

Remember to

Forget:

Archives for

Architecture

J o h a n n e s b u r g



This document is submitted in partial fulfilment for the degree:
Master of Architecture (Professional)
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9 Desember 2013

Abstract

The built environment of Johannesburg has gone through numerous changes in its relatively short history. Traces of past events are visible, but the full stories are unknown and there is an absence of memory on both an institutional and a social level. Through their interwoven relationship with time, buildings become references for memories. And as a collection of artefacts (buildings), each with its own narrative, the city can be seen as an archive of its own past.

This project investigates the relationship between memory and architecture through narratives of the built environment. The project aims to show that the rich history of everyday spaces, and the public participation that occurs therein, create associations and memories of place and the city.

The proposal is for the Hubert Davies site in the historically rich area of Ferreirasdorp to be converted into an Archive for the Built Environment of Johannesburg. An alternative approach to heritage is suggested – a commemorative architecture that is neither monument nor spectacle.

The programme would ensure the conservation of the site while also facilitating access to the history of the city through public participation and use. Through its adaptive re-use the archive's site and programme enable it to play an important role in reminding the city of where it comes from.

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Fig 1.1 >> Industrial site
showing various traces of
weathering and use. (Author)

1

Introduction

Architecture holds memories – memories of people, ambitions, knowledge, success, destruction, loss, division and fear. This is made possible because of architecture's relation to space and time. Daily activities take place within the space of buildings, and buildings endure the effects of time. Architecture is thus a captive of time, unable to escape the past as modernists like to claim. Likewise, time is reflected in architecture. Through their interwoven relationship with time, buildings become references for memories. And as a collection of artefacts (buildings), each with its own narrative, the city can be seen as an archive of its own past.

Willaim Urrichio, professor of comparative media history, refers to the city as a 'memory palace' (2012:47), a device for storing and recalling information. This 'memory palace' is a mental construct of a series of familiar places that are associated with stories, for instance the connected rooms of one's own dwelling. By imagining moving through these familiar places, one can easily recall the stories stored there (Urrichio 2012:45). The underlying principle, then, is that



Fig 1,2 The constantly changing city, Ainstey's building stands proud behind a demolished building in the foreground. (Eliovson nd circa 1956:4)

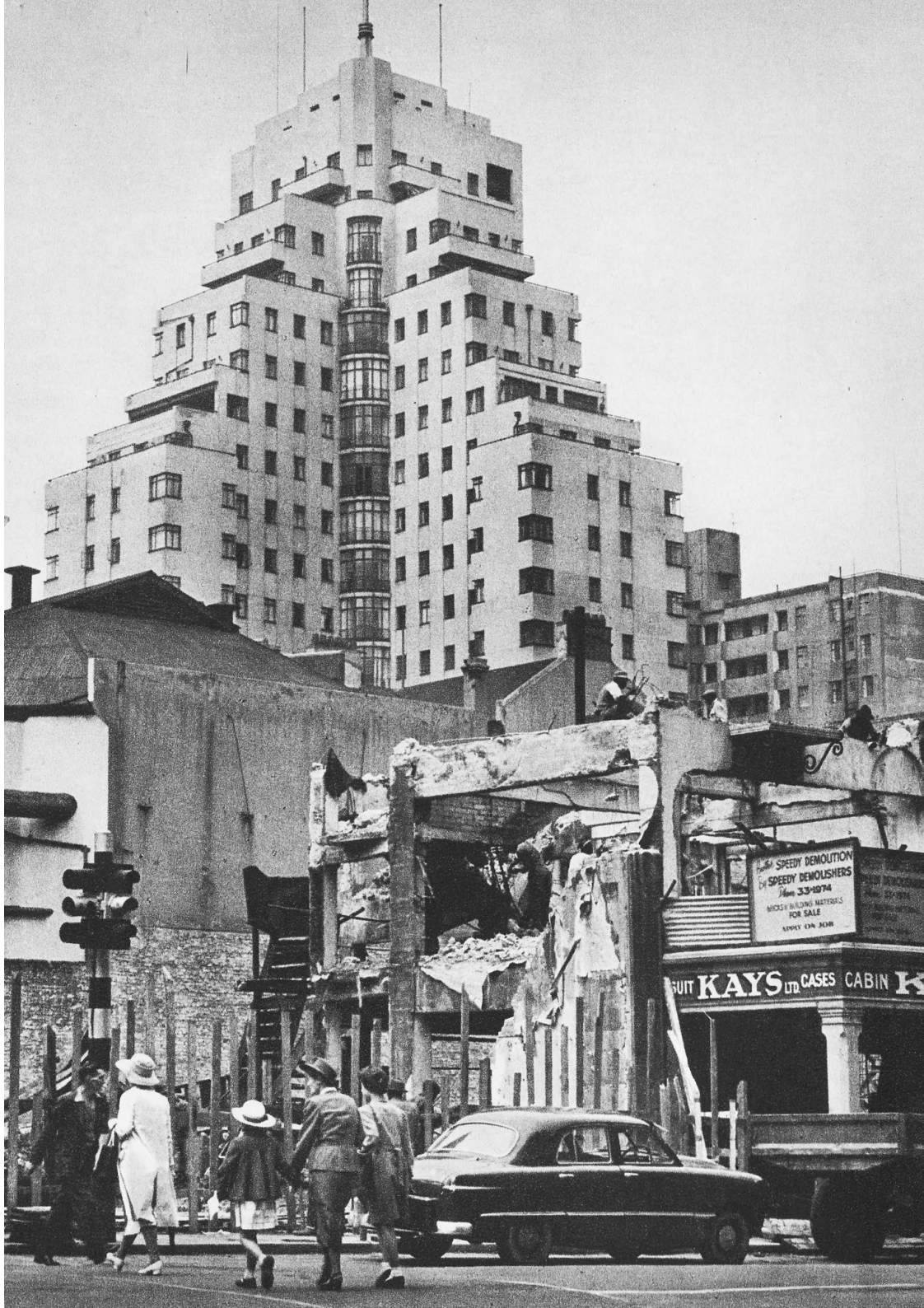


Fig 1.3 Prevailing contrasts and dialogue in the changing city of today. (Author)



Fig 1.4 The rich social space created on the streets of Johannesburg (circa 1956) through everyday activities, separate from the formal economy. (Eliovson nd circa 1956:36)



memories work on spatial terms. Urrichio goes on to explain that as 'material constellations of time, cities testify to their pasts and the endless process of their modification, their overwriting and their neglect. The spaces we traverse are loaded with signification, silent witnesses to the unfolding of the past and active triggers for the associations and experiences of countless other subjects in our present.' He adds that 'the one thing we know is that we will only be able to share the smallest fraction of these meanings' (2012:47).

What then would this 'smallest fraction' amount to if space were controlled and rigidly demarcated? And what signification, meaning and associations are there in the lonely monuments that use popular narratives to fill the void? Architect and academic Jeremy Till writes that physical space is measurable and often disguised as neutral, but definitely political. When the value of physical space is elevated above socially constructed space, there is an opportunity for it to be controlled and manipulated (2009:79).

The built environment of Johannesburg has gone through numerous changes in its relatively short history. Traces of past events are visible, but the full stories are unknown and there is an

absence of memory on both an institutional and a social level. Furthermore, for much of Johannesburg's history, physical space has been given precedence over social space, resulting in the control of people in private as well as public spaces. This highly stratified city has experienced divisions between extreme wealth and utter poverty from its very beginning. Worsened by formalised segregation and apartheid laws, the divide continues to exist even in the present. Experience of the city has therefore been mediated by the division and control of space, which has diluted the city's meanings, associations and memories.

This Master's dissertation investigates the relationship between memory and architecture through narratives of the built environment. The project aims to show that the rich history of everyday spaces, and the public participation that occurs therein, create associations and memories of place and the city.

Fig 1.5 View of Johannesburg
from the south west of the city
showing site location.
(Johannesburg Land Company)

Fig 1.6 >> Aerial Image showing
the location of the Hubert
Davies site.



1.1

Proposed site

The proposed site is situated in Ferreirasdorp, an area in the south-western corner of the Johannesburg CBD that is rich in history and deeply intertwined with the city's beginnings. The site is referred to as Hubert Davies, named after the company that first ran a business there. Hubert Davies' workshops were right on the edge of a mining camp, on the property of one of the first mines on the Main Reef. The company developed equipment that played an integral role in the technological advances in the mining industry as well as in the electrification of Johannesburg.

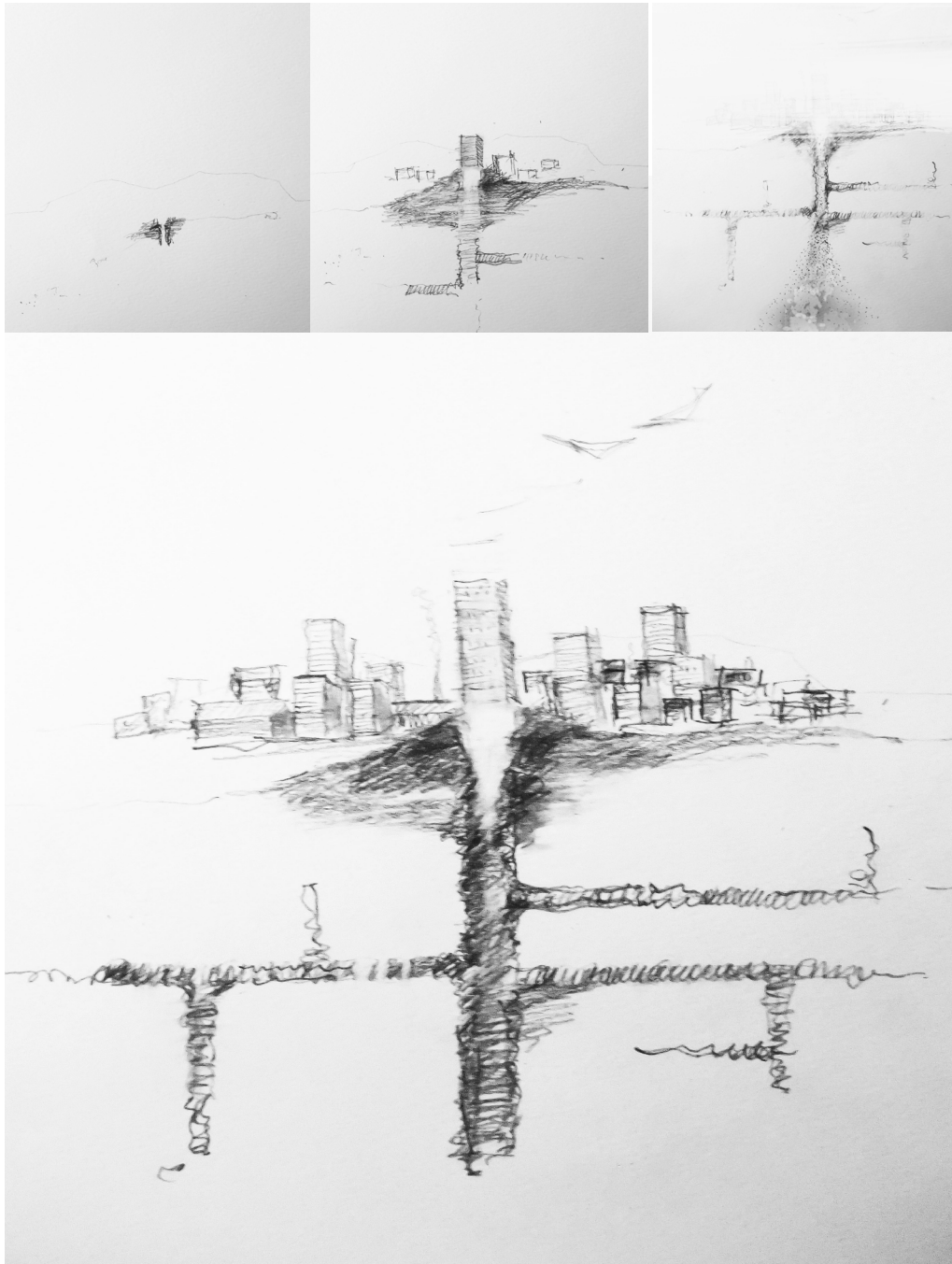
The original owners developed the site into its present form, but numerous other businesses have made use of the site over time. Its current condition suggests that it was well utilised until the current owners (developers) purchased it and terminated the existing lease agreements. The remaining buildings on the site date from the 1890s to the 1950s and consist of a series of empty and unused warehouses, workshops and a four story office building. Albeit in a state of decay, the site exists in more or less the same

form as when it was built. Remnants of mining are still visible in the vicinity, and the socio-historical development of the area can also be seen in marks left on the buildings and site.

The site is in close proximity to the M1 double level highway, the city centre, the mines and other places of historical significance. On its eastern edge, the site is hidden behind a series of low buildings, but viewed from the highway, the site's industrial nature is clear. It is currently closed off from the city and almost completely vacant. The importance of the site lies in its physical location and its potential as a heritage site, representing the convergence of mining history and everyday life.



Fig 1.7 Illustrations showing the growth of the city in relation to its underground, and subsequent potential loss of memory and meaning (Author)



1.2

Problem Statement

The challenging question about what constitutes heritage is symptomatic of the difficulty in finding identity in the South Africa of today. Although laws and regulations exist, the value of and motivations behind the preservation of the built environment are not always clear. Attempts to garner renewed interest in the CBD and Johannesburg's history focus on the grand narrative – architecturally impressive buildings and their stories – leaving out the more mundane, in-between bits. The three main problems considered in this project are site, programme and the public.

Site: The first problem is the reconnection of narrative to places that are not generally considered important sites of memory. While public activism has resulted in a slowly growing public interest in Johannesburg and its built heritage, many more stories can be told about the places and people that formed part of the city's daily existence.

Programme: The second problem deals with access to and representation of the city's his-

tory and architecture. Conservation of the built environment should go hand in hand with the preservation of its documentation. However, access to this documentation is limited, denying people the opportunity to appreciate Johannesburg's rich history.

Public: The third problem addresses public participation. The notions of public and private space have been greatly impacted by South Africa's socio-political history. Centuries of class differentiation and racial segregation, combined with a more recent fear of crime, have negatively influenced the design of and behaviour in South Africa's public spaces. However, I argue that participation in public space is essential in the creation of meaningful places, as individual and community engagement with the built environment is what gives public buildings significance.

1.3

Research Questions

The following research questions are explored in this study:

How can forgotten narratives be reconnected to place through architecture and participation?

How does architecture fulfil its role as mediator between past, present and future?

How can architecture disclose power relations and grant access to memory?

How can rituals in a public building improve associations with place?

1.4

Brief

This project aims to:

Activate the history and memories of the city through active engagement on different levels, going beyond a museum typology. This is achieved through various heritage interventions:

- Commemoration of the city's beginnings and its mining past through daily use of the Hubert Davies site
- Use of the site as an archive for the built environment, providing access to architecture and memories

Ensure that the buildings and social spaces engage with the public and facilitate the creation of value and identity

Use a popular, historical and contemporary interest in architecture to establish a renewed interest in the city

2

Historical Context

This chapter discusses the historical context of Johannesburg, Ferreirasdorp and the Hubert Davies complex, demonstrating the site's layered history. The programme is then introduced as a means to provide access to the heritage of both the city and the site.

ss.



2.1

The surface and the subterranean

In the early 1800s, the Transvaal Highveld was sparsely populated, with few trees and even fewer natural water sources. The monotonous landscape was disturbed by a series of rocky ridges which would become the source of much greater disruption than anyone could imagine. Beginning in the 1830s, after a number of alterations with the Sotho, Tswana, Pedi, Venda and Ndebele people, the 'Voortrekkers' began settling on the Witwatersrand (Callinicos 2012:50). When gold was discovered in 1886, people starting flocking to the area, staking claims all along the main gold reef. (2012:45)

Mining camps grew rapidly and incoherently, at first on land leased from farmers. In order to prevent the chaotic development that took place in other mining regions such as Barberton, the government decided to establish an official mining camp. The triangular piece of 'uitvalgrond' (left over land) previously known as Randjieslaagte, close to the main reef and between the farms of Doornfontein, Klipfontein, Braamfontein and Turffontein, became the town of Johannesburg (Van der Waal 1986).

At this point, Johannesburg was considered to be a temporary mining town, as it was expected that the gold reserves would be depleted quickly. Thus, the planning of the town was not taken very seriously. Nonetheless, surveyor J.E. de Villiers was appointed to do a formal layout of the mining town. He applied a basic grid pattern, with 300 stands of 50 by 50 Cape feet (15.74m x 15.74m) and 300 stands of 50 by 100 Cape feet (15.74m x 31.48m), a pattern that had been used in other towns in the country (Chipkin 1993; Van der Waal 1986). The city blocks were deliberately kept small, increasing the number of corner stands which paid higher taxes (Murray 2011). The city grid became a convenient measure for control and administrative purposes and a 'symbol of rational order' (Van der Waal 1986:7).

The prospectors' walking and wagon routes between the mining camps followed the trajectory of the main gold reef. Thus, it was the area's geology that determined the east-west axis of Commissioner Street and Main Reef Road, the city's two main arteries. Businesses and the major mining houses were established on this east-west axis. The diverted route between Kimberley and the capital Pretoria formed the north-south axis, and the two axes met in Ferreirasdorp (Chipkin 1993).

High gold yields led to the rapid growth of Johannesburg and Johannesburg being built up

three times before 1910. (Chipkin 1993; Benjamin 1979). The deeper the miners delved, the denser and higher the city grew. Historian Arnold Benjamin explains that 'this was a city founded on the most material basis – the lure of gold – and so its progress, more than most, has always been measured in visible, material terms' (Benjamin 1979: i). Demolitions were commonplace in order to make way for bigger, more technologically advanced structures that adequately displayed the status and wealth of the buildings' owners (1979).

Johannesburg's very existence and everything that transpired throughout its first few decades were directly related to the gold lying beneath its surface. The city's physical form and attitudes toward urban planning were not determined by the visible geography. Rather, it was the richness of the soil and the constant challenges faced in the subterranean world below that determined the shape of the city. In turn, the riches brought to the surface shaped the city's psychology.

Fig 2.2 Ferreira's camp in 1886
with tent and reed structures
in the veld (Johannesburg One
Hundred Years)



Fig 2.3 >> View west down
Marshall street , Ferreira'sdorp,
with large Robinsons tailings
dumps (Museum Africa)

2.2

Ferreirasdorp

The first mining camp developed on the farm Turffontein, where ex-soldier Col. I. P. Ferreira and J.P Meyer leased some land. This site was close to a water source – the ‘Fordsburg dip’ – and near visible outcrops of the gold bearing reef. As the road from Kimberley to Pretoria passed close by, what became known as Ferreirascamp became the first port of call for most new arrivals on the Witwatersrand. By 1887, Ferreirascamp was officially named Ferreirasdorp and recognised as a township of Johannesburg. By all accounts, it was not a very comfortable place to live. Due to its close vicinity to the open mines, the polluted and limited water sources and the overall bad living conditions, poor health and hygiene plagued the camp (Delmont 2008:43).

At first people set up temporary shelters such as wagons, tents, reed huts or mud and reed structures, but these were soon replaced by raw clay brick structures covered with corrugated iron. The most popular building material was pre-manufactured panels made from galvanised corrugated iron and timber that could be easily

assembled and disassembled as miners moved between diggings (Van der Waal 1987:2). In addition to these portable dwellings, fired clay bricks became the most common building material for more permanent buildings (Ibid.). The gold fields attracted a wide variety of people from all over South Africa and the world. Everyone came hoping to make it rich. Wealthier arrivals moved to areas such as the Northern suburbs to be further away from the dusty mines. Those who ended up in Ferreirasdorp were generally poor or not welcome in other places due to their race or class. This would set the course for the character of Ferreirasdorp for much of its life (Delmont 2008:48).

Historian Liz Delmont gathered information from the 1892-1916 Longland directories, which contained names and occupations of Johannesburg residents, to sketch the character of Ferreirasdorp. She notes that Ferreirasdorp was ‘the residential and working area of artisans, traders and entrepreneurs’. Carpenters, painters, tailors, leather workers, wagon makers, blacksmiths, farriers, butchers, grocers, builders, liquor vendors, book repairers and hairdressers lived and worked here (Delmont 2008: 59-60). People from many different backgrounds settled here for periods of time: Afrikaners, Jews, Coloureds, Africans, Indians and Chinese. The buildings that were constructed for religious or cultural purposes attest to this diverse cultural history.

One site on the corner of Marshall and Alexander streets captures the character of Ferrei-



1. **Johannesburg Central Police Station 1964**
2. Cantonese Club 1905, damaged in 1940's fire, 1950 rebuilt extant building - rest demolished in 1981
3. Mineral Water Factory 1928
4. **Transvaal Chinese United Club, Kallenbach & Reynolds 1906**
5. **Chinese United Club Mansions by W.H. Pabst 1948**
6. Hubert Davies and Co. Ltd workshops and stores since 1894
7. Bradley's Building (Bradley's Engineering Supplies) 1935
8. 2nd Bradley's Building, Eaton & Fair 1944 & 51
9. Originally on the premises Ferreiras Bar 1892; later Good Luck Bar; thereafter 'Coolie' Laundry 1894, Extant building built for Coloured School and Church 1929 by Hermansburg Mission - Owners since 1925 Converted from Church to bioscope 1951, Later Hubert Davies Store Room 1965
10. Chancellor house, restored as museum
11. **Anglo American K E F Gardiner 1937**
12. **Magistrate's Court**
13. **St Alban's Mission Church, FLH Fleming 1927**
14. Wesleyan Church
15. Mia's Building
16. Selby hostels

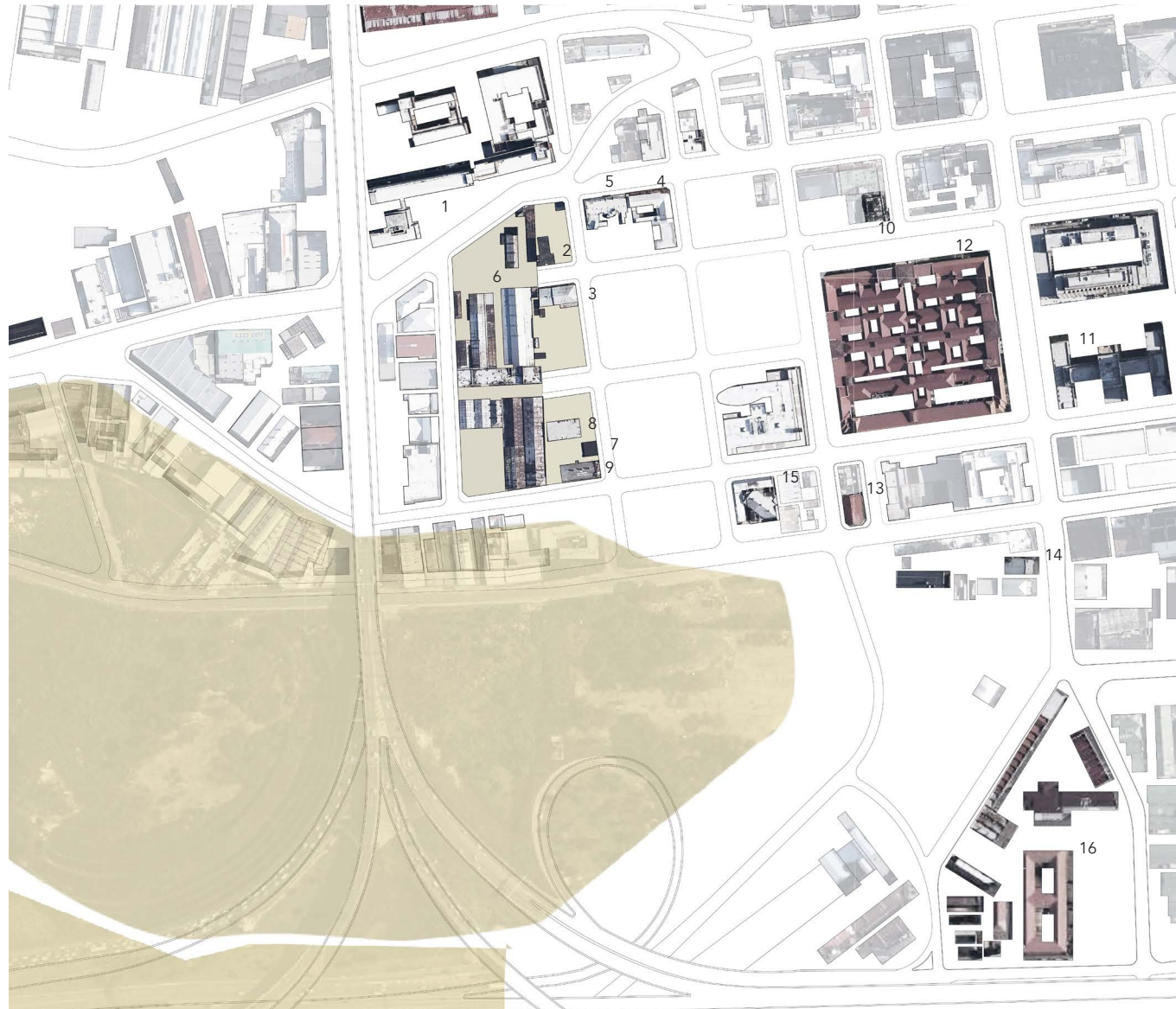


Fig 2.4 Diagram showing places of historical interest, annotations in bold indicate buildings that are still used for their original purpose.

Fig 2.5 >> Wesleyan Church
(Author)

rasdorp through its successive uses. According to the earliest records from 1892, stand no 230 and 231 was first occupied by 'Ferreira's Bar', after which it became the 'Good Luck Bar' and then a 'native eating house'. In 1894, it was used as a dwelling, but by 1903 it was a 'coolie laundry and dwelling'. The buildings on the site were demolished sometime before 1910, and by 1925 the Hermansburg Mission had erected a structure that served as a 'Coloured school and church'. By 1951, this same building housed a bioscope that served the Indian community, and upon special application it also accommodated an African market. By 1965, Hubert Davies and Company owned the site and had altered the structure to serve as a storage facility (Delmont 2008:13-15). The building has remained a storage facility and is currently being used to store construction materials used for infrastructure upgrades in the area. The extant building on the site is the one that was erected by the Hermansburg Mission, although its façade and interior were altered when it was converted into a bioscope.

Of the many different groups that settled in Ferreirasdorp, the Chinese community sustained it for the longest time. In 1904, there were about 912 Chinese migrants in the then Transvaal. The Cantonese-speaking Chinese people who settled in Ferreirasdorp were mostly 'free', as opposed to the indentured Chinese miners (Musiker & Musiker 2000:86). They established schools, shops and businesses as well as social and political clubs. Although it was difficult for Chinese, Indian and African people

to own property, some Chinese residents of Ferreirasdorp managed to register land in a representative or trust's name and over time they acquired the land rights.

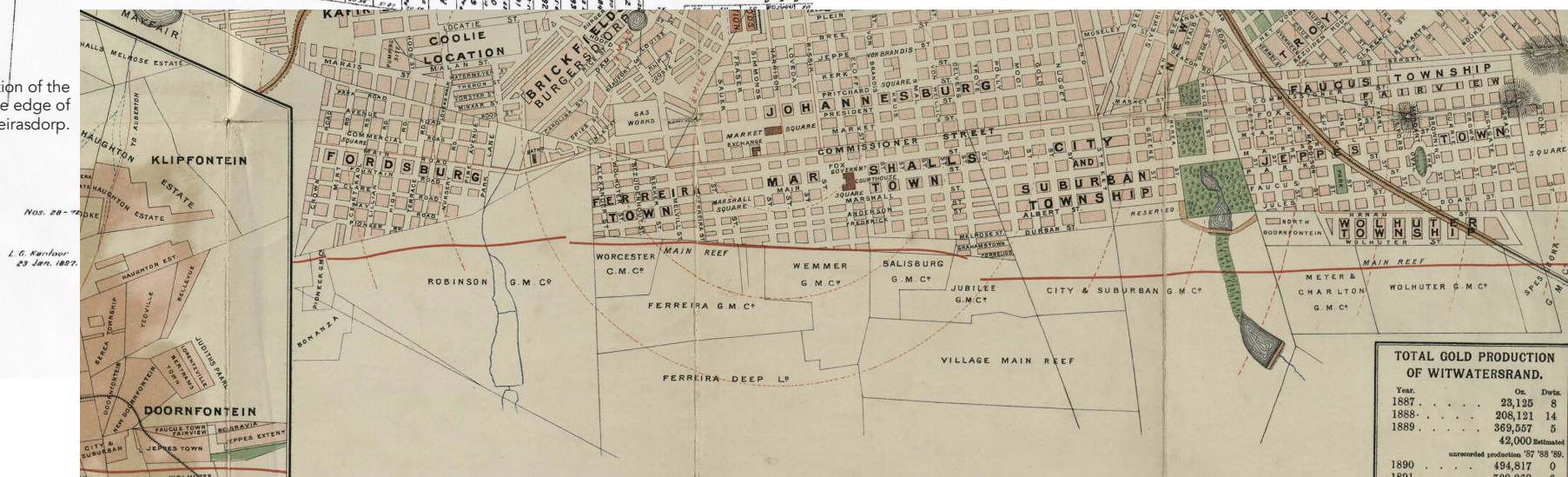
The Cantonese Club, designed by Allan Wilkie, was built on the corner of Fox and Alexander streets in 1905, while the Transvaal United Chinese Club, designed by architects Kallenbach and Reynolds, was built between 1906 and 1909 on the corner of Commissioner and Wolhuter streets (Delmont 2008:70-72). Both of these served as social clubs and lodging and meeting places for Chinese people in the Transvaal, and they played an important role in the Chinese passive resistance that worked alongside Ghandi's Indian passive resistance movement (Itzkin 2000:47). In 1940, the Chinese United Club acquired the property next to theirs and constructed the Chinese United Club Mansions, which was designed by W.B. Pabst and later declared a national monument (Ibid p.19)

In addition to the buildings, restaurants, shops and delis constructed and run by the Chinese community, their annual festivals also coloured the area. The most well-known was the Chinese New Year festival, which was a popular attraction and contributed greatly to the character of Ferreirasdorp. Unfortunately, due to degeneration in the area, most of the Chinese community have moved away, some moving their business to the other well known Chinese precinct in Cyrildene. (Savage & Dodd 2009)





Fig 2.6 The location of the leased property on the edge of Ferreirasdorp.



