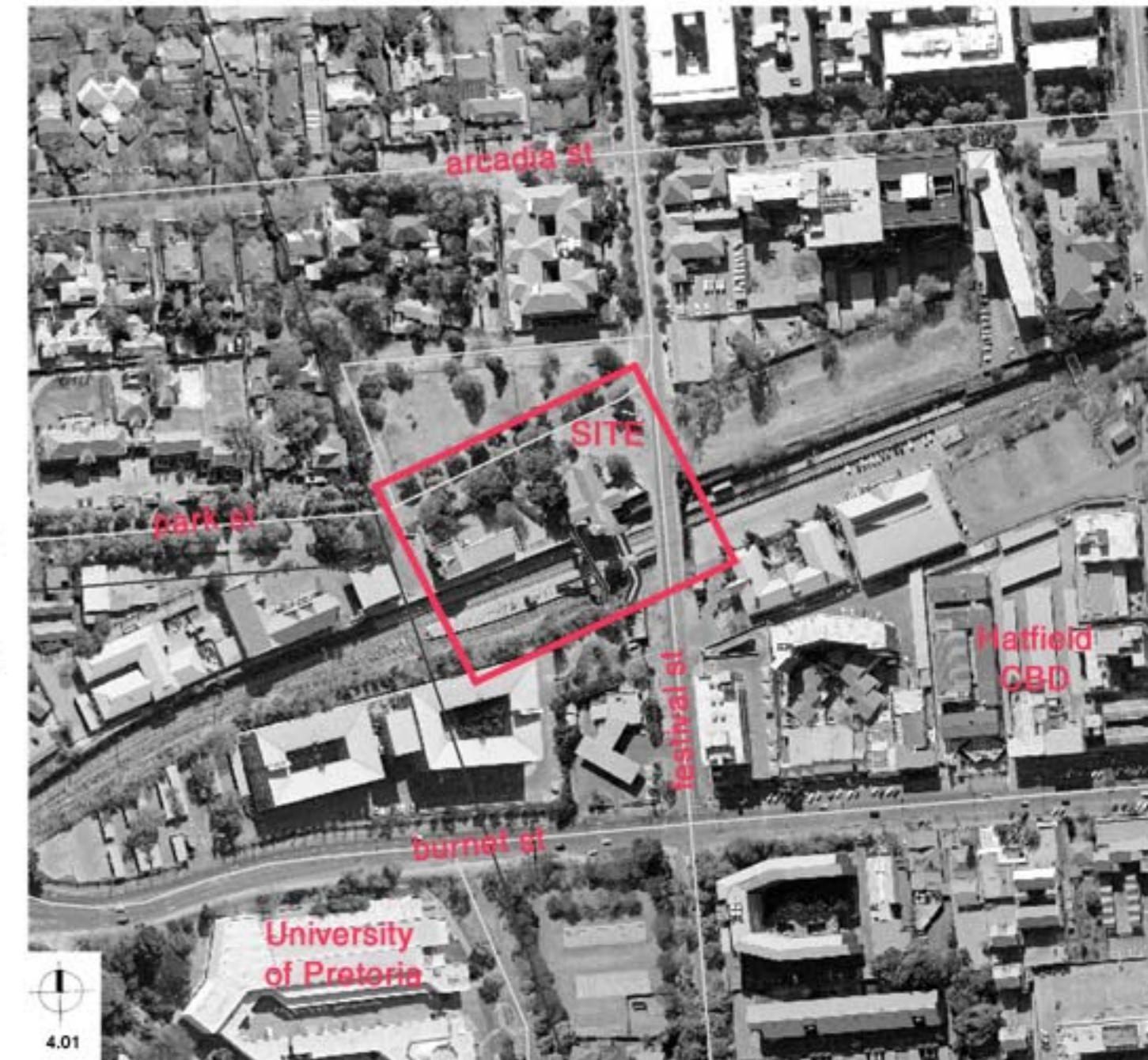
Site selection

The selected site on Portions 1, 4 and 8 of Erf 620 Hatfield is owned by the South African Rail Commuters' Corporation (SARCC). The SARCC consists of Metrorail and Intersite; the latter being responsible for managing SARCC buildings and structures (Taute 2008). Rissik Station owes its existence to the NZASM railway line constructed in 1892 as well as the development of the Hatfield suburb in 1905. It carries the name of Johan Rissik who was the surveyor-general at the time and who became the first Administrator of the Transvaal in 1910 (Laubscher 1992:4).

The station is located next to the intersection of Festival and Station Place Streets, and to the north of the railway line. It is situated among diplomatic and office parks, and a number of residential houses on the western edge of the bustling Hatfield CBD, and north from the University of Pretoria.

Festival Street bridge was constructed around 1996 to connect the areas on both sides of the railway line. The construction of this bridge has stimulated the economic development of this area in Hatfield, albeit at a much slower tempo than the bustling Hatfield CBD just across Festival Street.

Currently, the area has a calm and secluded feel to it, which is broken during peak traffic hours.



Historical description

Rissik Station already existed by 1910. The present station complex replaced the original design during 1948-1950, when the railway line between Pretoria Main Station and Richard Street was lowered and raised to eliminate level crossings (Küsel & Miller 2007:5). The construction of the new station complex entailed massive earthworks. In contrast to the other halts along this section of the line, Rissik was a proper station with ticket offices, ablutions and other facilities. It is much larger than the other halts due to its unique design with a siding, two overhead footbridges, and two elevator shafts providing access to the two platforms. Rissik served a unique purpose, since it was the station from where government documents would annually be transported between Pretoria and Parliament (Cape Town) via the so-called "White Train" (Küsel & Miller 2007:5; Bakker 2008).

Heritage value

Following his investigation of heritage and cultural sites in Hatfield, Van der Waal (1990) identified Rissik Station as an "exceptional cultural-historical resource worth preserving". More recently, a Heritage Impact Assessment (HIA) undertaken by Bombela Civils Joint Venture - Gautrain Project, had heritage experts coming to the same conclusion (De Jong 2006; Küsel & Miller 2007). These experts found Rissik Station to be the only of its kind in the country and that it has intangible heritage value that is worth conserving. The effects that the Gautrain project has on the station building are discussed in the next section.

The station design reflects the "two stream effect" of racial segregation during the apartheid era. After 1994 any such discriminatory signage was removed (Küsel & Miller 2007:9).



Table 4.01

No	Criteria	Rating
a	Importance in the community or pattern of history	Medium
b	Possession of uncommon, rare or endangered aspects of natural or cultural heritage	High
c	Potential to yield information to understand the natural or cultural heritage	High
d	Importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Medium
e	Importance in exhibiting particular aesthetic characteristics valued by a community or cultural group	High
f	Importance in demonstrating a high degree of creative or technical achievement at a particular period	Medium
g	Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Medium
h	Strong or special association with the life and work of a person, group or organisation of importance in history	Medium
i	History of slavery/labour	Low
j	Economic importance	High

4.02 A 1929 aerial photo with the Rissik Station area in block (Van der Waal Collection, University of Pretoria)
4.03 Graphic representation of the impact of the Gautrain project at Rissik Station. Shaded areas indicate those structures that are to be demolished for the purpose of the Gautrain

Table 4.1 Cultural significance of Rissik Station (adopted from Küsel & Miller 2007:6)

Impact of the Gautrain project

The Gautrain will run past Rissik on the southern track. Currently, this is only a single track line and has to be upgraded to include a second line for the function of the Gautrain. Construction of this second line is currently underway. However, this second line presented challenges to Bombela CJV as it has to run between the Festival Street bridge footing and the footings of the parking garage in front of Damelin College. This translates into the demolition of the two overhead footbridges, the southern elevator shaft, and the siding at Rissik Station. The impact is thus high and negative as is illustrated by fig 4.03 below.

