

CHAPTER 4

CONTEXT

- 4.1 Context introduction
- 4.2 The Phenomenon of Lost Space
- 4.3 Brief history of Johannesburg
- 4.4 Doornfontein: Change over time
- 4.5 Macro Analysis
 - 4.5.1 Infrastructure and districts
 - 4.5.2 Permeability within districts
 - 4.5.3 Socio-cultural places
- 4.6 The larger connection
- 4.7 Urban framework
- 4.8 Site location and Analysis
 - 4.8.1 Zoning surrounding the site
 - 4.8.2 Decay, Adapted and new buildings
 - 4.8.3 Movement, barriers and access
 - 4.8.4 Lost spaces
 - 4.8.5 Zone 1:
 - 4.8.6 Zone 2
 - 4.8.7 Zone 3
 - 4.8.8 Zone 4:
- 4.9 Outcomes of Site Analyses



Ponte Tower

University of
Johannesburg

College

Ellis Park Precinct

Doornfontein
station

End Steel park

Park Station/
MTN Taxi rank

Joubert Park/
JAG

Noord. str. Mall and
taxi rank

[JHB CBD]

Figure 4-01: Aerial view of JHB and study area (Author, 2019)

4.1_INTRODUCTION

The study area is located along the railway line within Johannesburg CBD and Doornfontein. The railway creates a distinct barrier within the context creating a clear separation between north and south.

Chapter 2 provided a theoretical background to the various issues that give expression to the phenomena of lost spaces within urban environments, where as chapter 3 investigated a theoretical approach towards place and place making. The theoretical investigation done in both of these chapters will be used to guide the analyses in order to understand the qualities of place, or the lack there of, with particular focus on the spaces and edges along the railway line.

The story of place is analysed in both its historical and present condition to understand the significance of the infrastructural layer of the railway line within Johannesburg as well as how Doornfontein has developed/changed over the years into its current state of decay and abandonment.

The idea of barriers are used as a conceptual lens to analyse place and non-place on a macro and micro scale.



Figure 4-02: Figure ground of JHB illustrating railway line and site location (Author, 2019)

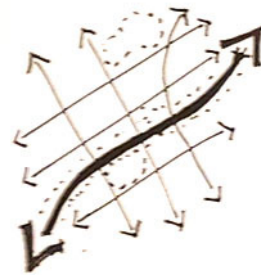
4.2 THE PHENOMENA OF LOST SPACE

Roger Trancik defines lost spaces as the underused and residual areas between districts that create undesirable urban areas. These anti-spaces/non places make no contribution to its surroundings or the users within a specific place. They are ill-defined without any measureable boundaries and fail to connect elements within the urban fabric in a coherent way (Trancik, 1986:2-4).

Vacant and unused land is found in cities all around the world that were built on the ideals of the modern movement in planning and architecture, where urban development where approached to treat buildings as isolated objects sited in the landscape, and not part of a larger system of streets, squares and viable open spaces. These conditions are particularly evident in the downtown core of the city.

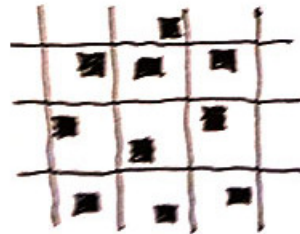
The phenomena of lost space is further exuberated by the “garden city” movement that drew people and industry to the periphery of cities, leaving the downtown core to become deserted. Over the past few years, the radical change in economic, industrial and employment patterns have further exuberated the problem of lost space within urban areas ((Trancik, 1986:2-4). This is especially true within urban centres in the South African context post 1994. These lost spaces are especially found along highways and railway lines, where major gaps disrupts the overall continuity of the city form. The disconnection caused by these gaps disrupts pedestrian links between important destinations, resulting in a disjointed and often disorientating experience within the urban realm (Trancik, 1986:2-4).

Given the issues explained before, Trancik identifies five major factors that contributed to lost spaces in our cities. They are listed as the following:



The automobile

The dependence of the automobile along with the infrastructural development of flows of movement over vast territories has made an urban environment in which highways, thoroughfares and parking lots are the predominant types of open space. Because of this, buildings are separated and encompassed by vast open areas without social purpose. Streets are no longer essential urban spaces for pedestrian use.



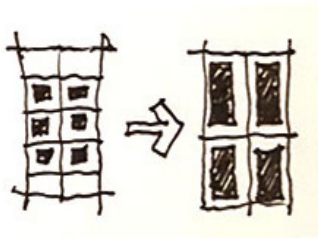
The Modern movement in design

The modern movement emerged from the new innovations and ideologies that developed shortly after the industrial revolution. This movement was founded on abstract ideals for the design of freestanding buildings that ignored or denied the importance of street space, urban squares and other important outdoor rooms. During the seventeenth and eighteenth century, planning was concerned with total composition and organization. During the nineteenth century as buildings became more utilitarian in their organization, the function was gradually displaced from external space to the organization of internal space – buildings became objects in themselves, separate from its context.



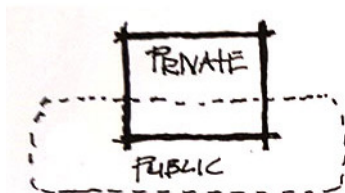
Zoning and urban renewal.

Zoning policies and urban renewal projects, whether well intentioned, was ultimately misguided responses to urban decay. The impulse was to clear the ground, sanitize and promote human well-fare by segregating land uses into separate zones that was often well integrated. These projects rarely corresponded to the existing spatial structure of the evolved community nor to the social relationships that gave meaning to the community.



Changing Land use

This is closely related to zoning and urban renewal. The relocation of industry and vacated commercial and residential buildings have vast areas of underused space within the downtown core of many cities.



Private vs Public space

The sanctity of private space has contributed to lost space by transforming the collective spaces of cities into private icons. The continuities of streets are broken by ill-placed buildings, varying height that violate height restrictions along with an array of facade treatments and styles that compete for attention.

It is important to identify the gaps in spatial continuity within the city in order to create a framework of buildings and interconnected open spaces opportunities that will generate new investment. Lost spaces, underused or deteriorating, provide exceptional opportunities to reshape an urban center, so that it attracts people back downtown and counteracts sprawl and suburbanization (Tancik, 1986: 3)

Figure 4-03: Reason for lost space (Author, 2019).

4.3_BRIEF HISTORY OF JOHANNESBURG

On the 24th of July 1886, George Harrison announced the discovery of gold on the Witwatersrand (SAHO, 2018). Prospectors around the globe quickly descended onto the ridges, which would later become known as Johannesburg, in search for opportunity and new found richness. A miner's camp was established north of the ridge on the remainder of the land between the boer farms of Doornfontein, Turffontein and Braamfontein. On the 4th of October 1886, the site was surveyed, a grid pattern was drawn, marking the official layout of the village.

The expanded growth of the Witwatersrand mining belt from Krugersdorp to Springs gave birth to the Rand Tram line, built in 1887 to transport coal and materials for the mines (Jong, Waal and Heydenrych, 1988). Between 1888 and 1900, Johannesburg's residential population escalated and grew from a mere 10 000 people to over 100 000 people (Nielsen 2012:11). The influx of residential development north from the outcrop of the gold bearing reef transformed the functional use of the Rand tram line, from transporting coal and materials to and from the mines, and developing it into a line for the transport of passengers.

In 1890, the Rand Tram had proportionally the greatest number of stations and halts. The main halts on the Johannesburg Boksburg route were Johannesburg (today Braamfontein), School (today Jeppe station), Jumpers (today Cleveland station) and Elandsfontein (today Germinston). Between 1891 and 1896, nine additional halts had to be provided, two of which were Doornfontein and George Goch (Jong, Waal and Heydenrych, 1988).



Figure 4-04: Johannesburg timeline (Author, 2019).

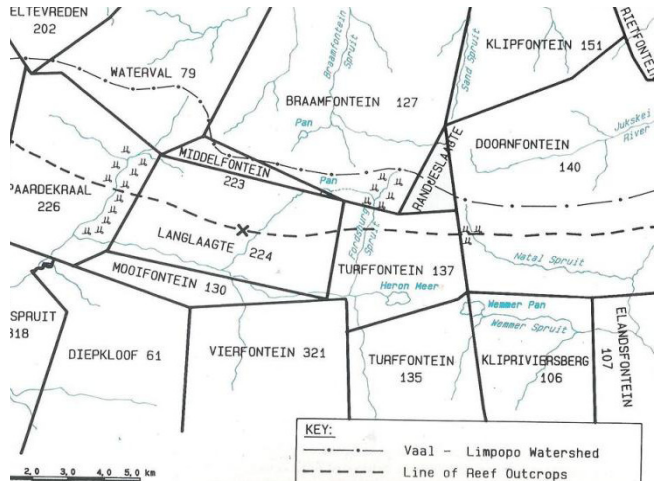


Figure 4-05: Johannesburg 1886, early farms showing Doornfontein towards the west

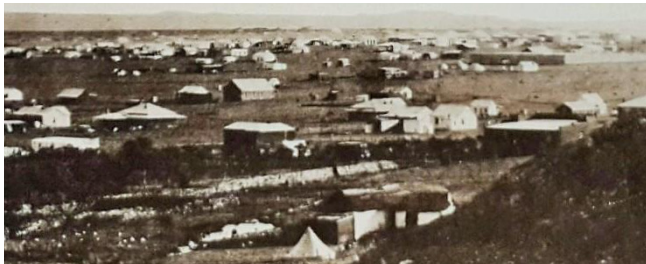


Figure 4-06: Johannesburg early mining camps, 1886



Figure 4-07: Johannesburg, constructing the railway line (SA History online).

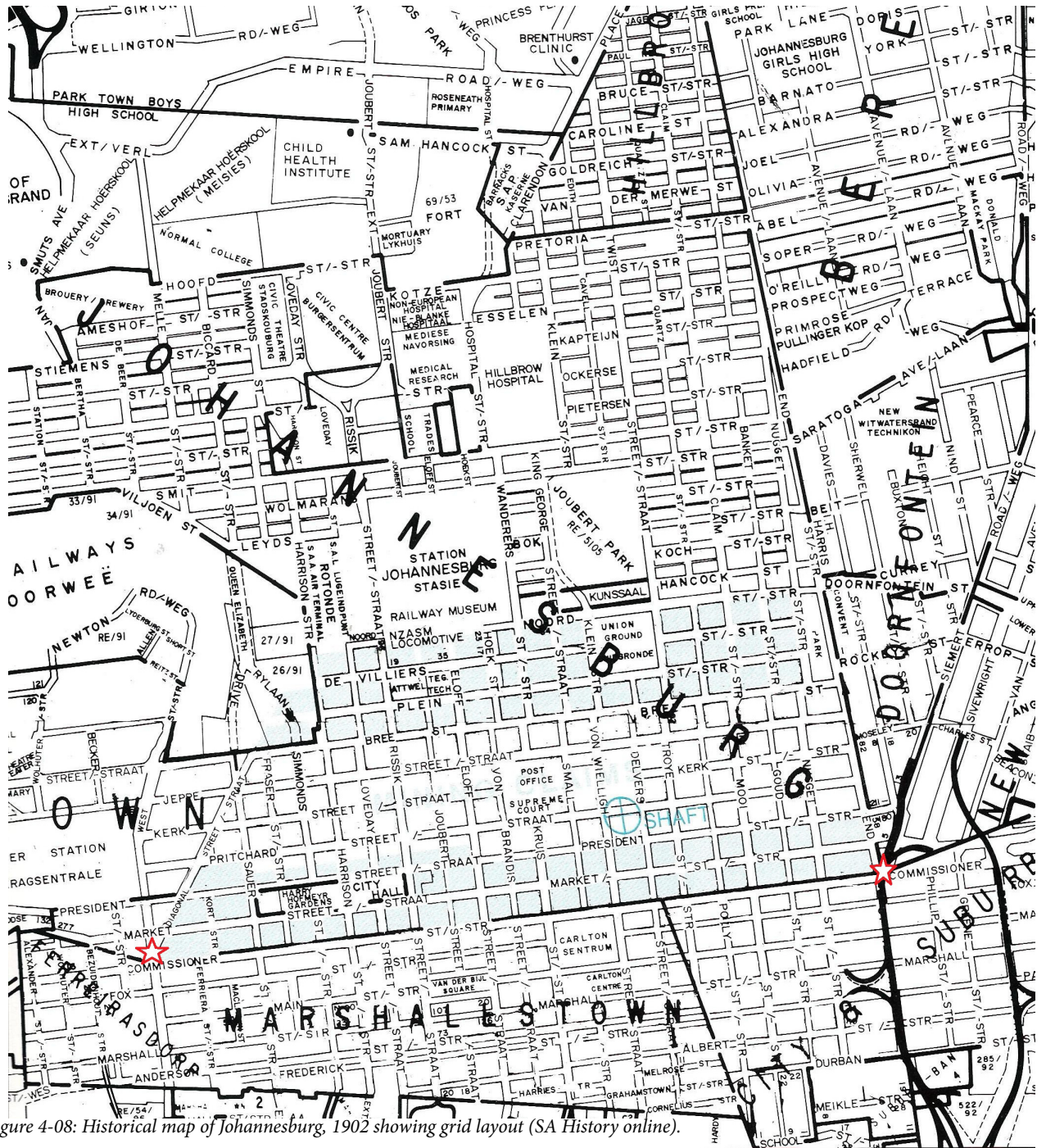


Figure 4-08: Historical map of Johannesburg, 1902 showing grid layout (SA History online).