2.3

History of the site: Hubert Davies & Co. Ltd

Robinson Gold Mine was established in 1886 after J.B. Robinson, at the time involved in the diamond fields in Kimberley, saw a sample of gold ore from the Witwatersrand. With a loan from mining magnate Alfred Beit, Robinson acquired numerous claims on the Witwatersrand. It is possible that Ferreirascamp was originally located on one of these claims but then moved east when the land was made available for mining. In 1894, Hubert Davies & Co. 'leased land (registered as Mynpacht no 349) from Robinson Gold Mining Company to set up their workshops and stores' (Delmont 2008:2). This leased land was adjacent to the mining area and on the western side of Ferreirasdorp.

John Hubert Davies had he became responsible for much of the electrical and mechanical innovation and installation in Southern Africa until his death in 1919' (Orpen 1966:2). Due to the tedium and expense of importing equipment, Davies began to diversify his business by designing and manufacturing parts and machines that were needed on the mines. Beginning in 1896, Hubert Davies & Co. moved some of their

workshops to the Ferreirasdorp property of no.1 Main Street Johannesburg, and some of their offices were subsequently erected on the site as well.

The workshops closed in 1899 at the outbreak of the second Anglo-Boer War and were used as ammunitions storage, but business reopened when the war ended (HUDACO catalogue 1956). After a short post-war recovery period, the business started growing at a consistent pace. In a short history published in the 1956 company catalogue, it is written that 'additional ground was acquired on the Robinson site and to-day the Company has modern workshops, offices and stores occupying a considerable area from Marshall Street to Commissioner Street in Johannesburg' (HUDACO catalogue 1956:1).

Occurrences in Johannesburg inevitably had an effect on the city's businesses. After World War I, economic pressure spurred labour unrest, 'starting in the building trade and spreading through council and municipal work to the mines - which flared eventually into a full-scale labour up-rising' (Orpen 1966:23).

'While not as badly hit as some companies, Hubert Davies could not evade the '22 strike entirely. Once again bullets clanged and ricocheted into the works and stores in Main Street, and some damage was done to the offices by riot-

ers. Most important, a number of "shops" men knocked off work to join the strikers, customers couldn't take delivery because of the transport collapse and work stoppages; supplies were scarce and turnover faltered'. (Orpen 1966:25)

Looking at the site today, one can see the effects that Johannesburg's past has had on the crude industrial landscape. The buildings' typology, additions, alterations and order are the result of pragmatic decisions made at various points in time. Construction methods and building styles are the most obvious indicators of time period. The oldest building is a timber structure with a corrugated iron façade on one end and a masonry wall on the other, with steel extensions that were added later. The newer buildings on the site make extensive use of structural steel. The response after labour unrest was to expand, as a 'particularly gratifying surge of demand largely made up' for work and profits that were lost. 'To cope, the workshops were extended to cover 2 ½ acres' (Orpen 1966:25), an office block was constructed and warehouse additions were made between 1922 and 1937. The office building is a typical Edwardian post-war office block with a precast concrete frame.

As the company grew, it built a new office building known as Hudaco House on the corner of Rissik and Frederick streets. This building, no 7 Rissik Street, now has heritage status and hous-

Fig 2.7 An illustration of Robinson Deep Gold Mine (University of Pretoria Archives)



Fig 2.8 Looking West, between Fox and Main streets. The magistrates court is in the foreground, the Hubert Davies site in the middle and mine tailings in the back (Museum Africa)



es the National Union of Mineworkers (NUM) (Orpen 1966:29). The workshops in Ferreira'sdorp were eventually vacated in the 1970's as the company's manufacturing division moved to larger premises in the east of Johannesburg.

In sum, the history of Johannesburg is interlocked with that of the gold mining industry. Ferreira'sdorp's past, in turn, is interwoven into the larger story of Johannesburg. The Hubert Davies site in particular is a place where Johannesburg's mining history converges with the stories of the ordinary people who made the city. This layered history makes Ferreira'sdorp the perfect area to facilitate the recall of memories from the past while at the same time celebrating the Johannesburg of the present.



Fig 2.9. Hudaco company workshops and facilities as pictured in the 1950s (HUDACO catalogue 1957)

3

Proposed programme

This Master's dissertation proposes that the Hubert Davies site be converted into an Archive for the Built Environment of Johannesburg. An alternative approach is suggested – a commemorative architecture that is neither monument nor spectacle. The programme would ensure the conservation of the site while also facilitating access to its history through public participation and use. The combination of programme as and site is tautological in that the programmatic insertion is essentially a reiteration of the intervention that will occur on the site. Thus, the archival information becomes tangible. The archive's site and programme enable it to play an important role in reminding the city of where it comes from.



Fig 3.1 Public space upgrades by the city and private investors has lead to improved pedestrian walkways and informative signage in parts of the city. (Author)

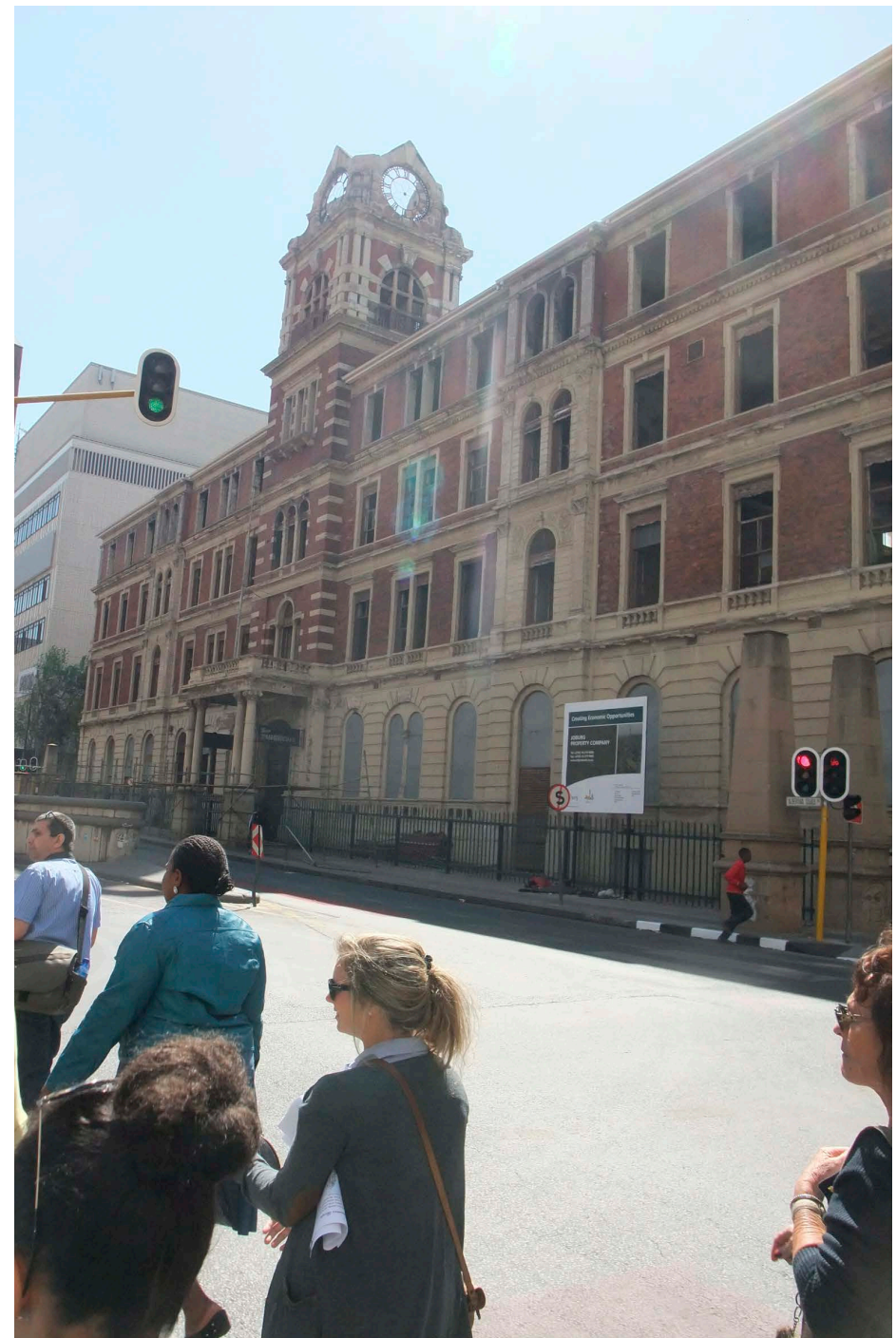


Fig 3.2 A heritage tour through the inner city in heritage month (September), stops to recall some interesting facts about the old post office (Author)

3.1

Programme Background

3.1.1 Johannesburg's heritage

There is a growing public and institutional awareness of both the value of Johannesburg's heritage and the challenges entrenched in dealing with the city's past. However, the institutions that manage heritage in the city are not fulfilling their mandate successfully.

The Provincial Heritage Resource Authority, Gauteng (PHRAG) is responsible for heritage in Gauteng province. Although its actions are governed by the comprehensive National Heritage Resource Act (NHRA), the PHRAG does not adequately carry out its responsibilities. According to heritage consultant Herbert Prins, 'it is common knowledge that the PHRAG is in disarray' (2013:1). Prins demonstrates the severity of the problem by identifying more than 60 sections of the NHRA that are not achieved. Some of the problems include poor management, lack of an official presence, weak organisational structure, issues in terms of human resources and budget and no communication with the public. Furthermore, there are no regulations or grading systems for heritage in the province even though

this is supposed to be compulsory, and political interference has occurred on more than one occasion (Prins 2013).

In spite of the practical difficulties related to the provincial heritage board, interest in the city's heritage has grown. Inner city rejuvenation efforts and tax incentives have led to a great number of building renovations and public space improvements, showing promise for more challenging heritage projects in the future. In addition to government and private interventions, virtual forums are also attracting public support and interest in the city's heritage.

There have been multiple efforts to commemorate the history of Johannesburg, each taking a different approach. Gold Reef City is a heritage theme park that is more spectacle than commemoration. Main Street Mall commemorates the mining history in the Ferreirasdorp area, but is a rather static installation of objects and signage. A number of heritage sites with emotional content have been developed over the last 15 years to commemorate important events in the anti-apartheid struggle. Walter Sisulu Square in Kliptown, Soweto is a well known example. Unfortunately, this site is experienced as contradictory, as the architecture overwhelms the important event that is meant to be commemorated there. Thus, although there is an obvious drive to commemorate a suppressed history, a lot of resources are spent on the representation of static narratives rather than on the facilitation of living memory.



Fig 3.3. Gold Reef City theme park and casino development, where the heritage element, in the reconstructed mining town is vastly removed in its perfectly painted white corrugated buildings, from the dusty reality of the mining towns. Also, this part of the theme park is never really functional, so it has become really just a theme park. (Johannesburg Land Company)

Fig 3.4. The Johannesburg central library has a documentation on the city and a comprehensive africana section, but storage facilities are not ideal.
(Author)



3.1.2 Documentation of the City

The Johannesburg City Council has the biggest collection of architectural documentation in the country, as copies of all planned construction, demolition and alteration must go through the council for approval. The public is allowed access to documents for a short time, after which copies may be requested. However, the current storage facilities and method of documentation are not conducive to the preservation of these architectural documents. Storage facilities are disorganised and materials are often misfiled, rendering them lost to the potential user. There is no consideration of the value or condition of the documents, and many have been damaged as result of being handled by the public and staff.

The Johannesburg city library also has a section for building plans. When possible, plans are protected and stored on hangers, but these storage facilities are also not well organised. Professional historians have commented that on a number of occasions, they have come across materials that the library didn't even know they had in their possession (Läuferts le Roux & Muindisi 2013). In addition to the City Council

archive and the city library, Johannesburg has a few privately managed libraries that make an effort to restore and store documents correctly. The Brenthurst Library even has its own book restoration facility.

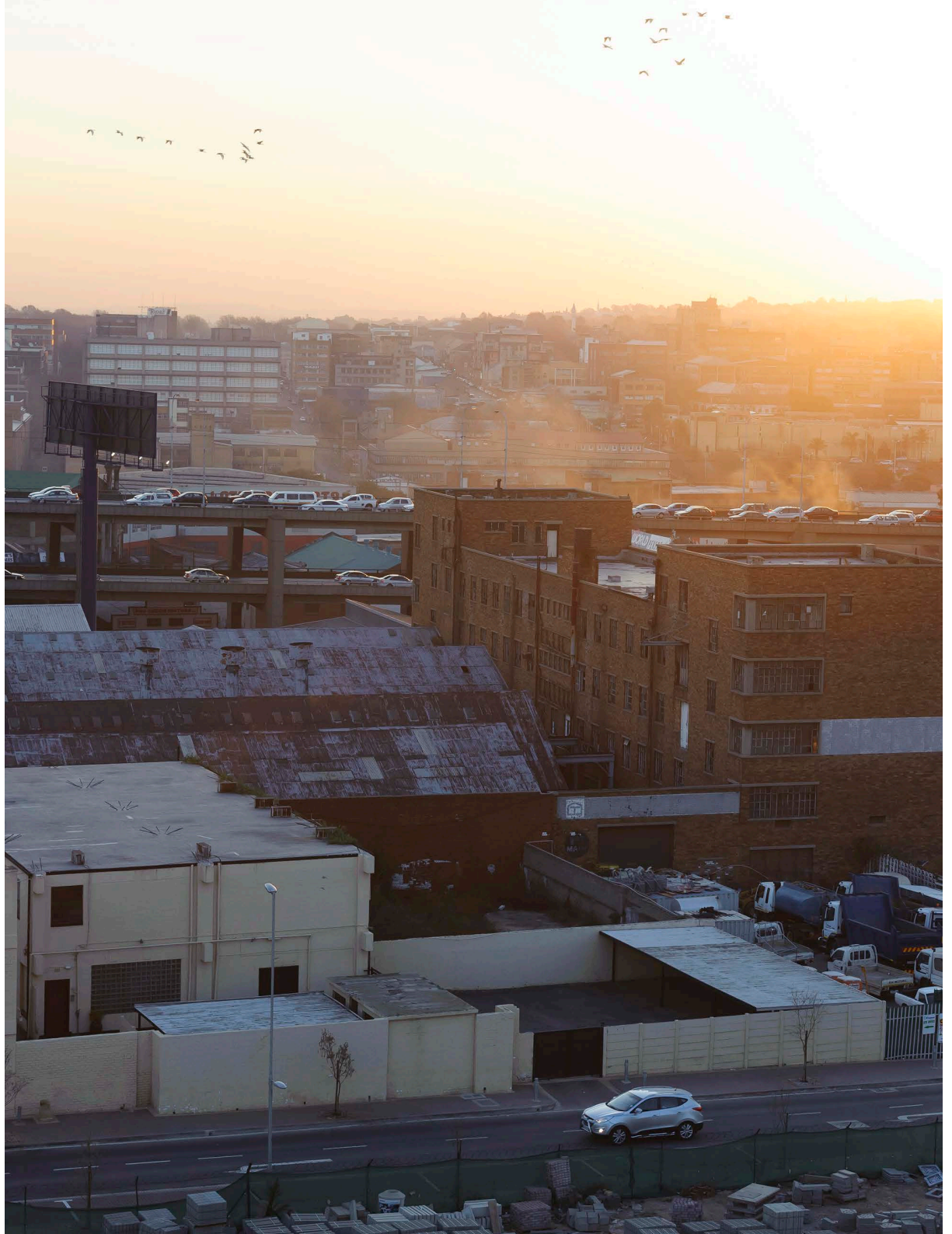
Academic institutions often hold invaluable, near-complete collections related to an individual architect or an architecture firm. The University of Pretoria, the University of the Witwatersrand, the University of the Free State, the University of Cape Town, the University of KwaZulu-Natal and Nelson Mandela Metropolitan University all house small archives of architectural collections. These university collections sometimes receive donations from public institutions which lack the space and expertise to store their materials properly. On occasion, members of the public also donate documentation to organisations such as the Gauteng Institute for Architecture (GIFA), the representative body for architecture in the province. The architecture library at the University of the Witwatersrand, for instance, has received crumpled, mouldy documents retrieved from the organisation's basement when they moved to new offices. These documents had been damaged before they were given to GIFA, and GIFA did not have the facilities or means to repair or store them. (Johnson 2013)

As evident in the description above, there is no single repository for documentation of the built heritage of Johannesburg. Even more problematic is the lack of an amalgamated catalogue of information about the city's architectural history.

Countries in the developed world often have institutions which act as centralised architectural repositories, for example the Royal Institute for British Architecture, the Canadian Centre for Architecture and the Netherlands Architecture Institute. But nowhere on the African continent is there an institution that fulfils this role. (RIBA; NAI; CCA)

The hodgepodge assemblage of facilities that contain architectural documentation in South Africa do not have the means to restore and conserve the documents. Furthermore, not all of these facilities are accessible to the public, while those that are accessible are often poorly organised, hampering access to information. Finally, these facilities usually lack comfortable working conditions, a public interface and relevance to the average resident. Although much of the documentation pertaining to the built environment is protected under the National Heritage Resources Act (NHRA) (Act No. 25 of 1999) and the National Archives of South Africa Act (Act No. 43 of 1996), the fact that the documentation is spread out over numerous institutions makes the implementation and enforcement of the aforementioned acts close to impossible.

Fig 3.5. The re-use of a large site like this would allow the bustling city life to pass through and not simply around the site. (Author)



3.2 Practical Implementation

The programmatic response thus deals with issues that exist around heritage in the city on different levels. Programmatically the archive would facilitate access to architecture and the history of the city while the site would physically enable people to interact with this architectural heritage. The implementation of the programme happens on a practical and a conceptual level in the following ways:

- The reuse of the site would become part of a heritage strategy that demonstrates the value of industrial buildings for the history of the city
- The intervention would open up dead space to public use, and add value to current attempts to rejuvenate the area
- A process would begin to develop a centralised collection of documentation of the built environment
- The archive would be a public building, a non-commercial node, a room in the city
- Research, reading, film, exhibition and lec-

ture facilities would provide a public service to the residents of Johannesburg

- A number of free educational and entertainment activities will be available for the public
- Heritage restoration training would result in valuable artisanal skills necessary in the conservation of the city's heritage
- Office space will be provided for businesses and public associations related to the built environment in close proximity to the archives and other relevant supplementary services

3.3 Conceptual Implementation

- Re-use of the site as a public building would contribute to place-making by making the intangible aspects of the site accessible to the public
- The commemoration of the site's heritage will promote an understanding of the city's history, provide insight into the surrounding area and instil a greater sense of belonging
- The preservation of and increased access to architectural documentation would lead to an understanding of the city and build a foundation for imagining how the city can be improved in the future
- The site will help to inspire children, professionals and clients of the built environment and promote a high standard in the industry

4

Theoretical Approach

The theoretical section begins with a discussion of “the everyday” – how mundane architecture can be rich in meaning and act as a valuable historical reference. Three industrial sites of socio-historical value are provided as case studies, namely the Newtown Mills, Piel’s Cold storage and the Top Star dump. Thereafter, notions of remembering and forgetting are explored by means of the public reaction to the demolition of one of these sites. This then leads to a discussion of tangible versus intangible heritage and what this may mean in Johannesburg. Together, these three concepts – the everyday, memory and heritage – inform the heritage strategy proposed for the site and the archive.

Fig 4.1. Daily life of a factory worker on a production line making tin cans. (Museum Africa)



Fig 4.2. Daily life in the city, men waiting at a bakery to get fresh bread for resale or consumption. (Museum Africa)



Fig 4.3. Daily life in the city, people on the sidewalk in Commissioner Street. (Museum Africa)



4.1

History of the Everyday

It is important that we begin to see that the heritage of Johannesburg is not only in the grand narrative of the city of gold but also in its many sub-plots. It is in the everyday rather than in the big events that more people are represented and a richer understanding of the city can be acquired.

The French philosopher Henri Lefebvre is credited with popularising the idea of everyday life – that which is ‘banal’, ‘ordinary’ and ‘routine’, ‘grounded in the commonplace rather than the canonical, the many rather than the few, and the repeated rather than the unique’ (Crawford 1999:8-11). The everyday is typified by the repetitive life of a factory employee, who is faced daily with the same tasks, in the same order, in the same space. Lefebvre writes that ‘the everyday is situated at the intersection of two modes of repetition: the cyclical, which dominates in nature, and the linear, which dominates in processes known as “rational”’ (Lefebvre 1987:10). In other words, Lefebvre suggests that although

there is constant repetition in the ‘everyday’, it is in the nature of time to eventually cause change (1987).

According to Crawford, everyday life takes place in everyday space (1999). Lefebvre wrote that all space is social, and this is the basis on which capitalist consumption has come to infiltrate everyday life. The notion of ‘capitalist consumption’ refers to the ‘dominant mode’ of control or representation in society. Lefebvre simultaneously criticises and praises everyday life, for he asserts that it is in the everyday spaces that the ‘dominant mode’ of capitalist consumerism may be resisted. This paradox is also put forth by Guy de Bord of the Situationists movement. For both de Bord and Lefebvre, the everyday represents both harsh reality and utopia; it is a place of ‘struggle’ as well as a place of ‘potential’ (Goonewardena 2008:130; Till 2009:139)

Lefebvre proposes that there are different ways in which we understand and essentially make space. Thus, how we conceive space is different from how we perceive space. ‘Conceived space’ (representations of space) refers to the measurable, abstract space of the plan – the idea of space (Elden 2004:181). ‘Perceived space’ (spatial practice), on the other hand, is that which is concrete or physical – used space (Elden 2004:181; Lefebvre 1991:38-39; 369). Lefebvre then adds a third term: ‘lived space’ (representational space) – ‘space as directly lived through

its associated images and symbols’ (1991:39), socially produced space that is ‘changed and appropriated by the imagination’ (Bremner 2010:32). Although these concepts are interrelated, everyday life is most associated with ‘lived space’. Constructed in people’s minds along with its appended symbols and meanings, ‘lived space’ can be the basis for struggle or resistance and can provide us with other narratives of the city.

In his book *New Babylon New Nineveh: Everyday Life on the Witwatersrand 1886-1914*, historian Charles van Onselen ‘illustrate[s] a few of the ways in which the world the mine owners made affected the lives of some of the ordinary people on the Witwatersrand’ (1982:3). This social and economic history of Johannesburg’s earliest years focuses on ‘everyday life’. Van Onselen speaks of distilleries, the transport industry, brickfields and service industries such as domestic services and prostitution. Although there is now little trace of the liveries, iron workshops, distilleries and grain storage facilities that can be seen on the old fire insurance maps of the city, some of the larger industrial sites that were on the outskirts of town still exist. These industries are intricately connected to the gold mining history of Johannesburg, but the stories of the people involved sketch a much denser history of the city.

4.1.1

Building Stories

‘Why wouldn’t the concept of everydayness reveal the extraordinary in the ordinary?’

Henri Lefebvre (1987:10)

The stories that follow are of a few industrial sites in the city that became the settings for the everyday lives of ordinary people. These stories illustrate how these and other industrial buildings can serve as memory devices through which to know the city.

The process of investigating these three sites doubled as participatory research in preparation for the architectural design problems of the archive. In addition to affording an understanding of archival space, relevant processes and problems, and information on the buildings in question, this experience also provided insight into the multiple links between the city’s narratives. Through ‘conceived space’ (representations of space in plans, photographs and descriptive texts) and ‘perceived space’ (as experienced during site visits), one moves closer to an understanding of ‘lived space’ – the meanings and associations that exist or could exist around such sites.

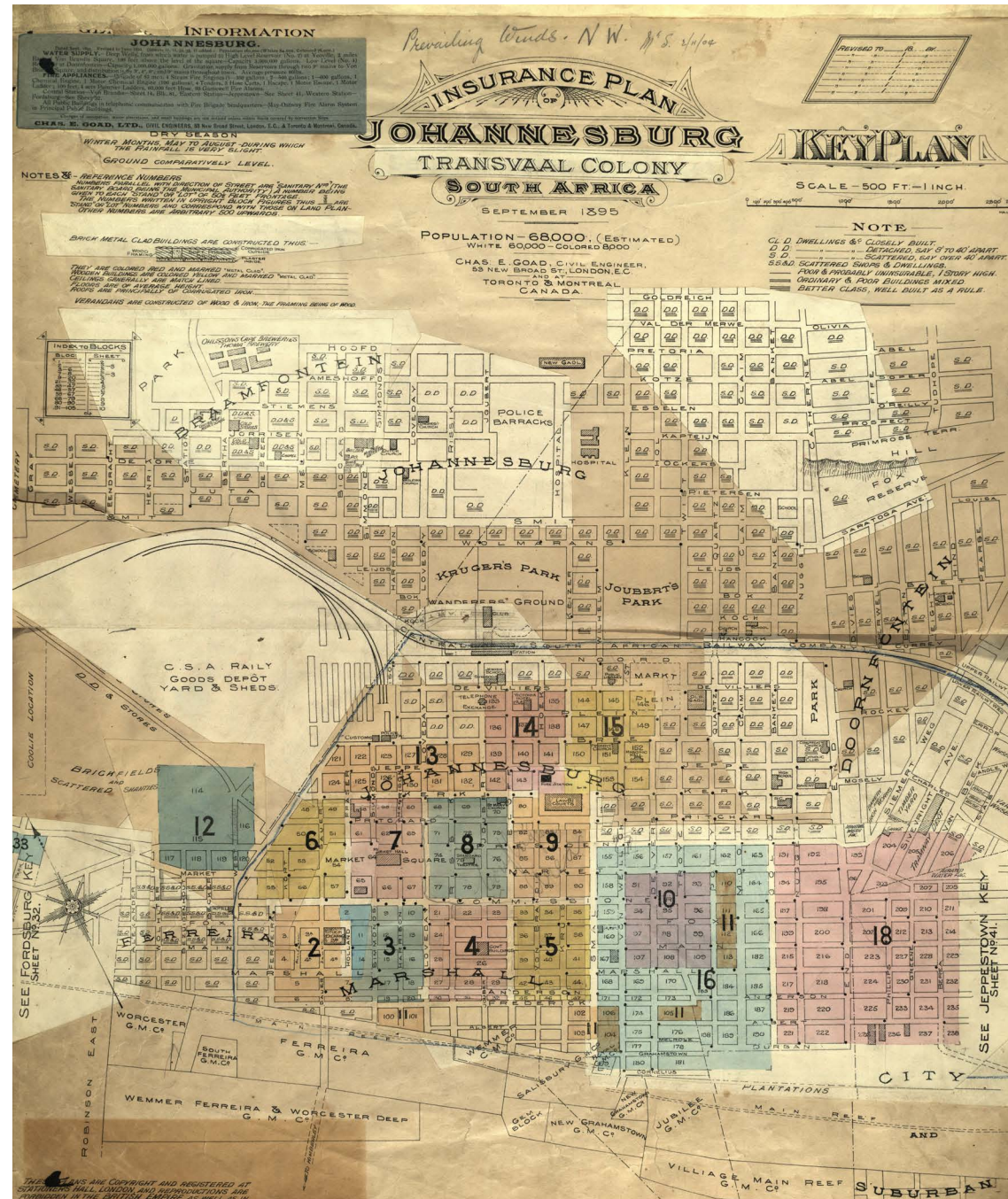


Fig 4.4.
Johannesburg Insurance plans. Goad, C.E. 1895-1910.

Fig 4.5. Price candles in the background, and the two buildings constructed for Joffe Marks' Premier Milling Company in the foreground.
(Author)

Fig 4.6. Location Newtown Mills Aerial photograph, western part of Johannesburg and the M2.



Newtown Mills

Joffe Marks came to South Africa from Lithuania in search of a better life. His descendant Georgina Jaffee wrote in *Joffe Marks, A family memoir* that Marks started out in the Eastern Cape but soon heard of the discovery of gold on the Witwatersrand. He made his way to Ferreira's camp, where he began buying food from farmers at the market and selling it to those working on the mines, often sleeping on stock to protect it from rats and robbers. His business was listed in 'The Witwatersrand Directory and Mining Guide' of 1888 as 'Jacobson & Marks, Produce Dealers, Commissioner Street'. Marks went on to become a produce broker and his business expanded rapidly. He managed to remain in business during the Second Anglo-Boer war, and after the peace treaty was signed in 1902, Marks started his business called 'Marks Limited' (Jaffee 2001).

Early 20th century Johannesburg was characterised by a sense of 'optimism that anticipated the expansion of mining in southern Africa – and thus the growth of related industries' (Jaffee 2001:89-90). In 1904, the area designated

by the government as the 'Coolie Location' was burnt down after being declared unsanitary (Brodie 2008). Marks purchased some of this land, and by 1910, after acquiring milling companies in Fordsburg and Germiston, he planned the development of the Newtown Mill. By 1913, Marks' acquisitions were amalgamated into Premier Milling (Pty) Limited. In this same year, the Natives Land Act was passed, ostensibly to 'increase the supply of farm labour' and improve the production of maize on farms (Jaffee 2001:90).