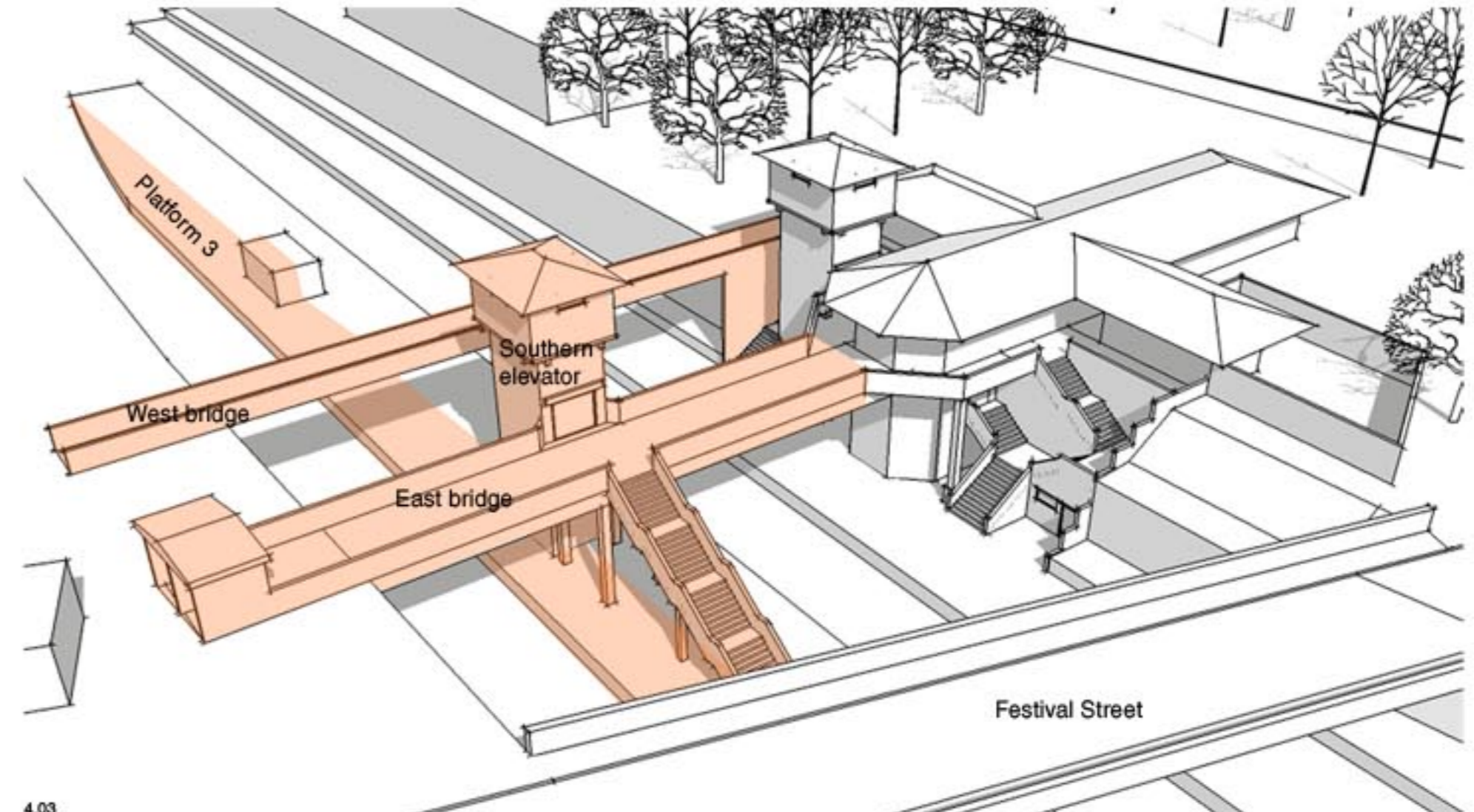
Current conservation status

The station dates back to the late 1940s and is only now approaching the 60 year mark. As of date, strictly speaking, it does not enjoy general protection under the provision of the NHRA (25 of 1999). However, since it is the only station of its kind in South Africa and has intangible heritage value, it enjoys a high conservation status and significance (Küsel & Miller 2007:5).

Legal requirements

According to Section 38 of the NHRA (25 of 1999) the following legal requirements affect the design proposal:

- Provide site interpretation at Rissik Station;
- Preserve the memory of any structural alterations through appropriate design;
- Preserve memory of the southern elevator shaft through appropriate design; and
- Preserve memory of the two footbridges through appropriate design.