4.4 DOORNFONTEIN : DEVELOPMENT AND CHANGE OVER TIME

MANSIONS FOR THE ELITE

1886-1900: Doornfontein suburb

Doornfontein is located towards the east of Johannesburg city centre. The area Doornfontein, which means in its literal sense “thorn fountain”, was originally the southern part of the farm owned by Frederick Jacobus Bezuidenout (SAHO 2019). After the discovery of gold in 1886 on the Witwatersrand, on the farm Langlaagte, Doornfontein farm was proclaimed a public diggings area (SAHO 2019). During the late 1880’s, Thomas Yeo laid out the suburb, which became the first suburb in Johannesburg. The freehold of the area was bought in 1887 by a company owned by the then mining magnate Barney Barnato, and the district became known as “Millionaires Row” (SAHO 2019).

The suburb attracted some of the wealthiest people of early Johannesburg society as the new suburb consisted of large stands, located far from the noise and dust produced by the mines to the south. Where they built their mansions (Marx and Rubin, 2008:77).

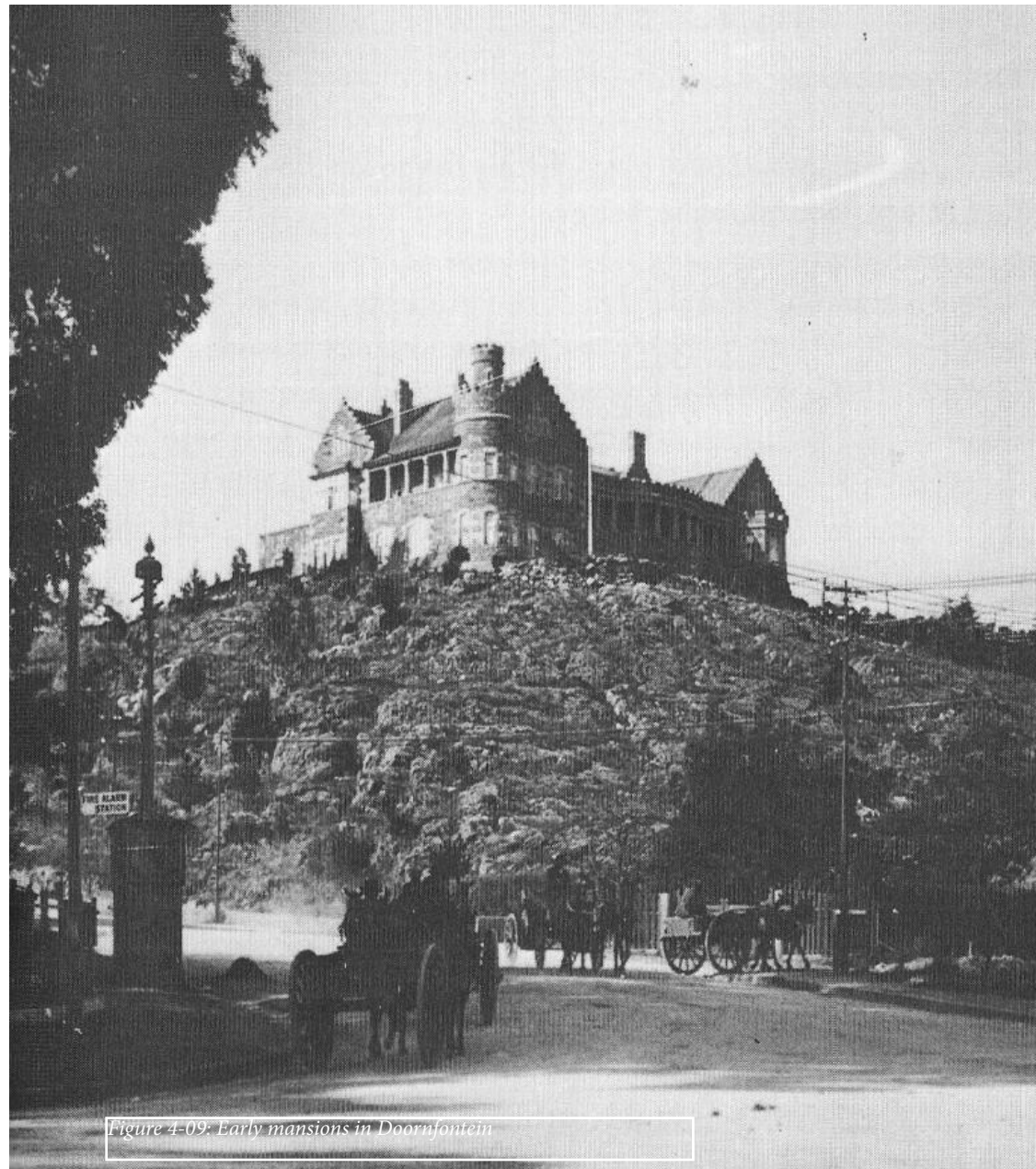


Figure 4-09: Early mansions in Doornfontein



Figure 4-10: Early Doornfontein farmland

MIDDLE CLASS

1910'S: Jewish and migrant African workers

The attraction did not last long. Shortly after the Second Anglo Boer war, 1902, many of the wealthier residents moved north over the ridge to Parktown to escape (SAHO 2019). (escape the dust, and new development north). During this period, the area appealed to the upper middle-class population, who could afford to move out of the centre of towns and into the leafy suburb of Doornfontein (Max et al, 2008:77). Close proximity to the cbd and mines further encouraged residents to locate to Doornfontein.

Shortly after the First World War (1918), Doornfontein became home to a large number of Jewish immigrants that began to establish themselves within the area (SAHO, 2019). The land tenure at the time had a rather different complexion as many of the middle-class households provided accommodation in the form of rentable rooms, shacks and yards to the industrial workforce of the mine that were not accommodated by their employers. These labourers consisted of migrant workers from rural South Africa, Mozambique and Swaziland (Max et al, 2008:78).

SLUM AREA

1920's : Doornfontein suburb

As the industrial life expanded, so did the need for affordable housing for the workforce. The shortage of housing saw Doornfontein develop into a slum area. By the 1920's, Slum lords informally sub-divided the once grand plots of Doornfontein into smaller yards and sub-sections, stacked with tin shacks and yards that were rented out to poor black labourers (Max et al, 2008:79).

In 1923, the Native Urban Areas Act was passed by the national government at the time, in order to try and segregate the more than 14 500 black residents living illegally in the slums and white areas of Johannesburg (Max et al, 2008:79). It was first introduced in Doornfontein, although with only 10% success rate as residents became skilled at avoiding the application of the act (Max et al, 2008:79). It was only until later, from the 1930's, where more efficient policy and application of slum clearance provision appeared as the town planning profession started to call for town planning schemes to eradicate the unwanted residents (Max et al, 2008:80).

LOWER CLASS AND LIGHT INDUSTRIAL

1940-1960: Doornfontein suburb

Doornfontein area had people living in slum conditions along with an established middle class Jewish community. Today, there are only few remnants still present in context.

By the 1940's, the issues that had faced the slum dwellers and the quality of housing encouraged many middle-class residents, who could afford to leave Doornfontein, to reside further north towards Hillbrow and Berea where a more cosmopolitan lifestyle was available to them (Max et al, 2008:81). During this time a lower income community of whites moved into the area and took over some of the existing housing as well as the new sub-economic units that the council supplied after the slums clearance of the previous decade.

It was during this time that Doornfontein also became home to light industrial manufacturing and warehousing. The reason behind this remains unclear, as few academics or historians seem to have studied this area in this particular period (Max et al, 2008:82). It is assumed that this occurred as both a result of the economical incline after the great depression together with the town planning schemes and sub-economic initiatives provided by the government.

SLUMS AGAIN

1970's: Upgrading attempts

During the 1970's, the downward spiral that occurred in the previous decades recurred resulting in Doornfontein once again devolving into slums. The area consisted of a mix race population with a few modest households who owned or worked in the surrounding industries. A lot of people in the area worked in sectors associated with the trains, busses as the area was a transport node (Max et al, 2008:82). Doornfontein at the time was notorious for drug dealing and alcohol abuse. Industry that had been developing in the area increased during this time. Even though there was some entrepreneurial activity, a lot of the social facilities in the area had fallen into disuse, resulting in little public space available for communal use.

In the early 1970's, the government at the time had prepared plans, referred to as the "infamous Guide Plans" which were born from the Physical planning act of 1975. The Guide plans were intended to "superficially" integrate social and economic development whilst at the same time addressing physical planning.

A group called the Doornfontein Development Corporation (DDC) consisting of a group of private sector individuals and companies saw the shortcomings of the proposed plans and instead developed their own plan to implement that would display a “burning example of development for the poor” in Doornfontein (Max et al, 2008:82-83). The plans were considered by the government for approval and after 3 years of no development the plan fell through. The radical nature of the project probably did not appeal to the conservative government’s intentions at the time (Max et al, 2008:83).

The project did however have an effect. Property speculators bought land from the poorer household and at the same time pushing up property values. At the same time, the municipality continued with their own projects for the area, the first being the development of the educational campus, today known as the University of Johannesburg (UJ), by buying properties and land and demolishing large portions of the existing community and structures (Max et al, 2008:83).

This had a dire effect on the residential community as the poorer folk who could previously afford property in the area were not able to access the market. Those who could afford to move, both residents and businesses, left the area. The new building owners in the area started to rent out the property to the poorer sectors of society and did little to maintain the property. The lack of affordable accommodation resulted in people yet again living in and sharing their homes to accommodate more people. The industrial growth from the south at Jeppe had industrialists seeking more affordable industrial land to develop. A lot of the properties in Doornfontein were converted to accommodate the need for cheaper industrial and commercial uses (Max et al, 2008: 83).



Figure 4-11: Aerial photograph before UJ, ()



Figure 4-12: Google earth image showing UJ today, (Google earth, 2019)

THE EXODUS

1990's: Migration, crime and loss of control

In the late 1980's and early 1990's, Doornfontein was mostly industrialised with a considerable amount of vibrant retail spaces that was associated with the transport node (Max et al, 2008:84). This was also the period of high political violence where most whites were threatened in different ways - this is where the exodus started. Building owners began to abandon their properties as suppliers refused to enter the area for the concern of their safety. Customers also avoided the area for similar reasons. This created a downwards spiral as more businesses withdrew from the area and more people from the surrounding hostels started to take over and move into the abandoned buildings. The situation worsened and by 1994 there were a large amount of slumlords occupying buildings and illegal squatting taking place. During the transition period just after 1994, the council did not know how to approach the situation. In fear of its staff's safety, who were threatened, the council pulled out more and more of the area until there were eventually no more formal presence in the area. After 1994, more and more factories and offices closed whilst informal trade became increasingly prevalent (Max et al, 2008:85).

Conclusion

Doornfontein has undergone several changes over the years, ranging from large plots with mansions for the elite towards the industrial character it has today. These changes in land-use were influenced by both external and internal factors.

What is interesting to note, is that Doornfontein was always a place where people sought accommodation and a sense of community. The change in land-use, driven by external factors, such as the land areas act, the construction of the University of Johannesburg and the new industrial zoning to the area, displaced existing communities either by choice or by force.

