Fig 3.1 Sketch of Existing ruins of the old Era Brick Factory (Author, 2018)

CHAPTER

03

theory

03.1 INTRODUCTION

This chapter focuses on the theoretical approaches used in the dissertation. Theories and strategies from both the *Heritage & Cultural Landscapes and Environment Potential* discourses are considered, and further synthesised with theories that focus on the alleviation of stigmas.

First it must be understood what a stigma is, what are the significance of stigmas - what relation do they have to architecture, and lastly, what are the most prevalent stigmas that the site is subject to?

03.2 STIGMA

A stigma (noun) is defined as a perceived negative attribute or feeling of disapproval that causes someone to devalue or think less of a circumstance, quality, or person. (Synthesis of multiple definitions, see 03.11 Endnotes).

According to a 2009 article by the Government of Western Australia, a stigmatising often leads to an individual being stereotyped. In turn, this leads to prejudice and lastly to discriminatory actions against the said individual or group.

STIGMA = STEREOTYPING –> PREJUDICE –> DISCRIMINATION
(Government of Western Australia, 2009)

This progression can then be further extrapolated to focus on stigmas of place.

Fig 3.2 Existing ruins of the old Era Brick Factory (Author, 2018)

Usually, the notion of 'stigma of place' is associated with landscapes that carry severe damage or that are linked to a certain negative event, such as the Chernobyl nuclear disaster or to Auschwitz, for example. This is not limited to historically significant places, as any productive facility that is currently in operation or has ceased operations (post-industrial sites), can carry a stigma (Leiss, 2013:2).

Thus, it is unsurprising that stigmas are often associated with areas where disenfranchised communities dwell. This notion is often held by both parties: those directly associated with such and area as well as those outside of the community in question, albeit from different perspectives and with different outcomes (Flanagan et al. 2017:6).

What are some of the most important characteristics of a stigmatized place?

- There is a **perception of risk.**

- **Avoidance** of the place as a result of the perceived risk.

- There is an **abnormality associated** with the place.

- The place has come to be associated with a **socio-economic or socio-political issue.**

- It is **discussed in a negative light** in the media or personal conversations.

- There is a **stereotypical mentality and image** associated with the place.

- **Suggestive language** is used by people when discussing the place.

- **Negative emotions and rash reactions** are evoked by the place. (Leiss, 2013:3,8) (Flanagan et al. 2017:7).

03.3 SIGNIFICANCE OF STIGMA

Now that it has been established what a stigma is, and more specifically what a stigma of place is, what danger does it hold to the immediate communities around the site?

This dissertation argued that stigmas are a threat to social systems, a phenomenon the philosopher, Jurgen Habermas, calls a legitimisation crisis, in other words an existential crisis that threatens the foundation of a social system (Habermas, 1978:68). He divides social systems into three fundamental components:
- Political/governmental
- Socio-cultural
- & Economic.
  (Habermas, 1978:6).

These components interact and influence each other and the following is a breakdown of each, and how they related to the settlements of Eersterust and Jan Niemand Park.

03.4 POLITICAL/ GOVERNMENTAL STIGMAS

A government needs a story, idea or ideology to give it legitimacy (Habermas, 1978:51). With the vast differences in political identity in the north-east of Pretoria (Jan-Niemand Park, Eersterust, Mamelodi and Silvertondale) placing this legitimacy in question.

According to the municipal election results of 2016, voters in Eersterust Jan Niemand Park and Silvertondale voted for similar parties, the majority being DA, where as the voters of Mamelodi voted mostly for the ANC (IEC. 2016).

Although this does not mean these communities held the same political view, background, or ideology. When taking the area's history in consideration there was not a coherent story that gave the social system in the area legitimacy.

According to the 2011 census - vastly different population groups tended to settle at Jan Niemand Park (69.3% white, 28.4% black, 10.8% coloured) than in Eersterust (83.5% coloured, 14.4% black). It seems as if Jan Niemand park is going to be more integrated than Eersterust in the future (see figure 3.4) (Census, 2011).