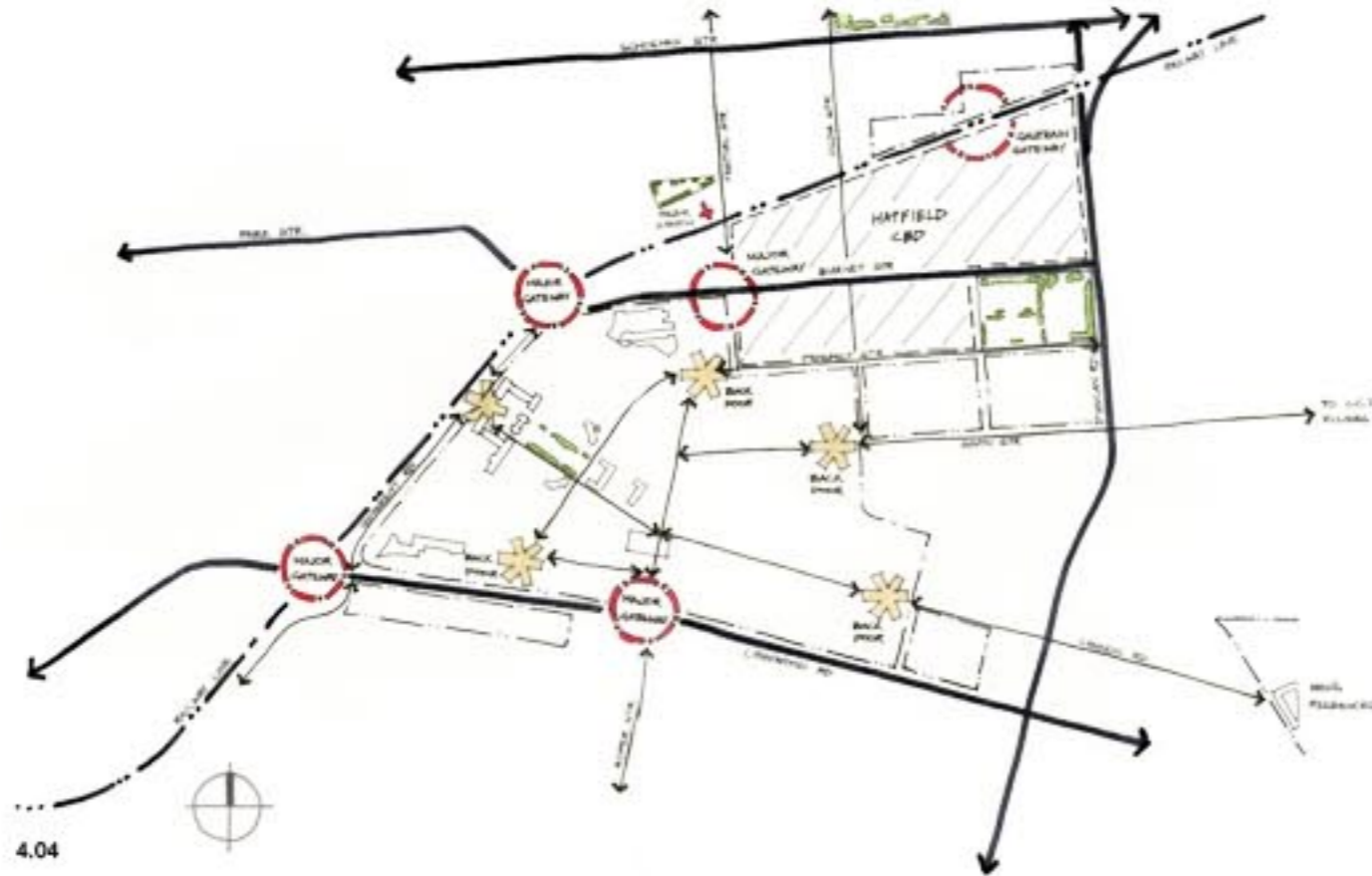


4.03

Site analysis

Accessibility

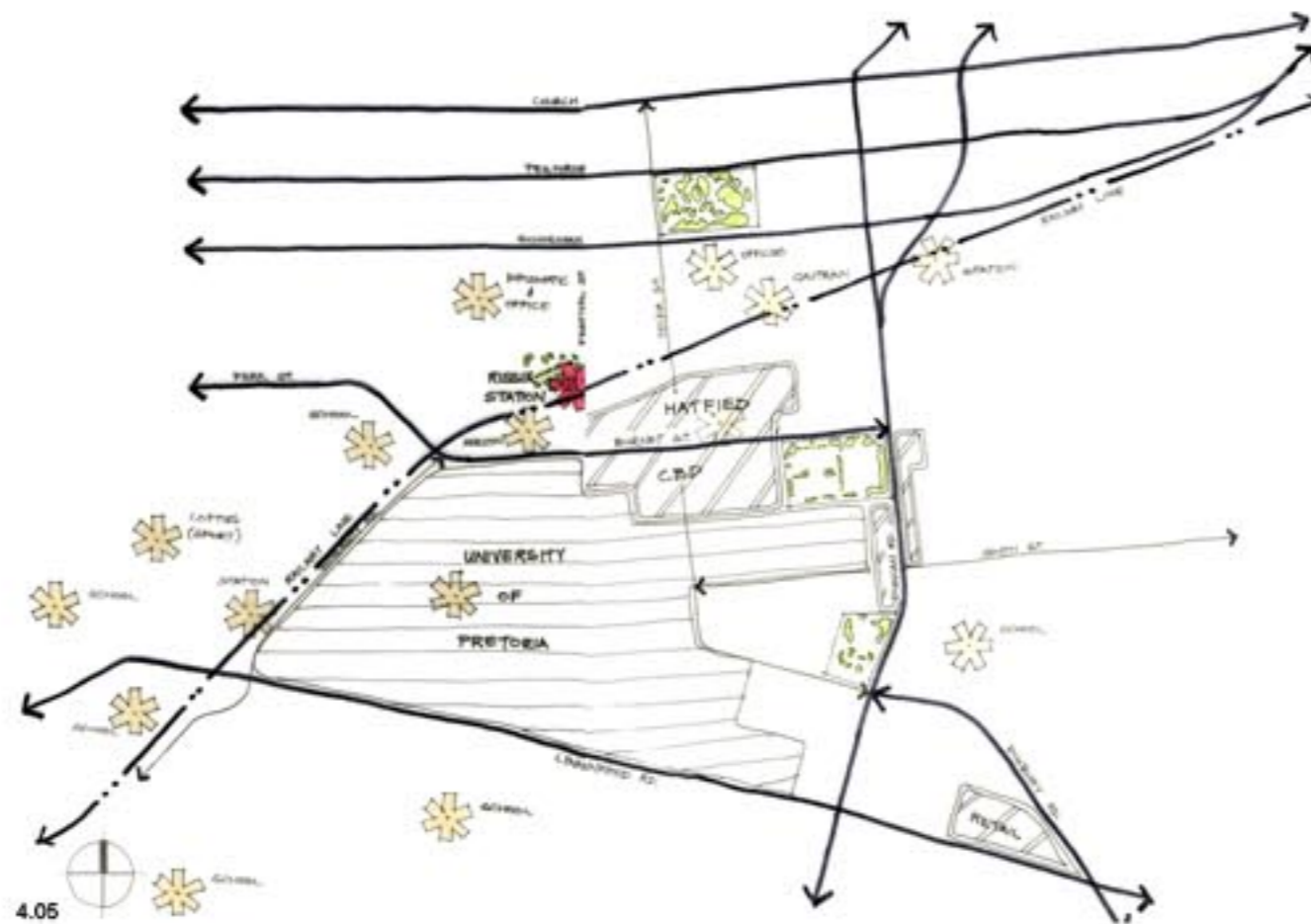
The starting point was an investigation of the existing routes, links and gateways into Hatfield. An analysis is made of the links between the selected site, Hatfield and the city of Pretoria as a whole. This gives a general indication of the accessibility of the selected site.



Primary uses

Primary uses are those use types which in themselves "bring people to a specific place because they are anchorages" (Jacobs 1972:173). Such use types include offices, factories, dwellings, places of entertainment, education and recreation.

Fig. 4.05 explores the relative importance and location of primary uses surrounding Rissik Station. The distribution of these usage types have a direct influence on determining the relative importance of the station as point of access to and from these. It also give and idea of the type of users most likely to utilise the proposed building.



- 4.04 Accessibility
- 4.05 Primary uses
- 4.06 Use distribution
- 4.07 Node-place



Use distribution

An analysis of the distribution of various use types in relation to Rissik Station, gives an indication of diversity and development trends in the area. This analysis reveals what use types is most likely to succeed or enhance the use of the selected site, and which should therefore be provided within the scope of the proposed project.

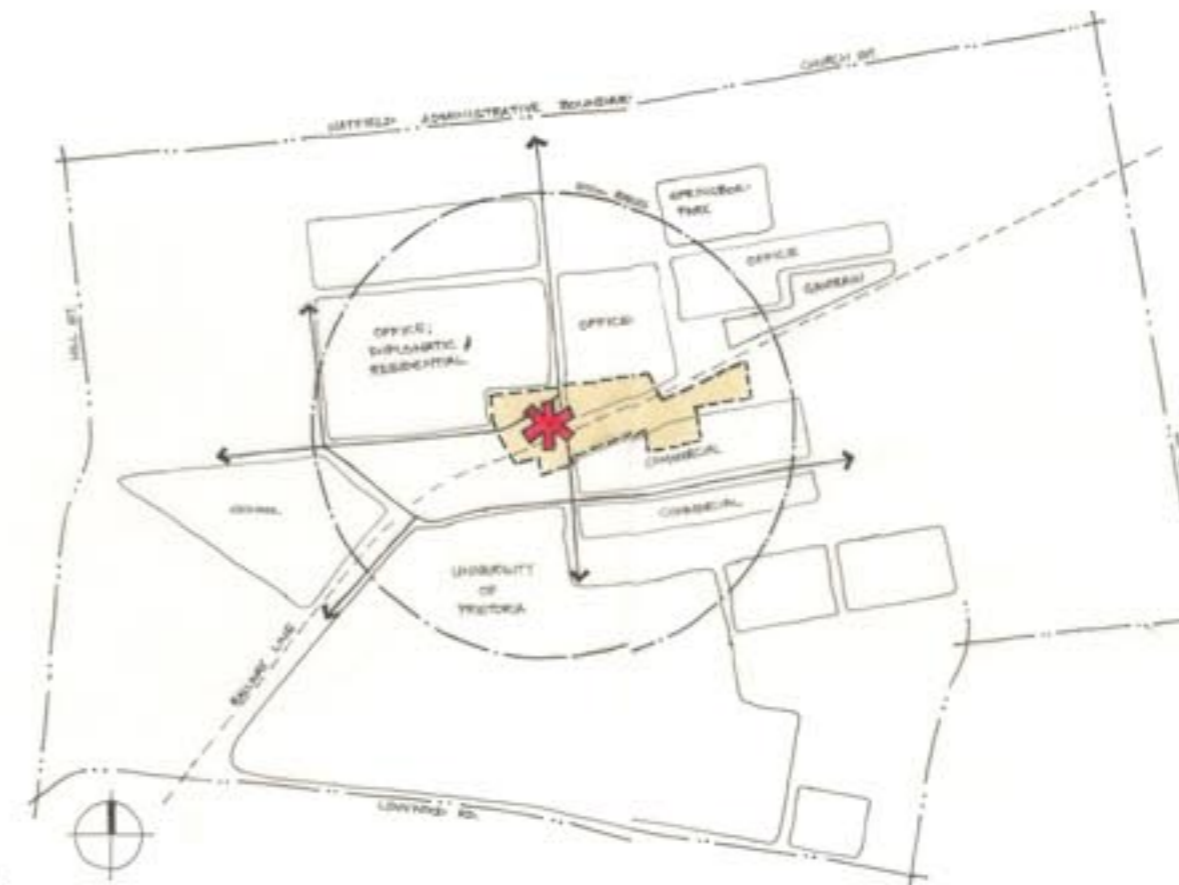
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Node-Place

Fig. 4.07 explores the concept (which will be discussed in the next chapter) of railway stations functioning as both a node and a place within their context.