The industrial zoning seemed to provide economic opportunities for the district at the time. Although, after 1994, as investors and owners of the properties withdrew from the area, a lot of these buildings became abandoned and was left to decay.

Today, the University of Johannesburg, along with social housing organizations such as AFCHO, attempt to appropriate and adapt the existing buildings to accommodate mixed use environments.

4.4_MACRO ANALYSES

This section looks at the larger urban fabric and the underlying ordering structure of the city to understand the conditions and possible threats the city are currently facing on a spatial level.

The railway line was the first infrastructural device to allow for the transportation of materials along the east and west. Over time, several additional infrastructural layers, such as roads and bridges, along with other spatial and pragmatic devices had been used to create definite distinctions and barriers between districts.

4.4.1 | INFRASTRUCTURE AND DISTRICTS

Doornfontein is bordered by the main feeder routes of Joe Slova drive towards the east, Nugget Street towards the west that establish the north-south connections to the city, and Smit street forming the northern boundary that connects the city from east-west.

The sunken railway line creates an incredible scar and barrier in the urban landscape. It separates the poorer residential neighbourhoods towards the north from the central business districts, decreasing the level of permeability, access and movement from the north towards the south.

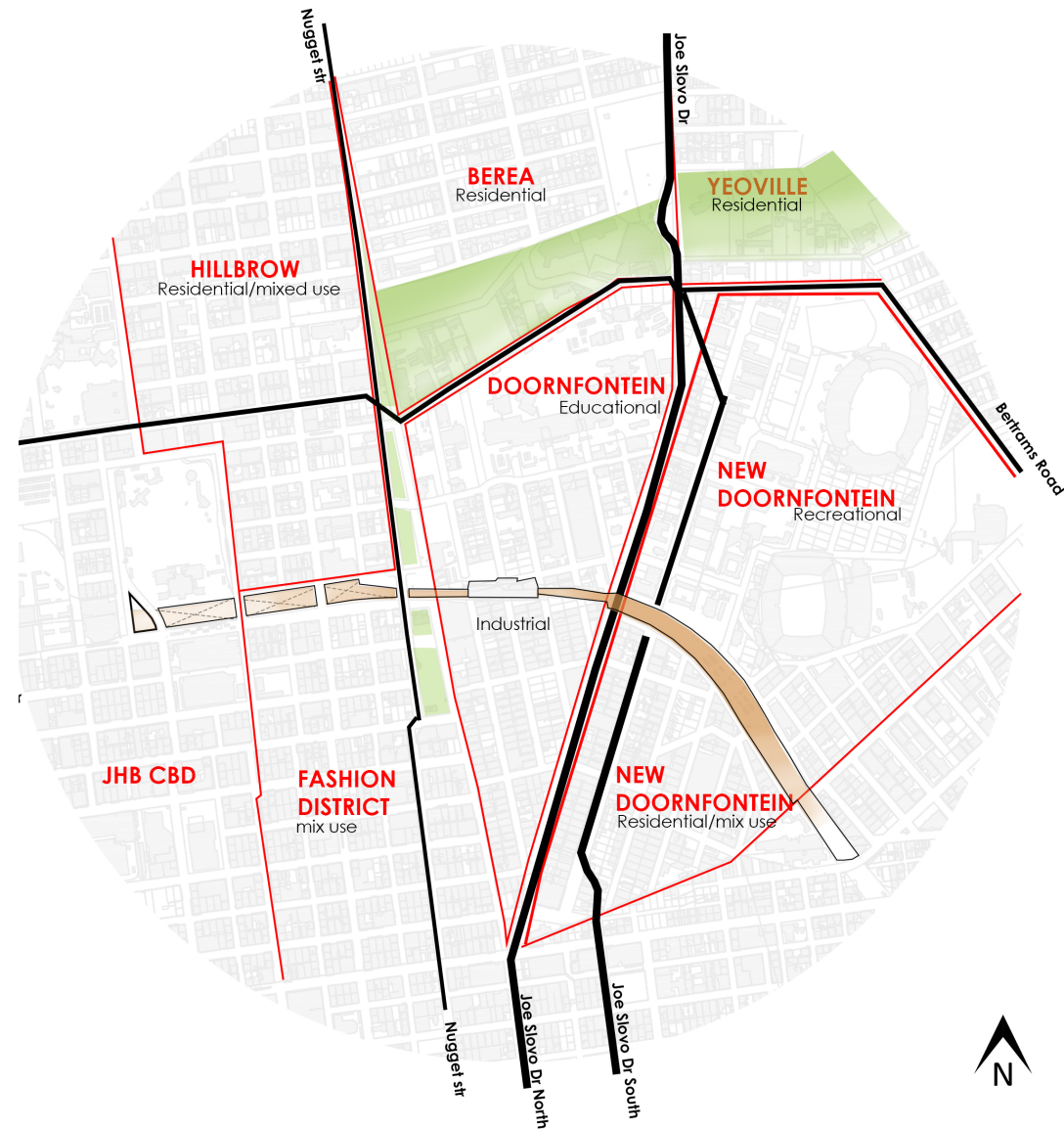


Figure 4-13: Macro analyses - infrastructure and districts (Author, 2019)

4.4.2 | PERMEABILITY WITHIN DISTRICTS

The fall of the topography further increases the problem of the railway line towards the east when it reaches the downtown core of Doornfontein. The condition of the railway line changes from being sunken to being level with the street, further decreasing permeability and access within the urban environment. This creates a physical, visual, social and ecological barrier as it divides Doornfontein, social life and End Street Park into two distinct areas.

Apart from the railway line as a distinct barrier in the urban environment, Johannesburg's block sizes, measuring 80x80m, allow for a high level of permeability, allowing for easy access, choice and walkability. Doornfontein, on the contrary, has large blocks measuring 80x220, further decreasing the level of permeability in the east-west direction. The size of the block, as noted in the land biography study, were initially laid out as large plots for the elite where they first build their mansions where it evolved into the current condition it is today. The presence of the University of Johannesburg towards the north, along with the school at the edge of End Street Park further isolates this area north of the railway line. The area has become disconnected and forgotten within its larger context.

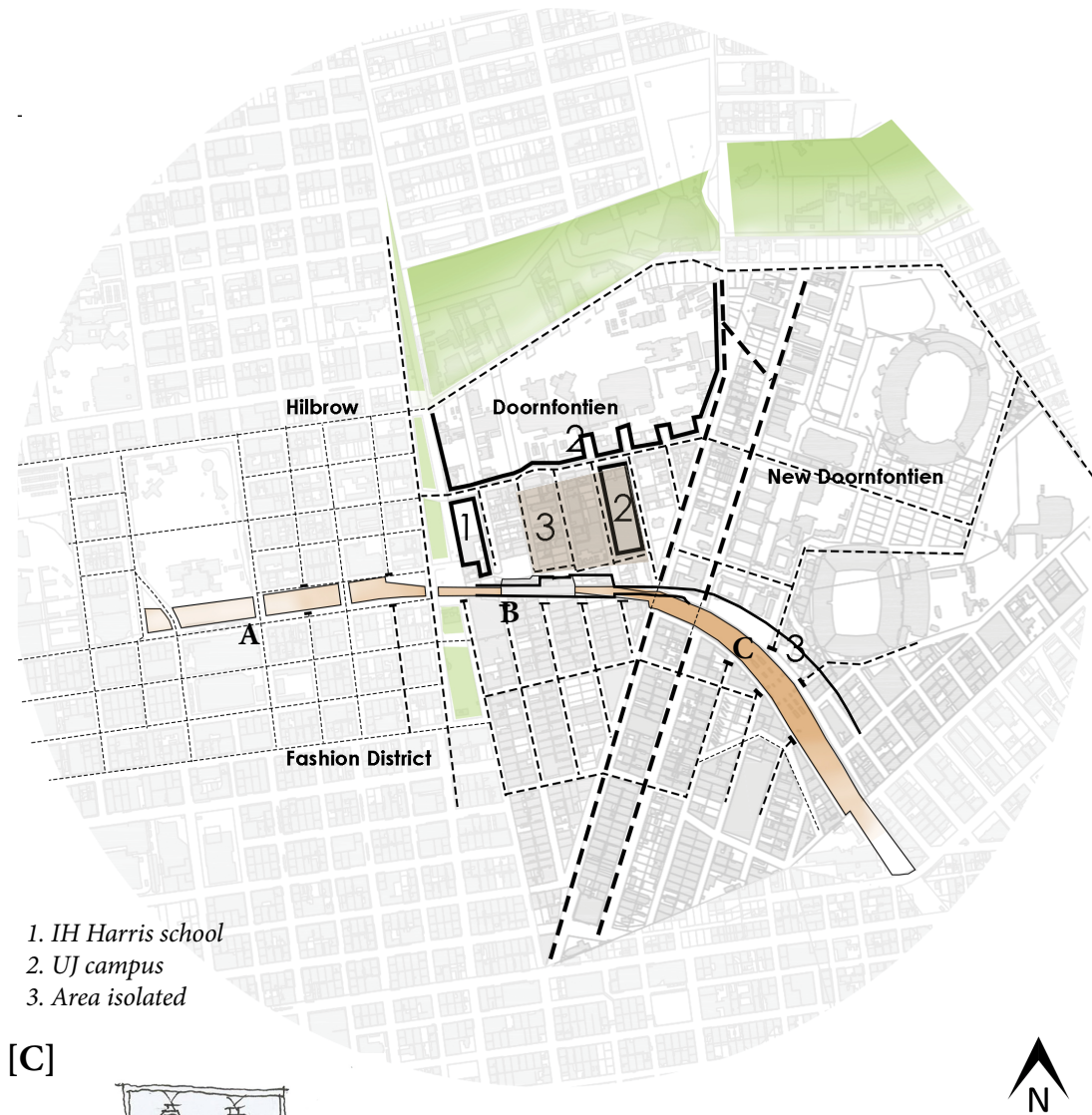


Figure 4-14: Macro analyses - Permeability within districts (Author, 2019)

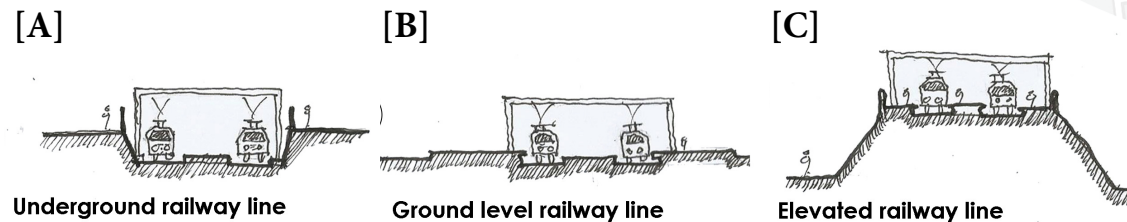


Figure 4-15: Macro analyses - Railway line sunken, level and elevated (Author, 2019)

4.4.3 | SOCIO - CULTURAL PLACES

Doornfontein is well located in close proximity to transport infrastructure that cuts through the area, recreational and cultural facilities of Ellis park sport precinct towards the east, University of Johannesburg's educational precinct towards the north and the inner city of Johannesburg towards the west.

Noord street shows a high activity of movement that correlates with the transport infrastructure in the area. The intensity of pedestrian movement in the area allow economic opportunities for the informal traders that occupy the street edges. The movement intensity declines towards the east, moving towards Doornfontein station.