The development of a power station, mills and a market led to Newtown being 'the first area in Johannesburg to be given industrial status' (Jaffee 2001:107). Between 1915 and 1925, the Premier Milling Company was affected by World War I, industrial disputes, miners' strikes and the Native Urban Areas Act (1923). Some property was damaged in the strikes, and the company was forced to coerce labourers to move into compounds. Nevertheless, the Premier Milling Company managed to finish the second phase of the Newtown Mills and commission two more

Fig 4.7. The silos have been appropriated by the city through signage and graffiti. (Author)

Fig 4.8.>> The Mills@Newtown as an attractive office space. (Author)



mills during this time period (Hancock 1994 in Jaffee 2001).

The Newtown Mills closed in 1994, but the business started by Marks still exists today as Premier Foods, and it is one of the leaders in the industry. With the construction of the M1 highway, the Mills were split from eastern Newtown and fell outside of the area that was developed as a cultural precinct. This helped to better preserve the character of the area, but it also made it less attractive to investors. The Mills were purchased and restored as a multi-purpose development. As loft-style offices, the Edwardian style building has kept its character on the outside, but steel finishes have been subtly added to the new doors, gates and windows. The large interior spaces are adaptable depending on the tenants' needs. Unfortunately the area has gone through an economic slump due to the recent global financial crisis.

The story of the Newtown Mills can be read as the tale of an ordinary individual who found a place in South African society and left quite a legacy. At the same time, it can also be read as an historical account of South Africa through the many important events that are connected to the site where the mills still stand. The story is also about a growing city, the milling industry and entrepreneurship. The tale is further interwoven with the socio-political and economic history of

Johannesburg – the industrial booms, wars, labour unrest, forced removals and segregation laws. The relative distance of the Mills and other extant industrial buildings from the commercial centre of the city also tells the story of the city's spatial development – the segregation, spatial barriers and high pace of development. And the narrative continues even to this day, showing some of the struggles of inner city rejuvenation efforts.

The Mills and their accompanying silos are familiar structures. They are monumental but at the same time somewhat camouflaged, as they blend into the industrial landscape; grass does not have to grow over something for it to become so commonplace that it is not noticed by passers-by. The re-use of the Mills has made the stories surrounding it slightly more public, adding a layer of meaning to this part of the city. History is complex, layered and constantly changing. But this complexity is condensed and made tangible through objects or buildings that act as symbols, as points of reference that connect one moment in the present to many in the past.

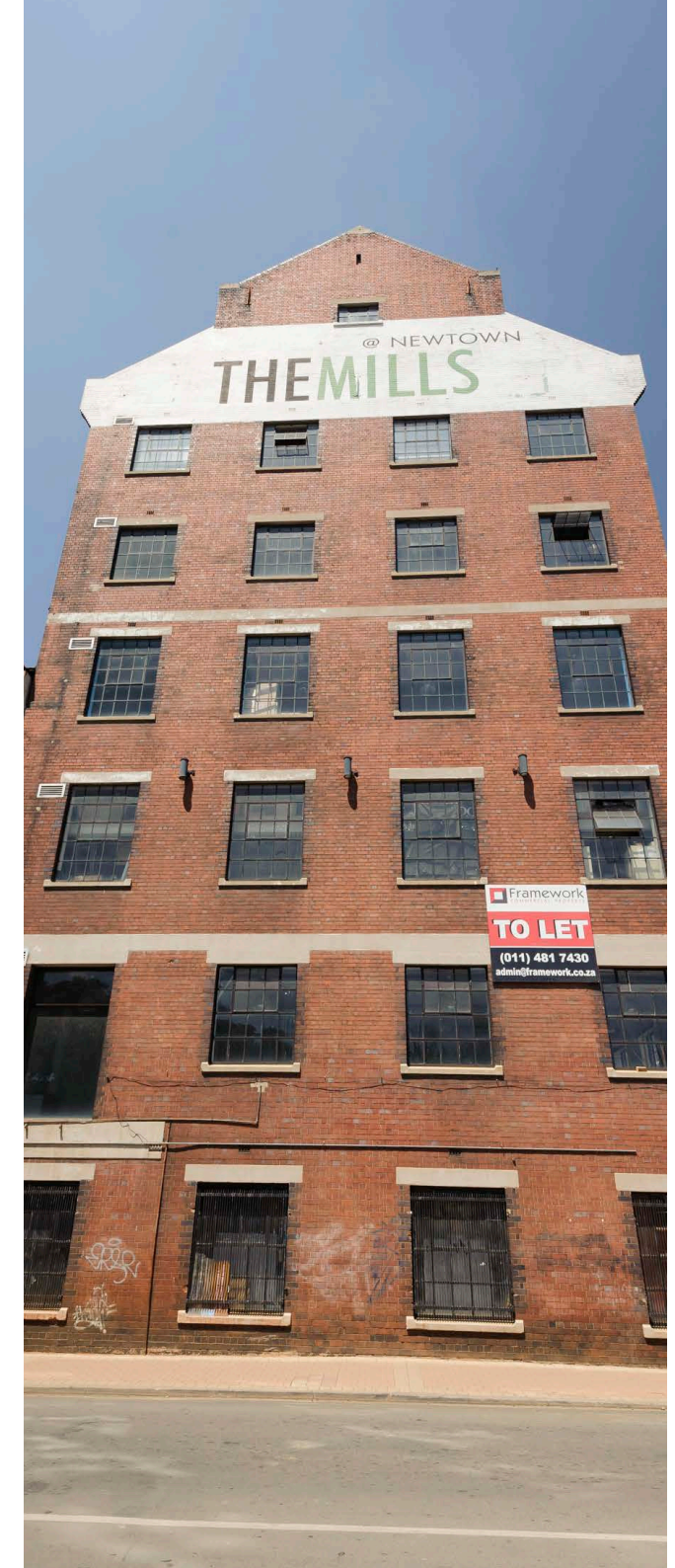


Fig 4.9. Photograph of exhibition, Bensusan Museum of photography, David Goldblatt image of Piel's building. (Author)



Fig 4.10. Location of original Piel's building, Aerial photograph, western part of Johannesburg and the M2.



Fig 4.11 Elevation of the Piel's building, Theophile Schaerer n.d.

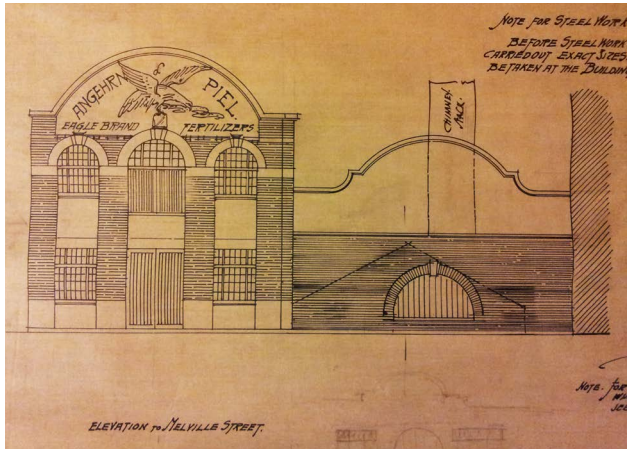


Fig 4.12 Elevation of the Piel's building, Theophile Schaerer n.d.

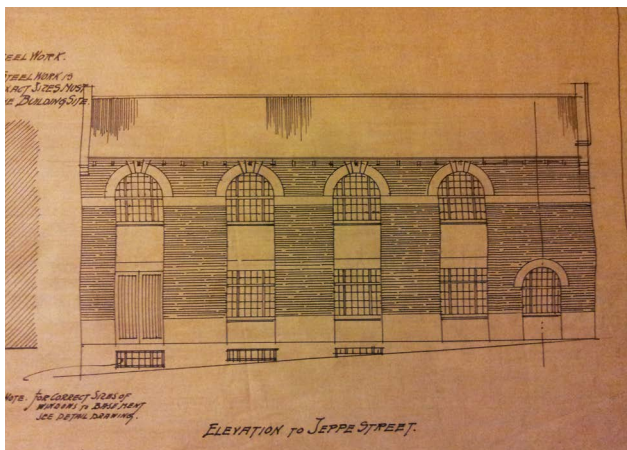


Fig 4.13 >> Mills Groundfloor Plan, Theophile Schaerer n.d.

4.1.1/b

Piel's Cold Storage

Piel's cold storage building was designed by architect Theophile Schaerer on a corner stand in Newtown. Schaerer's most well-known building in Johannesburg is the Wolmarans Street synagogue, but he also designed numerous industrial buildings including cold storage facilities like this one, power stations and one of the iterations of Premier Mills. Although the building itself no longer exists, a company with the same name operates from an office at no.93 Jeppe Street close to the original site on the corner of Jeppe and West. (Mark Scheerer, an architect and great grandson of Theophile Schaerer, showed the author drawings for Piel's Cold Storage. A few days later, the author came across this graphic black and white photograph taken by David Goldblatt that was on exhibition at the Bensusan Museum of Photography in Newtown.

The photograph captures the building beautifully, enabling the viewer to catch a glimpse of Johannesburg's past. An aerial view reveals the structure's location, size and protruding chimneys, confirming its industrial nature. On the

other hand, the decorative rounded parapets on the façade and the arched window details on the façade and elevation are rather distinct, as they are more characteristic of a Cape Dutch or missions revival style than a cold storage facility. Perhaps it was this juxtaposition that caught Goldblatt's eye.

While this one building does not provide a general historical overview of Johannesburg in the same way as the Newtown mills, it tells a more specific story. The realisation that this structure – captured in an image in a museum – was a real-life building in Johannesburg that provided a very necessary service creates a sense of place. This sense of place is enhanced by the fact that the business itself still exists, albeit in a new building. A photograph combined with a geographical reference provides a tangible and meaningful memory of the past. The extant signage for 'Piel's' at 93 Jeppe Street may seem insignificant, but even such a small reference adds to this particular story of the city.

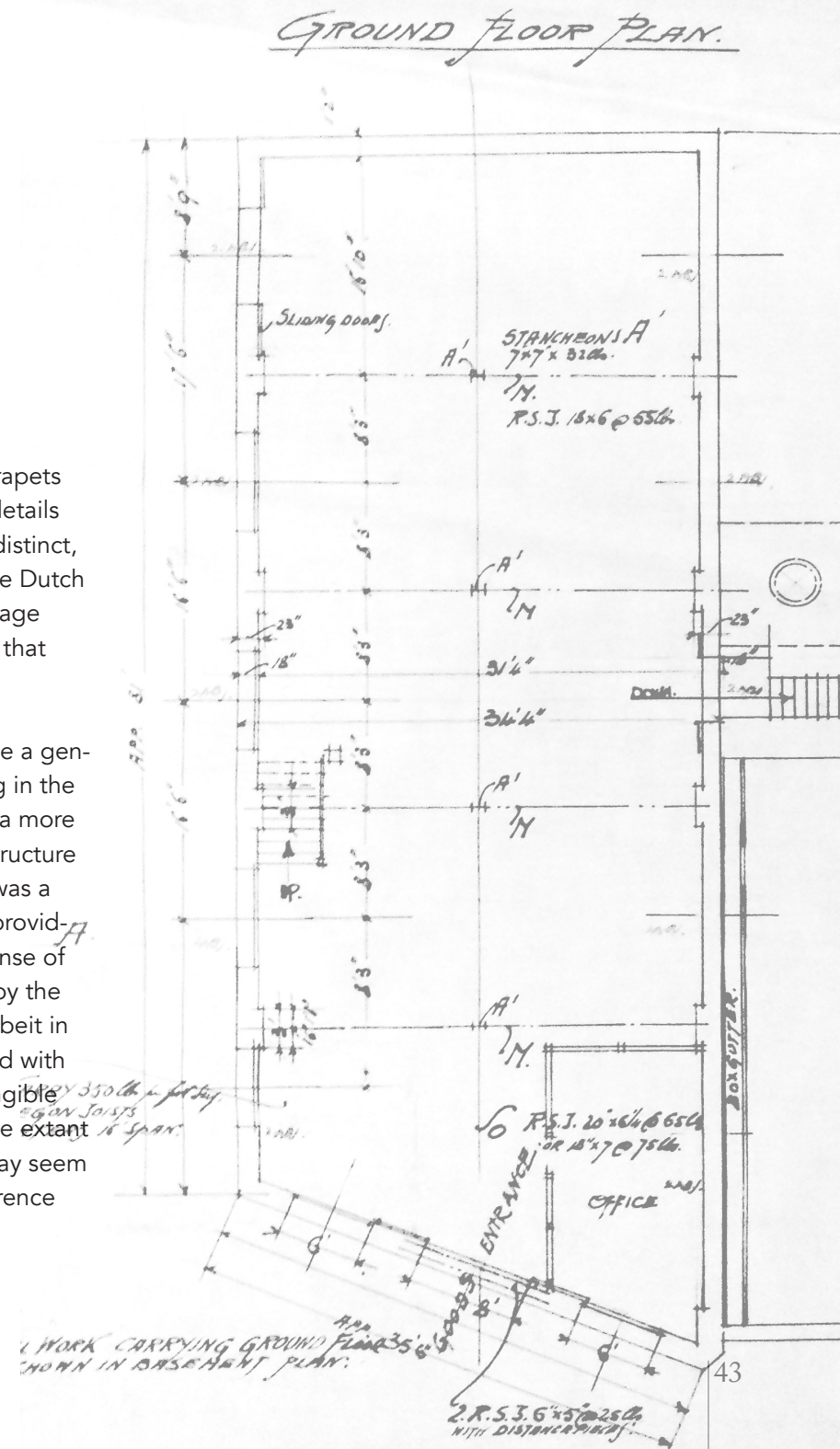


Fig 4.14. Eroding Ferreiras
tailings dump, March 2013.
(Author)

Fig 4.15. >> The excavation
at Ferreiras/ Top Star tailings
dump. Looking west towards
Brixton March 2013. (Author)



4.1.1/c

Top Star

'Joburg is full of stories of erasure. The mine dumps and the drive-in are symbols of this. It's a transitory place and a tough place driven by the pursuit of wealth. And what remains often is just memories' Sally Gaule in an interview with The Star (Ho 2012).

Top Star Dump, known before the establishment of the Top Star Drive-Inn as the Ferreira Dump, was started in the later part of the 19th century. This makes the parts of the dump older than a hundred years and is classified as archaeological, Section 2.2 (a) of the NHRA (Fourie & van der Walt 2006:33).

Ferreira's dump is one of the first man-made structures in Johannesburg. Like many others, the dump has been almost entirely built over, swallowed by the city and appropriated in more than one way. The Top Star drive-in theatre operated here for 48 years, closing just a few years ago. Some people built informal dwellings on the dump and made it their home, while to many others it was an iconic heap of sand that reminded them how much mining is a part of Johannesburg's history. It is not only the

Top Star Dump that carries meaning for Johannesburg residents. Other massive mine dumps that form a barrier and gateway between Johannesburg and Soweto also evoke emotional responses as they are re-mined and contested. These dumps are landmarks that characterise the city, and their images have been used in many books, brands and publicised images which attempt to express the essence of Johannesburg.

'The mine dumps are things of terrible beauty; of course they are probably toxic and are an environmental hazard. But some of us have this irrational love for them; it's the paradox of Joburg.' Sally Gaule in an interview with The Star (Ho 2012).

The Ferreira Dump contains the waste from the Ferreira Deep gold mine. The dump has existed since 1899. The Ferreira Deep mine was part of Ferreira gold mines, which was liquidated in 1929, causing mining operations to cease. In the 1940s, the Ferreira Estate Company Ltd, which then owned the property, attempted to obtain development rights for a residential township, but eventually an Industrial Stand Permit was granted instead (Fourie & van der Walt 2006).

Some industrial development on the site took place in the late 1940s, but the site then went

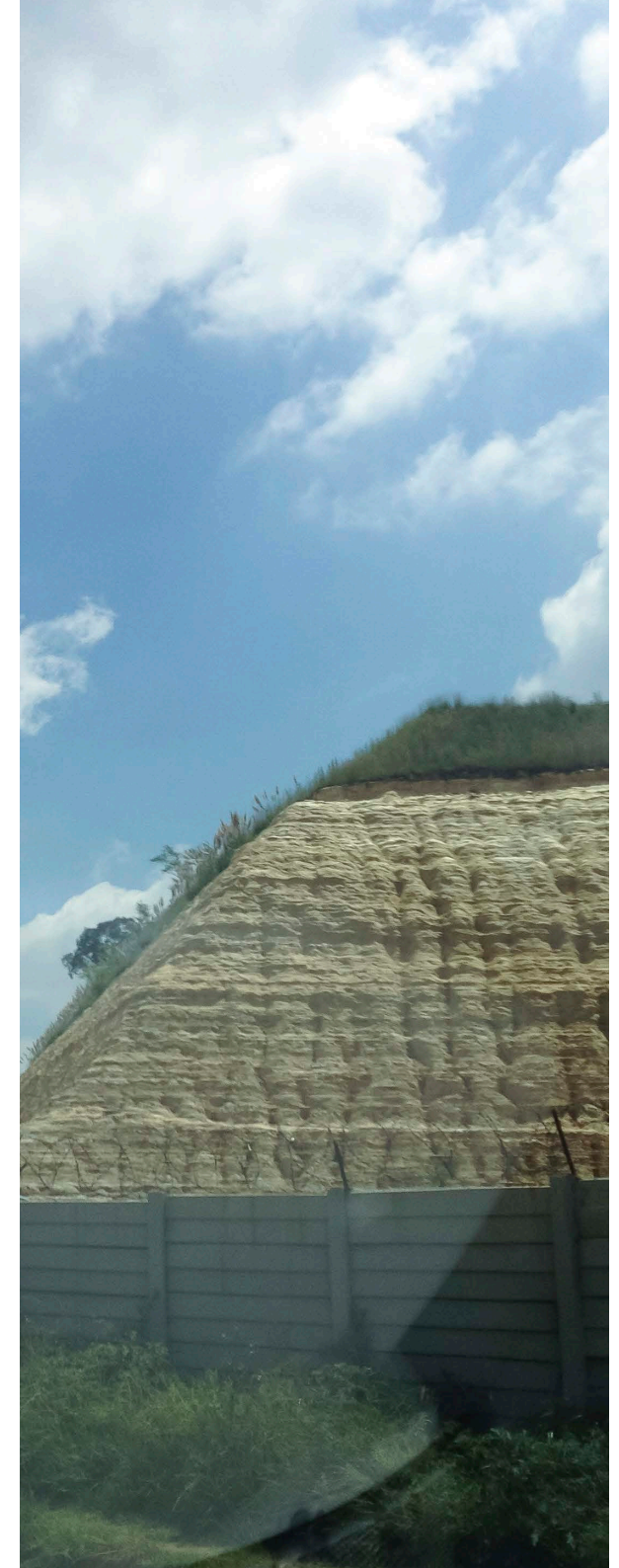


Fig 4.16. The excavation at Fer-
reiras/ Top Star tailings cavity,
railway siding
March 2013 (Author)

*“The mine dumps are things of terrible beauty; of course they are prob-
ably toxic and are an environmental hazard. But some of us have this
irrational love for them; it’s the paradox of Joburg,” Sally Gaule in an
interview with The Star about her photo exhibition documenting the Top
Star dump. (Ho 2012:na).*



through a number of zoning changes because 'an industrial development would require large numbers of black workers, whereas the "general business" zoning would require much less black labour'(Fourie & van der Walt 2006:27). Ownership of the property changed, and the new owners again applied for township development. Although there was some opposition, approval was eventually given, but the Johannesburg City Council had indemnity against anything that might go wrong, given the fact that the development would occur on tailings (Fourie & van der Walt 2006).

However, instead of building a residential development, the owners established the Top-Star drive-in theatre on the Ferreira dump in 1960. Since that time, the mine dump has become known as Top Star (Fourie & van der Walt 2006). The last film screening took place in the mid 2000s. Re-mining of the Ferreira tailings dump commenced in 2006, and the film screen was removed in 2010 (Ho 2012).

The history of the Ferreira dump is a story of the very beginning of mining in Johannesburg and the early experimentation and innovations in mining technology. It is also a story of the rapid growth of the city, the area's industrial activity, the character of the city authorities and the push by developers to build over these sites. The re-zoning and plans for development

in the 1950s illustrate how apartheid thinking had become commonplace. Meanwhile, the landscape reflects the power of time, as the development, roads and grassy mounds that came later almost completely hide signs of the dump's previous life as a tailings dam.

Architect and academic Deborah Berke writes that architecture of the everyday 'may be generic, banal or common, quite ordinary, crude, sensual, vulgar and visceral, it acknowledges domestic life, may take on collective and symbolic meaning but is not necessarily monumental, responds to program and is functional, may change as quickly as fashion, but is not always fashionable and is built' (Berke 1997:225). The opposition to the planned mining and reclamation of Top Star in 2006 indicates that the site has symbolic value. It was and still is a part of the city's collective memory. The Ferreira dump was perhaps monumental, but its re-appropriation as the Top Star drive-in made the massive dump disappear into the urban fabric. It was a crude, yet regular feature of the landscape – until most of it was taken away.



Fig 4.17. How will we be able to remember that which is hidden or inaccessible? A slightly weathered facade of an old shed on the Hubert Davies site.
(Author)

4.2

Remember to Forget

‘What the past and the future have in common is our imagination, which conjures them ... our imagination is rooted in eschatological dread; the dread of thinking that we are without precedence or consequence. The stronger that dread, the more detailed our notions of antiquity or of Utopia’
Joseph Brodsky (1994:31)

The re-mining of some of Johannesburg’s oldest mine dumps, including Ferreira’s, sparked a public reaction of remembering and forgetting. The dumps are landmarks, some of the few reminders of the city’s origins as a mining town. The excavation of these colossal structures has considerably changed Johannesburg’s landscape and has resulted in mixed reactions.

Top Star is an interesting case study, as the mine dump blended into the urban environment rather than standing out. The film screen on top was a curious addition, and this odd combination in that particular place made it well-known and now fondly remembered. With its removal came public realisation of the iconic status of the mine dumps, stimulating new dialogue about their meaning. It was an awkward

change in the landscape. And along with the physical change came a growing awareness of how uneasy change is for those parts of the mind that make use of images or landmarks to navigate. Our ability to find our way around the city has been impacted, but so has our ability to understand the city itself.

Philosopher Marc Augé says that it is the threat to memory that gives it meaning, and that memories are formed by the idea of their own destruction (2004). In the same way, change in our physical surroundings makes us want to keep references to the way things were before. This is true even when it becomes apparent that our memories of the past are flawed, for what we remember are mostly ideas of memories, imagined realities.

Remembering and forgetting are closely related, something which becomes quite evident in places like museums. As architect and academic Lindsay Bremner writes, ‘whenever history becomes memory and is institutionalised, certain choices are made, certain forgettings sanctioned, certain remembering disallowed’ (2010:241). Forgetting is thus more than simply a lack of remembering – it is sometimes a conscious effort. In South African society, selective memory attempts to repress the past, or at least parts of the past. However, this makes it more likely for the past to repeat itself. It is in this sense that it is necessary to remember

and understand both the good and bad parts of our history. Paradoxically, by remembering traumatic events in the past, society is able to put these memories behind them, and thus in a way forget them.

Architecture also tries to forget. Too often, as seen throughout the Modernist movement, architecture has been used in an attempt to control time. Architecture which avoids reference to time and context is trying to ‘freeze’ time so as to not have to deal with its uncertainties (Till 2009). These attempts are what philosopher Karsten Harries refers to as the ‘defence against the terror of time’ (Pallasmaa 2005:323). However, time is complex. It is linear and cyclical and social, and it cannot be reduced to a present moment. Thus, a better alternative to running away from time is to embrace time, to realise that architecture can ‘accommodate the multiplicity of time’ by being connected to both the past and the future (Till 2009:95).

A repository for memory inspires dialogue between the past and the future and reveals the multiplicity of time. And a recognition of the significance of time contributes to our understanding of the world. Thus, an archive is not simply a repository of old documents. It is a tool that allows us to engage more fully with the world around us.

Fig 4.18 The juxtaposition of numerous building types, sizes and styles make Johannesburg a interesting case study when considering an approach to heritage. (Author)



4.3

Heritage

‘I see the fundamental task of architecture as the mediation between the world and ourselves, history, present, and future, human institutions and individuals, and between the material and the spiritual. Architecture can strengthen and maintain our grasp of the world and ourselves, and support humility and pride, curiosity and optimism.’ Juhani Pallasmaa (2012:108)

The following discussion outlines an approach to heritage that informs the heritage strategy for both the site and the archive. The spatial implications are discussed later on alongside the design component. Heritage is relative, as it refers to both tangible and intangible elements whose meanings are socially constructed. And although heritage is about the past, it is really for the sake of the present and the future. It is thus necessary to understand heritage in terms of ‘past’, ‘present’ and ‘future’.

Heritage policy used to be fixated on the past. The value of objects or sites was largely determined by what the object or place was and

what it stood for at a particular moment in the past. This was an objective measure with an assumed fixed meaning. It is this type of thinking that informs policies which reduce the value of a site or object to its age. These policies, in turn, often use terms such as ‘heritage’, ‘cultural significance’ or ‘representation’ without qualifying them.

In the last 20 years, however, there has been a major shift in thinking about heritage, and a realisation that intangible as well as tangible aspects need to be understood for a more holistic approach to heritage management (Muller & Gibbs 2009). Intangible heritage can be defined as ‘the manner in which humans relate to, or feel about, the environments in which they live’ (Nanzen, in Puren et al 2006:191).

Norwegian architect and theorist Christian Norberg-Schulz’ idea of ‘dwelling’ helps to unpack the relationship between the intangible and tangible in the city. According to Norberg-Schulz, dwelling is about the feeling of ‘belonging’, and is accomplished through ‘identification and orientation’. He goes on to state that ‘identification is what allows us to relate meaningfully to a world of things’, while orientation is possible due to our ability to understand the ‘spatial relationships’ of places or things (Norberg-Schulz 1985:15-25). The tangible and intangible are not separate, but together inform the genius loci, the ‘particular

character' or 'spirit of a place' (Norberg-Schulz 1980; 1985). It is thus our interpretation of and associations with the physical environment that inform a 'sense of place'.

Put in other words, objects or buildings are not meaningful in themselves; meanings are attached to them through social processes. 'Identification with a particular place could therefore be perceived as a mirroring between the subject and the environment over time', says architect and theorist Niel Leach. He goes on to propose that people should see themselves in these environments or objects, 'introject' or internalise them and make the places or objects a part of themselves (Leach 2006:144). The result is a relationship between the self and the 'other' — the object or place.

Section 2 (xvi) of the NHRA (1999) states that a 'heritage resource' is 'any place or object of cultural significance', while Section 2 (vi) states that 'cultural significance' refers to 'aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value'. According to Section 3 of the Act, a 'place or object is considered part of the national estate if it has cultural significance or other special value because of its:

- Importance in the community or in the pattern of South Africa's history;
- Possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;

- Potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- Importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- Importance in exhibiting particular aesthetic characteristics valued by community or cultural groups;
- Importance in demonstrating a high degree of creative or technical achievement at a particular period;
- Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- Strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; or
- Significance relating to the history of slavery in South Africa'

As the above list indicates, the NHRA recognises that evaluations of the past should incorporate an understanding of the meaning that is given to places or things through rituals. These rituals may be religious, business-oriented, political or simply patterns of everyday life. In addition to recognising the importance of the meaning associated with objects and places, the NHRA also begins to address heritage from the vantage point of the present, providing 'broad guidelines on how cultural heritage should be interpreted' (Muller & Gibbs 2009:8). Another important heritage framework is the International Charter on Monuments and

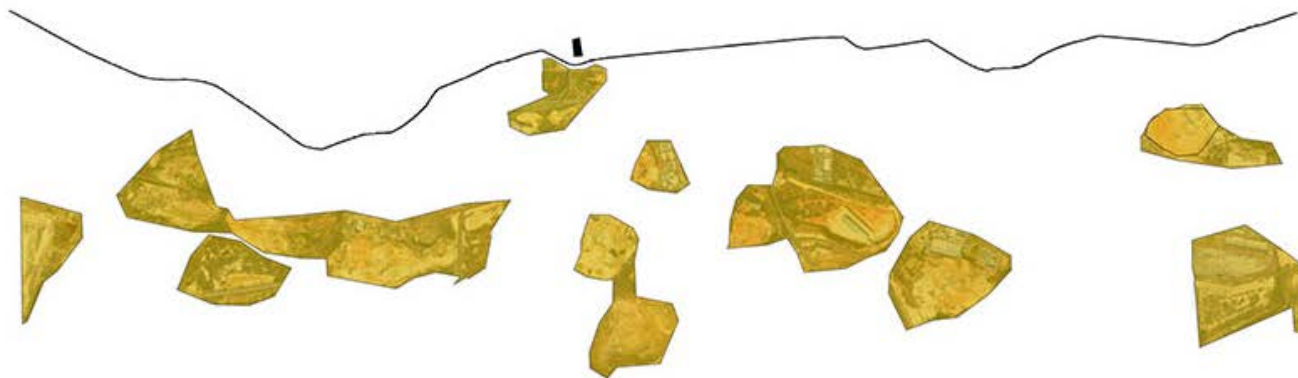
Sites (ICOMOS). Like recent charters before it, the Ename Charter of 2008 focuses on the 'interpretation of heritage'. This underscores that heritage is a process whose meaning will change over time, rather than a static category. The Ename Charter (2008) defines public heritage interpretation as 'not merely the communication of factual scientific, artistic, or historical data about archaeological sites, cultural landscapes, and historical buildings – but as a complex public exercise of historical reflection among many stakeholders, characterised by a concern for open access, sustainability, and inclusiveness' (Silberman 2009:7).