The data show that these communities had some common ground related to first language, yet the segregation by physical barriers was a cause for concern. The brick factory site is large, creating a permanent barrier that is reinforced by the two rivers running on either side.

To the south, the prominent Stormvoël Road creates yet another barrier between Eersterust and Silvertondale, which is predominantly an industrial area. An added result of Apartheid era spatial planning, and the decades of segregation, is the polarisation of the so called ethnic/racial groups who live in isolation from one another.
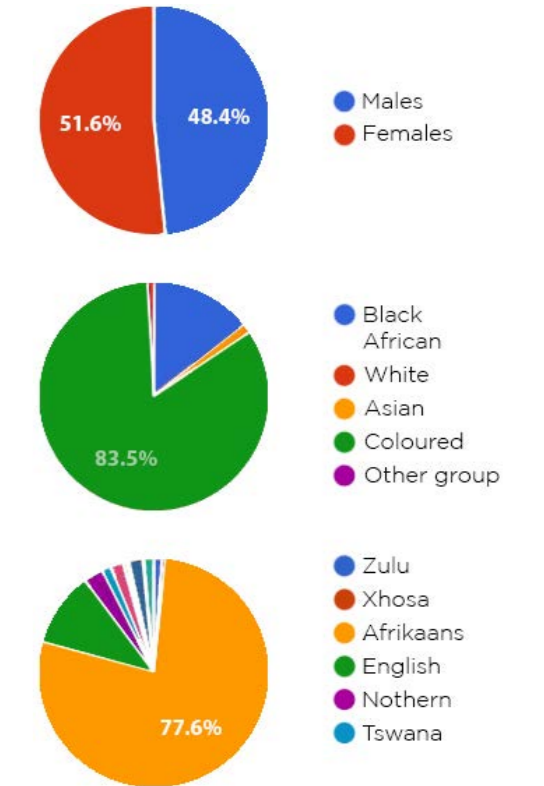

Fig 3.3 Population Statistics Of Eersterust in 2011 (Population Statistics, 2011)
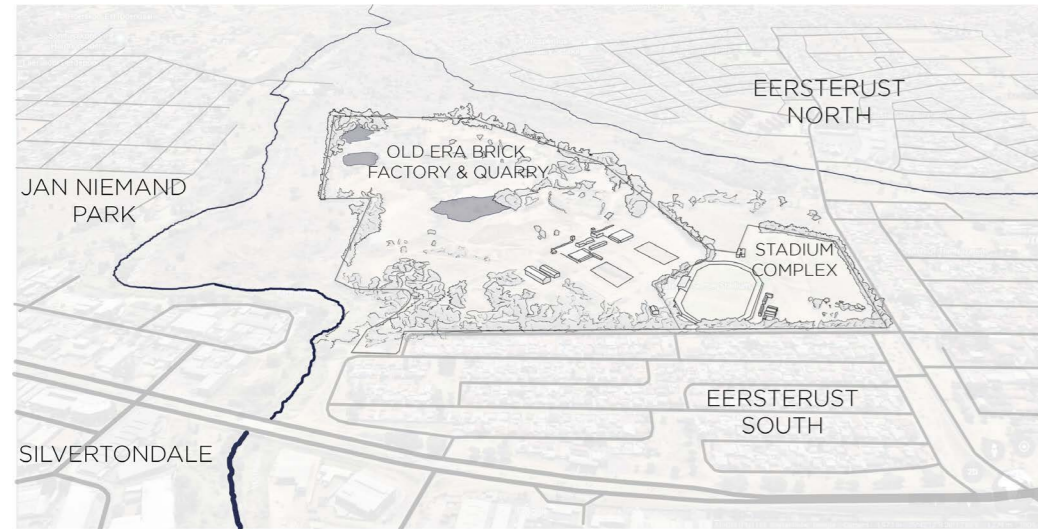
Fig 3.4 Current Site Condition (Author, 2018)

Fig 3.5 Political/ Governmental Stigma (Author, 2018)

Within Eersterust itself there is segregation between the north and south by the Rietspruit river. Figure 3.5 illustrates the three segregated communities around the site where their- cultural, religious and political differences are reinforced by physical and natural barriers.