Despite Doornfontein's attractive location and recent attempts at regeneration of the area towards the south, the area north of the railway line remain in a constant state of deterioration

PLACES: Activity and movement intensity

- LEGEND**
-  - Railway line
 -  - Places of interest
 -  - High Pedestrian Movement
 -  - Taxi Activity
 -  - Vehicle activity/connectors

1. Park Station
2. Joubert Park
3. North Street Taxi Rank
4. End Street Park
5. Doornfontein Station
6. University of Johannesburg
7. China Mall
8. Johannesburg College
9. Ellis Park Stadium and Sports Precinct
10. Ellis Park Station
11. Ellis park Taxi Rank

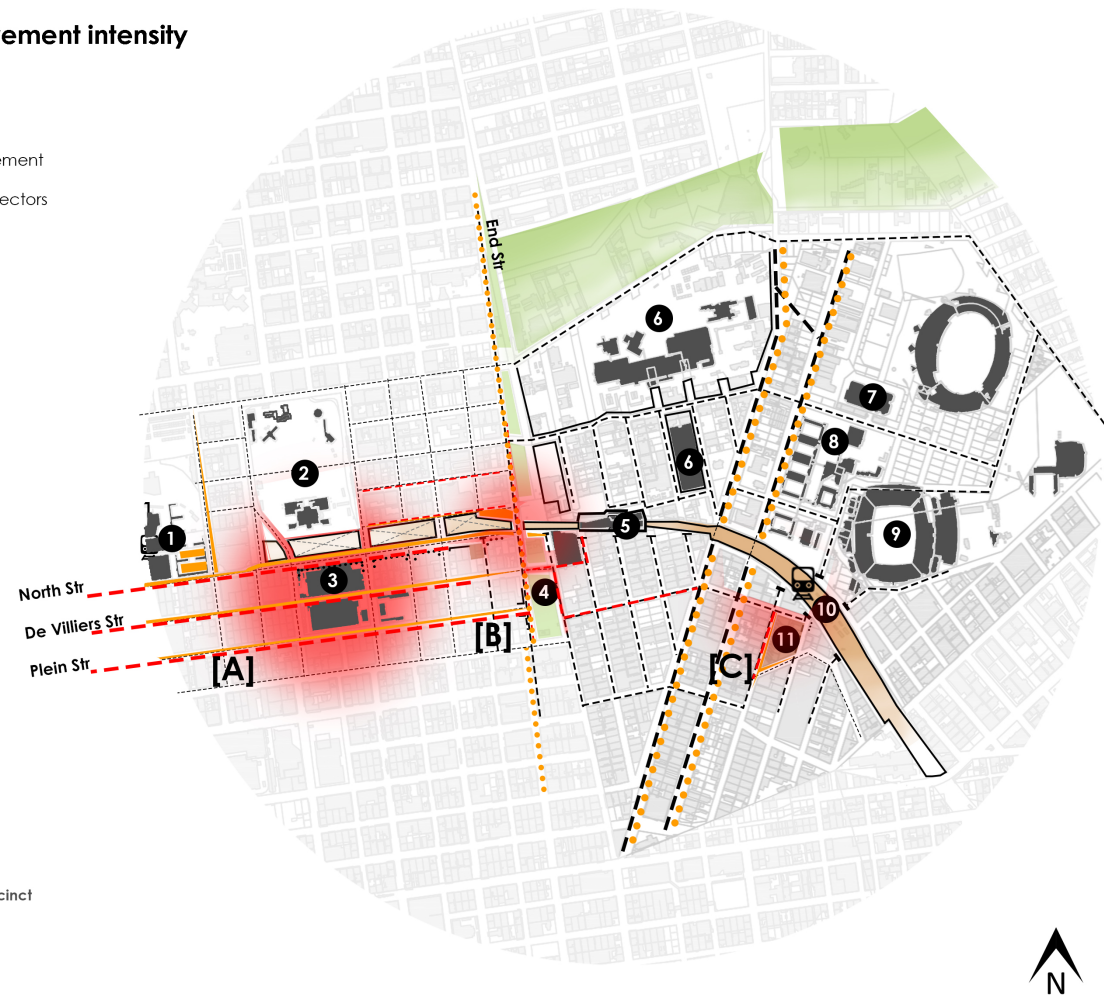


Figure 4-16: Macro analyses - Movement, Social and cultural places (Author, 2019)

PLACES and SPACES of significance

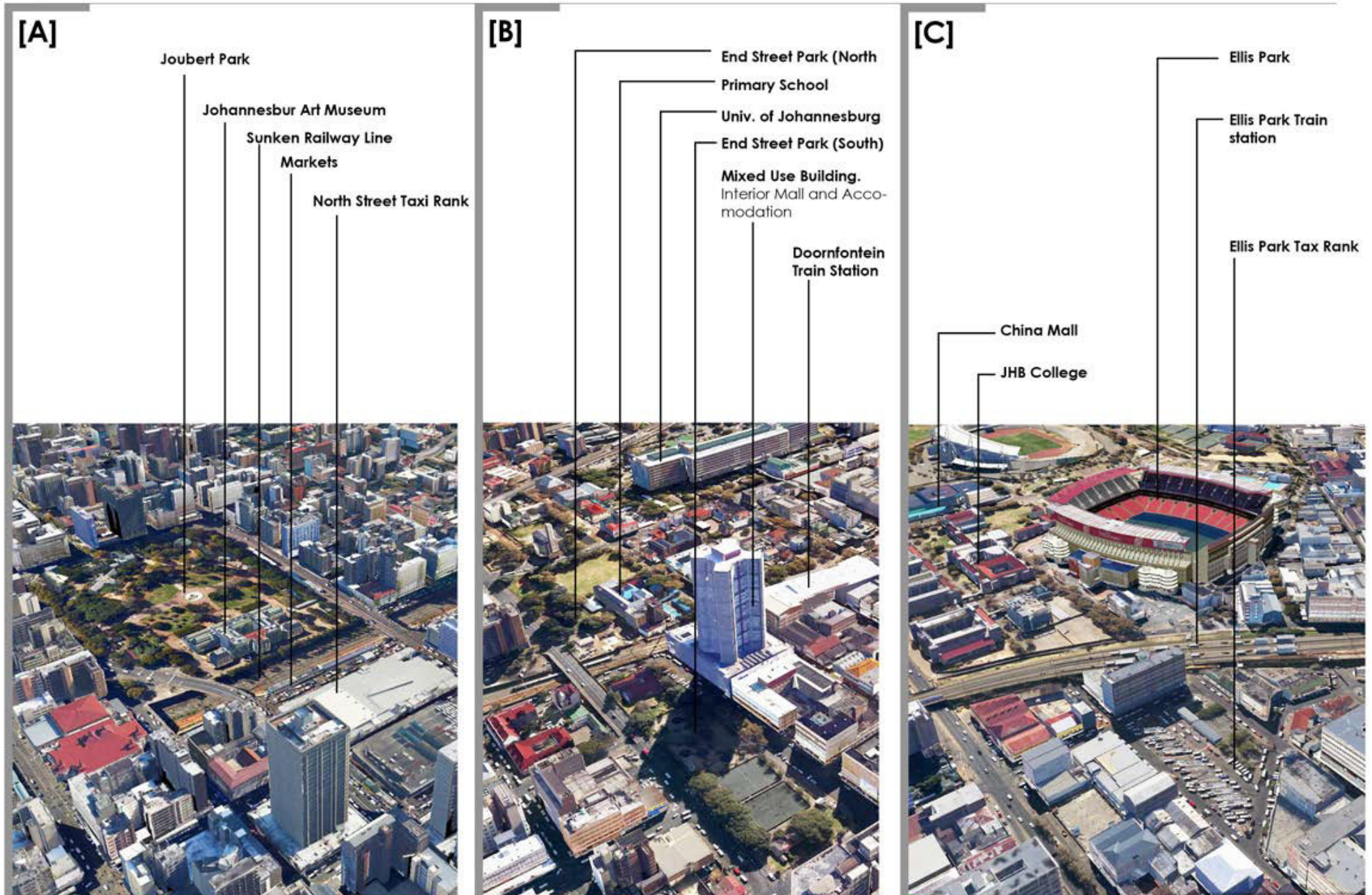


Figure 4-17: Macro analyses - Aerial view of identified places of value within Johannesburg (Author, 2019)

4.5 _ THE LARGER CONNECTION

THE SEAM AND THE SPINE _ Newtown Landscape Architects

‘The Seam’ is a strategy developed by Newtown Landscape Architects that respond to the current lack of green open space and parks. The strategy employs an approach that makes reference to landscape urbanism theories. By identifying a series of urban voids and brown field sites on the scale of the CBD of Johannesburg, it aims to reclaim, remediate and creatively stitch back the lost fabric to provide new places for citizens to socialize and safely move between districts (Barnard and Young, ud).

The intervention manifests itself as a linear system of parks that originates from a natural ecosystem that stretches from the western edge of Observatory ridge, towards the railroads from Ellis park and Doornfontein, continuing further west towards Park Station and finally ending at Newtown’s Cultural precinct. The ecological value of the scheme will provide and built resilient capacity within the urban environment to respond and adapt to the future growth and development of the city (Barnard and Young, ud).

The chosen site becomes a smaller node within the intended vision and strategy.

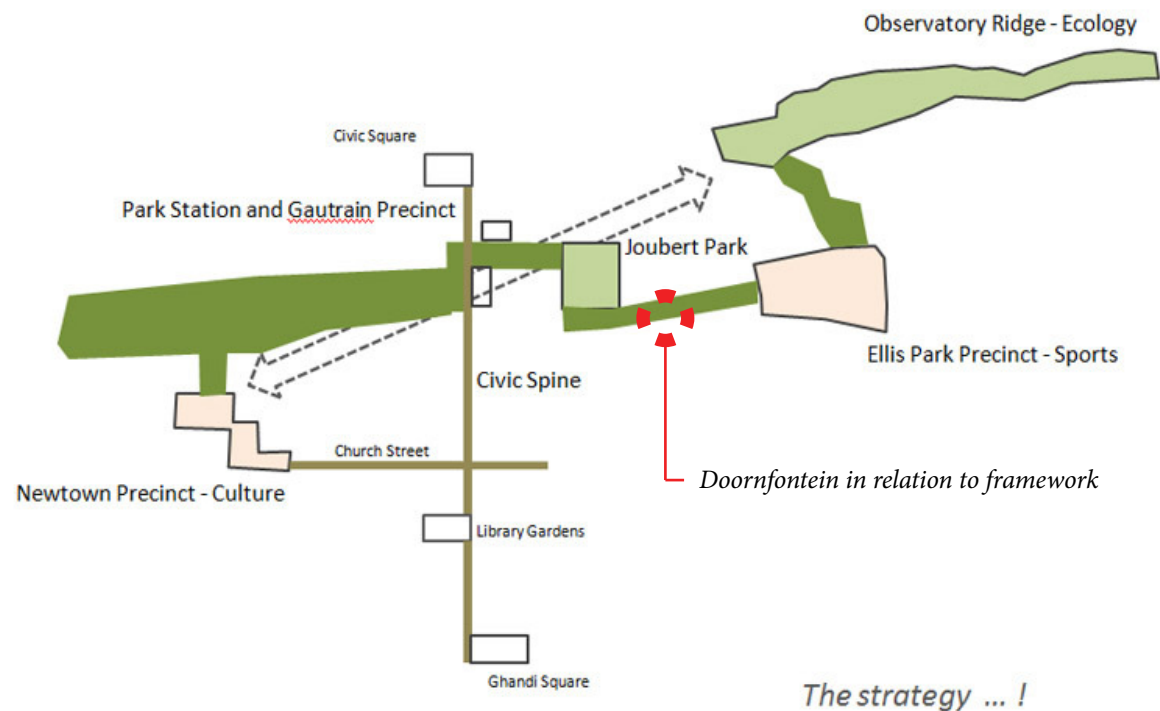


Figure 4-18: The Seam and the spine framework proposal by Newtown Landscape Architects (https://www.newla.co.za/projects/johannesburg_inner_city_park.php, 2019)



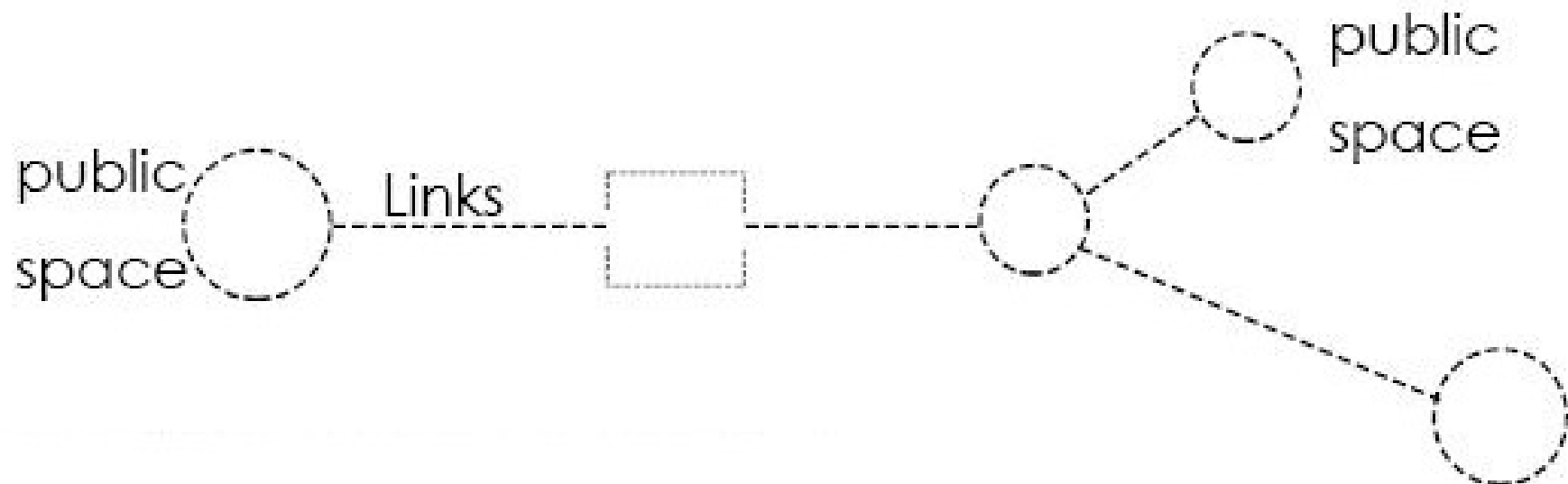
Figure 4-19: The Seam and the spine framework proposal by Newtown Landscape Architects (https://www.newla.co.za/projects/johannesburg_inner_city_park.php)

4.6_URBAN FRAMEWORK

4.6.1 | FRAMEWORK APPROACH

The urban framework responds to the vision proposed by NLA address the issues of disconnection between places of value within in Johannesburg. An activity spine is proposed to connect the various open spaces and places of value by extending Noord street to End street park, and further along towards the recreational precinct of Ellis park.