Lefebvre's triad of conceived, perceived and lived space is an ideal framework for the interpretation of architectural heritage. Space is made and experienced on different levels, and therefore built heritage must be interpreted on multiple levels. The past is important, but so are the present and the future. A consideration of all these levels puts renewed emphasis on how meanings are made, interpreted and retold for the sake of the present and how these meanings become a basis for imagining the future. This critical analysis of Lefebvre, the Ename Charter (2008) and the National Heritage Resource Act (1999) has led to the heritage strategy proposed for the site and the archive.



Fig 5.1. Hubert Davies site relative to the mines and Main Reef road.

Fig 5.2 >> Signage on the wall in Hubert street.



5

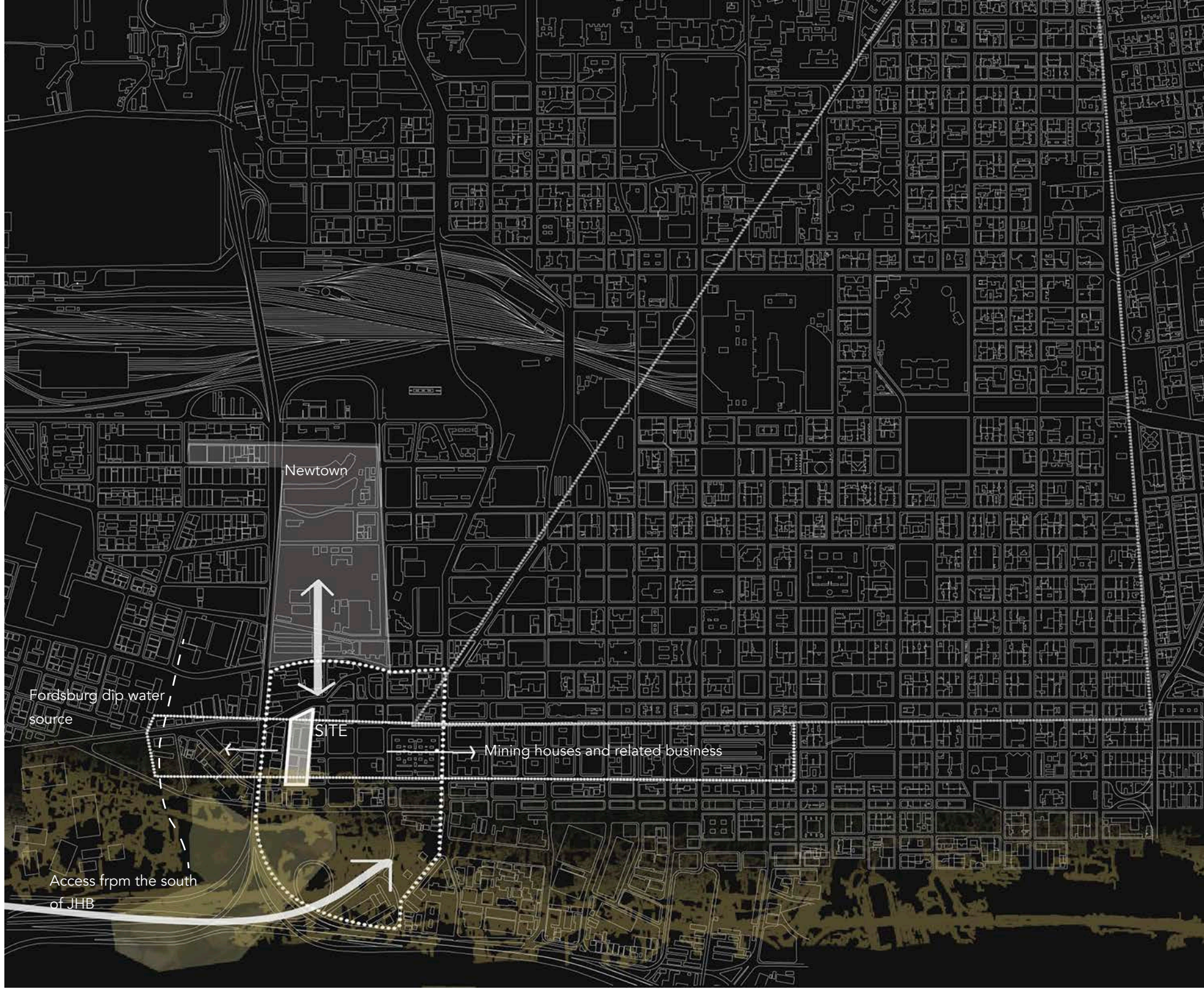
Context & Site Analysis

The signage is still visible on the side of the post-war office block in Hubert Street Ferreirasdorp. The business was there before the street was. The company played an important role in electrification of the city and in technological innovation for the development of the mining industry.

The existing conditions and opportunities on the site is discussed in relation to its context. Together with the historical background this investigation will inform the approach to Hubert Davies as heritage site and to the archive as mechanism for making heritage accessible.



Fig 5.3. The site relative to Newtown, the Randjeslaagte triangle, and the east west relation to mines and mining houses.



5.1

Context

Situated just south of Newtown, the site could easily be incorporated into the cultural precinct that has developed there. Its position on the edge of the original city is reinforced by Diagonal street that is close by, and more specifically by the site boundary that indicates its original 'zoning' as mining property on the edge of Ferreirasdorp. The site is situated on an east-west axis that symbolically links it to the mining houses on Main street to the east and to the original water source of the mine camp and mining activity to the west.

On the surface Ferreirasdorp is confusing and like the rest of the city, full of contradictions. Multiple vacant buildings from closed down shops to empty industrial sites stand forlorn a few blocks away from the very successful mining houses. Some vacant city blocks serve as parking alongside the mega-block magistrate's court. Government services, the courts and police station stand in contrast to the semi-formality of the blanket district and the automotive repair services on the southern and western edges. The Westgate Rea-Vaya and train station, is a major gateway to the city from the south, but enters unceremoniously where the mine tailings have been removed. Upon closer inspection one quickly notices the remnants

of yellow sand where erosion has washed away some of the retaining walls on both side of the M2 highway at Crown interchange. Signage on empty buildings reveals its previous identity as 'China Town' and a number of blue plaques faintly point out the historical importance of the place.

The two government buildings have very different characters and effects on the area, attract numerous daily users and are part of the reason that so much of the vacant land is currently used for parking. The Magistrates Court is a massive building with a heavy presence, certainly intentionally so. The Central Police Station is imposing for other reasons, its height and monotonous modernist façade dwarfs any visitor, criminal or victim alike while it is still at times referred to as John Vorster Square conjuring up the wrongs committed there during apartheid.

Much of the fine grain of Ferreirasdorp has been demolished over time. Most of the existing low rise buildings are vacant, previously Chinese restaurants or shops, or have been turned into automotive workshops. Developers, the Johannesburg Land Company, have acquired much of the property in Ferreirasdorp. The Hubert Davies site and smaller adjacent properties, as well as the four city blocks between these and the magistrates court and a number of others now belong to them. These are major factors contributing to the emptiness that is experienced in the western part of Ferreirasdorp.

The Jhb Land Company has developed, and manages the one block adjacent to the court, which is leased by Zurich Insurance. This building's eastern façade is slightly higher than, but respects the magistrate's court in its design with a homogeneous marble façade that mimics to an extent the geometry and symmetry in the western façade of the court building. The Zurich building has been placed just



Fig 5.4. Remnants of mine tailings (Author)



Fig 5.5. Closed down restaurant on Commissioner street (Author)

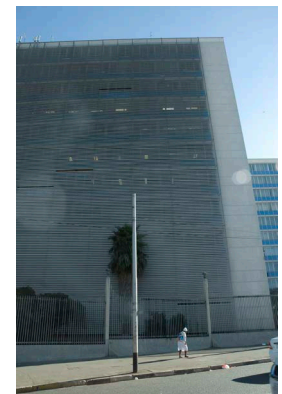


Fig 5.6. Johannesburg Central Police Station (Author)

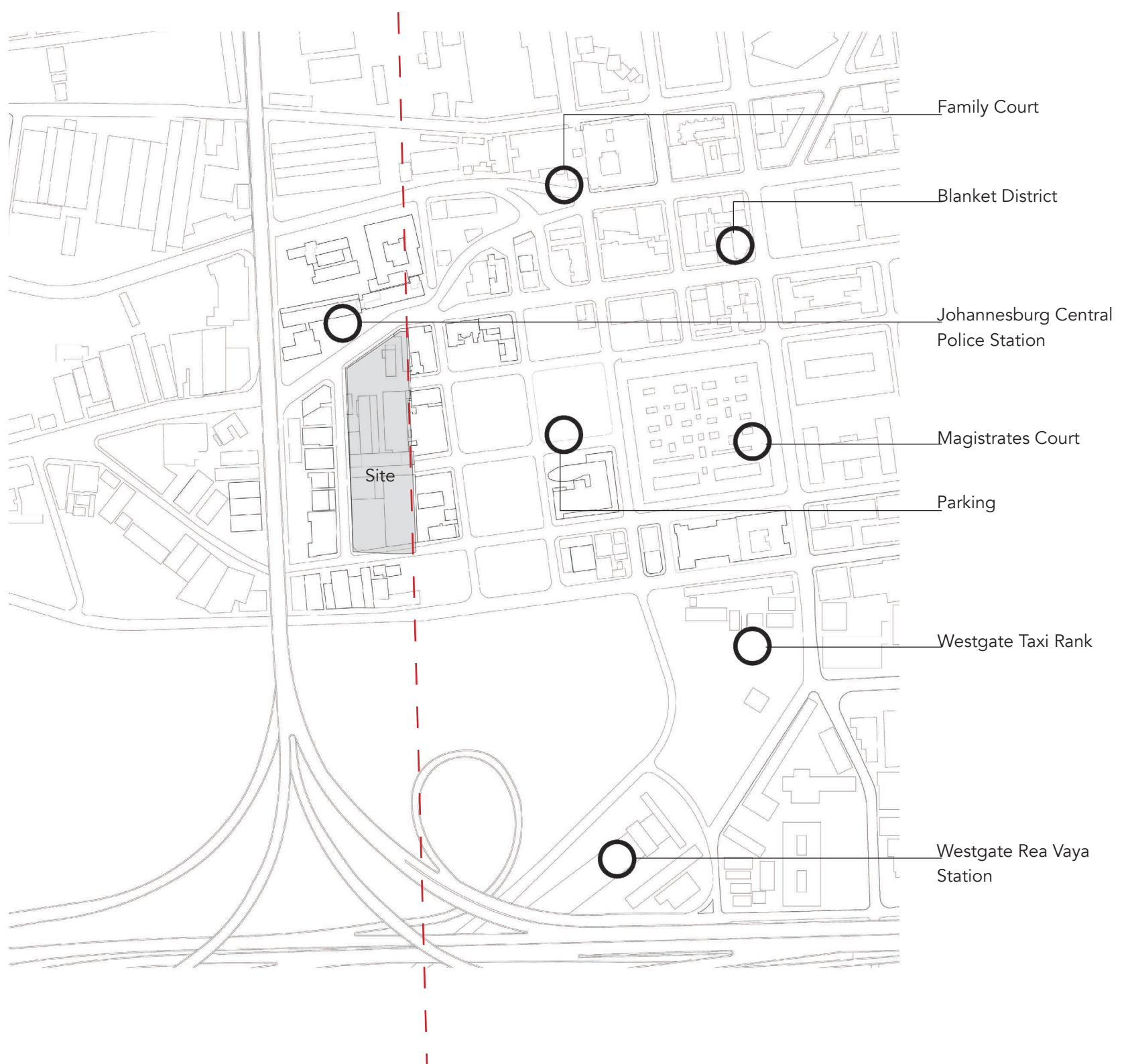


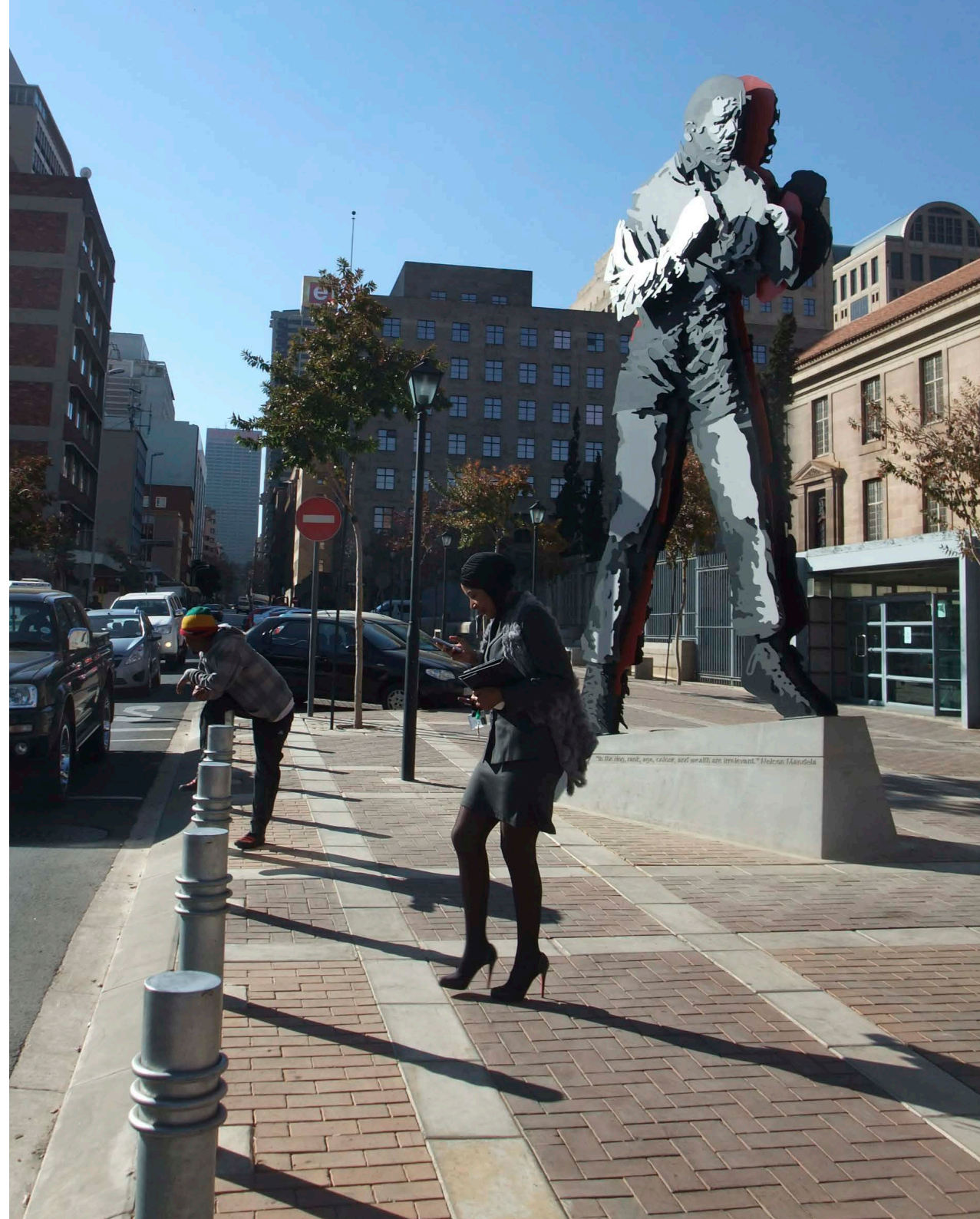
Fig 5.7. Important activity nodes in Ferreirasdorp

Fig 5.8. >> New public art installation in front of the magistrates court of Nelson Mandela shadow-boxing. (Author)

south of the Main street axis, which allows a view of the western entrance of the court building from the western bypass. The success of this new development on the 'wrong side' of the magistrates court has attracted some attention and efforts by government, and the private sector seem to motivate each other to go forward.

The City of Johannesburg has established Urban Development Zones (UDZs), and Ferreirasdorp falls within one of these. According to this scheme, developers and investors receive tax incentives to build or refurbish buildings in these areas. The UDZs work hand in hand with newly improved transport nodes. Westgate precinct is one such node in the south western quadrant of the city that provides greatly improved access to the CBD from the south and west through a railway station, taxi rank and Rea Vaya station connected to the rest of the city network. The City has plans for a much denser business district in Ferreirasdorp. The Johannesburg Development Agency (JDA) have begun improvement efforts around the Westgate transport precinct that runs into Ferreirasdorp through upgrading of the roads, public spaces and sidewalks.

Vacant land, vacant shops and automotive industries in the western part of Ferreirasdorp might be enough reason for it to be called 'grungy' (Garner 2011:164), but recent public and private investment has seen projects like the refurbishment of Chancellor house come to fruition and has improved the general condition of the area mostly by focusing on the spaces between the buildings. Nodes of everyday activity in Ferreirasdorp attract visitors to and through the site, investment in heritage and public art together with the general public space upgrades has extended the everyday activities, visits to the police station and courts, transit and shopping, to include tourism in the area.



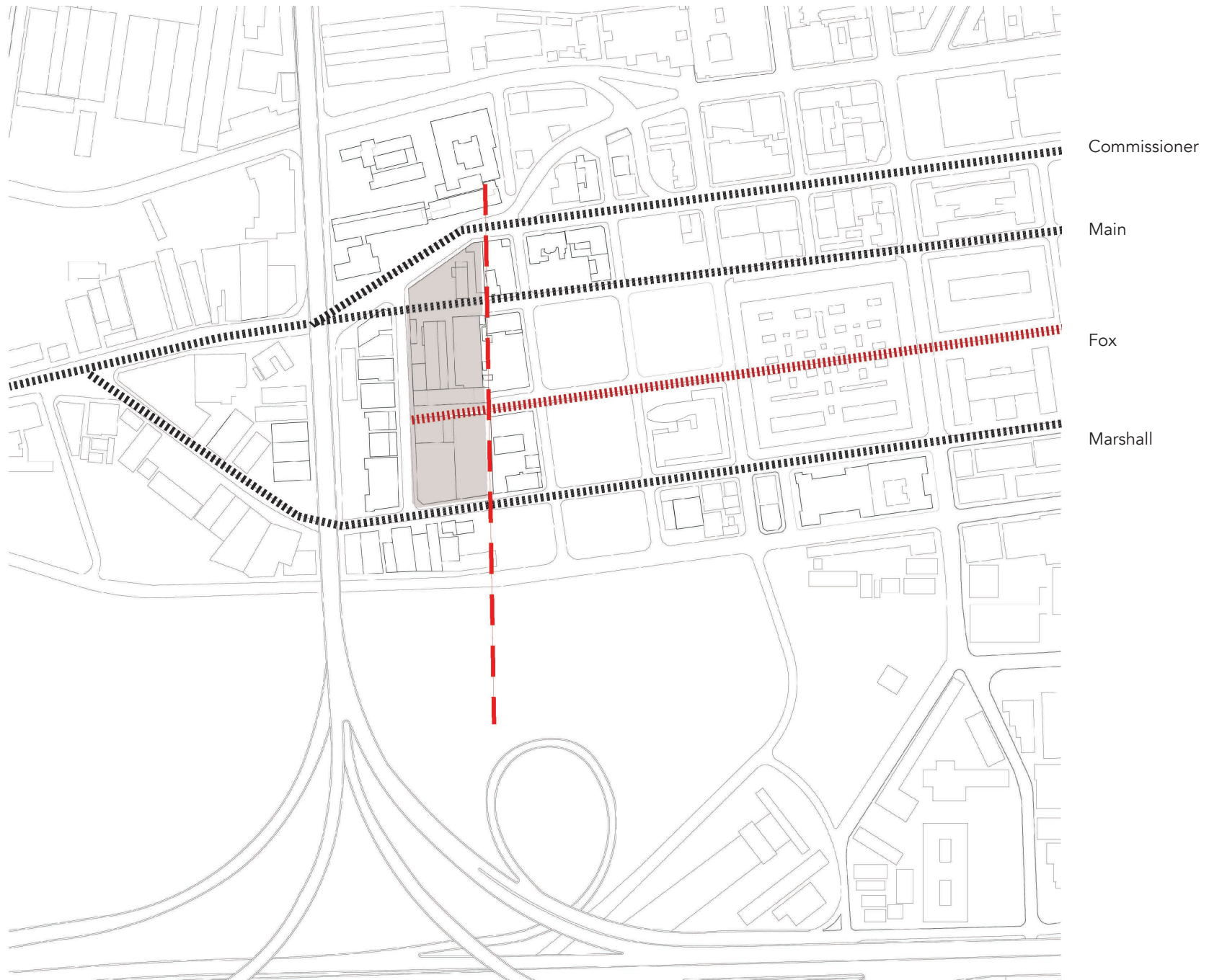


Fig 5.9. Important axis relating to the site

Fig 5.10.>> Looking north from the centre of the site (see next page - 2b)

5.2

Axis and access

5.2.1 Site line

The Hubert Davies site is situated on a number of different axis that determine or inhibit access on different levels. From the east of the city, Main Reef road splits to become Commissioner street and Marshall street, these form the Northern and Southern boundaries of the site. As was discussed in the historical analysis of Ferreirasdorp, the edge of the township ran up against the property of Robinson mine. The Hubert Davies site was acquired from the Robinson mine, and this axis that is contrary to the other north-south boundaries in Ferreirasdorp becomes an important reference to the origins of township as well as the business on the site.

5.2.2 Main Street

As the Hubert Davies site is on the edge of the original township at No.1 Main str and No. 1 Fox str. the main str axis begins here, runs through the main corridor of the Magistrates Court to the other side where it has been pedestrianized and more recently become known as the Main street Mall. This was an effort by the mining houses, such as Anglo American together with the Jhb

Land Company to upgrade the urban area of this corporate mining district, one of the few areas where business remained in the CBD throughout the time that others vacated the inner city. Main street links Ferreirasdorp to Ghandi Square, another major transit and pedestrian nodes, and numerous other buildings and places of historical interest.

Main street becomes an important narrative route that tells of the city's history as so many events and dealings flanked this axis between Commissioner and Marshall streets. The magistrate's court was seen to cut Ferreirasdorp off from the developments on its eastern side, and the effects from this are still apparent. Perhaps even more so now that security measures employed has meant that a security entrance has been put up to the side of each of the eastern and western entrances of the court, disturbing the movement through the site. A tourist would for instance not be able to follow the route along Main street with their belongings, as cameras have to be left with security, which means that people will enter and exit on one side defying the purpose of this axial thoroughfare.



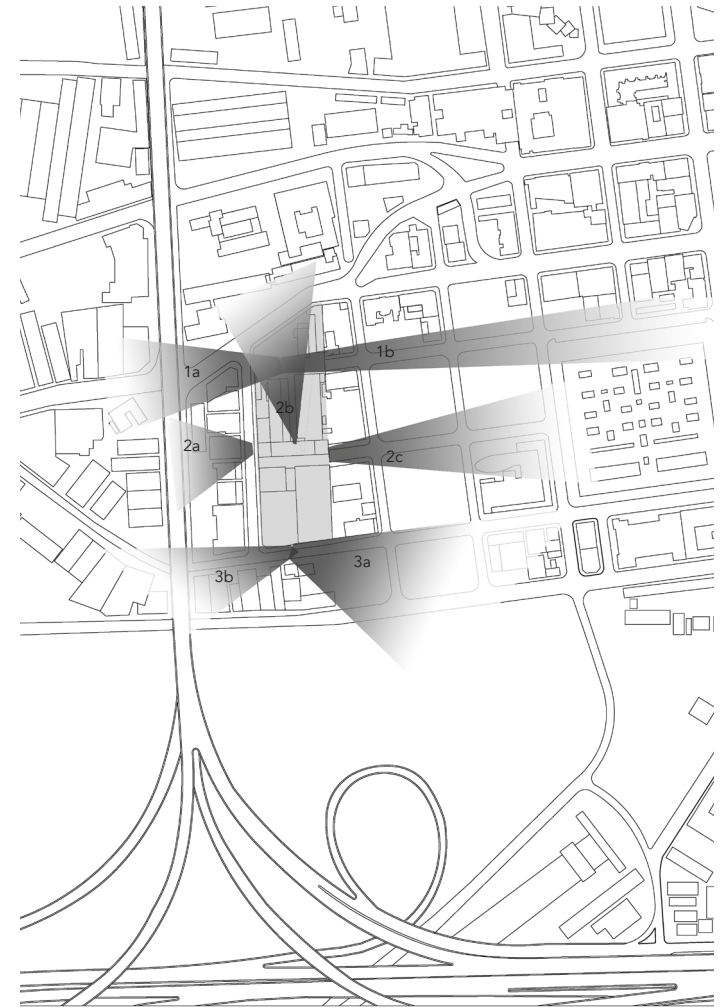
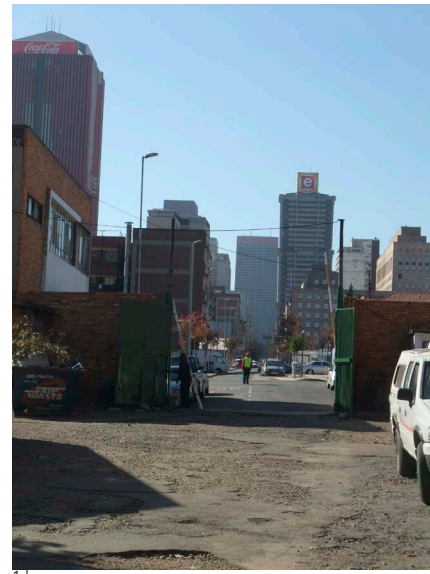
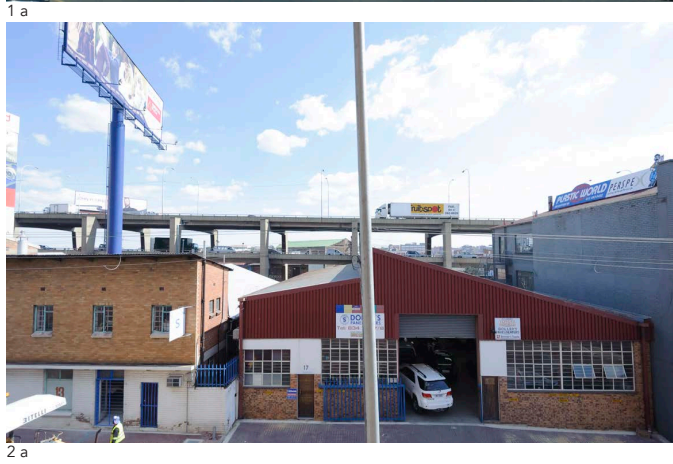


Fig: 5.11. Lines of sight along the major axis leading away from the Hubert Davies site.
(Author)

5.2.3 Transport

A simplified diagram of the major routes around the site indicate the fast moving M2 highway that skirts the city, through the crown interchange, with the closest offramp to the site being at Selby. The main north-south routes provide the link from Soweto through the Westgate transport interchange. The slower east-west routes follow the historical main reef axis.



Fig 5.12. Major movement routes.

5.2.4 Pedestrian Movement

Pedestrians follow the routes of public transport but also opt for the shortest route between points where possible. The open land next to the Westgate transport node has become one of these a shortcuts to get to Commissioner and Main Reef road.



Fig 5.13 Main pedestrian movement routes.



Fig 5.14 Diagrams describing the historical development and significance of buildings on the Hubert Davies site (Author)

5.3

Existing buildings on the Hubert Davies site

1. Small dormitory Post 1937 pre 1952
2. Workshop facilities for HUDACO pre1937 building adapted pre 1952
3. Warehouse Hudaco Office or production extension pre1937 building adapted pre 1952
4. Workshop extension of the 4 storey office block, basement below. post 1946 pre 1952
5. Four storey Office Block, Brick, post-war Industrial Office Construction, post 1946 pre 1952
6. Double shed, workshop/stores. Earliest Documentation Surveyors diagrams July 1930
7. Small hipped roof shed attached to large sheds pre 1930
8. Long, double shed, workshop/stores. Earliest Documentation Surveyors diagrams July 1930
9. Row of accommodation facilities post 1937, pre 1952
10. Corrugated Iron Shed Possibly pre1930, or rebuilt on older foundations.