This analysis investigates Rissik Station's potential to function as node-place. From this it becomes clear that the station has a potentially strong node-place function as it is located in close proximity to commercial, entertainment, residential, office and educational facilities.

It therefore becomes clear that Rissik Station offers development opportunities that could help to enhance the user's experience of his/her environment.



4.07

Movement patterns

Vehicular and pedestrian movement patterns around Rissik Station were analysed as is shown by fig. 4.08, with the majority of movement situated along Festival Street. Station Place Street shows more subdued patterns of movement, which mainly coincide with peak traffic hours.

The figure also shows the current bus and taxi stop next to Rissik Station, as well as the parking area to the north. The existence of pedestrian movement and transport allows for informal trading to occur.

Potential intervention areas

Fig. 4.09 investigates the areas suitable for potential intervention on the selected site. The area marked A was found to have the best potential and most suited.

User distribution

In fig. 4.10 the distribution of users from Rissik Station to its immediate surrounding area is analysed. From this it becomes clear that the station plays an important role in commuting people to work in a great variety of settings.



4.08



4.09



4.10

- 4.08 Movement patterns
- 4.09 Potential intervention areas at Rissik Station
- 4.10 Pedestrian access & user distribution

Urban analysis and proposal

In an attempt to address the proposals put forward by the Group Framework and to improve the urban experience at Rissik Station, the following urban development is proposed. The issues investigated to achieve this are discussed below.

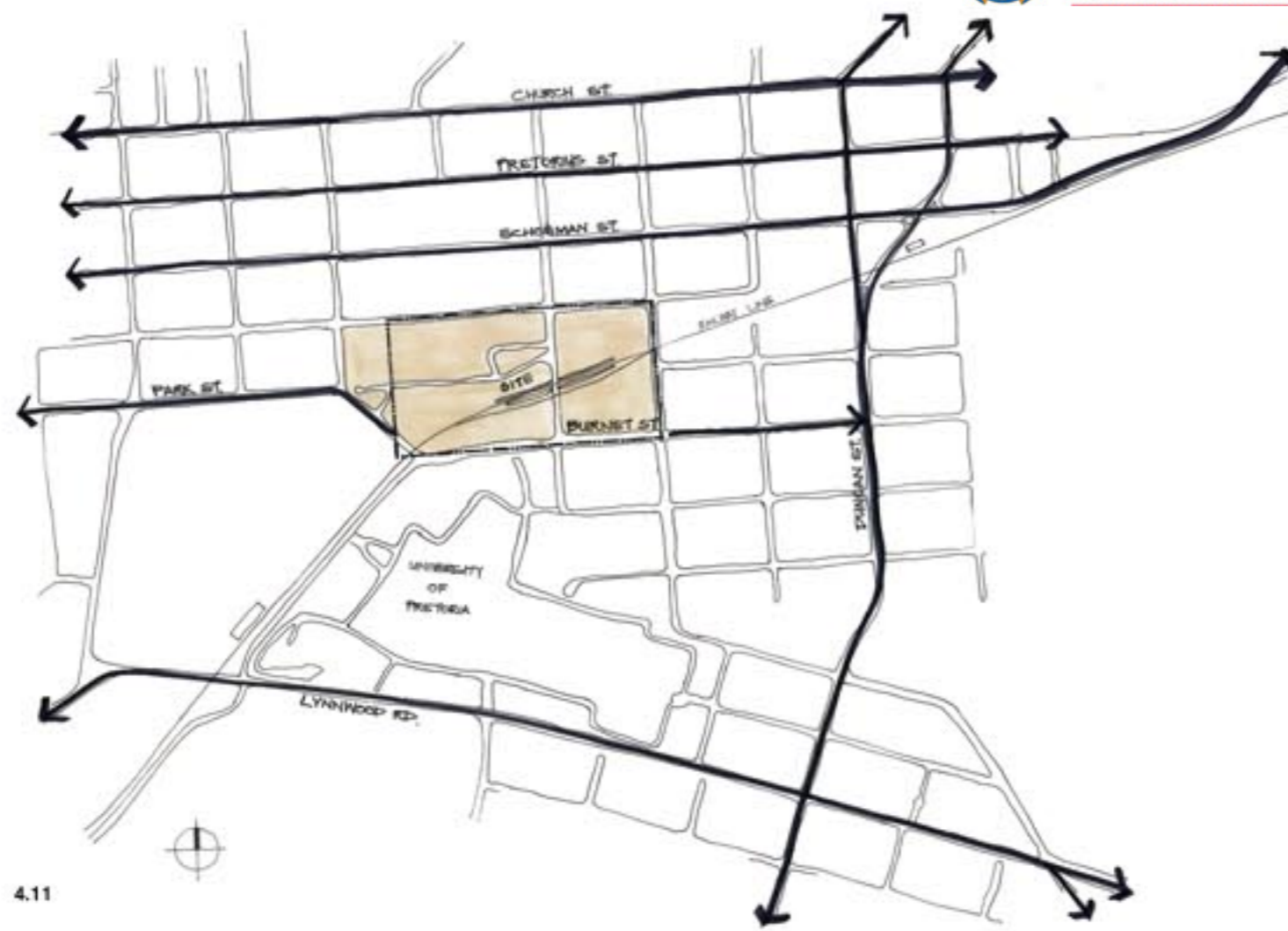
Permeability

The key question here was where people can or cannot go. Bentley (1985:10) states that only accessible places can offer choice to people. Permeability, therefore, concerns the number of alternative ways through an environment.

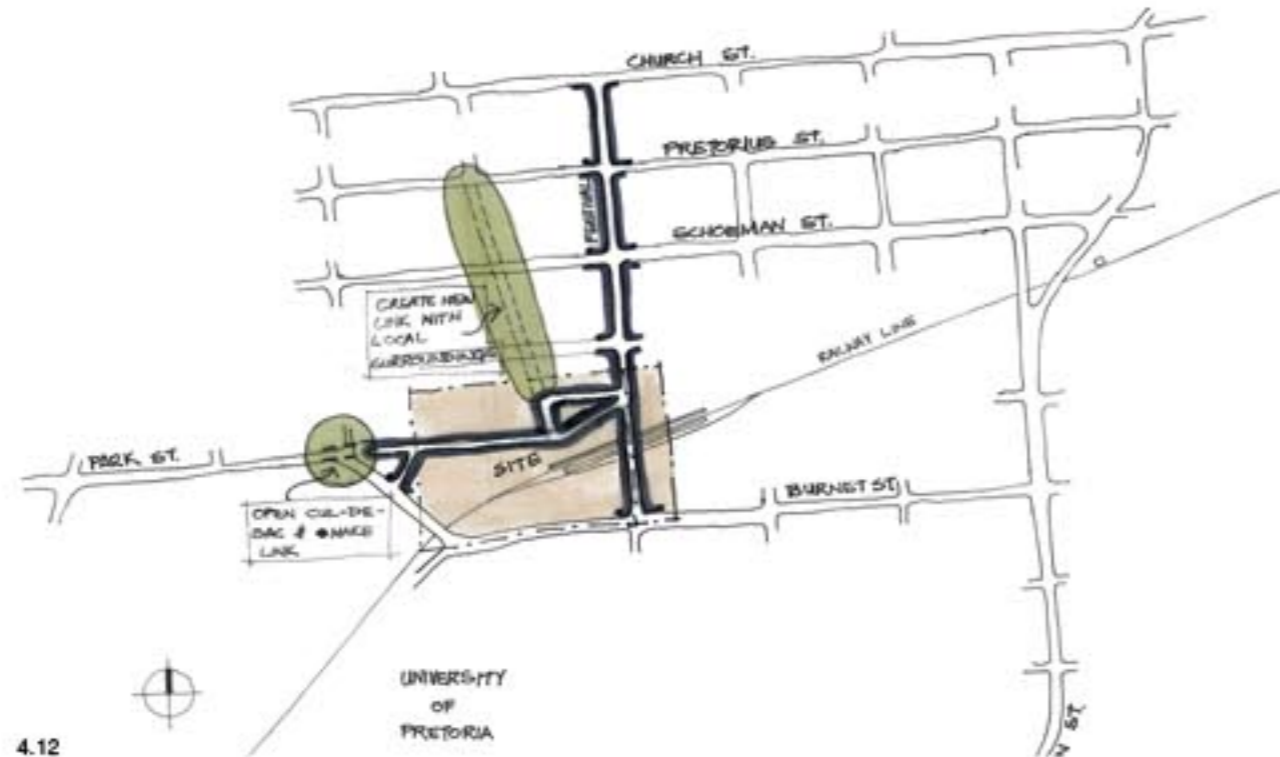
In fig. 4.11 the site's existing connections from the city of Pretoria as a whole are analysed. These are the main streets that carry through traffic, linking the various parts of Pretoria.