The new connections are defined by strengthening the edge conditions along the routes as well as establish new intermediate nodes to allow for increased legibility within the context.



URBAN VISION (ISSUES TO ADDRESS)

1. Identified places and spaces

- A. Park station precinct
- B. Joubert park/Taxi rank precinct
- C. End Street Park Precinct
- D. Doornfontein station precinct
- E. UJ
- F. Ellis Park precinct

2. New Nodes nodal developments/gateways landmarks.

- 1. Threshold/gateway to Doornfontein station (on east)
- 2. Threshold/gateway to Doornfontein station (on west)
- 3. Strengthen Paths and edges Places, spaces and nodes
- 4. Decking railway at street level
- 5. Strengthen edge conditions between places and spaces.

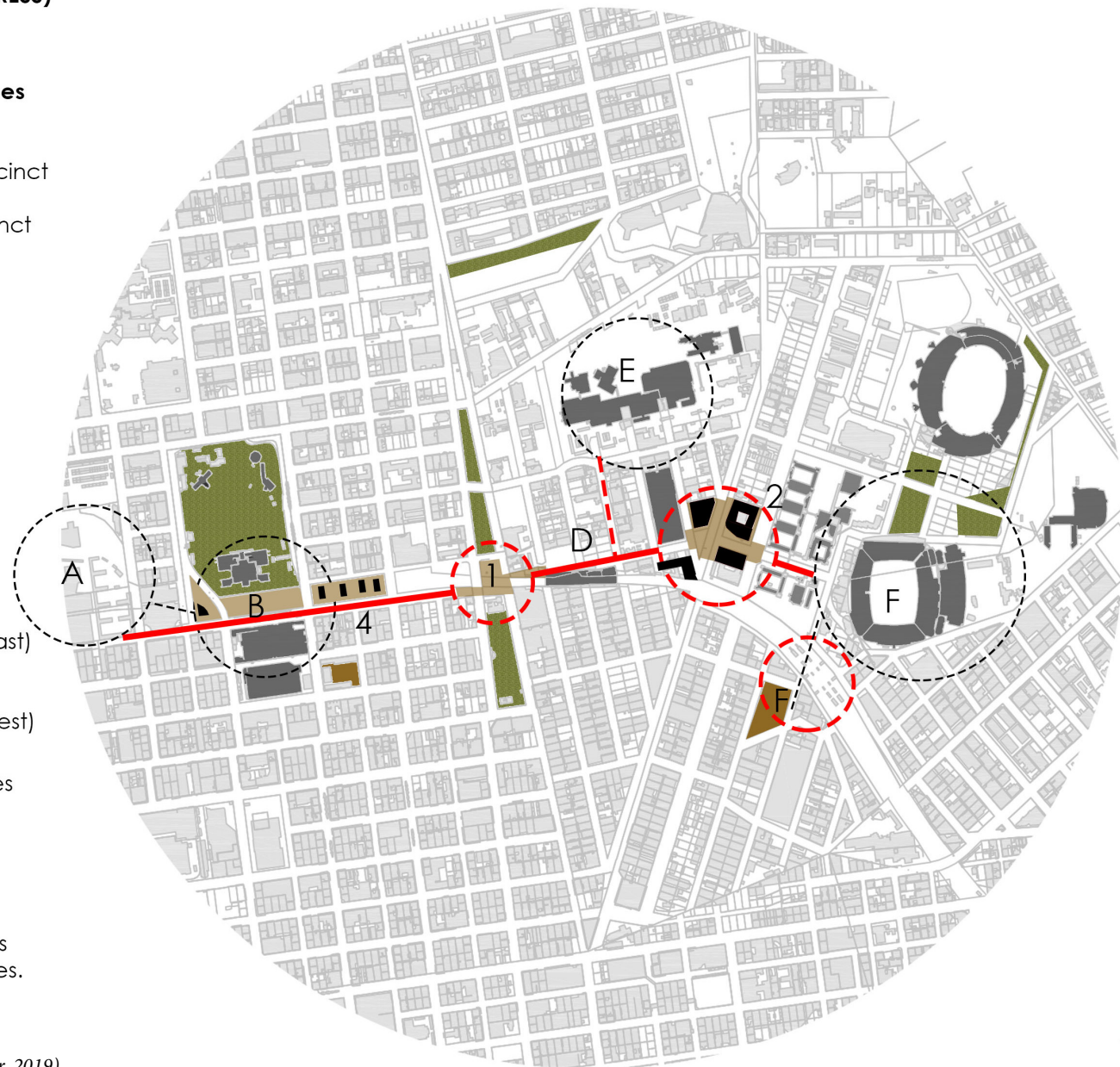


Figure 4-20: Urban Framework proposal (Author, 2019)



Figure 4-21: Photo of the railway line on site (Author, 2019)

4.7_SITE LOCATION AND ANALYSES

4.7.1 | SITE INTRODUCTION

The site of interest is located on the fringe where Johannesburg CBD meets Doornfontein. It is on this edge where the railway line creates a physical barrier and separation within the downtown core of the city, separating the existing parks, places and people.

The site holds a great deal of potential as it currently functions as a throughfare for pedestrians to gain access to Doornfontein train station situated towards the east. The movement towards the station is however illegible and obscured from the public view as the existing infrastructure and buildings either obstruct clear movement paths or form dead edges with no response to the context and railway line. This results in the space becoming lost and characterized by a disintegrated urban fabric with no synergy between programs and spaces.

The site is chosen as it holds potential to utilise the lost space to become a new access threshold and urban gateway to Doornfontein that is currently isolated. The existing functions surrounding the site can be utilized to inform new programs that can allow for more synergy, exchanges and integration within the context.

The site analyses will focus on the edges and spaces adjacent to the railway line to allow for an understanding of the condition/s that give expression to the existence of lost space.

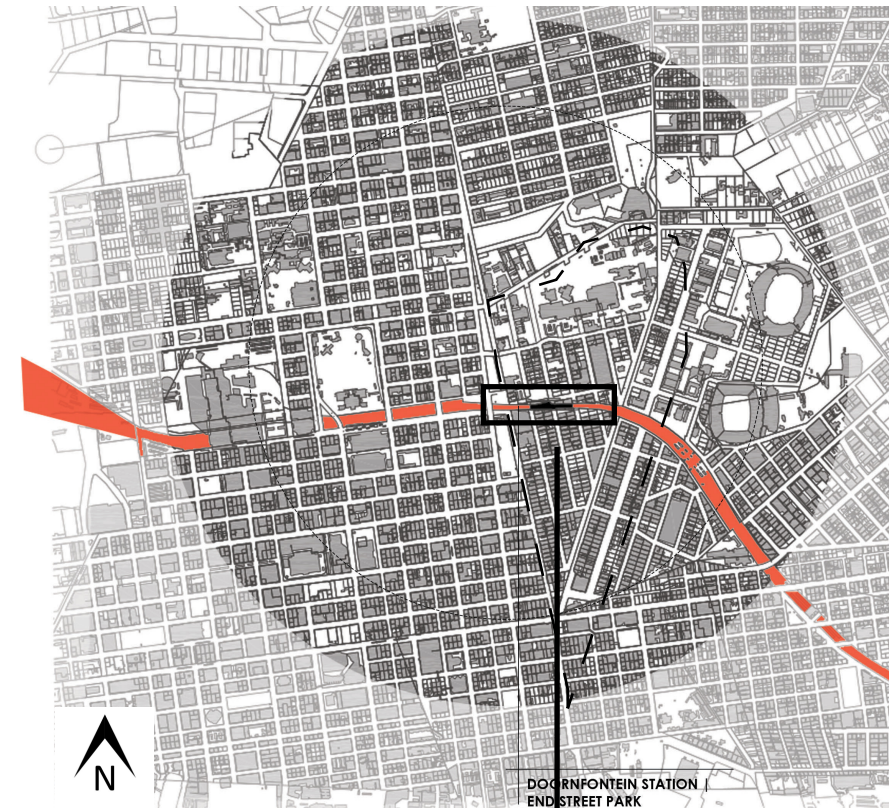


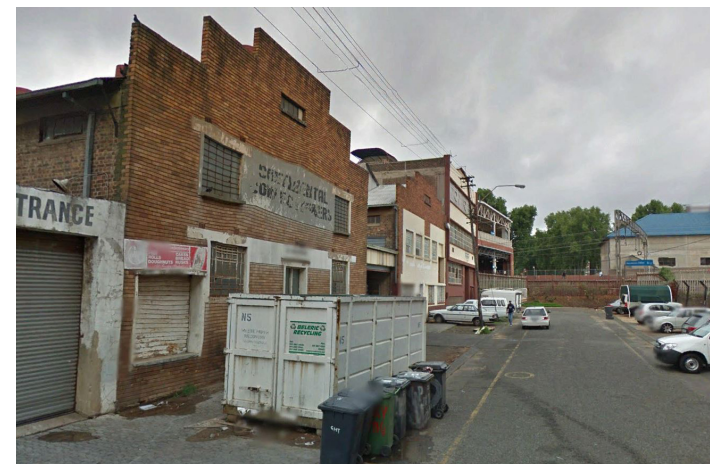
Figure 4-22: Figure ground of Johannesburg showing position of site (Author, 2019)



Figure 4-23: Site location (Author, 2019)

4.7.2 | ZONING surround the site

The area surrounding the railway line is predominantly industrial in terms of building typology. The proximity of the area to the CBD and the University of Johannesburg saw a recent regeneration in the area where adaptive reuse strategies were applied to accommodate mixed use development for social housing and student accommodation.



4.7.3 | URBAN DECAY, ADAPTED AND NEW

The area shows characteristics of urban decay as a large portion of the industrial built fabric is abandoned. Existing houses and apartment blocks that are in use today are not maintained, further detracting from the image of the area.

Figure 4-28: Abandoned building north of the railway line



Figure 4-29: Residential building north of railway line



Figure 4-30: New mixed use development on Davies street (South)



Figure 4-27: Site Analyses - Decay, New and adapted buildings (Author, 2019)

4.7.4 | BARRIERS, MOVEMENT AND ACCESS

The movement of pedestrians is impeded by various boundaries that obstruct movement within the area, particularly to and from the train station. The most prominent barrier is that of the fenced off railway line that is level with the ground. Other barriers are the fenced off parks and the existing inwards facing mall that does not respond or contribute to the existing park. Dead edges of boundary walls along the route towards the station creates spaces that do not engage with people. The low level access caused by the various barriers contradicts the role of the train station as an accessible public space.