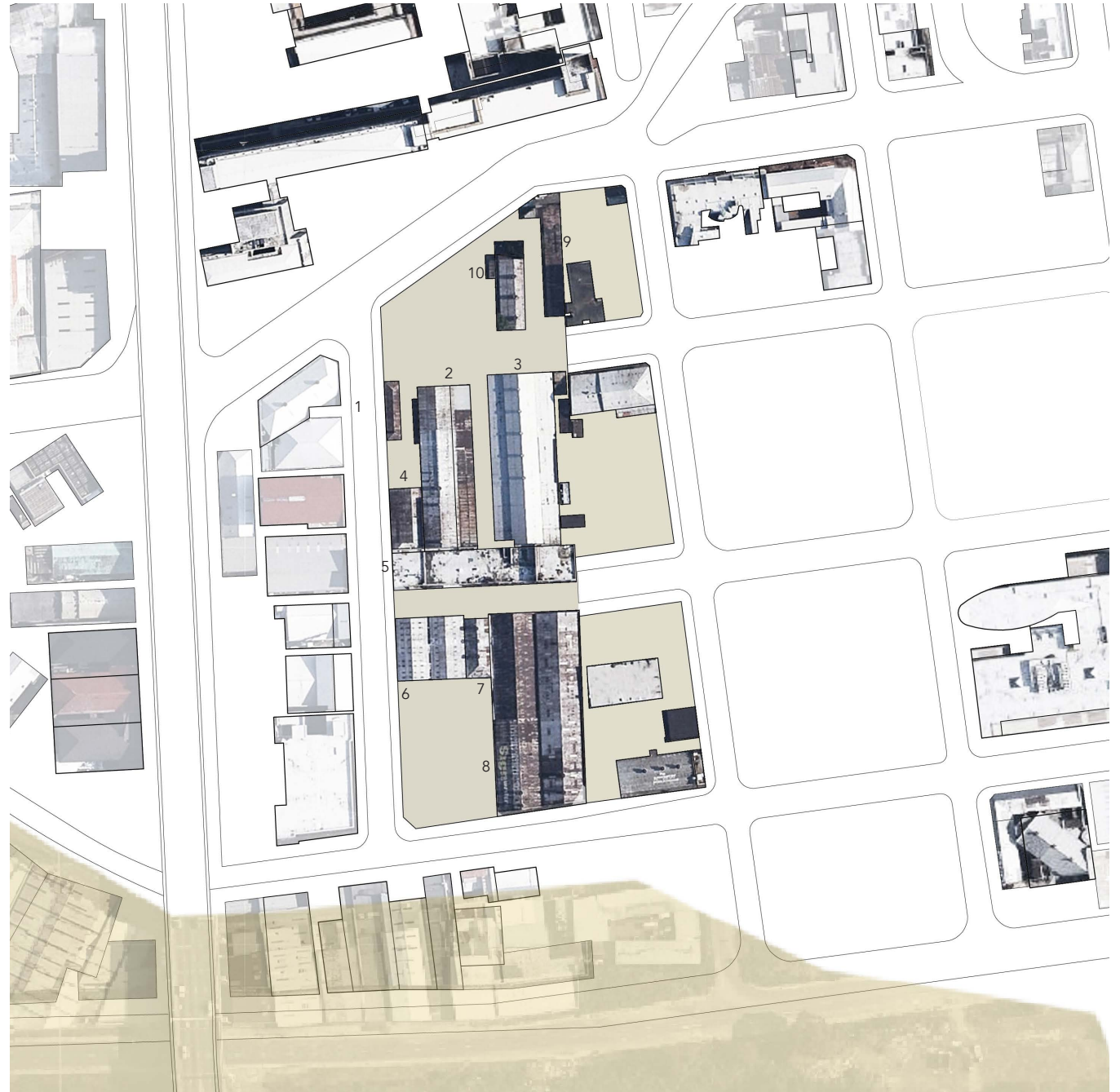




Fig 5.15. The site is closed off to public yet the edges have potential to be activated for public interaction with the site



1. Johannesburg Central Police Station
2. Hubert Street
3. Office block built for Hubert Davies
4. Old deliveries entrance to Hhubert Davies stores and workshops

5.4

Site edges

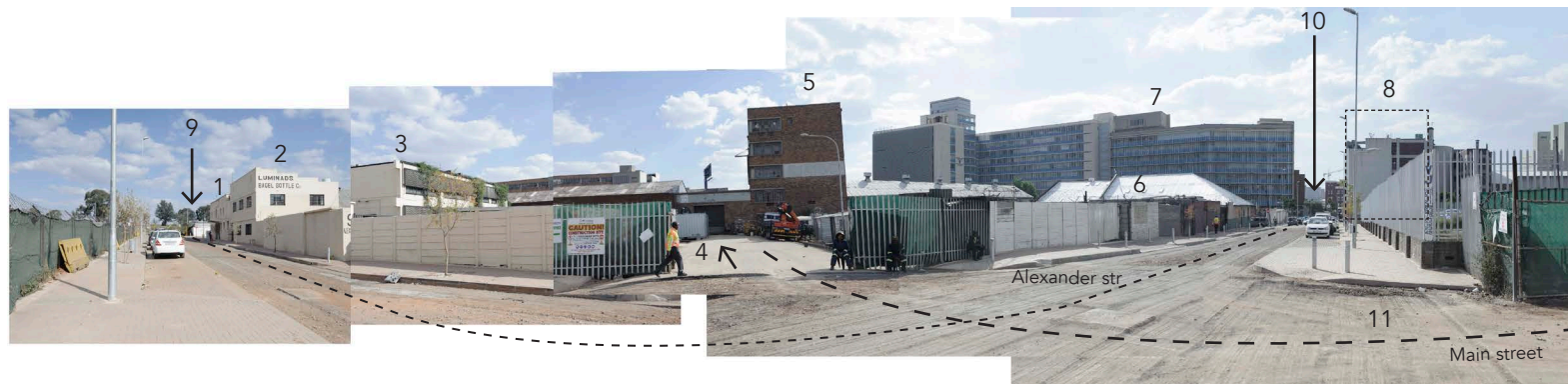
Fig 5.16. Diagrams illustrating site edge conditions. There is no public access to the site and the edges are inactive. The site takes up a large space between nodes of activity. It sits between the JCPS and the Westgate Transport interchange.

1. Johannesburg Central Police Station (JCPS)
2. Limited public space in front of the JCPS
3. Northern edge of site
4. Shed most recently used as offices and as soccer court
5. Office Building
6. Shed, most recently used as automotive workshop
7. M1
8. Commissioner to Main Reef road looking west
9. looking east up Commissioner



Commissioner street

1. Old Church/ school/ bioscope
2. Bradleys building
3. Building by N. Eaton and Fair
4. Old entrance to Hubert Davies workshops
5. Old Hubert Davies Offices
6. Old print shop, now automotive workshop
7. Johannesburg Central Police Station
8. Pabst building
9. to Westgate transport node
10. to Newtown
11. Road and pavement upgrades



Alexander str

Main street

6

Precedent studies

Sir John Soane's house is analysed as a theoretical as well as a spatial precedent, while Carlo Scarpa's Castelvechio is considered as a precedent that reveals an approach to dealing with old and new in a heritage building.

Fig 6.1. An illustration of the Sir John Soane house as classical treasure chest.
(<http://blogs.artinfo.com>)

Fig 6.2. >> The Sir John Soane House museum has been compared to other buildings that deal with ephemeral knowledge, such as dioramas and panoramas or a cabinet of curiosities, because of its spatial and narrative techniques
(Marcus 1993:187)



6.1 Sir John Soane's House

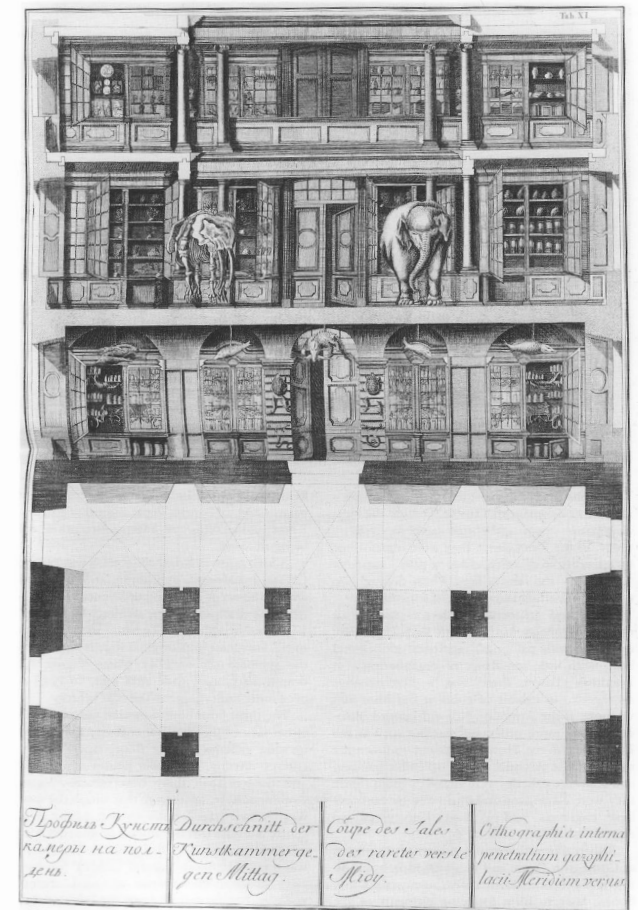
The main reason why architecture conveys narratives so well is that architecture and narratives share certain characteristics. Architectural theorist Sophia Psarra describes these characteristics as 'structure', 'perceptual experience' and 'representation' (2009:4). A good example of a place which capitalises on the similarities between architecture and narratives to create meaning is the Sir John Soane museum in London, which was left to the British government upon Sir Soane's death on the condition that it be preserved as it was when he died. Soane was an architect, professor and archivist of architecture and art. During his lifetime, he managed to create a collection of objects that can be likened to Camillo's theatre of memory.¹ Alternatively, through narrative Soane seems to demonstrate what 'aestheticizing the ruin attempts to repress' (Halmi 2011:22).²

The museum seems to have dialogue with time rather than framing and freezing a moment, and thus history is both praised and made the fool. Visitors follow a route through the museum that progresses in a linear fashion through

historical periods, but it is also a circuit that may be repeated. Visual connections between rooms allow views across 'time', disturbing the historical progression and creating 'interwoven notions of space and time' (Psarra 2009:125). One such visual connection is an axis that continues to the garden. This further supports the idea of the inclusivity of time by connecting the artefacts and the museum with the world

[FOOTNOTE : 1. Camillo' 16th century memory theatre, 'in which the whole world, natural and supernatural, is represented in a seven-tiered semi-circular building' (Marcus 1993:175) with symbols representing knowledge groups, under which numerous cabinets and drawers store information made accessible in this way to its theatre goers. The memory theatre is a 'memory machine'(Uricchio 2012:46). Soane's house could be seen as a specialist version of the memory theatre, focusing on architecture. Others have compared Soane's house to the diorama's and panaoramas of the 1700s (Furjan 2004:75) that changes the relationship between the spectator and the spectacle, 'theatricalising the audience'.

2. Referring to Soane's own unpublished writing, in which he begins to divulge his conceptual intentions through imagining the house as a ruin.]



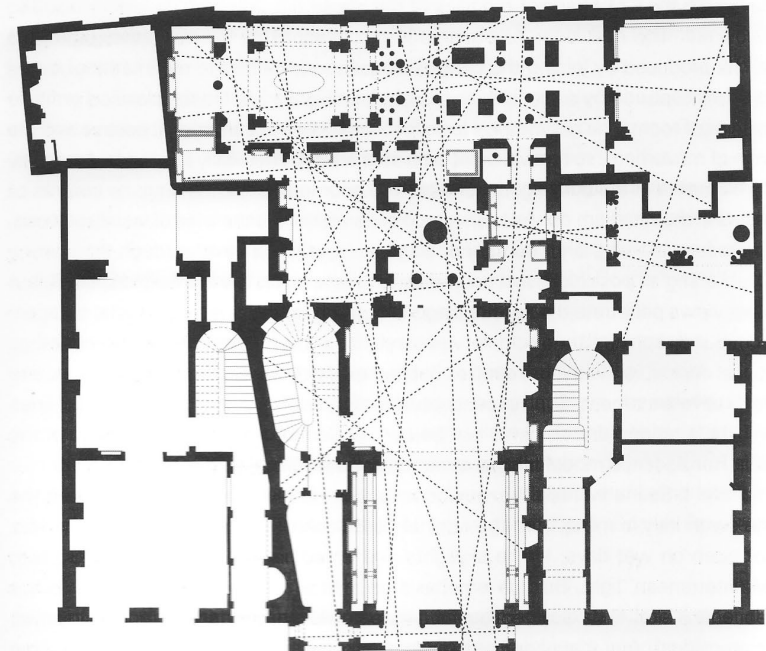
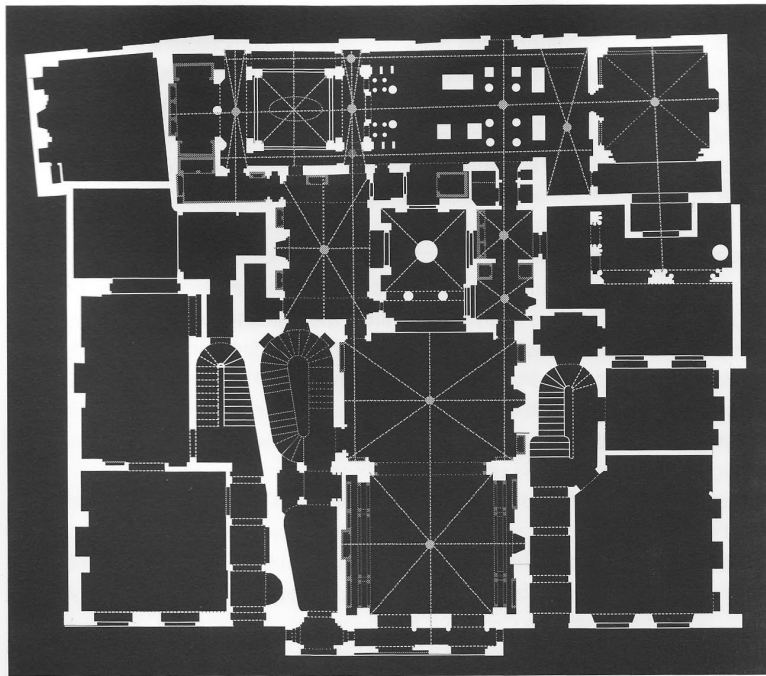


Fig 6.3. In Sir John Soane 's House axial symmetry (top) of each room, stands in tension to the diagonal visual links (bottom) through spaces. (Psarra 2009)

outside. Psarra has written that 'the architectural dimensions of Soane's narrative develop as interwoven notions of space and time, of temporal succession and spatial compression, experiencing the house in sequence and comprehending it as a whole by few changes in direction' (2009: 125).

Soane's house also displays certain tensions between parts and the whole (Psarra 2009), evident through the visitor route described above as well as in the use of mirrors and light. The breakfast room, for instance, contains almost a hundred mirrors, many of them convex, some on the walls and many on the domed ceiling. Mirrors change the perception of spaces by providing alternative perspectives, distortion and reflection. The mirrors serve to both fragment space and present simultaneous different views of space (Psarra 2009), while the reflections of movement and light within the space create theatrical optical effects (Furjan 2004). Light plays an important role in what Soane refers to as the 'poetry of architecture', a phrase he borrowed from Etienne Boullée (Si-

dlauskas 1993:63). Natural light enters through coloured skylights and clerestory or oversized windows, while openings in the walls and floors allow light to filter through the different levels. These planned openings highlight the changing nature of light, which animates the spaces and objects within the museum. Space thus acquires a theatricality both through the position of the viewer and the way light interacts with the objects (Furjan 2004).

It is not simply through the application of architectural techniques but rather through the tension created by how the techniques are applied that Soane's narratives create meaning. The narratives 'blur[] the boundaries between reality and representation' and ask the viewer to distinguish between the two (Psarra 2009:130). Soane's house museum layers representation within conceptualised space within an architectural container. The layers are made intelligible through the narrative, a constant juxtaposition in which the visitor partakes as he moves through the museum.

The proposed archive of Johannesburg's built heritage has a similar composition: representation within conceptualised space within architecture. While working with documentation on the city inside the archive, opportunities should be provided to notice the existing building, as well as the outside, in order to make a connection with the living city. Further, like in Soane's house the visitor to the archive will experience clusters of historical information as they browse through a particular collection, but will also experience different layers of history at the same time. Through structure, experience and representation, the archive engages in dialogue with the site and the user. Like the Sir John Soane museum, the archive's intention is not to 'aestheticize the ruin', but rather to connect history to the present and future.

Fig 6.4. Castelvechio



6.2 Castelvecchio Museum, Verona 1956 - 1964

Carlo Scarpa with C.Maschietto
& A.Rudi.

The restoration of the former citadel of Verona grew from restoration into a museum project. Carlo Scarpa 'tried by individual exposures and little judicious demolition to reveal the different historical strata of the structural complex' of Castelvecchio. His intention was through separating historical periods to show the building itself as heritage and through small interventions to illustrate the development of Castelvecchio over time. 'Scarpa was more interested in historical transparency than in the theory of restoration; he wanted to make history come alive by a well-ordered juxtaposition of the fragments'. (Los 1993:73)

Scarpa uses contrasting materials that attach to the original structure like black concrete pedestal and steel viewing deck as well the angled bridge in black steel. The main aim being to make the building and the art inside it more accessible. These interventions are distinct from the old, yet practical. He does not strictly follow the old order of the building. An

entrance is made and a concrete and steel wall introduced that breaks the original symmetry of the doorway, but it serves the new programme and simultaneously draws attention through disrupting the harmony. Scarpa also introduces new components into the physical structure that requires some demolition. New windows are designed by Scarpa and built in to the old structure, to emphasise the artworks in the museum. The art works in turn become the spatial strategy that helps to guide people through the museum. (Stavroulaki & Peponis 2003).

The idea, to emphasise the existing through the introduction of the new forms, materials and new configurations in Castelvecchio illustrate what Rab explained as monuments playing a 'an active role in the critical interpretation of regional history. (Rab 1998:448)

The approach to heritage in the proposed archive applies some of Scarpa's logic. Understanding the history of the site is considered

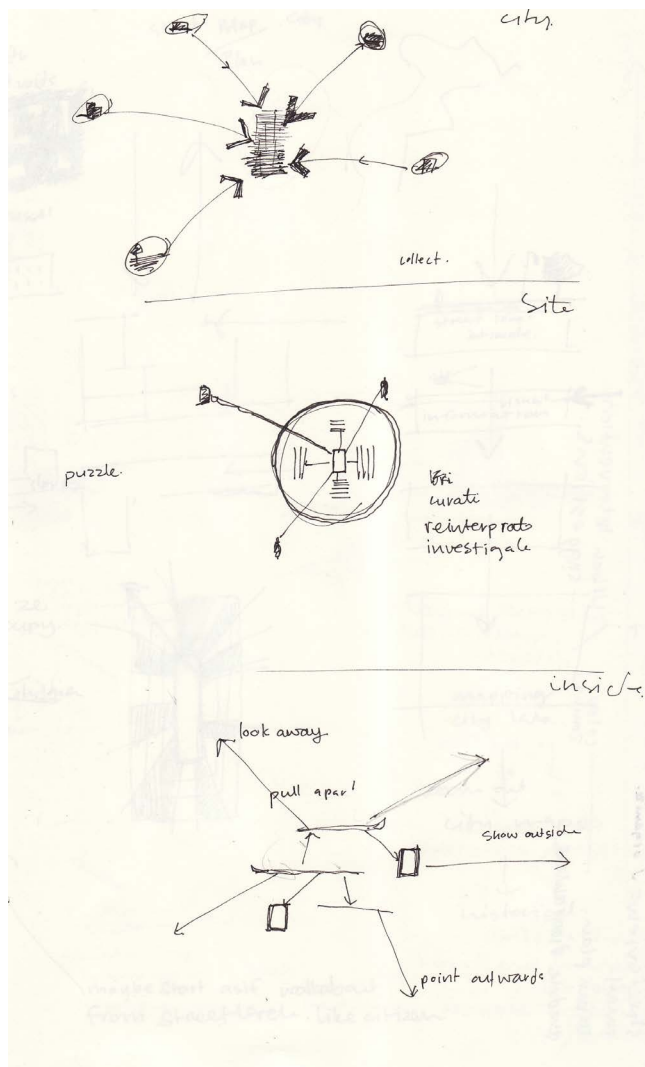
more important than purist preservation of everything that is old. Contradiction between new and old materials, as well as the way in which these materials are used together would assist the visitor to the archive in understanding the historical site. Some demolition is required on the Hubert Davies site in order to make the industrial site more accessible both in terms of experiencing the architecture and using the site.

7

Design Development

The design process began with inquiries into the history of the Hubert Davies site, as potential mnemonic device. Together, an understanding of the significance of the extant structures on the site and of the programmatic requirements of an architectural archive, has lead to an appropriate heritage strategy for the site and archives, with a past, present and future focus. The heritage strategy in turn will guide the architectural intervention.

Fig 7.1 Conceptual purpose of the archive, collecting the city, investigating the city and returning the interested gaze towards the city.



7.1

Concept

The concept developed around the fact that few references to the origins of the city have been able to capture meaning in the way the mine dumps have for the city of Johannesburg over time. The aim is then to find a way to symbolically fill the void left by the re-mining of the dumps around the city. To propose an archive to be inserted into a forgotten heritage site is an explicit but layered response to the problem.

Conceptually purpose of the archive is firstly to draw the city in, its people as well as through the collection of documentation of the buildings in Johannesburg. Secondly to investigate, interpret/reinterpret the materials collected, pulling it apart through research, new opportunities and insights. Thirdly to shift the focus from the documentation to the city, essentially looking away from the archive. Therefore, remembering and understanding the past, to make new and better futures in which those pasts may be forgotten, but could serve as the solid foundations.

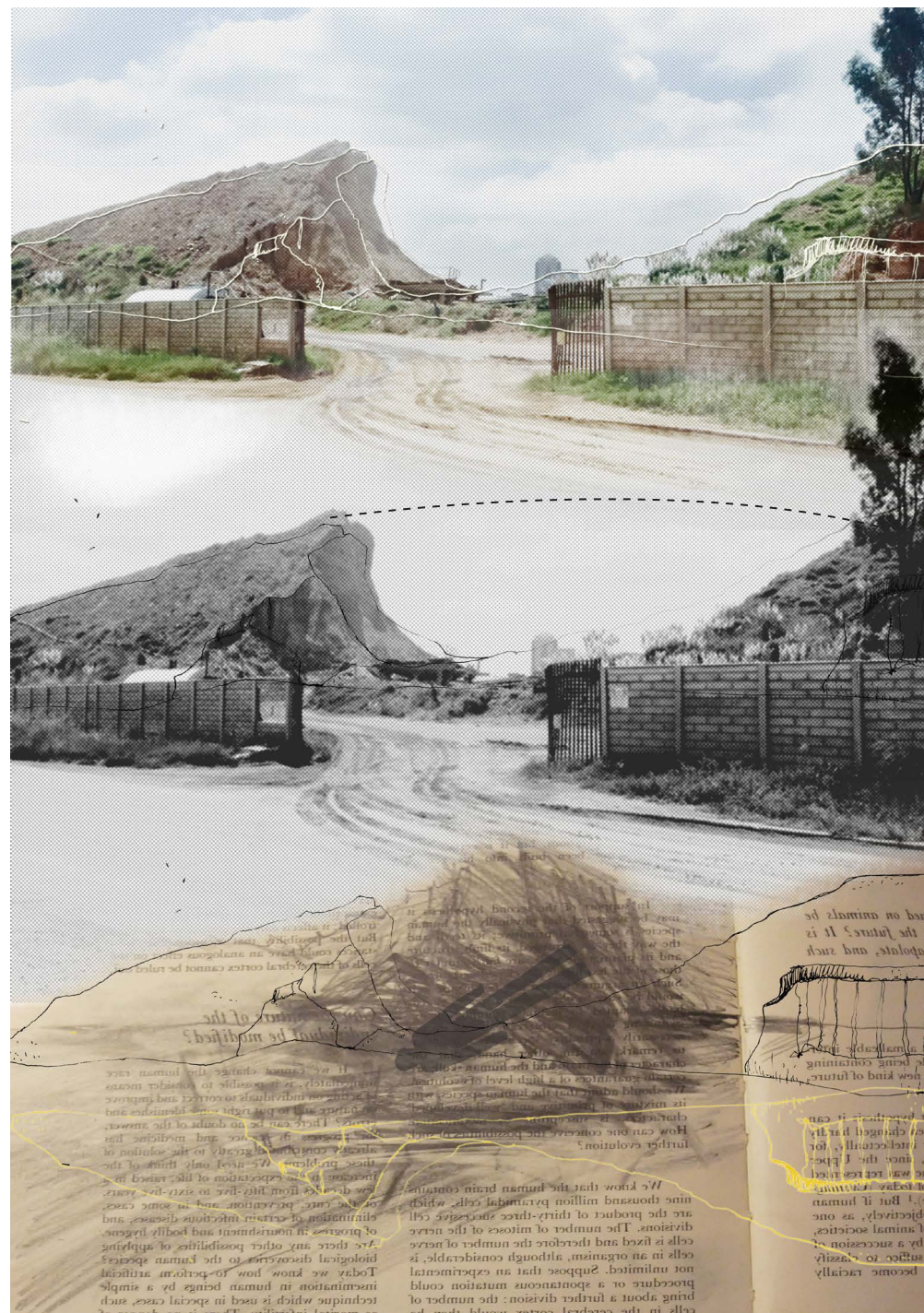


Fig 7.2. How to begin to fill the void left by the removal of landmarks around the city (Author)

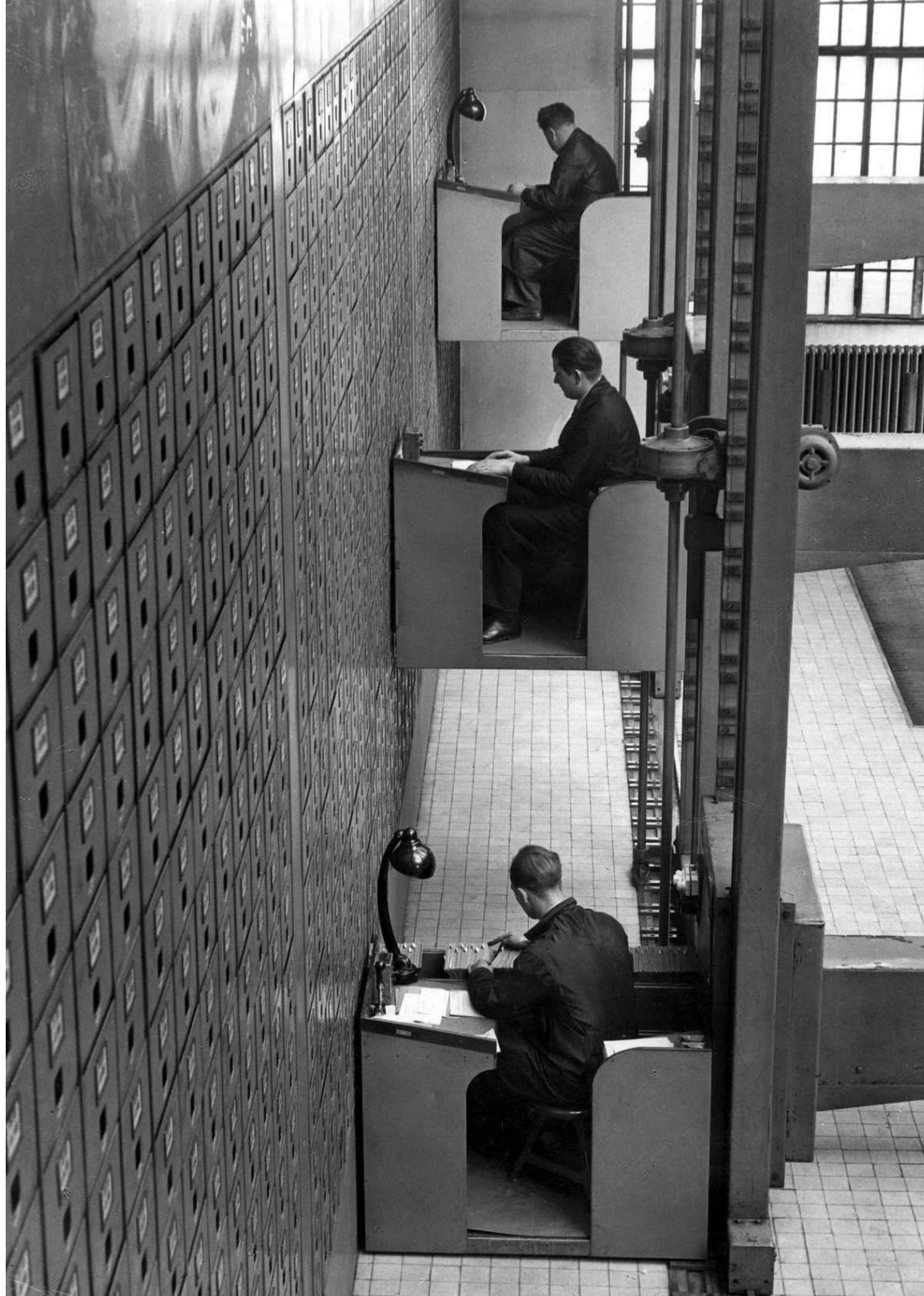


Fig 7.3 State archives France
1937.
([http://media-cache-ak0.
pinimg.com/736x/9d/25/98/
9d2598e2692525770f-
f2564b9116209.jpg](http://media-cache-ak0.pinimg.com/736x/9d/25/98/9d2598e2692525770f-f2564b9116209.jpg))

7.2

Archives

Pearce-Moses describes the archive as 'materials created or received by a person, family, or organization, public, or private, in the conduct of their affairs that are preserved because of the enduring value contained in the information they contain or as evidence of the functions and responsibilities of their creator'. His simpler definition is 'the building housing archival collections' (Moses 2005:30). Thus, the term archive denotes place as well as the activity of collecting and organising materials.

The oldest known archives have been uncovered in Mesopotamia in the form of collections of stone tablets dating to between 3000 and 2500 BC. They are thought to have been made by Babylonian, Assyrian and Sumerian scribes (Wellisch 1981). The Library of Alexandria is another bastion of knowledge from the ancient world, but it is more myth than fact (Bagnall 2002). The saying goes that 'knowledge is power'. Similarly, buildings that contain knowledge are often associated with power. The Latin root of the word 'archive' is 'arca', which means 'a place for safekeeping, chest, box'

(Levy 2001:96; latinlexicon.org). However, the French philosopher Jacques Derrida writes that the Greek term 'arkhe' refers to 'the originary, the first, the principal, the primitive'. 'Arkhe', in turn, comes from the word 'arkheion', which means 'a house, a residence of superior magistrates, the archons', those who 'had the power to interpret the archives' (Derrida 1995:9-10).