Next, the routes connecting the selected site at Rissik Station with the main routes are identified. From this, it is apparent that Festival Street plays an important role in connecting Rissik Station with the rest of Pretoria (fig. 4.12).

To achieve permeability at the local scale, it is proposed that a new street be made and that the cul-de-sac at Park Street be opened.

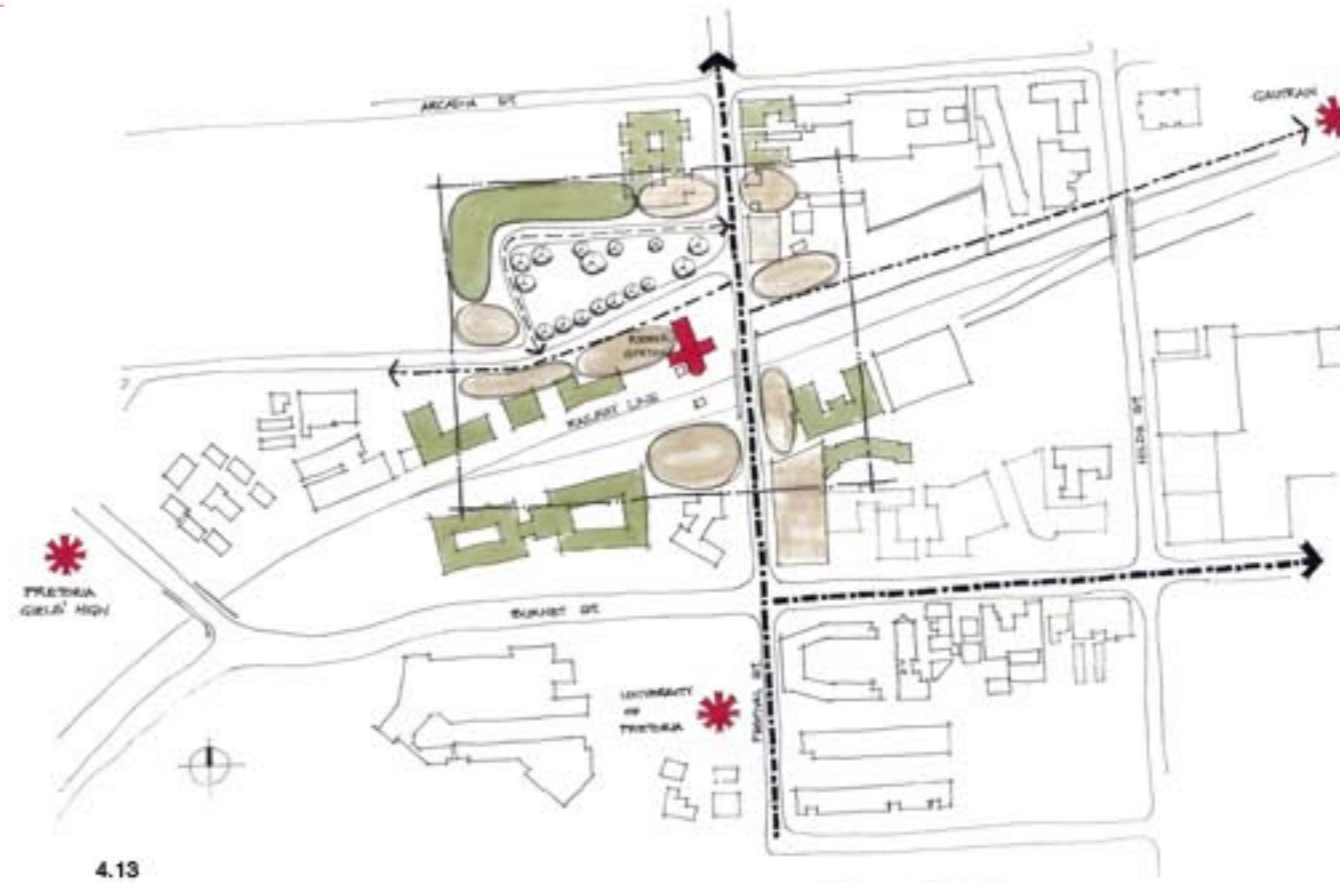


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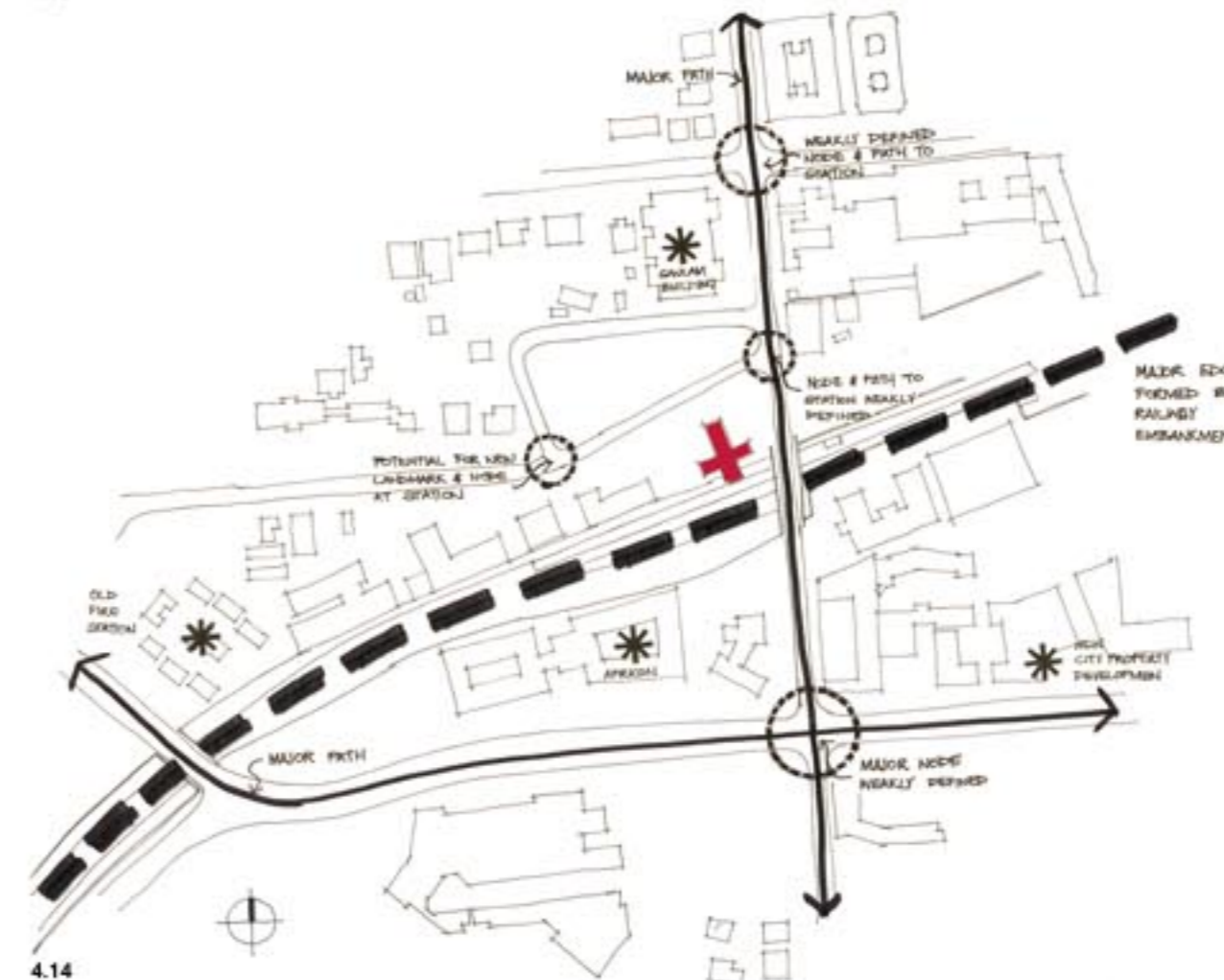