- a End Street Park (South)
- b Mixed use/ Retail and Housing
- c Mall and AFCHO Social housing
- d Old Creche (AFCHO offices)
- e Parking lot
- f End street park (North)
- g IH Harris Primary school
- h Mixed use / Retail and Housing
- i Shed building / Retail
- j Parking lot
- k School play area
- l Student housing
- m Industrial / mechanic repair
- n Station plaza
- o Church
- p Housing
- q Offices
- r Univ of JHB extention

- 1 Bridge access
- 2 Mall Access
- 3 Station Access on Davies st
- 4 Station Access on Currey st
- 5 Station Access
- 6 Station Access

- Pedestrian movement
- Dead edges
- Fences
- Active edges

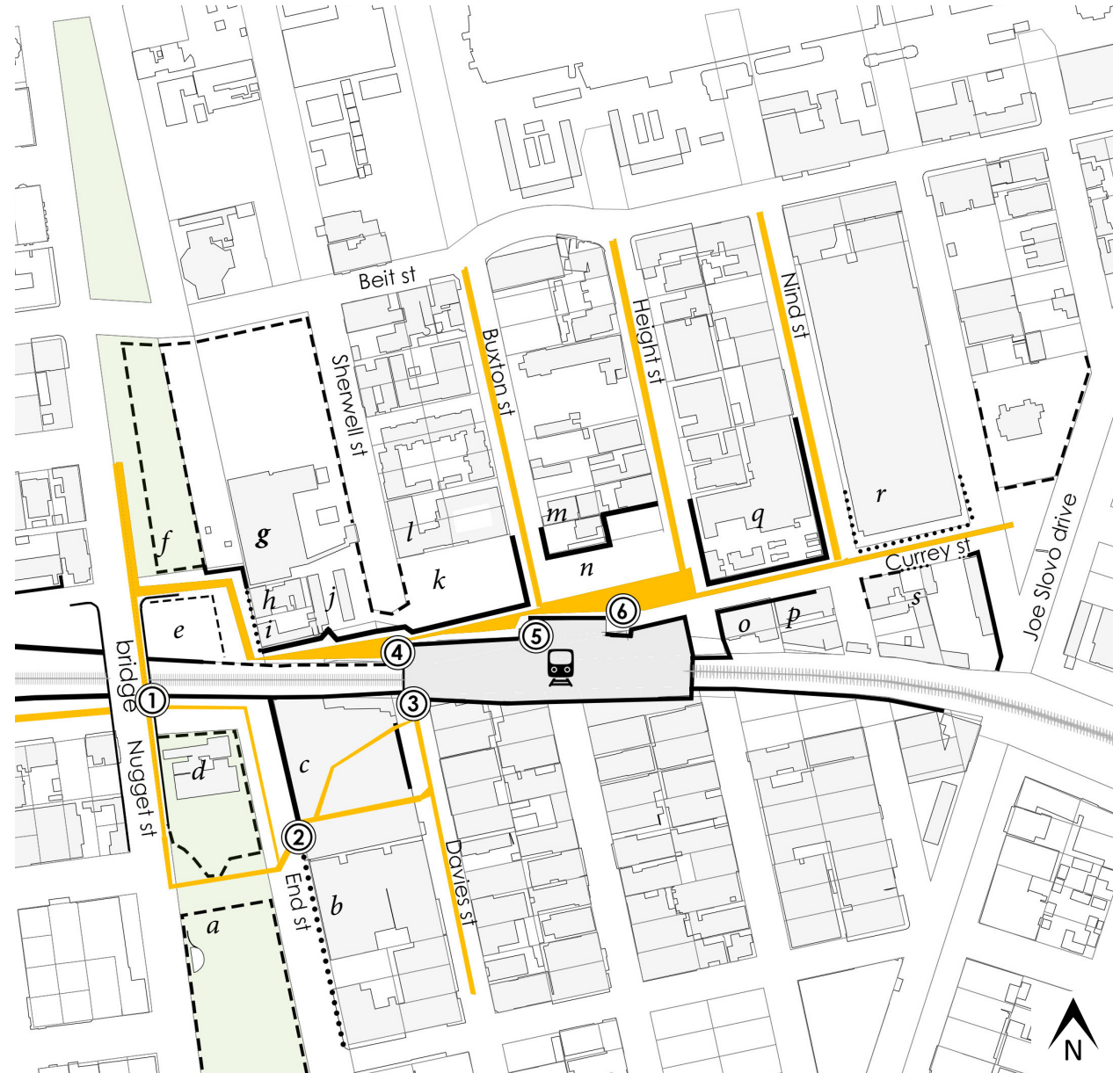


Figure 4-31: Site analyses - Barriers, movement and access (Author, 2019)

1 | BRIDGE: Connection over railway line



Figure 4-32: Site analyses - Nugget street bridge over Noord street and railway line, accessed by staircase. (Author, 2019)

2 | MALL ACCESS: Connection to station



Figure 4-33: Site analyses - End street mall entrance, allowing access to Davies street and station (Author, 2019)

3 | STATION ACCESS: Davies street/mall



Figure 4-34: Site analyses - Station staircase on Davies street. (Author, 2019)

4 | STATION ACCESS: Currey street

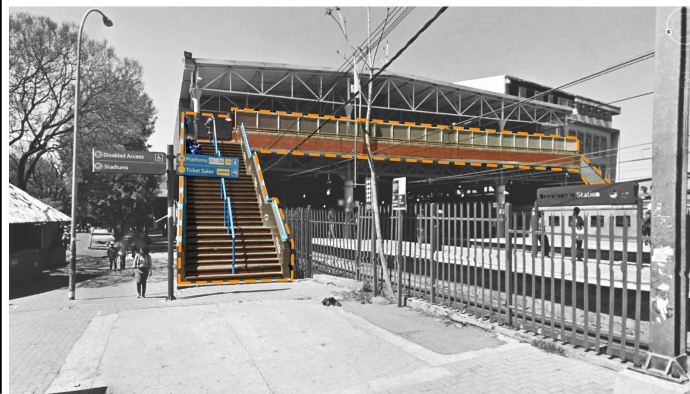


Figure 4-35: Site analyses - Station Access on the pedestrianised Currey street, providing access to station and Davies street (Author, 2019)

5 | STATION ACCESS: Currey street



Figure 4-36: Staircase and ramp access to station on Currey street (Author, 2019)

6 | STATION ACCESS Currey street



Figure 4-37: Staircase access to station from the station plaza (Author, 2019)

4.7.5 | LOST SPACES ALONG THE RAILWAY

The dissertations' site can be classified as a lost space due to the following reasons: It is bordered with pedestrian flows with limited cross circulation of movement, the effect of the infrastructural layer of the railway line as well as the existing built fabric and their lack of spatial response towards the railway line. It can also be considered as a residual boundary site between districts. In the case of Doornfontein, the site is situated between commercial, residential, educational and soft open spaces.

The following zones (Figure 4-33) are highlighted as being lost spaces and will be analysed individually to understand its legibility and other conditions that give expression to it being classified as being lost.

- ZONE ① *Isolated street*
- ZONE ② *The parking lot*
- ZONE ③ *Alley way 1*
- ZONE ④ *Alley way 2*
- ZONE ⑤ *Station Plaza*



Figure 4-38: Site analyses - Aerial view looking west of identified lost spaces (Author, 2019)

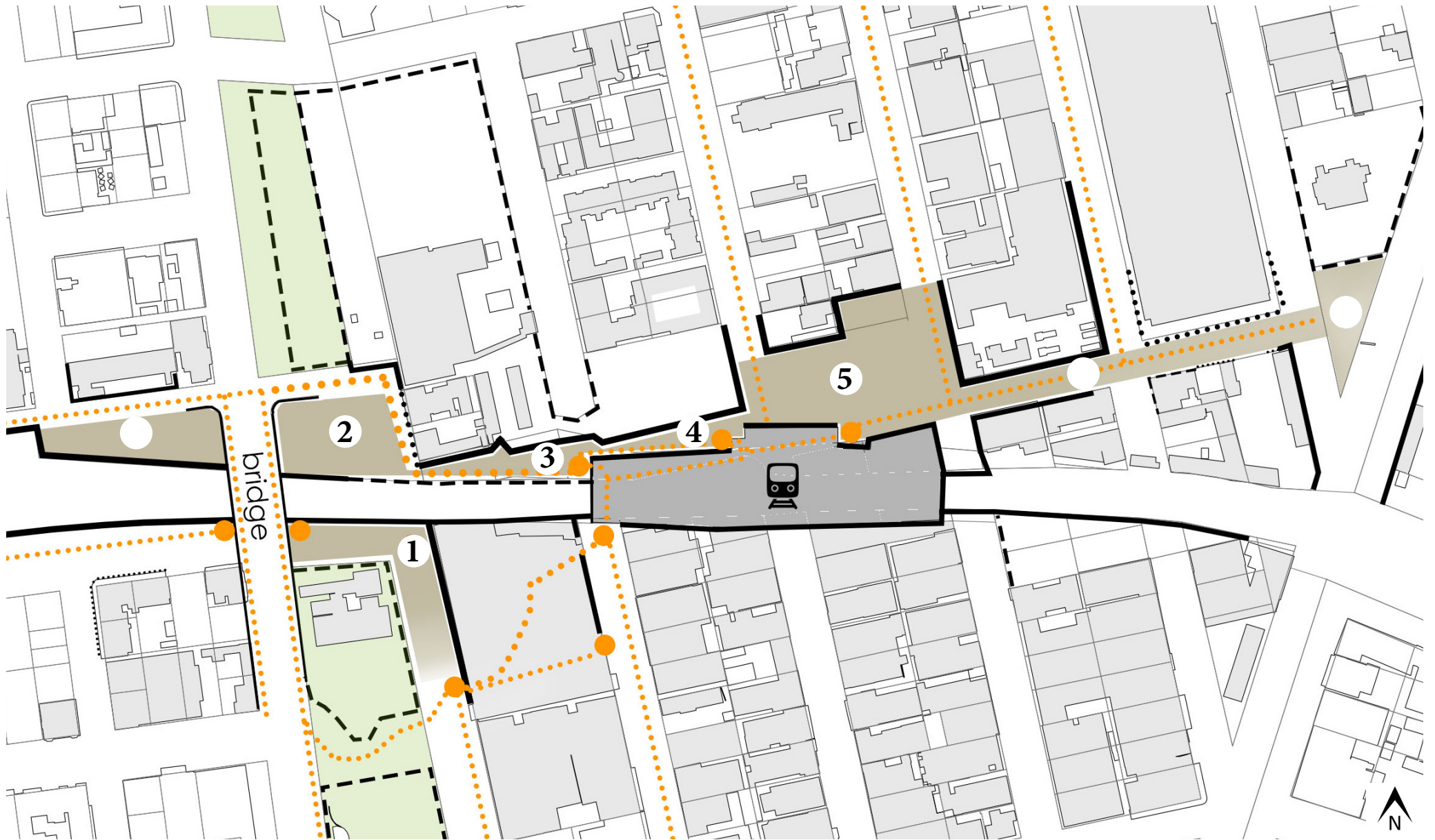


Figure 4-39: Site analyses - Plan view of identified lost spaces, movement and access points (Author, 2019)

ZONE 1/CONFLUENCE 1:

- (a) **Railway line**
- (b) **Bridge over railway line**
- (c) **The Mall (AFCHO housing)**
- (d) **Creche**

End street park, as its name suggest, marks the edge between City and Suburb. The parks were upgraded in 2010 in participation with community involvement to increase the safety of the area in an attempt to get rid of illicit activities. End street park south is well utilised, as the mini soccer fields attract the children of the area for recreation and play (further south).

The dead and inactive edges of the railway line and the bridge overpass create a physical barrier in the context. The mall currently functions inward and does not respond towards street and the park, detract from potential movement patterns on site. The placement of the creche in the park creates obscurity in what lies behind it. Lastly, the bridge over the railway line serves as the only point of crossing over the railway line. The elevation between the park and the bridge makes the park a sunken space, devoid of pedestrian movement.