The difference between archives, libraries and museums is that archives mainly collect original and unpublished data, while museums focus on artefacts and libraries on published documents (Pearce-Moses 2005:28). Architectural archives in particular focus on 'documents and materials that are created or assembled as part of the design, construction and documentation of buildings and similar large structures, and that are preserved for their administrative, legal, fiscal, or archival value' (Pearce-Moses 2005:24). Architectural records may include drawings, written and photographic records, sketchbooks, models and other project records as well as office and legal documentation in print or electronic format (Lowell & Nelb 2006; Pearce-Moses 2005).

The creation of an archive is intentional. Archived material is actively organised and preserved while remaining accessible to a specific or general audience. It should be emphasised that although the documents are preserved,

they are not kept simply for the sake of preservation but rather to be made available to and used by the public (Dryden 2008). Architect Brian Carter aptly describes the archive as a treasure,

'inherently rare, sometimes unique, often fragile or endangered. It must therefore be protected against theft and the elements, against natural decay or wear due to repeated use. Paradoxically, a treasure also calls for visibility and accessibility. What purpose does it serve to keep a masterpiece hidden away forever or to have magnificent jewels locked up in a safe? For a treasure exists only by virtue of the human perception through which it is seen, touched, admired, gauged, evaluated and compared; in this way, it is deemed valuable and useful, whereas it would otherwise remain an ineffectual object, an unspoken thought.' (Carter 1998:20)

7.2.1

Process

The process within the proposed archive begins with the conceptualisation and design of buildings for the city of Johannesburg. The design and construction of buildings are captured in documentation. Sometimes, there are documents for structures which were never built, and sometimes there are buildings for which no representation exists. Further documentation is often produced after the construction, alteration or demolition of buildings.

Once a central archive is created, materials in various forms may be donated by the public or institutions or may be actively sourced by the archivists. In addition, the archive will also work to produce new documentation of the built environment. Donated materials will first be delivered to the conservation lab, where their condition will be assessed and their value appraised. Documents will then go through a process of restoration or preservation. Hereafter documents are classified and physically ordered within the archive, library, short term storage facility or salvage yard. Thereafter the materials will be available for public use.

Research by archivists, staff and academics will produce exhibitions, lectures and other participatory events that make the archives more broadly accessible to the general public.

The main processes that take place and determine the use of space in the archive are appraisal and arrangement of material as well as access to the documentation, which is either made possible or inhibited by the preceding processes.

7.2.1.1 Appraisal

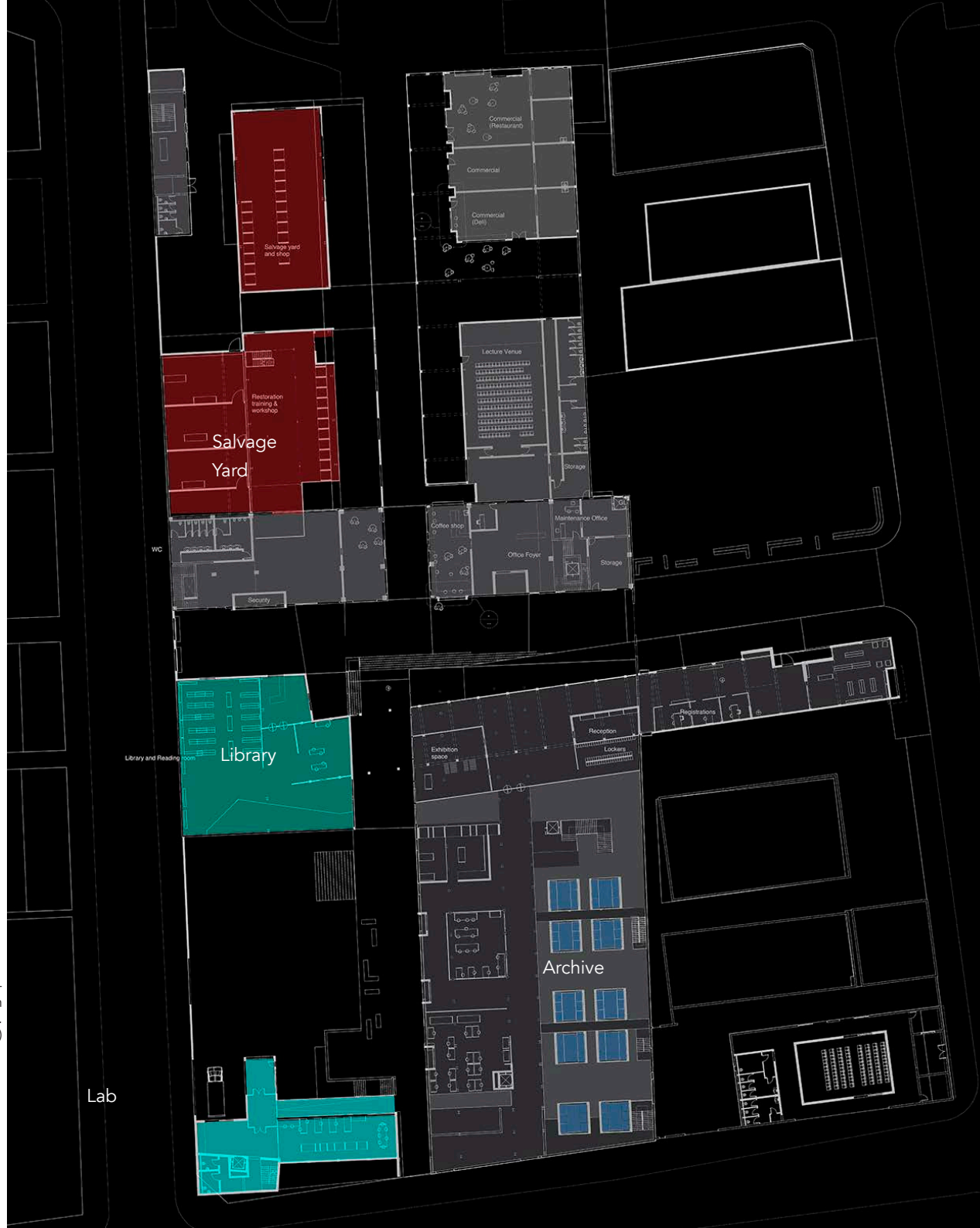
The word appraisal refers to the process of analysing material and determining what should be retained in the archive and what should not be kept. Each archival institution should have its own specific appraisal strategy in place. Appraisal requires a good understanding of the current and future uses of materials, as one must be able to distinguish between items with 'enduring value' and those that can be eliminated. The appraisal process also influences the way materials are arranged, how they are preserved and the digitisation strategies that are followed (Lowell & Nelb 2006; Pearce-Moses 2005).

Architecture archives collect materials that are relevant to architecture and related fields such

as landscape architecture, interior architecture, spatial planning, town planning, urban design, city planning and engineering. Perhaps the most important components of an architecture archive are drawings and plans, which are valuable sources of information in their original format. Any duplication of drawings, whether it be through photographs or microfilm, compromises the scale and information communicated through the documents' materiality. These original documents are useful for many different reasons. For example, owners may access the original drawings if they plan to restore, reuse or renovate buildings. The original plans also allow for an understanding of both structural and heritage requirements.

Archival theory and practice has changed a lot in the last 20 years. Archivist Alicia Rekrut explains that in the past, appraisal strategies focused on the text or information contained in the documentation. Recently, however, there has been a shift. There is now a renewed interest in the materiality of documentation and the information that is contained in original documents' physical qualities. Thus, during the appraisal of documents, more attention is being given to the 'context of their creation and use' than was in the past (Rekrut 2009:63; Bearman 1994; Nesmith 1982; Cook 2005).

Fig 7.4. The processess determine the spatial configuration of the facilities.
(Author)



Another recent trend in archives, influenced by post modernism, is a focus on the multiple narratives contained in documents. This has led to a reconsideration of the role of the archivist, the access provided to archives' users, and the composition and value of digital collections. Documents are now seen to gain much of their value from their social meaning (Booms 1987). But society is not static, nor is the meaning assigned by society to objects. Therefore, meanings are constantly evolving (Nesmith 1999). The archivist is thus no longer an objective facilitator but is instead a mediator of meaning.

7.2.1.2 Arrangement

As long as libraries and archives have existed, there has been the challenge of figuring out how to arrange and organise the information in space. The goal is to arrange documents in a way that 'reflects the records as created and facilitates their use' (Lowell & Nelb 2006:89). Different solutions have been used over time, some of which are hypothetical, for example Boullée's design for the Royal Library (1784), Camillo's Memory Theatre (1550) and the panoramas and dioramas of the 1700s. Systems in use today such as the Dewey system allow for secondary and tertiary classes of information, while computer databases allow even more comprehensive classification.

Thomas Marcus writes that 'literacy is both a tool for the extension of knowledge and for domination'. Thus, libraries and other buildings that display knowledge also use spatial arrangement to facilitate the social ends of order and control (Marcus 1993:172). Nevertheless, the social influence of libraries and archives has only recently been recognised. Archivists have been encouraged to adapt to the ideological and technical changes that have taken place within the archival science discipline (Kaplan 2002; Kettelaar 2001). Like the anthropologist, the archivist used to assume that a neutral and objective relationship with the archive was possible, but postmodern ideas of multiple narratives and positionality provide an alternative perspective. Anthropologists realised in the late 1800s that their presence while conducting research had a profound effect on their work, with great implications in terms of observation, representation and power. Similarly, archivists have started to reflect upon their role in the archive. Kaplan writes that archivists should engage in an on-going discussion about their position, representation and power (2002).

7.2.1.3 Access

'...power to make records of certain events and ideas, power to name, label, and order records to meet business, government, or personal

needs, power to preserve the record, power to mediate the record, power over access, power over individual rights and freedoms, over collective memory and national identity...' (Schwartz & Cook 2002:5)

Researchers, students, educators, professionals and the general public all access archival collections. The archive for architecture would be the one-stop-shop for interested parties researching typologies, architectural history, individual designers, techniques, structural detail, social organisations, development, ideologies and much more (Lowell & Nelb 2006).

The archivist is in a position to include or exclude material, to represent material in a way that tells one story but not another, and to provide access to certain narratives and not others. Therefore, the dialogue between the documents and archive users (who represent society) is mediated by the archivist. Acknowledgement of the archivist's power makes the archive more transparent.

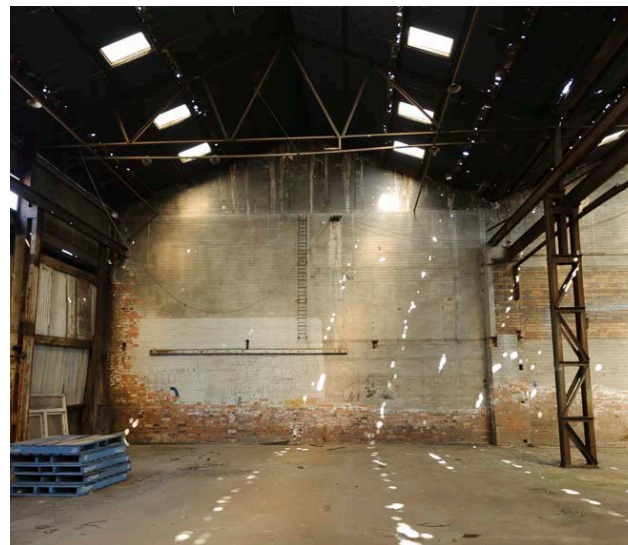
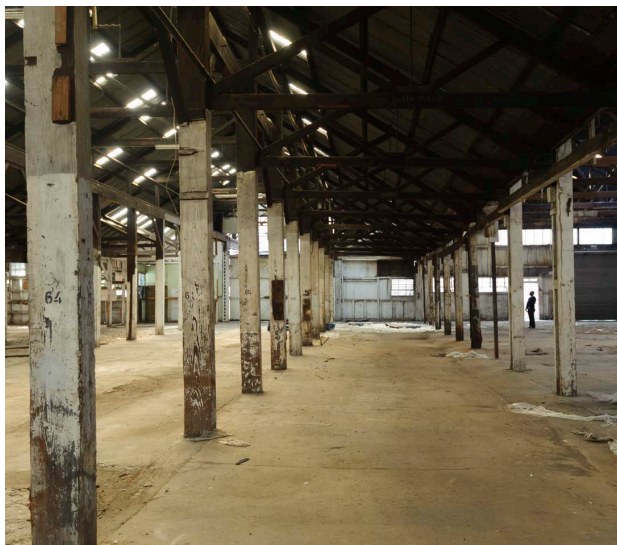
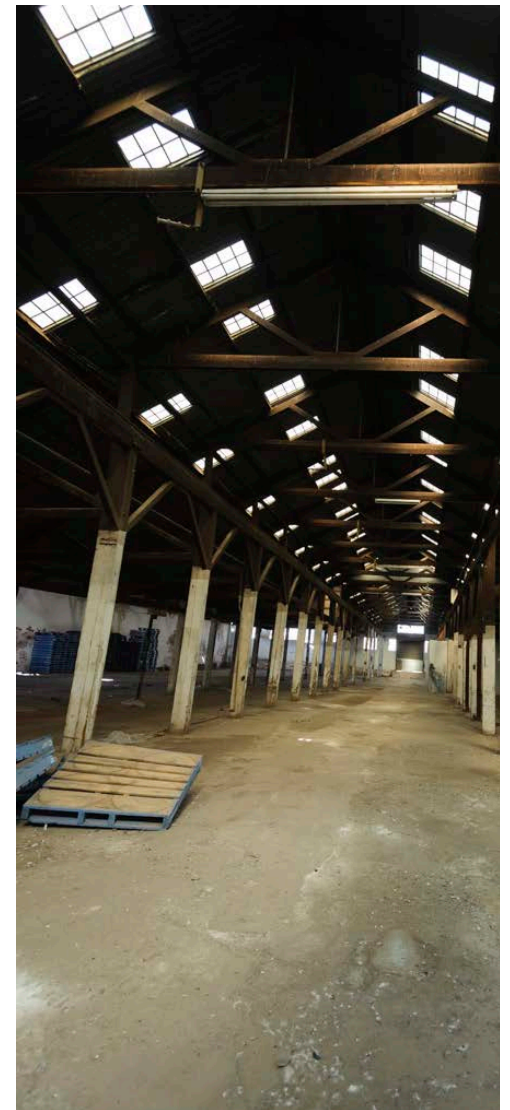
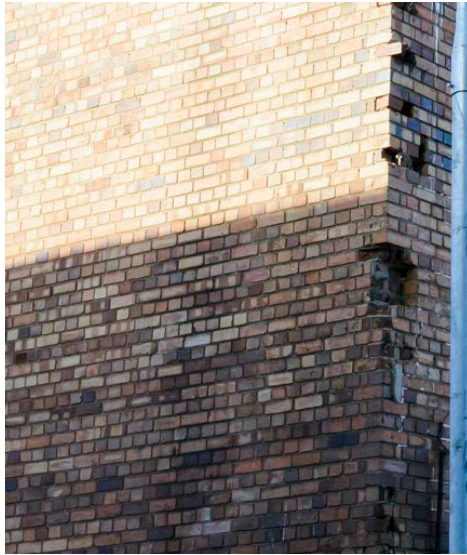


Fig 7.5 Significant structures on site that need to be considered as part of the heritage strategy.
(Author)

Fig 7.6. Markings on the wall in one of the sheds on site

7.3

Heritage Strategy

Considering Section 34 of the National Heritage Resource Act (1999), all buildings on the site will require permits for any alteration as they are all older than 60 years. The history of the Hubert Davies site has been discussed and the individual buildings on the site described. Their significance is further assessed through the principles of the Ename Charter (2008) and the ICOMOS Charter for the interpretation and Presentation of Cultural Heritage Sites (2007) that preceded it, as these essentially incorporate the approach to intangible heritage in the National Heritage Resource Act (1999) while being more comprehensive.





Fig 7.7. Fox street entrance
to the Hubert Davies Site.
(Author)

7.3.1 Site strategy

Facilitate access to the previously closed industrial site by making it public; allow thoroughfares; create a civic space on open land facing the police station; facilitate access to the history of the site as an important business in the history of the city;

Make use of multiple sources of information to establish the narrative of the site; the site can remain a living case study, incorporating empirical and ethnographic information; make some of the intangible attributes visible through contrasting interventions.

Consider authenticity and meaningfulness through assessment of individual structures and their value as a complex. Utilise identified structures in their original form or illuminate important qualities of the site through additions and access that the intervention allows; maintain the integrity of the shed (as a storage space and workshop, the shed is preserved, repurposed as a storage space of architecture and workshop that is aimed at building the city, its function in many ways remaining the same)

Reuse of the Hubert Davies site; adapt for sustainability, as well as preservation of materials; plan for densification; incorporate the archive in a multipurpose development, business plan includes rentable office space, commercial and civic functions; plan for a percentage of flexible usage.

Facilitate interaction between the public and professionals through heritage/architecture/city based activities – outreach programme – grow public interest in the city

Training facilities for heritage restoration, through site and activity promote artisanal skills in the built environment.

Promote access and understanding

Reliable, broad based information sources & Attention to Setting and Context

Preservation of Authenticity

Planning for Sustainability

Concern for Inclusiveness

Importance of Research, Training, and Evaluation

7.3.2 Archive strategy

Qualities that will determine the form of the archives - Open up the archives, allow the documents and archival and research process to be visually accessible to the general public, creating a greater understanding of what this entails as well as holding the archives accountable to how the documents are treated and stored.

Reliable, broad based information sources – With an emphasis on multiple sources, actively collect material that support the built environment projects; film, voice and sound recordings (what places sound like); Collect people's stories associated with places; this creates opportunity to communicate the importance of the everyday.

Attention to Setting and Context – Important to provide a physical reference to the city through views to the outside, as well as view in, or by other means create a tangible link between the 'perceived' city and the 'conceived' city.

Preservation of Authenticity & Planning for Sustainability - Original document available to the public through the archive, facilities that cater for this; conversely a innovative digital platform allow for other types of investigation not possible before. A combination of authenticity and innovation. Influence the form of archives, research space, access; Space to access digital and other material, discussion & demonstration facilities; digitisation centre (reprographic facilities), conservation lab, allow public visual access.

Concern for Inclusiveness & Importance of Research, Training, and Evaluation – Further documentation on subjects that have been left out of archival collections due to previous prejudice or ignorance. Training in restoration of material.

7.4

Programme

The programme makes use of international best practice by looking at institutions with a similar aim as this archive. Internationally it considers places such as the Canadian Centre for Architecture (CCA), the Royal British Institute for Architecture (RIBA) and the Netherlands Architecture Institute (NAI), and locally Brenthurst Library and the Johannesburg public library as well as Iziko Museums in Cape Town. The programme is reconsidered to suit the site and expanded to suit the context.

Information and registration
Lobby with lockers
Search facilities
Liasons desks
Paper collections
Audio/Visual collections
Reading room
Research stations
Ablution facilities
Library
Conservation lab
Reprography
Exhibition space
Lecture Facility
Management offices
Research offices
Security
Restaurant/Cafe
Bookshop
Parking & public transport routes

Reconsidered archive

Education & Training
learning facilities
workshops & training in scarce skills and heritage restoration

Conservation lab
paper restoration
binding and book repairs
reprography
training

Research facilities
indirect natural light
comfortable space
visible outdoor
large desks for comparative study
temporary storage areas

Salvage Yard
library of building components removed from heritage sites
storage facilities

Increased visibility
archives visible to public
process understood
value understood

Increased access
research space between archival spaces
registered researchers to access archives

Relation to the city
increased public nature of the building
visual links to the city
everyday city through the site

on the precinct level

Letable Offices
associations that relate to the archive
e.g. PHRAG, SAIA in the city

Retail and other business
supporting functions, restaurant, cafe, printers, courier, hairdresser, everyday business



Fig 7.8. Locality Plan of the Hubert Davies site.

7.4.2 Implementation

Programmatic needs together with the heritage strategy and existing site conditions inform the design. The programmatic arrangement of the site is illustrated here while the main elements will be discussed in more detail together with drawings of the final design intervention.



Fig 7.9. Diagram showing the programmatic distribution on the site.

Fig 7.10. Activate the edges by opening up the site.



Route

A public thoroughfare begins to open up the site to public use and exposes the general public to the archives. As the site sits mostly behind other buildings, the routes through the site create new activity and helps to activate the edges. The robust grain of the site is refined in order to make this industrial site comprehensible to a public audience.

Fig 7.11. Route through the site incorporating spaces between the buildings as well as a civic space to the north in front of the police station.



Fig 7.12. Section along north-south route through the site looking west showing how the site can become a public throughfare with green spaces and resting places.

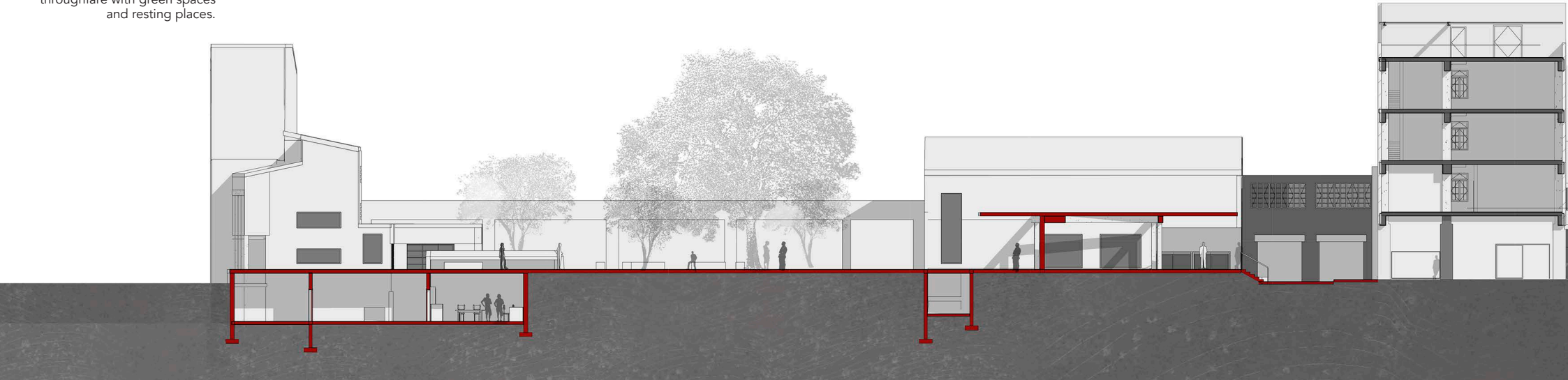
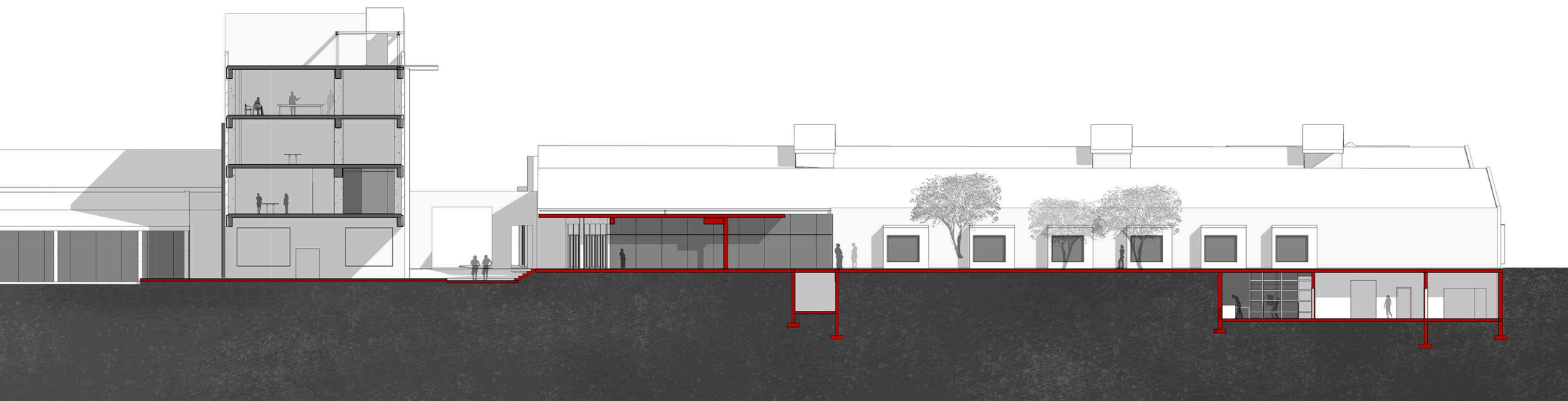
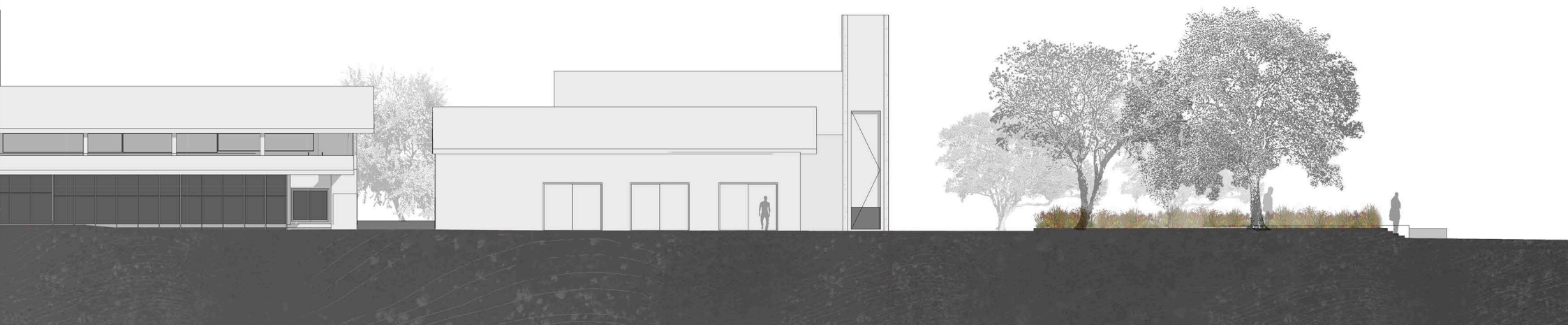


Fig 7.13. Section along north-south route through the site looking east showing the possibility of with the benefit of chance viewings of exhibitions or other activities .





Arrival

Visitors to the archive arriving with public or private transport will on most occasions access the archive from Alexander street through the Main street entrance. This arrivals lobby is a part of the archive that juts out into the city from the hidden site. Here visitors will get information about the archive and the rest of the precinct, leave belongings that are restricted in the archive in the lockers provided and proceed to reception where they may register to use the facilities or simply access the public areas. The entrance building also houses a public bookshop.

A concrete frame structure of the entrance building is further inserted into the existing shed along the angle of the Ferreirasdorp grid. The town grid meets the Hubert Davies site at an sharp angle. The boundary of Ferreirasdorp/Robinsons mine is crossed in passing from the arrival to reception area and is thus commemorated at this point through a view along this axis from within the building as well as markings on the floor surface outside.

The shed's northern facade is altered. The angle follows the line from the new entrance building to be set back at an angle. This gesture opens up the courtyard behind the office building and leads visitors along a series of sliding doors towards the libraries entrance. Visitors may also enter the archive along this northern edge, where they will enter into an open foyer space that allows them to experience the structure of the original shed in terms of their size and materiality.

The original timber structure is kept in tact, but as mentioned, a concrete frame passes through the space in contrast to the old structure. Spatial arrangement follows the concrete frame with the main reception desk and an enclosed but transparent exhibition space. These areas are open to all public visitors.

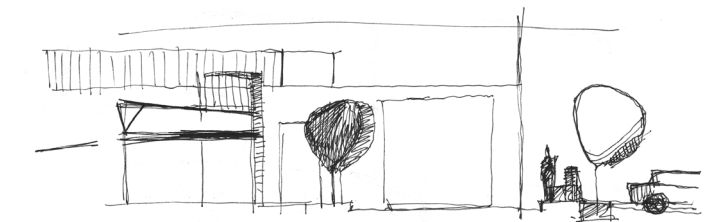
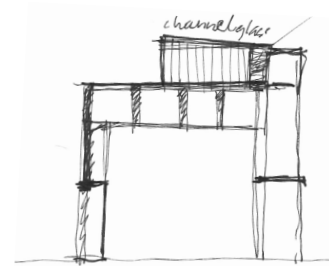
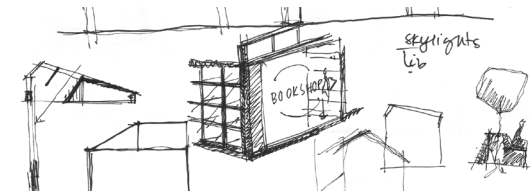
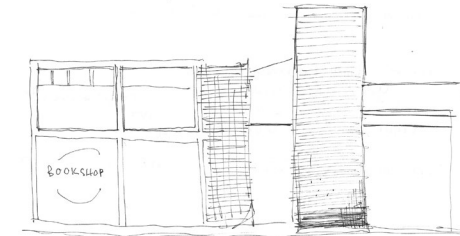
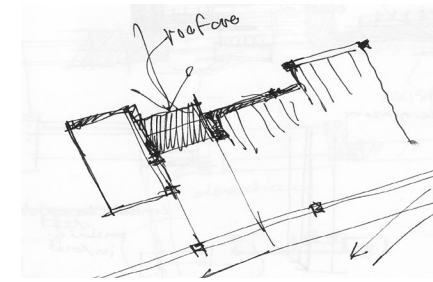


Fig 7.16 Ground Floor Plan





Fig 7.17 Entrance alongside northern facade.