4.12

- 4.11 Connections to the city as a whole
- 4.12 Connections to the main streets and local surroundings
- 4.13 Concentrating pedestrian flows
- 4.14 Legibility analysis



4.13



4.14

Variety

According to Bentley (1985:10) the second key quality to have in order to obtain a "responsive environment" is that of variety in uses. This is important in offering the user a choice of experiences.

To achieve this, the levels of demand for different types of uses on the site were analysed. This was done by an investigation of the concentration of pedestrian flows (fig. 4.13), as this factor directly influence the economic and functional feasibility of the proposed project.

Magnets in the form of the Gautrain Station, University of Pretoria, Hatfield CBD, and the schools, stimulate a flow of pedestrian to and from them. Rissik Station's central location between these magnets offer opportunities for commercial and office functions. In addition, Rissik Station contributes to the pedestrian flow in the area by bringing people from all over Pretoria via the so-called Ring-rail system.

Legibility

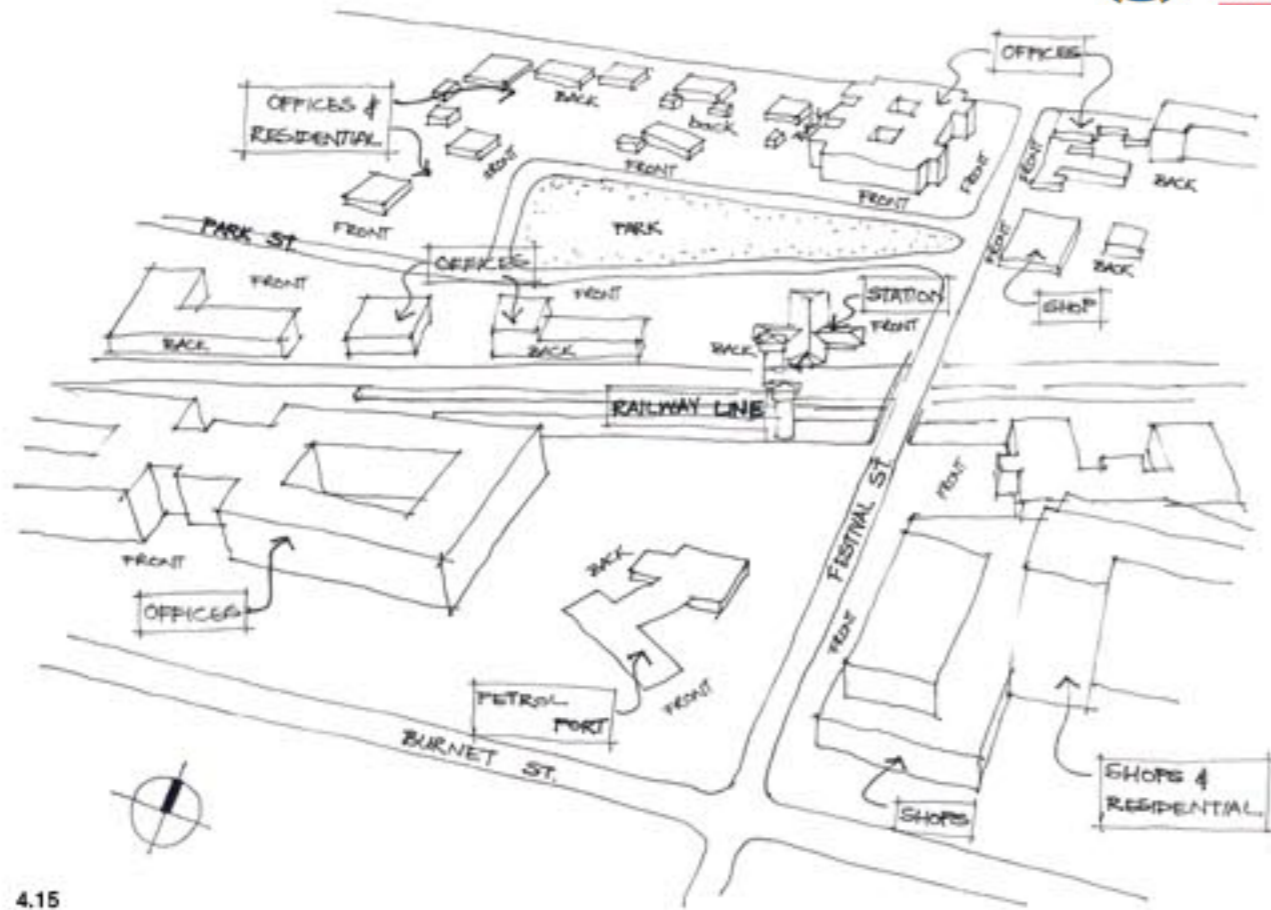
This aspect relates to how easily users can understand the area layout. In fig. 4.14 the selected site is analysed in terms of certain physical features that play a key role in how people make sense of their surroundings. Kevin Lynch (1960) suggests that these features can be grouped into five key elements namely: nodes, edges, paths, districts and landmarks.