Figure 4-40: Site analyses - Zone 1 key plan (Author, 2019)

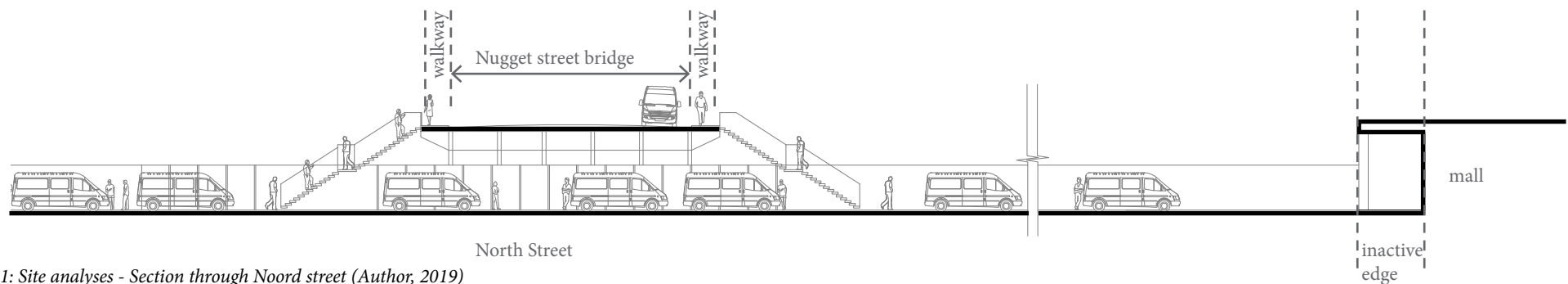


Figure 4-41: Site analyses - Section through Noord street (Author, 2019)



Figure 4-42: Site analyses - Section through end street, illustrating active and inactive building edges and facades (Author, 2019)

Figure 4-43: Site analyses - Photo analyses of End street (Author, 2019)



ZONE 2/CONFLUENCE 2:

- (a) Railway line, (b) Bridge
- (c) End street park North (d) Housing (3 storeys)
- (e) School (f) Shed

This space is currently sunken and functions as a fenced off parking lot, with some informal trading taking place on the ramp down into the space.

The space is surrounded by a series of ill defined edges. The fence enclosing the park and a portion of the school original entrance forms the northern edge of the space. There is also no control point or access to the park on this edge. The eastern edge responds to the “street” with commercial activity on the ground floor. Even though this is a positive attribute to encourage activity and passive surveillance, it permits visual connections beyond the site.



Figure 4-44: (Right) Site analyses - Zone 2 key plan (Author, 2019)

Figure 4-45: (Below) Site analyses - Section through Zone 2 with existing buildings in elevation (Author, 2019)

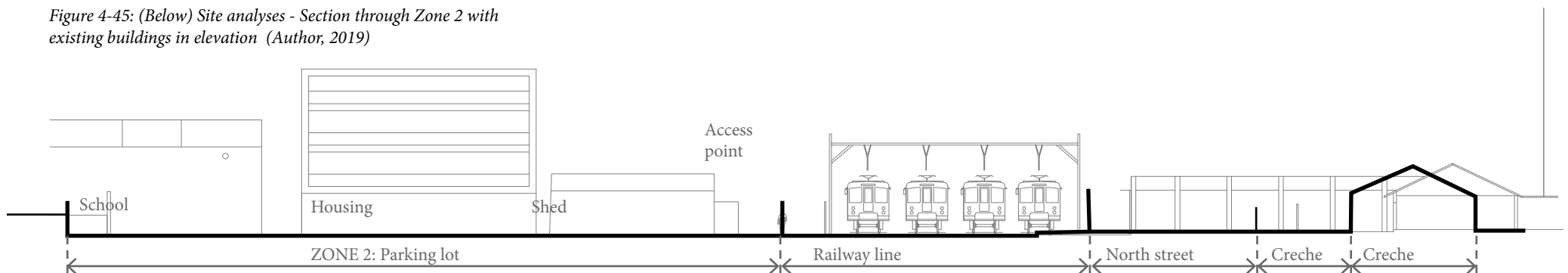
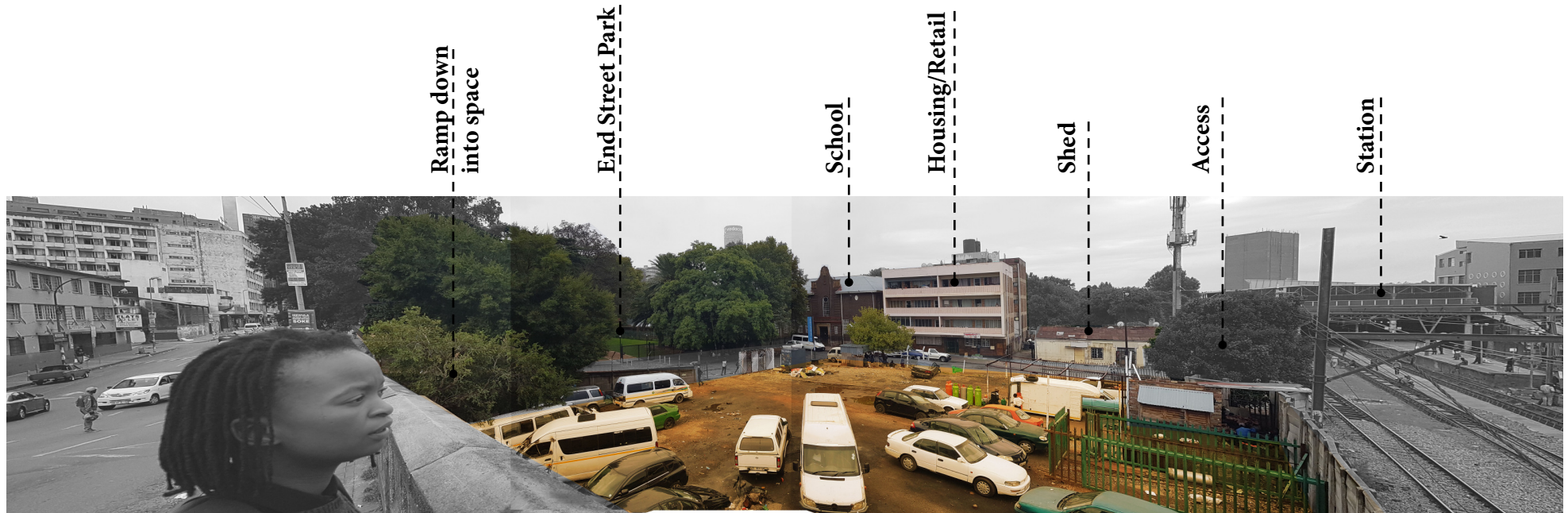


Figure 4-46: Site analyses - Photo analyses of Zone 2 from entrance ramp to Currey street and End street park on the left (Author, 2019)

Figure 4-47: Site analyses - Photo analyses of Zone 2 from Nugget street bridge showing existing parking lot and buildings beyond (Author, 2019)



ZONE 3/CONFLUENCE 3:

- (a) **Railway line**
- (b) **The Shed**
- (c) **Parking lot**

This space forms the eastern approach towards the train station. The station's entrance is announced by a staircase that extends into the space. The space is defined by the fence of the railway line, a unresponsive edge of the shed building and a boundary that enclose the parking lot of the school.

“Make shift” and existing covered structures are used by informal traders (to an extent), selling food and other goods to pedestrians passing by.



Figure 4-48: Site analyses - Key plan of Zone 3 (Author, 2019)

Figure 4-49: Site analyses - Section through Zone 3 (Author, 2019)

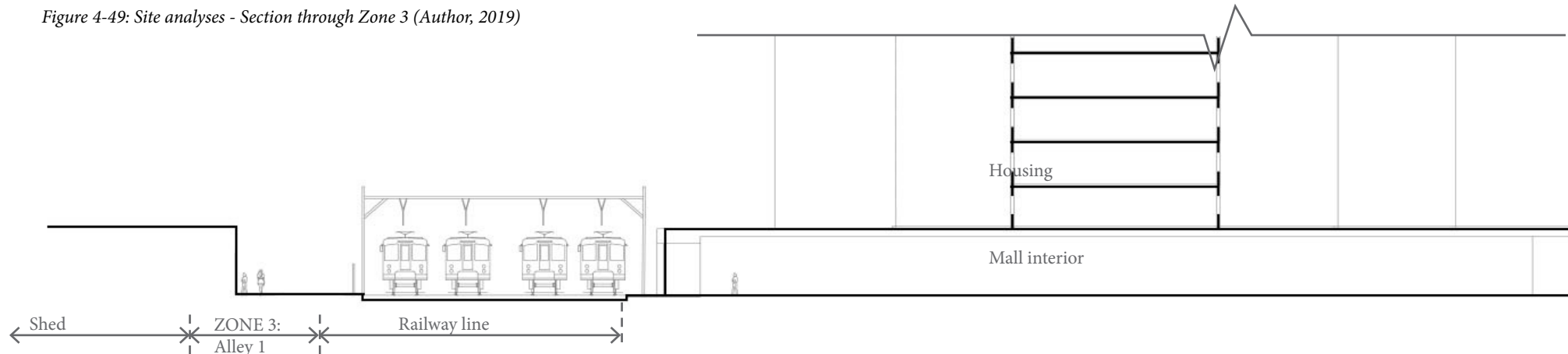


Figure 4-50: Site analyses - Photo analyses of Zone 3 from train station looking down (Author, 2019)

Figure 4-51: Site analyses - Photo analyses of Zone 3 showing dead edges and informal traders along the route (Author, 2019)



ZONE 4/CONFLUENCE 4:

- (a) Doornfontein Train Station
- (b) IH Harris primary School playground

This space is very compressed and defined by the train station and a solid boundary wall enclosing an extended play area for the school children. This action by the school has also closed off the connection towards the north, further weakening the permeability within the urban blocks. Pedestrian movement has become secondary as they move through a narrow route, that is unlegible and unresponsive within its context

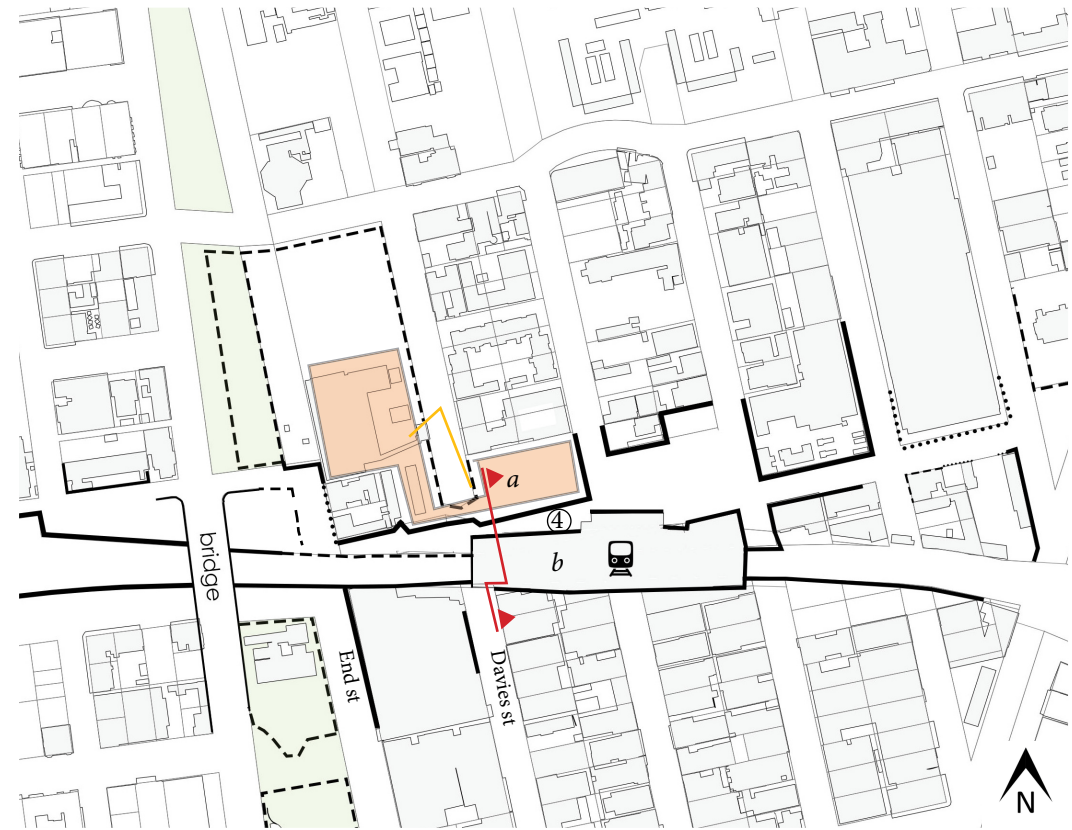


Figure 4-52: Site analyses - Key plan of Zone 4 (Author, 2019)