Fig 7.18 Main street entrance building.

Fig 7.19 North Elevation





Fig 7.20 Section AA - Through the Main street entrance building, reception foyer and library.



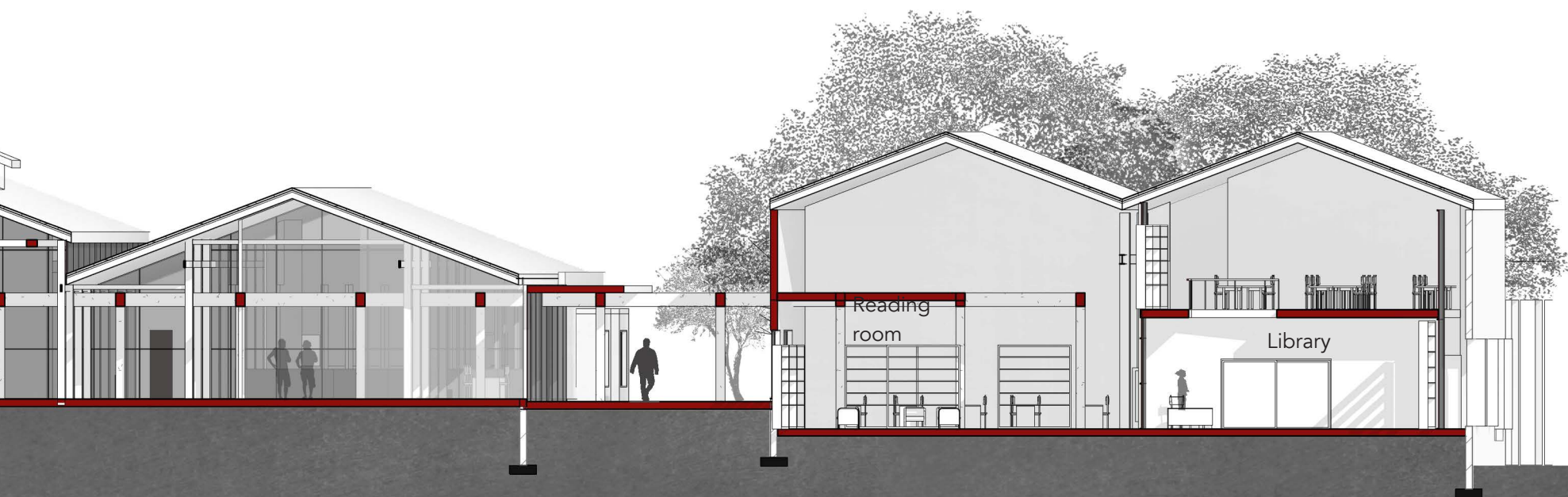




Fig 7.21. Perspective of the entrance building on Main street.



Fig 7.22. Interior view of the Library reading room.

Fig 7.23. Ground Floor Plan - Southern section of site.

Fig 7.24 >> Concept sketches for the archival storage spaces



Archives

The archives comprises of the archival collections, research space amongst and separate from the collections, and a digital archival search facility. The archives are directly connected to the library and conservation labs. The sheds that house the archives are the oldest on the site and was considered the most valuable to conserve as the timber structure of the one shed is not commonly seen anymore and serves as one of the main references to the old mining style architecture.

The architectural interventions in this space fills in between the existing column structure, touching it softly and at the same time drawing attention to its significance by interacting with it. The archival collections are housed in stacked rooms in the adjacent shed. This is a more robust intervention as the inserted concrete frame structure commands most of the space. The rooms are designed in such a way to be relatively small and stand apart from each other but are clustered in groups. This serves the technical requirements as well as the conceptual requirements of transparency well.

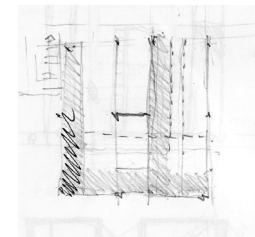
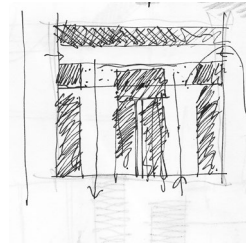
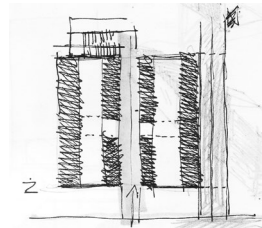
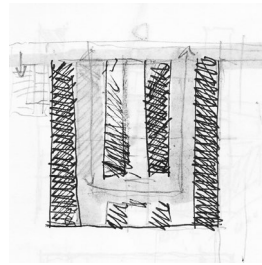


Fig 7.25. Conceptual sketches of the archival storage spaces.

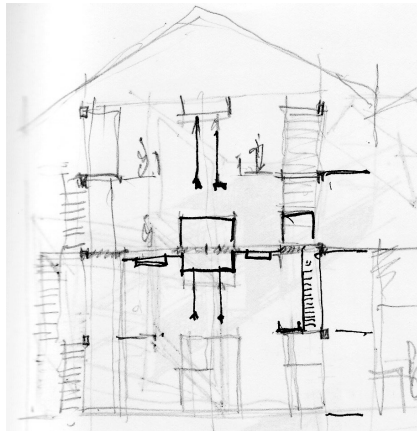
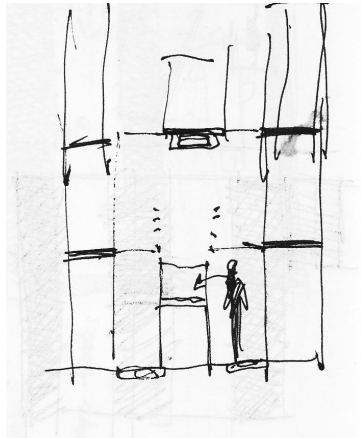
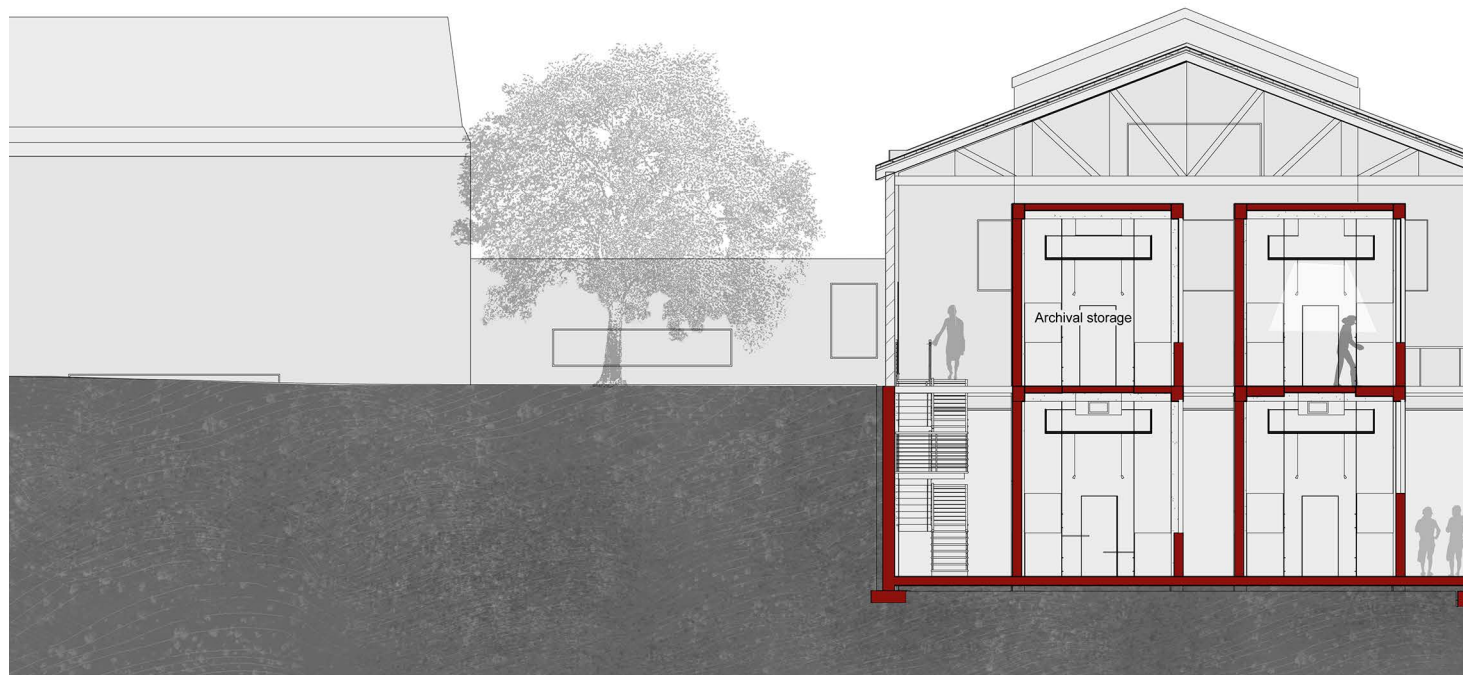
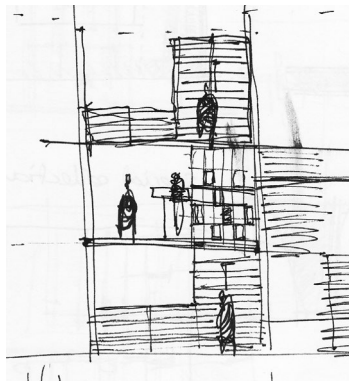


Fig 7.26. Section BB - Archival storage spaces with lab in the background.



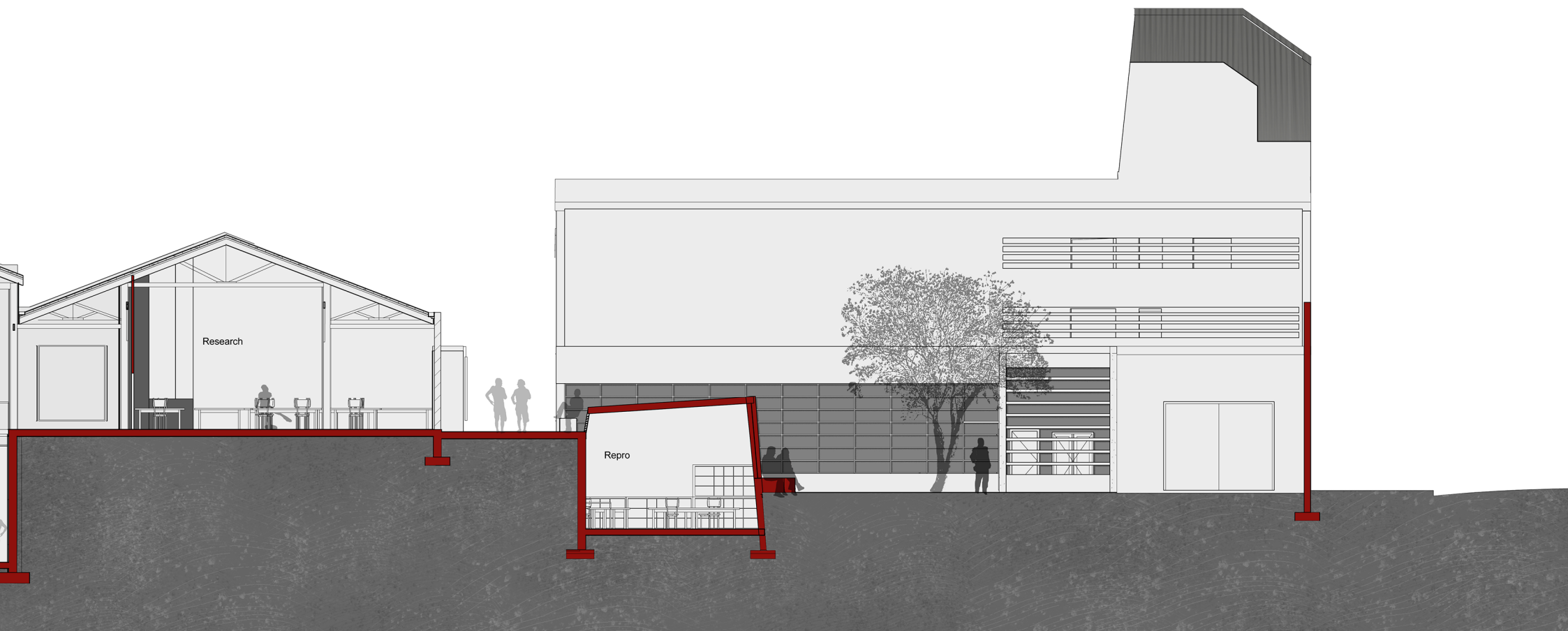
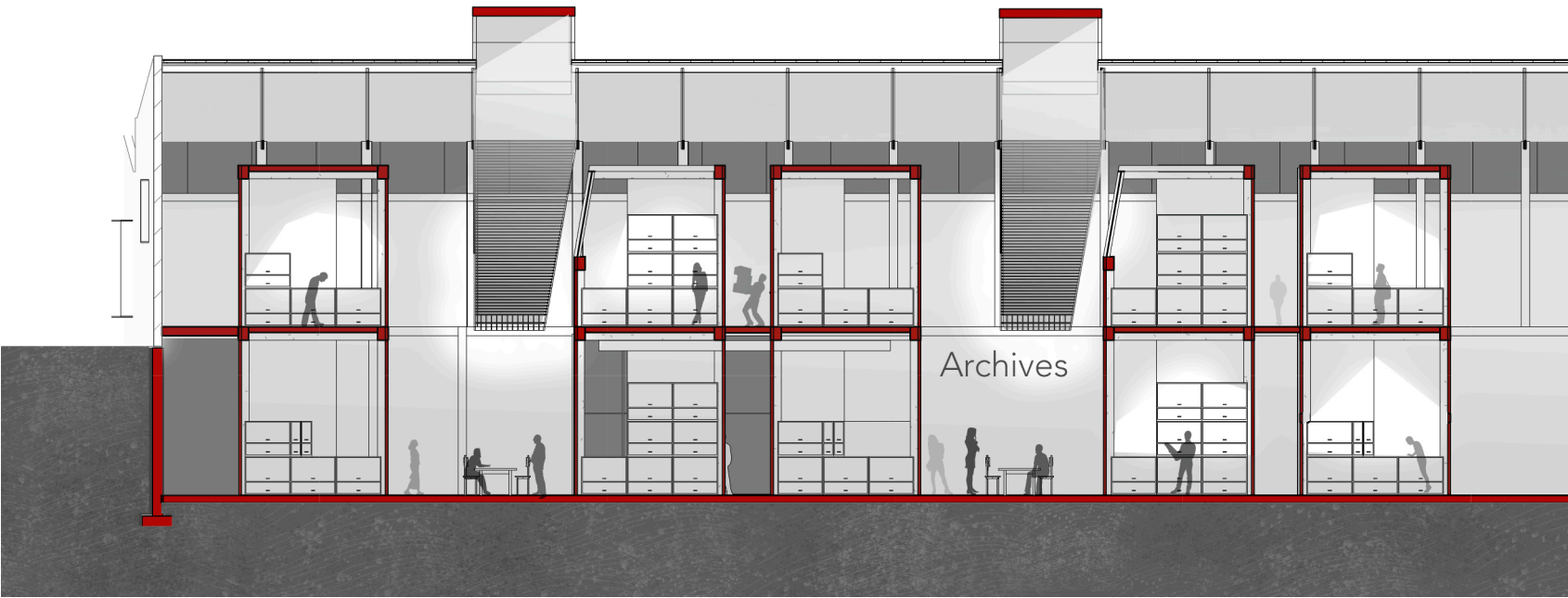


Fig 7.27. Section CC - Archival storage and study areas, with sky lights for diffused natural light.



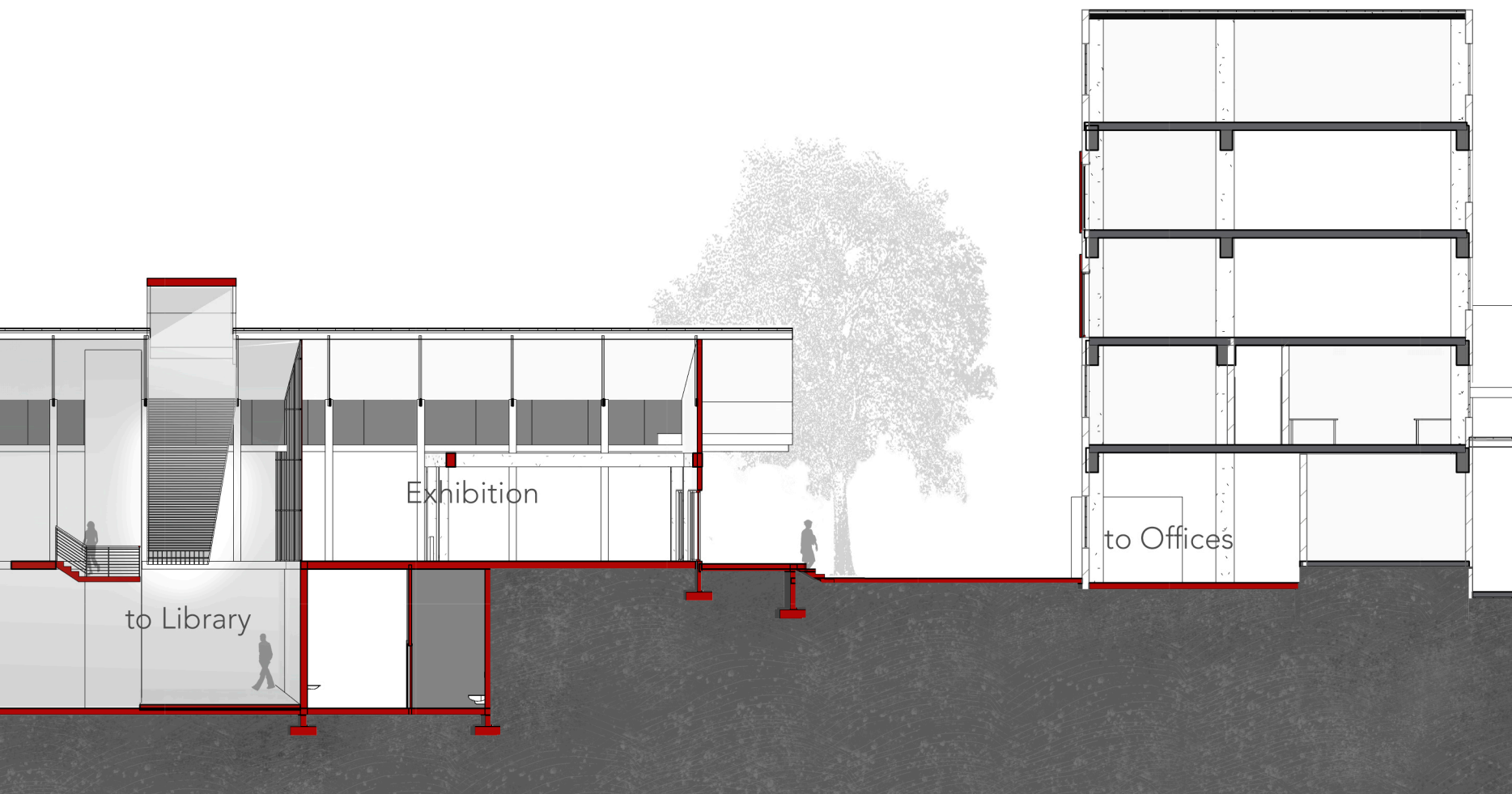


Fig 7.28. From left - Blue tiles on the Pabst building, Commissioner street; Masonry pattern on a wall in Alexander street; Green tiles on an industrial building Commissioner Street. (Author)

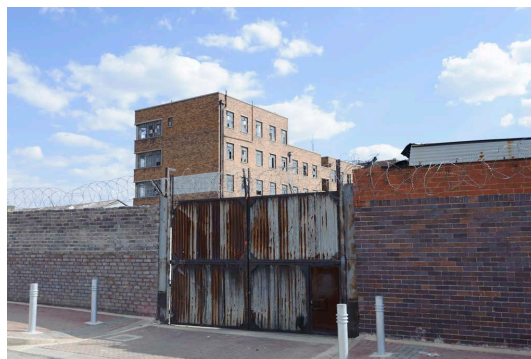
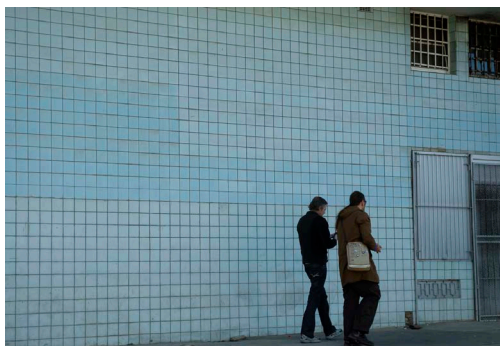
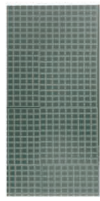


Fig 7.29. Section DD - Archival rooms make reference to the area of Ferreirasdorp through thier materiality.





Off shutter
concrete



Green mosaic
Commissioner Street



Masonry reference
from Alexander Street



Light blue tiles
referencing the
Pabst building

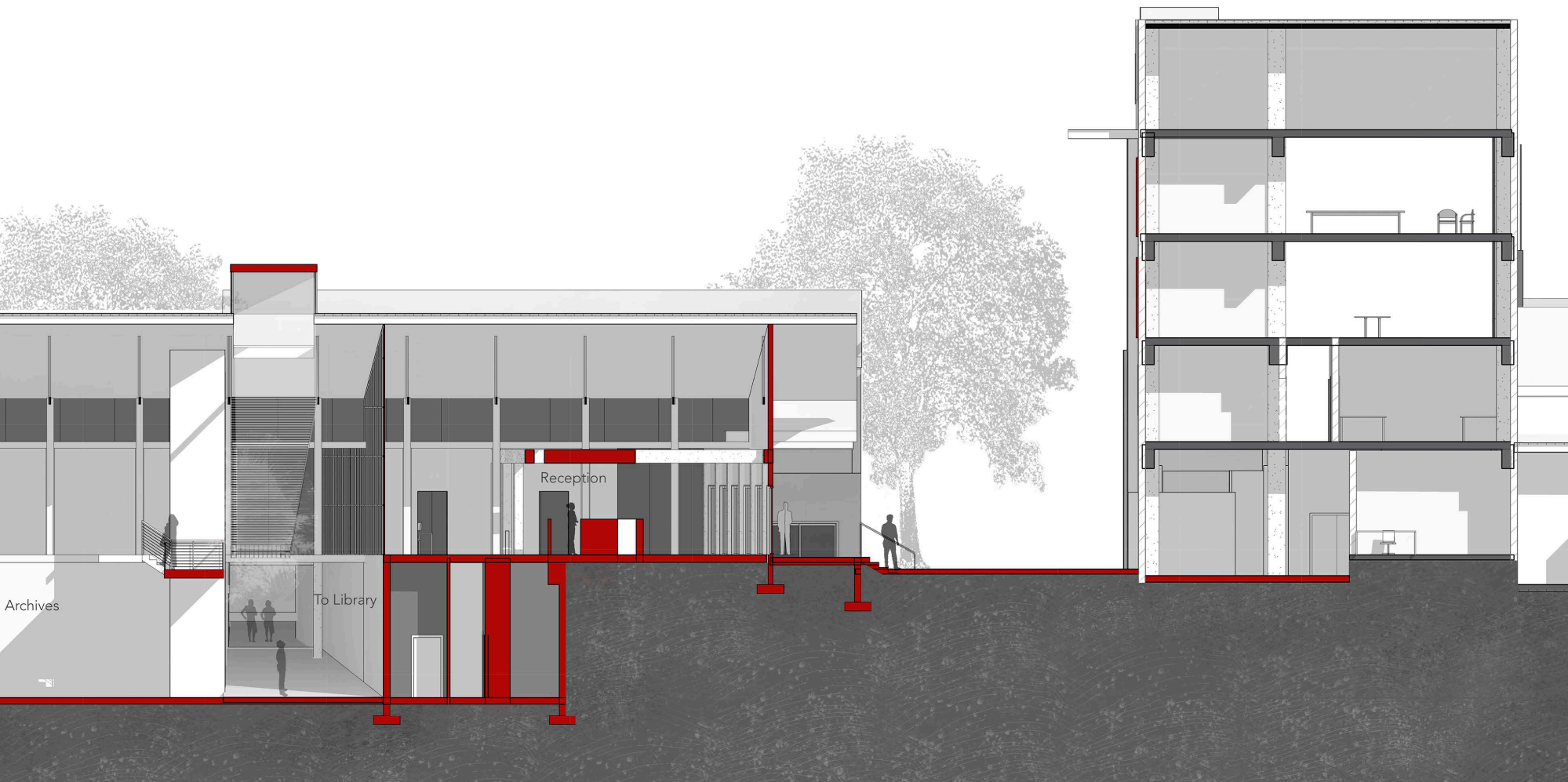




Fig 7.30. Perspective into the archival space from the foyer .

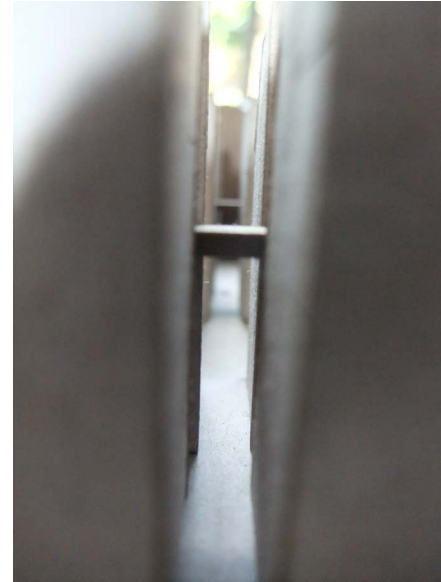
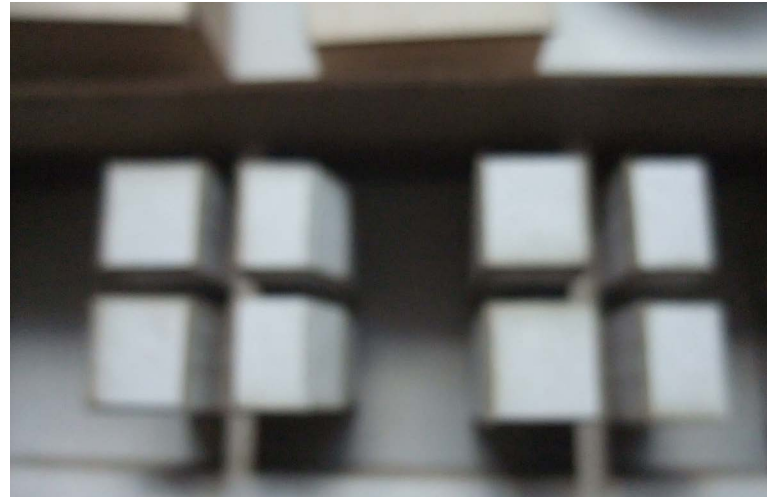


Fig 7.31 Modeled archival storage rooms.



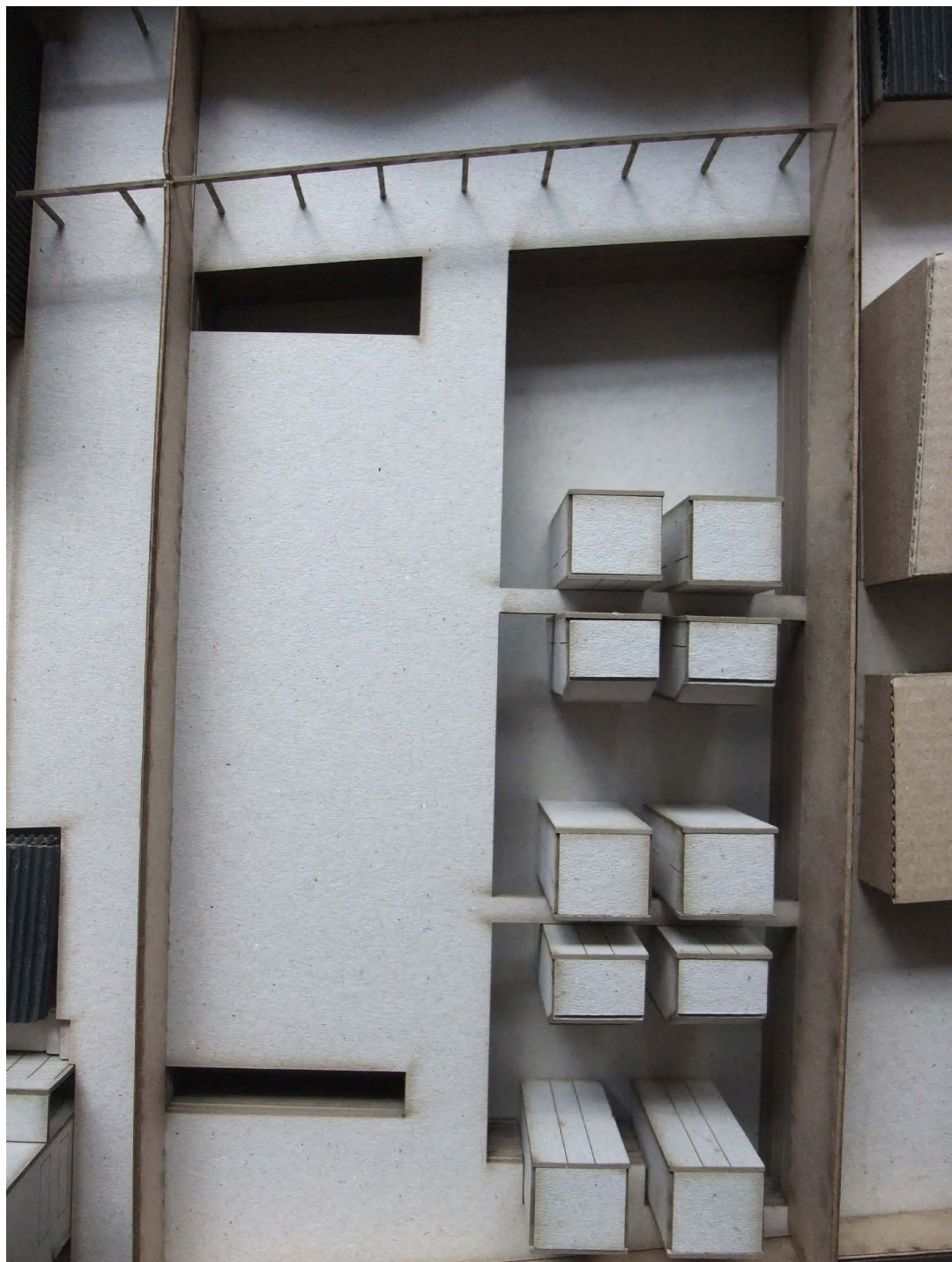


Fig 7.32 Archival storage rooms clustered together.