Variety of uses

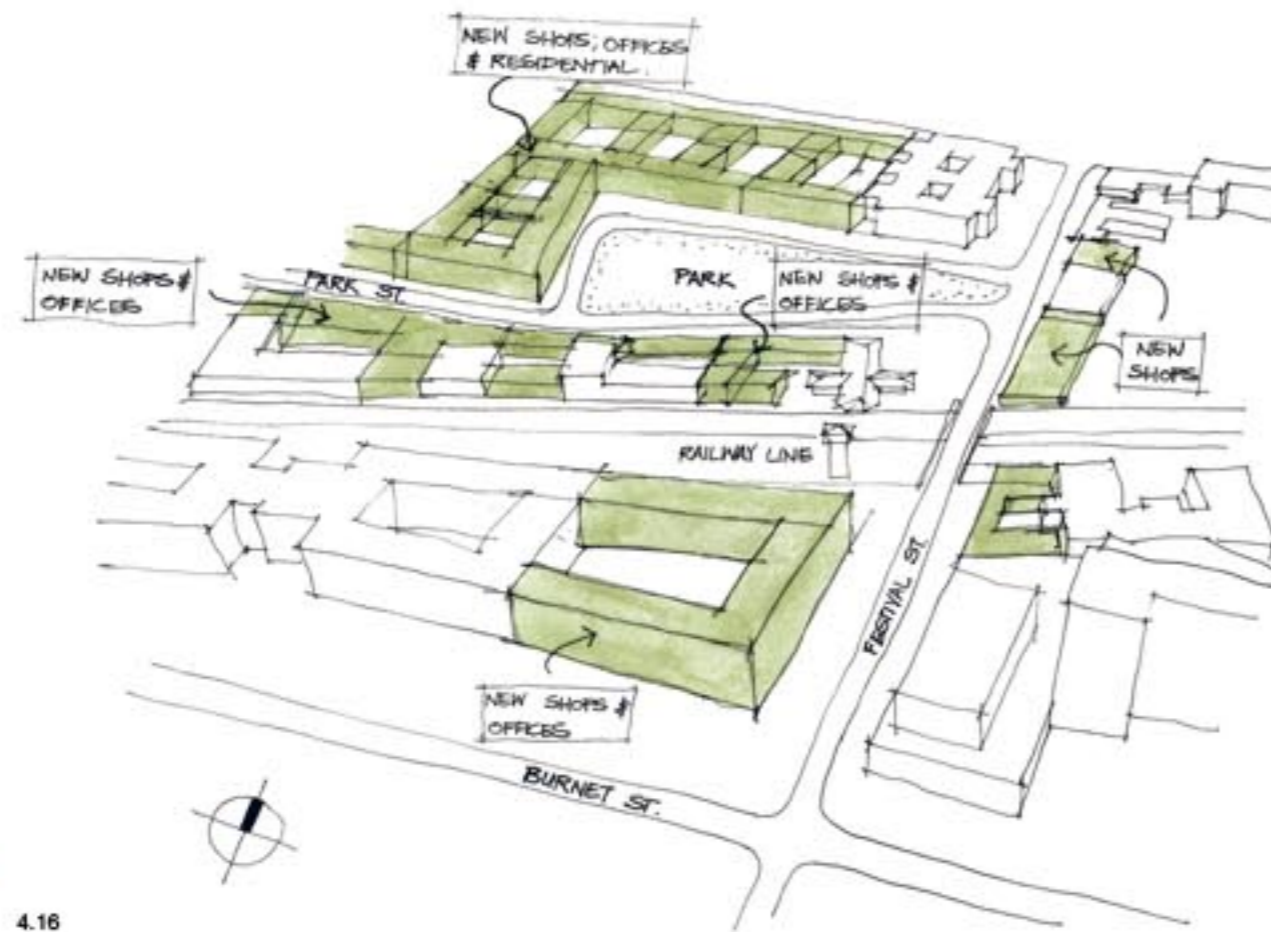
Some uses are incompatible because of functional factors like noise or traffic generation. These cannot be located close together. The first step, therefore, was to note the existing uses on and around the selected site (fig. 4.15), in order to decide on appropriate uses for the proposed building. These uses will have to function in conjunction with the station's existing use.

The second step was to locate new uses compatible with the existing (fig. 4.16). From this it becomes clear that the proposed buildings have the potential to house office and retail facilities.

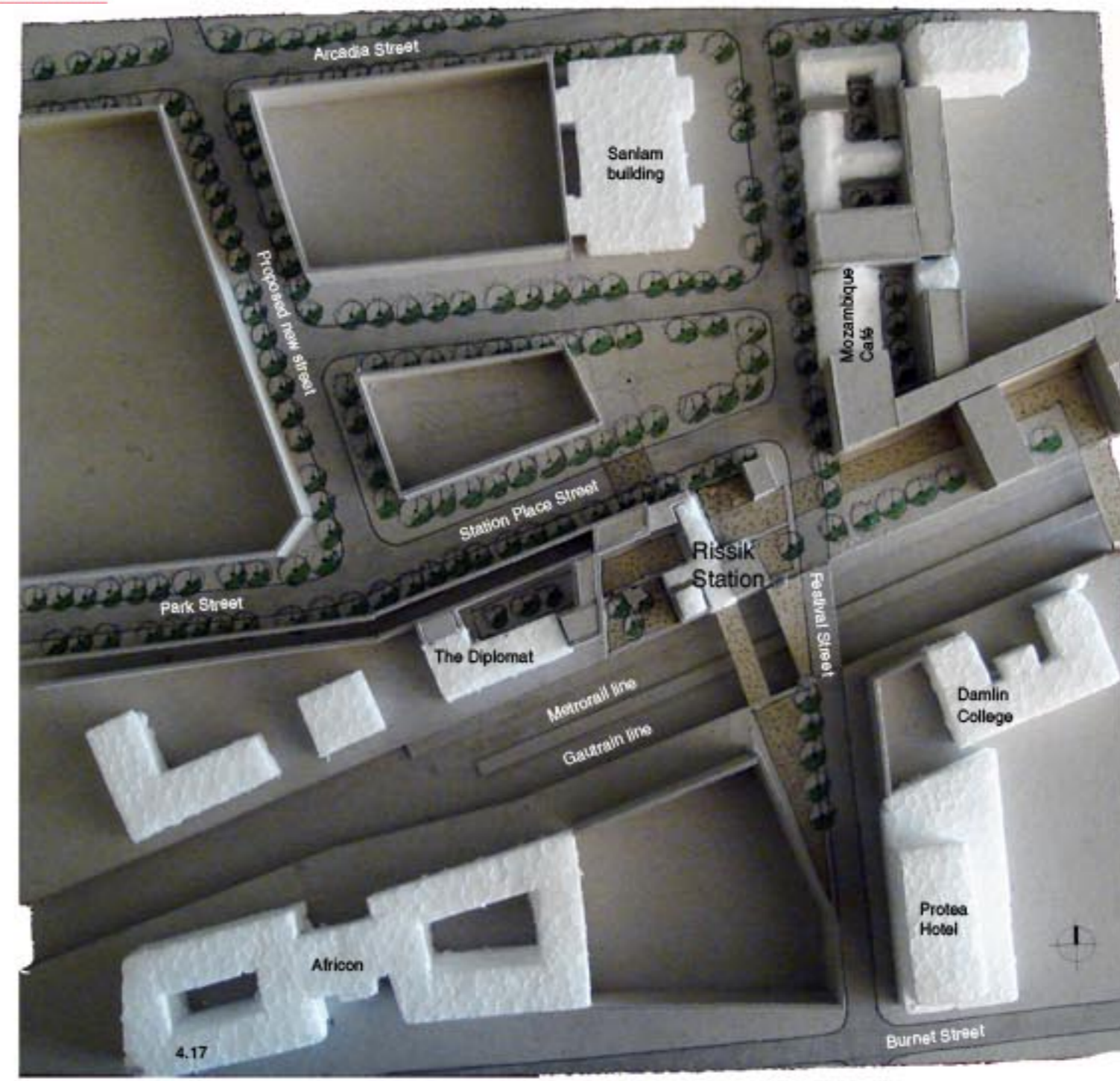
It is proposed that the same process be followed in determining new uses for the entire proposed urban development scheme.



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Proposed urban development concept model

The concept model explores the principles put forward by the proposed urban development. It attempts to give definition to the street edges, create public and private spaces, and contribute to a positive urban experience at Rissik Station. All existing structures are in white on the model.



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- 4.15 Existing structures and uses
- 4.16 Proposed new structures and uses
- 4.17 Top view of proposed urban development concept model
- 4.18 View to the south
- 4.19 View to the north

Streetscapes

Festival Street:

Festival Street is a busy two-way street and one of the ways Hatfield connect with Church, Pretorius and Schoeman Streets. The street is less active than Burnet Street.

The sidewalks are pedestrian unfriendly and uncomfortable. With the exception of the Mozambique Café, all other buildings lining the street have inactive street frontages as they are fenced off with palisades and other forms of fencing. There are little to no trees lining the street to provide shade for any pedestrian activity.

Currently, the street is dominated by office activities. Office blocks offer no street activity. Visitors to these offices habitually park their motor vehicles on the road side.