Figure 4-53: Site analyses - Section through Zone 4 (Author, 2019)

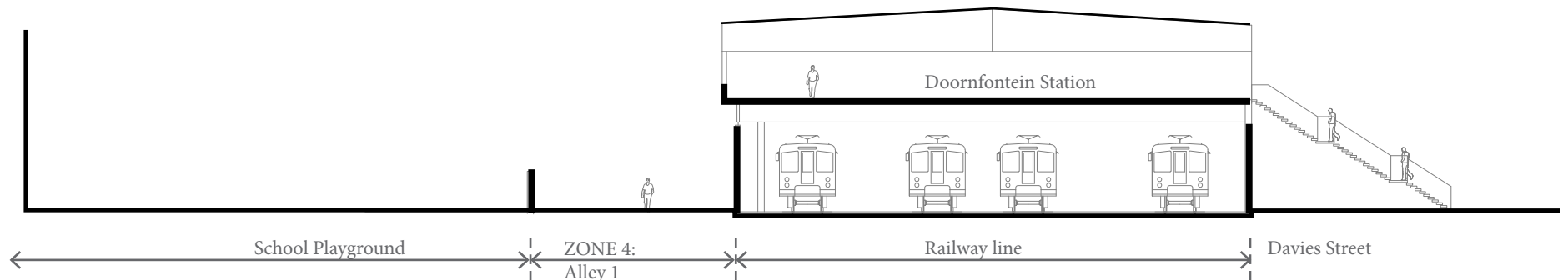




Figure 4-54: Site analyses - Photo analyses of Zone 4, showing the barrier between the station and school playground (Author, 2019)



Figure 4-55: Site analyses - Photo analyses illustrating existing school entrance on Davies street and dead end that prohibits access to the station beyond (Author, 2019)

ZONE 5/CONFLUENCE 5:

- (a) **Doornfontein Station**
- (b) **IH Harris school Playground**
- (c) **Mechanical/Industrial**
- (d) **Offices**

Doornfontein station was upgraded in 2010 in preparation for the FIFA world cup. The railway station is built over the railway line and accessed by two staircases and a ramp to allow for universal access. Passengers then move from the station down again to gain access to the platforms below.

Small markets stalls have been incorporated around the station to allow space for informal traders. These spaces however seem empty and underutilised during the site visit.



Figure 4-56: Site analyses - Key plan of Zone 5 (Author, 2019)

Figure 4-57: Site analyses - Photo analyses, corner of Currey street and Buxton street showing empty plaza, defined by low density buildings with dead edges (Author, 2019)



Figure 4-58: Site analyses - Photo analyses, view from Sherwell st. Informal market structures with little activity (Author, 2019)



Figure 4-59: Site analyses - Photo analyses, looking west from station plaza, dead edges and low scale buildings define the plaza (Author, 2019)



4.8_OUTCOME OF SITE ANALYSES

The initial outset of this dissertation identified the railway infrastructure as a major contributing factor that gave rise to the condition of lost spaces in urban environments. This is specifically true within the context of Johannesburg where the railway line cuts through the urban fabric, creating a distinct barrier between people and places. The main purpose of this study was to understand the various barriers that give expression to the condition/s of lost space within Doornfontein. The theoretical investigation that was done in chapters two discussed the ideologies of the modern that ultimately gave rise to the phenomena of lost space.

Trancik (1986) elaborates on the development of lost space caused by modern ideologies as a result of the Automobile, the modern movement, zoning policies/renewal strategies and the privatization of public space. The theoretical investigation done in chapter three provided an approach to place making as a response to the condition to non-places or i.e. lost spaces. Both of these theoretical investigations guided to analyses of the context in terms of the issues pertaining to non-place and the potential for place to evolve.

4.8.1 | BARRIERS CREATING LOST SPACES

The lost spaces surrounding the railway line were found to be a condition of both the infrastructural networks present on site, along with the function and response the existing buildings have towards the infrastructure and its immediate context. These barriers are classified as infrastructure and functional. This further results in a series of barriers categorized as being:

- *physical barriers*
- *movement barriers*
- *social barriers*
- *ecological barriers.*

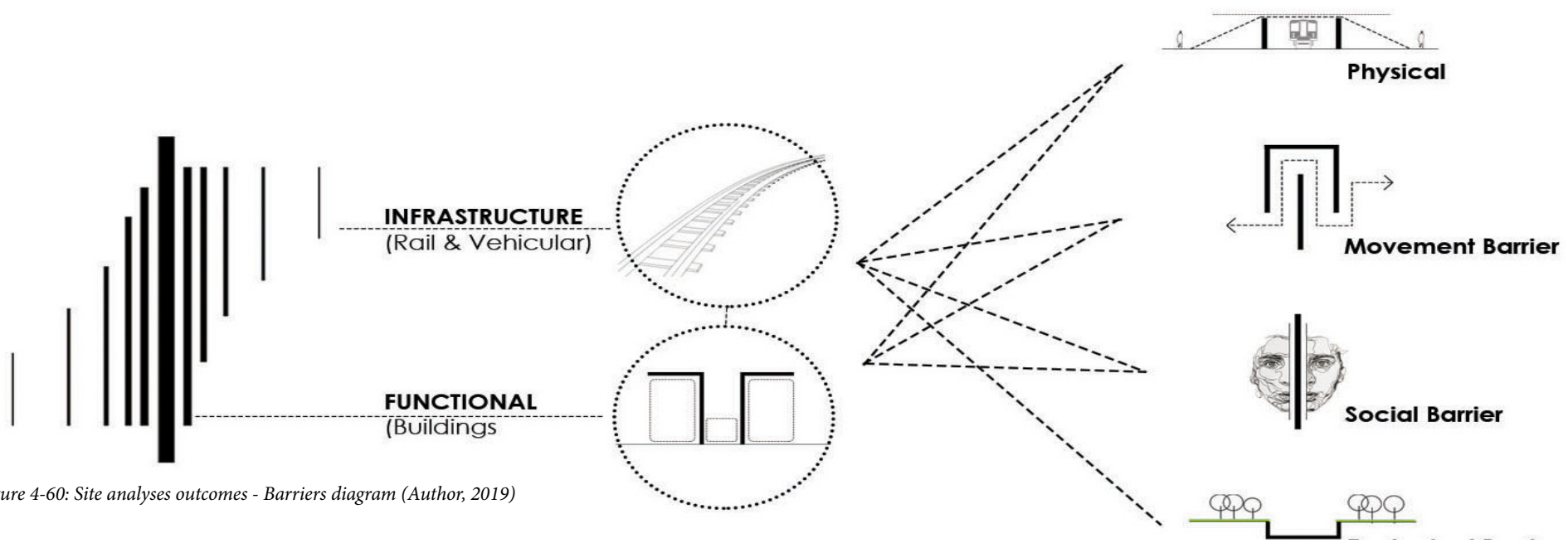


Figure 4-60: Site analyses outcomes - Barriers diagram (Author, 2019)

4.8.2 | THE POTENTIAL FOR PLACE TO EVOLVE

What prohibits evolution?

In order for place to evolve, it is important to understand what prohibits change and evolution to occur (Mang, 2016). The barriers created by infrastructure along with the built fabric that responds to it has isolated the area to a point where it has become a non-place, lost and forgotten. When applying regenerative thinking to create vibrant and thriving environments, professionals and designers is endowed with the responsibility of identifying certain aspects of a system that need to collapse in order to make way for new life to occur (Du Plessis, 2013: 38). The analysis of existing patterns of flows, movement and exchanges within the context were done to determine what systems need to collapse or adapt in order to generate new life, (refer to figure). This include the area north of the railway line that consist of the school, that can be adapted, and the existing residential housing, that can either adapt or collapse to accomodate a program that can allow for better integration within its immediate context. The area south of the railway line that consist of the mall and existing creche can be adapted to engage with the street and pedestrain movement. The chosen site will aim to engage with these issues and oppertunities on an Architectural scale. This will not only contribute to the making of place but also strengthen the image and legibility of the urban environment. This will be further developed in Chapter 6: Concept and Design development.

The people and the story of place

The train stations proximity to the residential neighbourhoods, existing cultural intuitions, such as the University of Johannesburg, Ellis park, schools and specifically the site surrounding the railway station are comprised of a diverse group of people that travel through the site for either the purpose of commute or to bridge over the existing railway station to reach their destinations. This diversity is essential to allow for possible relationships and exchanges to evolve within place. It is therefore important to allow for spatial conditions that can strengthen these relationships. These relationships will be further developed in chapter 5 - Program; and chapter 6 Concept development.

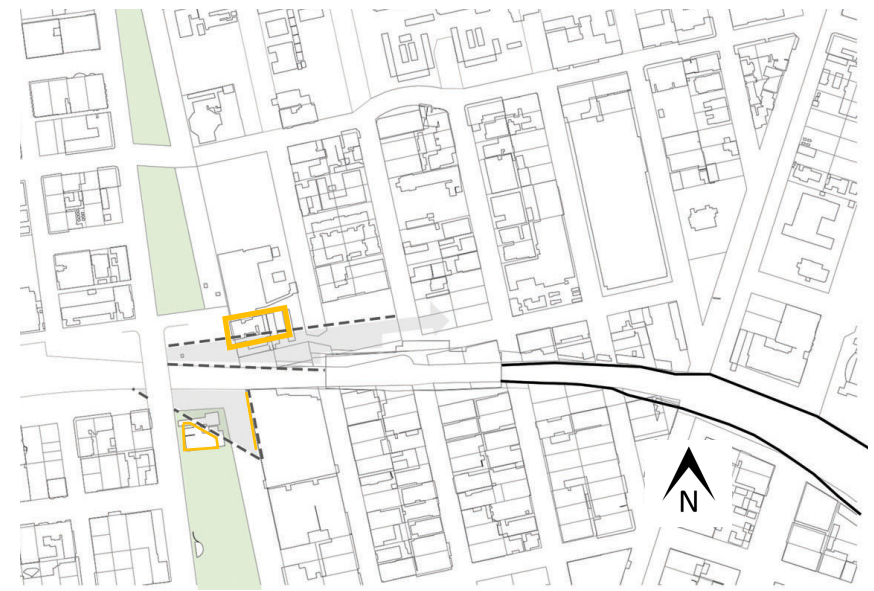


Figure 4-61: Site analyses outcomes - Fabric in need of change or adaptation (Author, 2019)

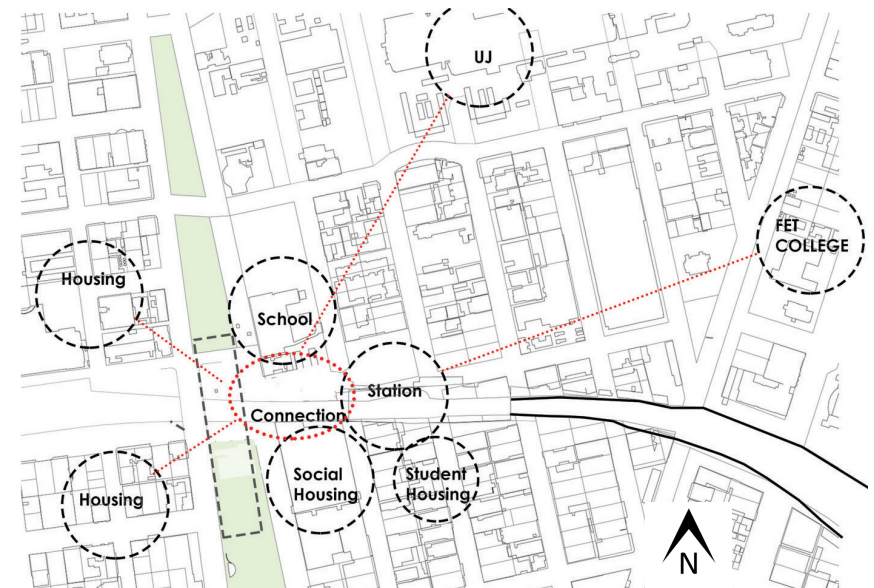


Figure 4-62: Site analyses outcomes - Potential relationships within the context (Author, 2019)