Fig 7.33. Plan - Lab lower level, entrance, collection and sorting facilities. From the labs materials are taken to the repro centre or directly to the archives where they are stored for use.

Hubert Street



Marshall street

Lab

The conservation lab is an entrance into the archive, an entrance for the collections. It is essentially a whole building in service of the archives. Materials will arrive at the labs and be prepared through various processes from which they will be filed within the publicly accessible storage spaces.

The lab has a delivery entrance as well as an entrance for public and a control for access into the archives. The ground floor is a sorting room. The second floor houses restoration facilities. In part, a concrete frame structure, the design of the labs reflects on the exterior on Marshall street elements of the design of the internalised archives.

Natural ventilation in the lab is facilitated through a solar chimney. Solar control is also an important design consideration as not to expose documentation to unnecessary radiant light. This is further discussed with the technical analysis.

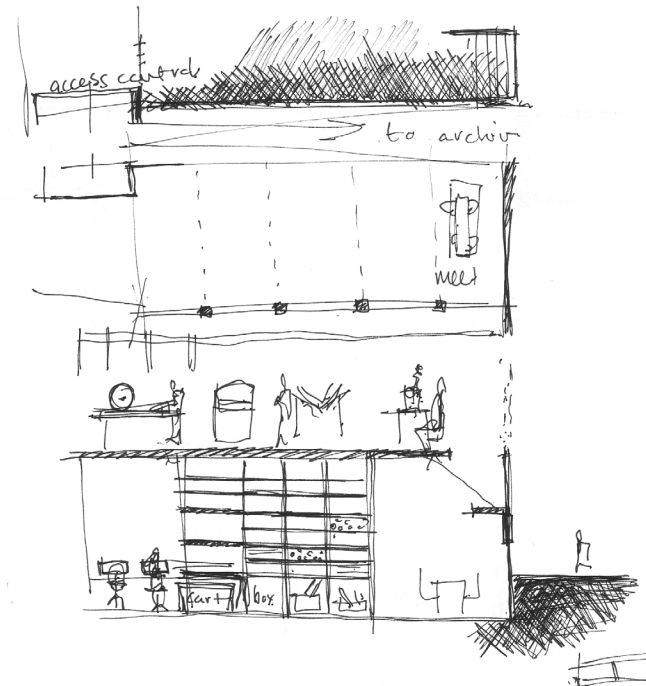


Fig 7.34. Concept sketches of the labs sorting and restoration facilities.

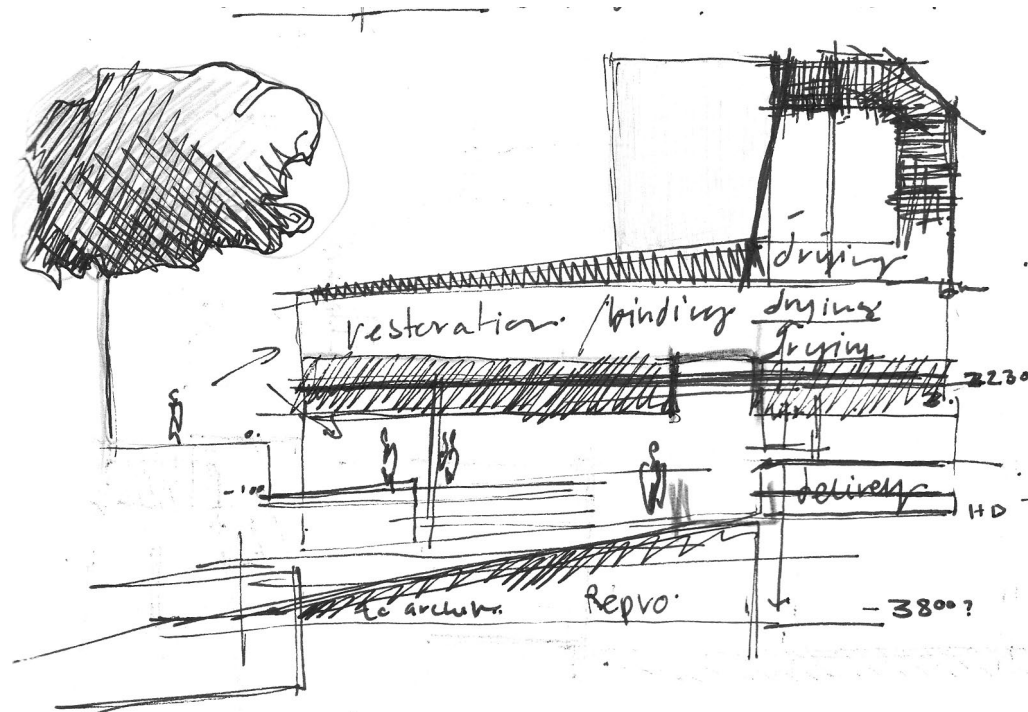


Fig 7.35. Concept sketch - Lab, indicating the connection to the archives below.



Fig 7.36. South Elevation
of Labs and Archives within
existing sheds.

The southern edge of the site is accentuated through the solar chimney which will be visible from the Westgate transport interchange, and noticeable because of the contrast between the concrete structure with corrugated sheet metal solar collector, and the masonry office block on the site. Masonry detail on the lab's street facade is a reference to existing masonry walls in Alexander street.

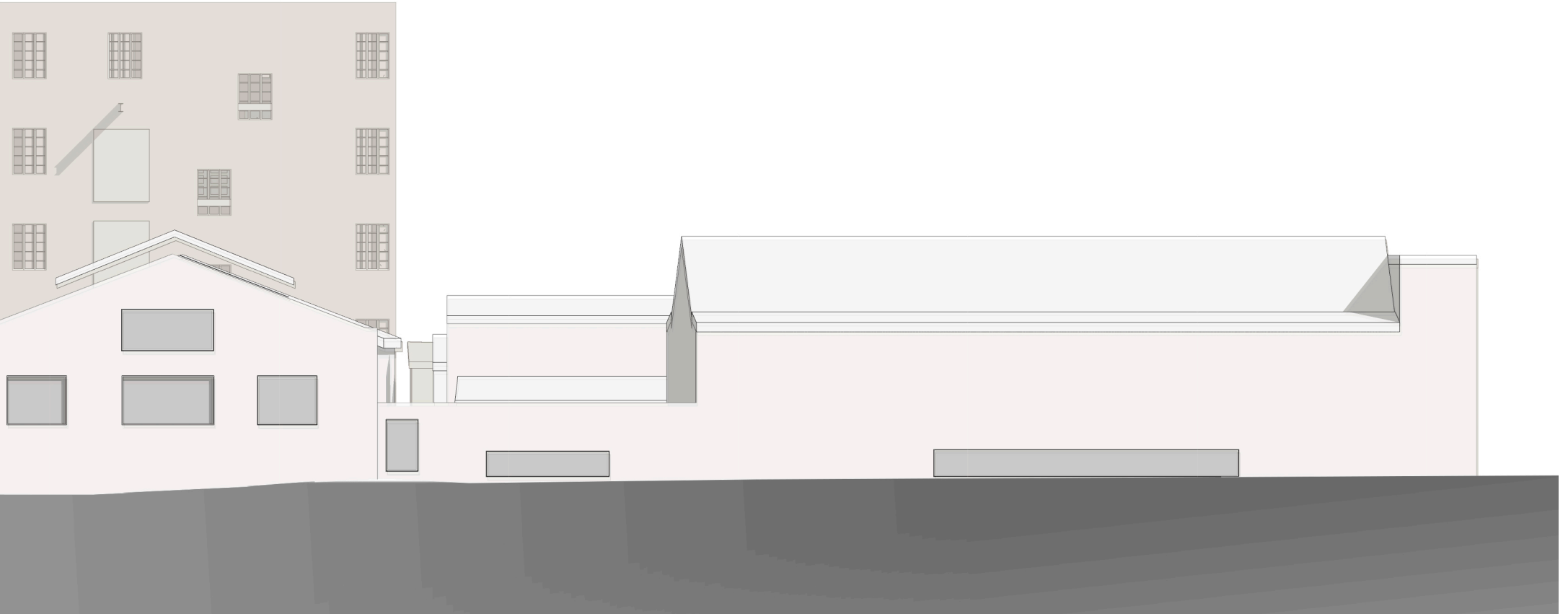


Fig 7.37. West Elevation



Fig 7.38. East Elevation





Servicing the archives



Gas fire suppression system



HVAC



Power supply

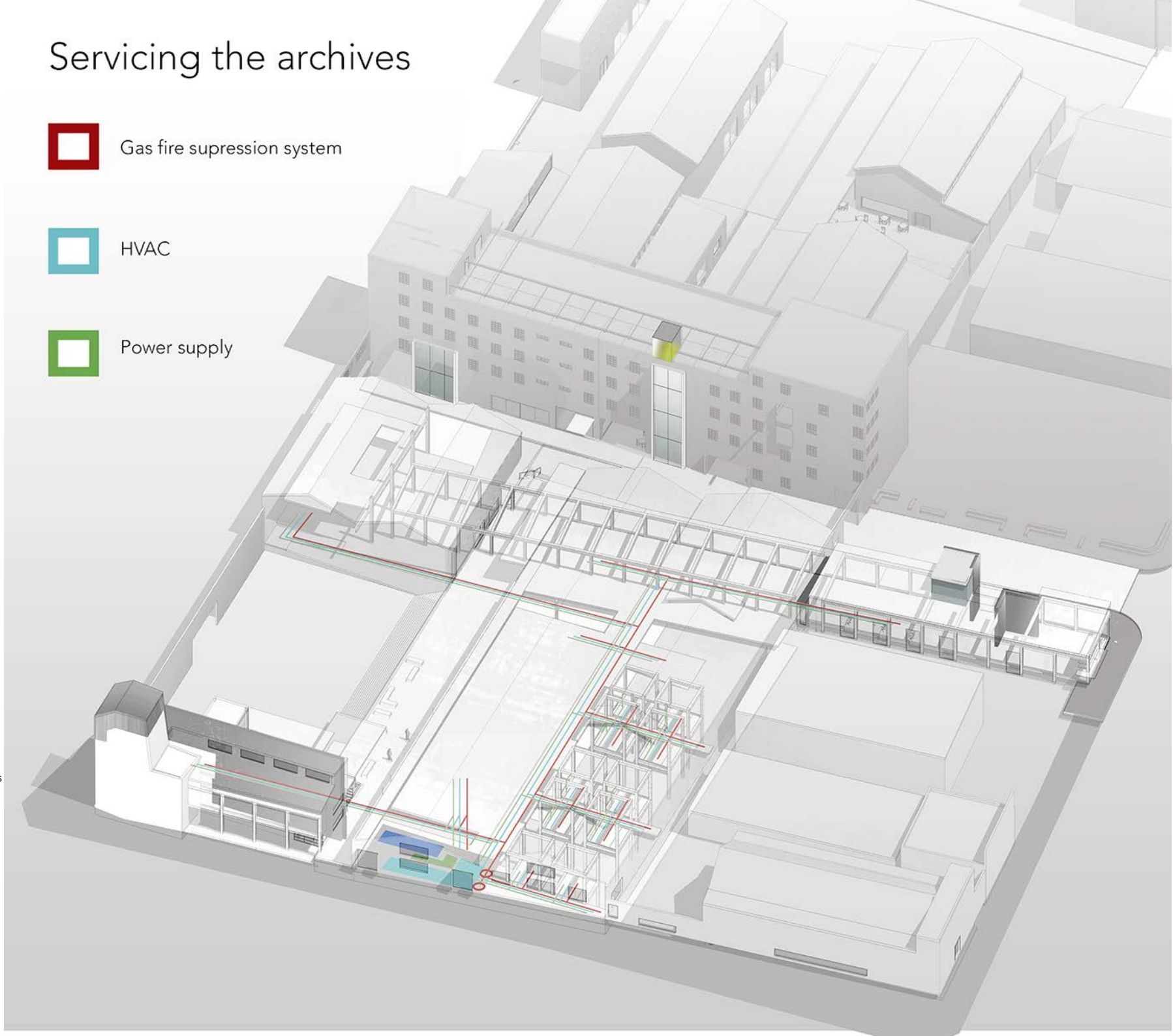


Fig 7.5.1 Diagram illustrating how the technical requirements are met and how they inform the form of the archives.

7.5

Technical requirements

The archives building requires a number of systems to be in place for environmental monitoring and control as measures to preserve and protect archival material. Service requirements vary according to the different uses in the building. The archival storage areas and conservation labs being the most highly serviced followed by the research and exhibition spaces.

7.5.1 Temperature and relative humidity

High temperature and high relative humidity increases processes of deterioration. The former, through oxidation and the latter through acceleration of chemical processes as well as increased opportunity for mold, that can damage most forms of documentation (Olcott Price 2010:254). Because most documentation include organic material in the cloth or paper, major fluctuations in temperature and relative humidity will also cause deterioration due to the expansion and contraction of the organic compounds. (Ibid. 2010:255). Temperature and relative humidity

should thus be controlled. Within the storage areas temperatures may be kept to around 16 degrees, while in the research area and lab temperature may be kept between 20-21 degrees Celsius. Relative humidity should be kept between 35 to 40 percent, as constant as possible (Ibid. 2010:255-257). Temperature and relative humidity should be electronically monitored to avoid major fluctuations of either, for instance when HVAC system fails or when and exhibition or research area has a high occupancy for a long periods.

7.5.2 Fire Supression

The most appropriate system for fire suppression in the archives or exhibition spaces will be a 'clean agent' system. Gaseous systems are CO2 or halon based, with a similar alternative found in a product called 3M NOVEC 1230, which is stored in a liquid form, but dispensed as a gas. While CO2 distinguishes fire by lowering oxygen, halon and the 3M product works by absorbing heat. Similar to removing oxygen, this mechanism removes one of the other elements that are necessary for a fire to burn, namely heat. (www.3m.com)

7.5.3 Lighting

Wavelength as well as temperature and duration of exposure are concerns that have to be dealt with in

lighting design for storage, research and exhibition spaces in the archive. Ultraviolet radiation in sunlight, fluorescent, halogen mercury vapour, and metal halide lamps emit high levels of ultraviolet radiation. (Olcott Price 2010:257) It is the cool, blue wavelength in the visible spectrum that poses a threat and causes deterioration of documentation. Incandescent lamps on the other hand produce less of the blue wavelength but emit heat (Ibid).

Shading devices as well as UV filters can be applied to natural light sources to avoid sunlight on documentation. In storage spaces lighting levels can be kept to between 100-150 lux, while research spaces and labs will require higher lighting levels, around 300-600 lux. (Olcott Price 2010:259) UV filters can also be fitted to individual lights where necessary. Documents should be kept in storage folders and drawers when not in use.

Exhibition spaces will require different lighting design. Infrared light sources will be used and set up in order to avoid hot spots developing on glass casings. Exhibition spaces are dimly lit between 50-150 lux, depending on the sensitivity of the material. (Ibid 2010:282). LED lamps are a good solution as they can be designed to emit a particular spectrum of light and do not produce high temperatures (Connd:3).

Servicing the archives



Gas fire suppression system



HVAC



Power supply

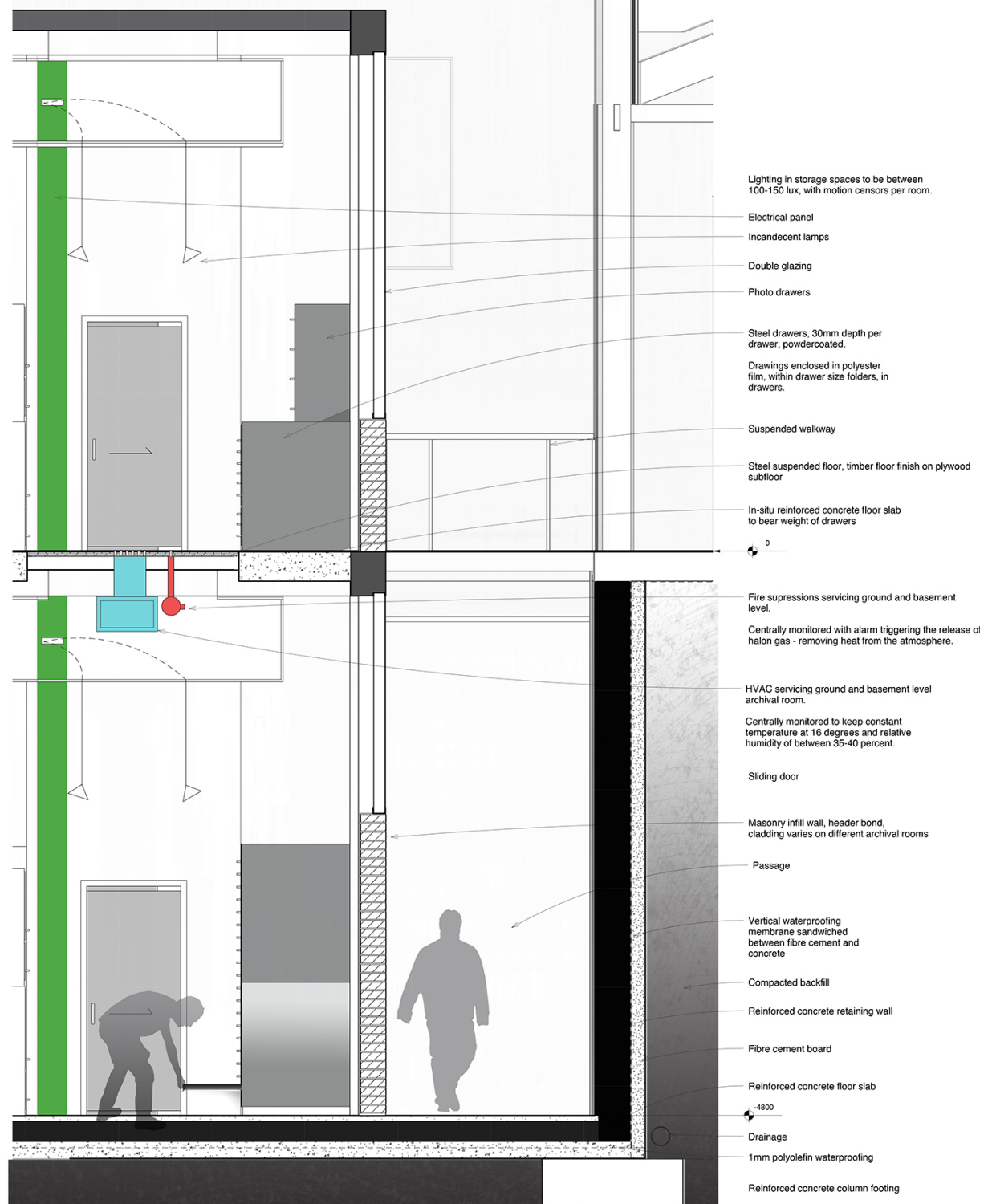


Fig 7.5.2. Section through the archival rooms and circulation passage alongside it showing its structure and how the archives are serviced and used.

7.5.4 Handling and Storage

Archival processes of appraisal, arrangement and accessibility is greatly influenced by systems of handling and storage. Storage facilities should make use of shallow, flat drawers. Storage facilities require space for documents that do not fit drawers and may have to be kept rolled due to their size. From receiving materials, documents are prepared for filing in the archives. After going through restoration processes most documents can be enclosed in a polyester film and then rolled around a secondary tube and placed in a marked larger tube, or filed flat. All enclosures that come into contact with the drawings to be acid free. Polyester film does not have an effect on the drawings and prints, while also protecting them from dirt when they are handled. The polyester encapsulation also gives the document a level of rigidity although additional backing boards are provided when documents are brittle or particularly vulnerable (Olcott Price 2010:263-275).

Steel drawer cabinets are powder-coated to reduce the opportunity for materials to be exposed to rust. Other paints have shown negative effects on documents due to them emitting volatile organic compounds, while timber shelving should also be avoided due to chemical sealants used on them.



Fig 7.5.3 An example of rolled storage
(<http://nestabode.com/archives/>)

Fig The towering structure on the corner of the site serves as solar collector for passive ventilation.

Drawings recieved that have been damaged by water, or those wet for purposes of restoration, are dried on racks exposed to this natural air flow.

Passive Ventilation and indirect light in the conservation lab

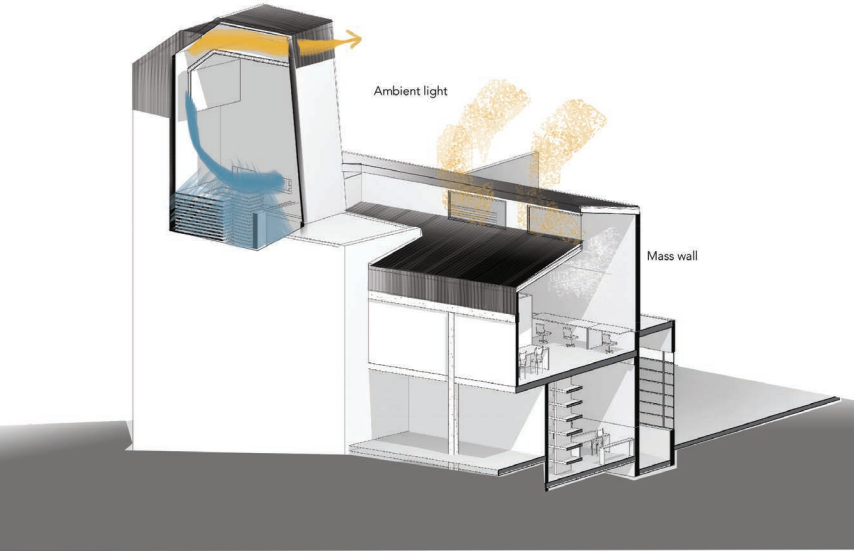
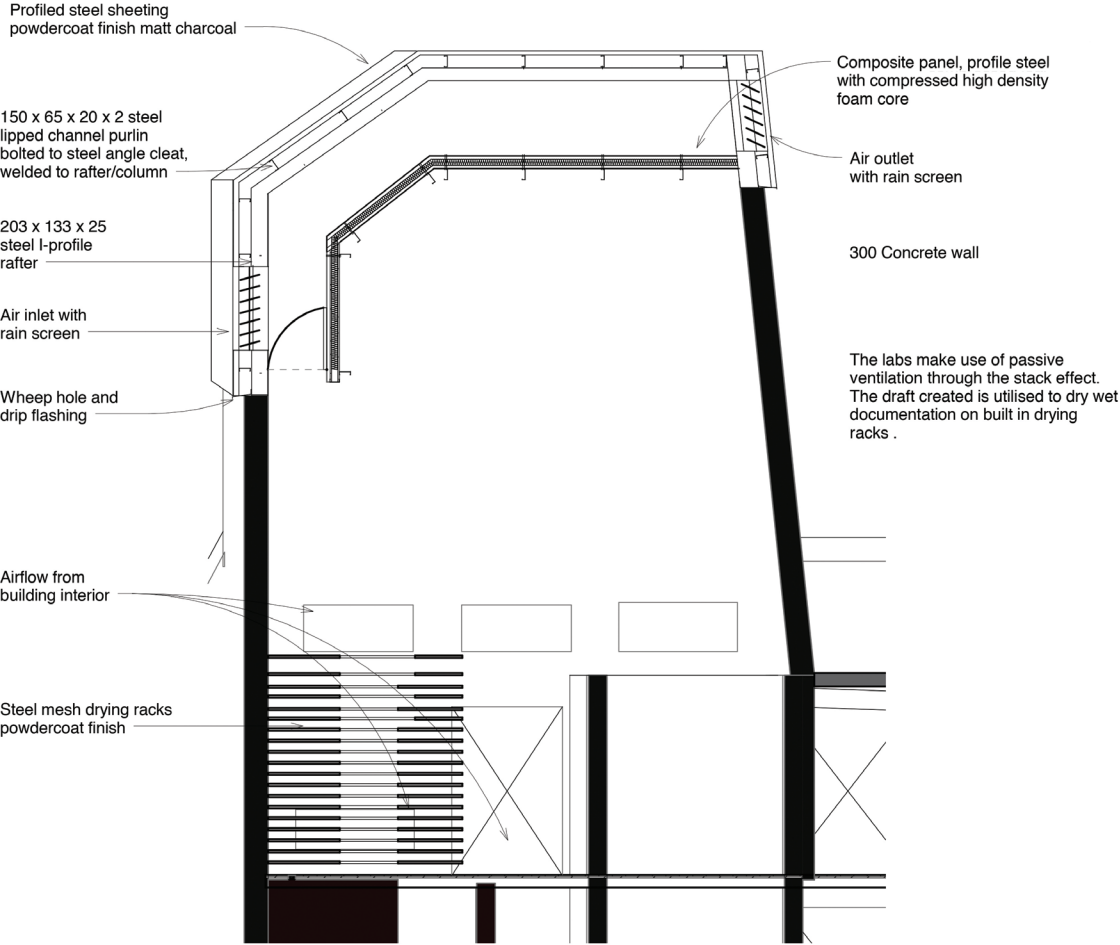


Fig This diagram illustrates how passive ventilation enhanced by the solar collector creates a breeze that is used to dry wet material. Further it shows the use of indirect light so as not to expose the material to sun light, while a mass wall to the north will increase the ambient temperature when the space is enclosed in winter.



Detail - Solar Collector



7.5.5 Technical Strategy

Because of these specific requirements, the archival storage spaces are designed as separate boxes. Smaller enclosed spaces have many benefits for the protection and monitoring of the archives. The smaller spaces increase the control and eases monitoring of temperature and relative humidity. Smaller space means a decrease in traffic and less occupants at any given time that could affect temperature fluctuations. The HVAC system will service each individual space and its particular requirements.

Fire suppression will be aided by the enclosed archival storage spaces. With a fire monitoring and alarm system, the fire suppression may be triggered for the particular affected area. The fire rated enclosure will reduce fire to specific areas and increase time for escape in the event that fire is not controlled.

The enclosed areas make it possible to have movement sensors for lighting, which will ensure that documents are not exposed to light unnecessarily for long periods of time. For lighting design of exhibition spaces, a 'low light level transition area' is provided, 'to give visitor's eyes chance to adjust to exhibit lighting'. (Olcott Price 2010:282). Warm tone LED lamps are installed on adjustable rails, in order to achieve particular lighting requirements

per exhibition. Ambient lighting in the exhibition spaces reduce high contrast between lit objects and backgrounds and makes the dim lighting easier on the visitor's eyes.

The Lab deals with all new acquisitions as well as maintaining the collection in the archives. Documents will go through a process to prepare them for the archive. Conservation processes will depend on the state of the materials, but will often include processes to remove acid from the paper documents to ensure its longevity, unrolling rolled documents and drying and cleaning documents in the event of water damage, before they can be handled further. Document sleeves are marked with an electro magnetic strip and documents are captured digitally so that they can be found through a digital search. Thereafter documents are filed in the archival storage rooms in shallow drawers so as to make them accessible to be used. Drawings are kept in folders within the drawers as these keep them from sliding around and provide a rigid casing for moving the documents from storage to research area.

The archives are open to the public. The public may use research and digital facilities and retrieve archival materials with the assistance of an archivist, to be used in the designated research areas. A public individual or research professional may register to have

a high level access to archival storage spaces and retrieve their own materials with the benefit of being able to browse through archival material within their contained spaces, as this is often acquired.

The archival rooms are designed to accommodate greater accessibility and a higher level of transparency. Accessibility benefits the user. While the physical transparency supports accessibility as it allows a level of monitoring of users and how they work with fragile materials, it is also a transparency at the level of the institution as the archive are obliged to keep an ordered and functional collection.

8

Conclusion

This study investigated how to link stories to site through everyday use. A publicly accessible archive was designed that dealt with heritage in a twofold manner. Firstly recognising the heritage value of a disused but significant industrial site and secondly through the content and intention of the archive, that is to make architectural documentation accessible to the public. The result of this proposal could be the proactive conservation of architectural ideas through activities that centre around the valuable documentation, but moreover, the stimulation of an interest in the city as a rich and valuable social space.

The tautological subject matter of architectural heritage within a heritage site shows how such a double narrative can result in realising a connection with heritage outside of the archives and the site, in the city.

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