Station Place Street:

This street is a relatively quiet two-way street. It is the extension of Park Street running through Arcadia and past Pretoria Girls' High School, but a cul-de-sac at the intersection with Hill Street cuts it off. Apart from busses transporting people to Rissik Station early on week day mornings, only sporadic vehicular traffic makes use of it. There are plans to re-open the cul-de-sac to the rest of Park Street.

The sidewalks are wide and offer a tranquil walk, but are unfriendly in the way building frontages are inactive and fenced off. House office and residential use dominate the street.

Jacaranda trees (*Jacaranda mimosifolia*) line the street. They provide an "avenue-like" quality to the street and help to extend a colonnade effect to the street.



Serial vision

The eight sequential images try to capture the sense of discovery and drama that is experienced in moving towards and through Rissik Station. The two elevator shafts continuously shift as one moves past, and create an interplay of new alignments and grouping.

There are lines of advantage which can be colonised, such as the parapet of the footbridges or staircases (fig 4.27). It allows for an immediacy of views and position.

Dramatic level changes allows for intimacy, enclosure, exhilaration, and exposure.



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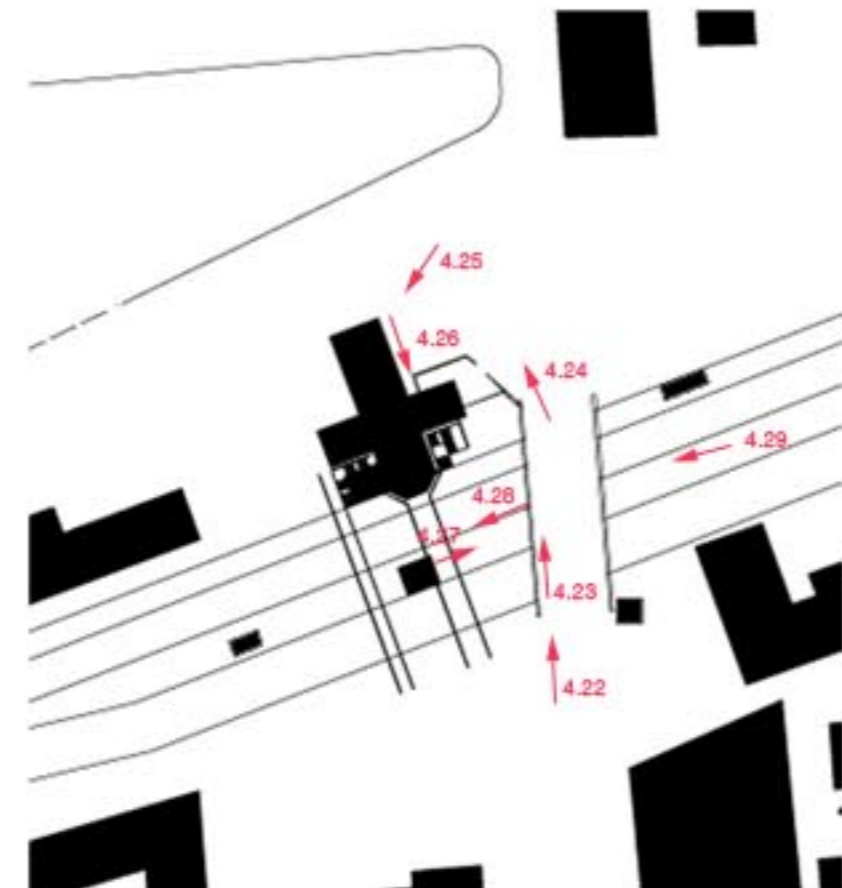
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Assessment of existing structure

The fact that two elevator towers were constructed at Rissik Station give the impression that the facilities were designed to handle large volumes of documents to and from the platforms. This serves to emphasise the importance Rissik Station had in previous times.

An investigation by Küsel & Miller (2007:10) has found that many structural elements at the station show signs of stress. There is also noticeable problems with water penetration (fig 4.35).

Many alterations have previously been made to the station building as is evident from the images.



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- 4.22 North view of Rissik Station along Festival Street
- 4.23 Looking west from the Festival Street bridge
- 4.24 Looking west from Festival Street
- 4.25 North view of Rissik Station
- 4.26 Rissik Station entrance
- 4.27 Stairs to platform
- 4.28 Platforms, tracks and eastern overhead footbridge
- 4.29 Waiting commuters on platform
- 4.30 Plan of Rissik Station showing viewpoints
- 4.31 Previous alterations on the eastern facade
- 4.32 Previous alterations on the western facade
- 4.33 Previous alteration work
- 4.34 Southern elevator tower
- 4.35 Water penetration problems
- 4.36 Alterations at ticket office (east wing)

SWOT analysis

Strengths:

- Tree-lined walkways;
- Presence of buildings with heritage and cultural value;
- Zones of tranquillity and energy;
- Few derelict areas;
- Existing infrastructure moderate to good;
- Roads, electricity, water, sewerage and waste disposal services;
- Formal and informal economic activity;
- Mixture of office, retail, residential, and institutional activities;
- Good volumes of pedestrian movement along Festival and Park Streets;
- Presence of taxi and bus interchange facility; and
- High volumes of taxi, bus and private vehicles along Festival Street.

Weaknesses:

- Presence of derelict spaces, especially along railway line;
- Existing open green space is under-utilised and becomes unsafe at night;
- Irregular build-to lines along Festival and Park Streets;
- Restricted activities after 7pm due to closure of other activities in the area;
- Limited permeability as a direct result of the "gated buildings";
- Weakly defined public space; and
- Rissik Station doesn't function as place-node in its area, due to the fast moving traffic along Festival Street.

Opportunities:

- Convert the open and green space into well-defined public space;
- Integration of formal and informal economic activities;
- Diversity of spaces and activities;
- Increase pedestrian movement along walkways;
- Use of urban design principles to transform Rissik Station into a place-node;
- Densification in land-use of the proposed site;
- Increased economic activity due to

- increase of taxi, bus and train uses;
 - Attractiveness and ease of public transportation; and
 - Development of intermodal facilities at Rissik Station.
- Threats:**
- Garbage pile-up on derelict site across Festival Street from station;
 - Lack of public space;
 - General security is low with little police presence;
 - Specific market conditions due to low-income clientele;
 - Low maintenance of infrastructure and services;
 - Demolition of many significant features of the station building as a result of the Gautrain project; and
 - Tension between formal and informal traders.

Client body and user group

According to Metrorail (2008) an estimated average 1.7 million paying customers make use of their services on a weekly basis. Around 70% of these commuters are black people with a monthly household income of up to R2,499. The majority (63%) of commuters are between the ages of 24 and 49 years, with 64% being male. According to a 2005 estimate, Metrorail held a 14.7% share in the South African public transport industry.

Recently, the South African Government committed itself to upgrading the commuter railway infrastructure. Mr. Trevor Manuel (current Minister of Finance), announced a R1.5 billion capital investment in this transport service for the current 2008-2009 financial year. According to Pressly (2006) capital subsidies in rail transport increased from R655 million in 2004 to R2 billion in 2008-2009.

This proposed project envisions that railway transport will increase as the preferred form of public transport, given the recent sharp increase in petrol prices. It is envisioned that more age and race groups will make use of this form of public transportation. Due to the presence of the University of Pretoria, a large portion of the user group is envisioned to be consisting of students as well as young professionals.

The property is currently owned by the South African Rail Commuters Corporation (SARCC). Intersite manages the facilities as the property development and investment wing of the SARCC.

- 4.37 Rail commuters
4.38 Metrorail forms part of the South African Rail Commuters Corporation (SARCC)
4.39 Metrorail train, Hatfield



Conclusion

Following the investigation in this chapter it becomes clear that the existing Rissik Station building does not adequately address the future needs as is envisioned by the two presented frameworks. A balance has to be achieved between the station's heritage and the demands and needs of the urban context. This requires a transformation of the existing station facilities to address the envisioned future demands and needs.