03.5 ECONOMIC/ ENVIRONMENTAL STIGMA

Habermas links the legitimacy of a governmental system to a stable economic system. In an industrial setting the economic system is often related to production (Habermas, 1978:6 & 69).

This fits in perfectly with the productive history of the site, that gave many families in the area jobs and security, however since the factory has ceased production it has left an economic void. This void is exacerbated by the environmental scar that has been by the quarry. The perception of post-industrial sites are generally negative, especially one that has been abandoned. The current owners are exacerbating the situation using the site as an excavated soil and building rubble dump.

The stadium itself is completely underutilised and the combination of the two components creates an even worse perception of the site.
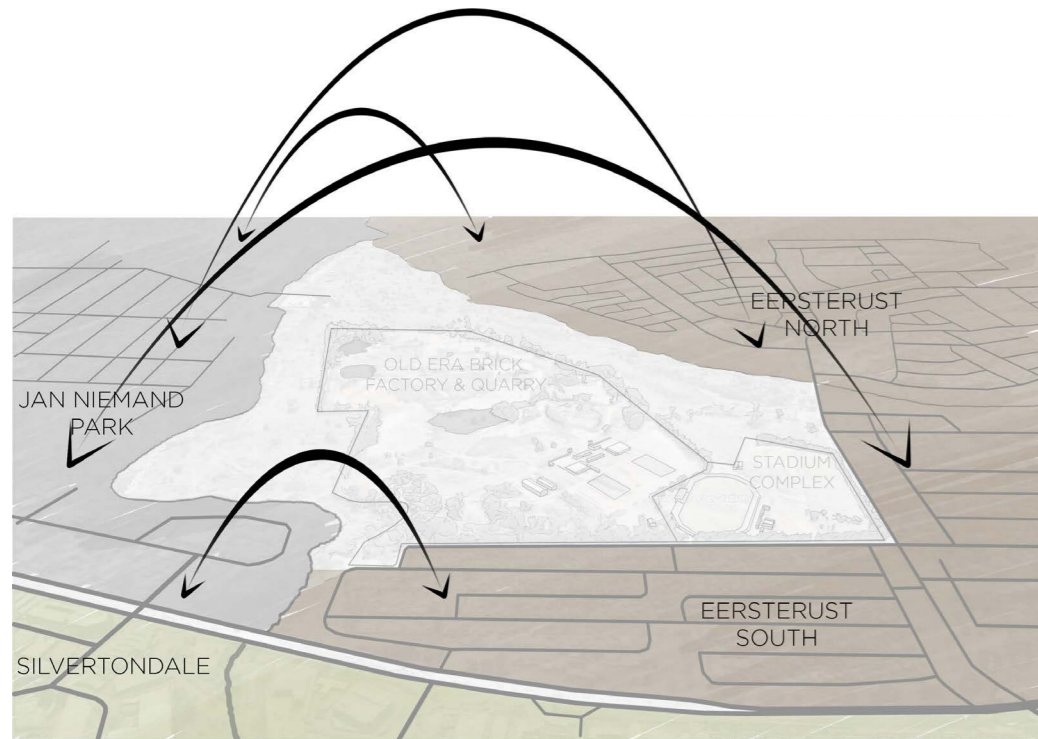
For the economic system to stabilise a new program that creates **economic opportunity** and is not decremental to the landscape must be introduced.

03.6 SOCIAL STIGMA

Habermas refers to a socially cohesive system as a *lebenswelt* or a lifeworld. Socio-cultural groups often have shared beliefs values and agreed upon rules of operation (Habermas, 1978:6 & 16).

Eersterust is by no means the most impoverished community in Pretoria, yet there is a clear difference between Jan Niemand park and Eersterust. Within Eersterust there are further differences in income between the south and north. The poorer members of the community live in the older southern part of Eersterust and the more affluent members of the community live to the north, up the hill towards the newer areas of the suburb.

This creates conflicting world-views with little shared beliefs values and agreed upon rules of operation. The rather large derelict site creates a breeding ground for unfavourable circumstances, like substance abuse. While walking on the stadium grounds, the author encountered a couple
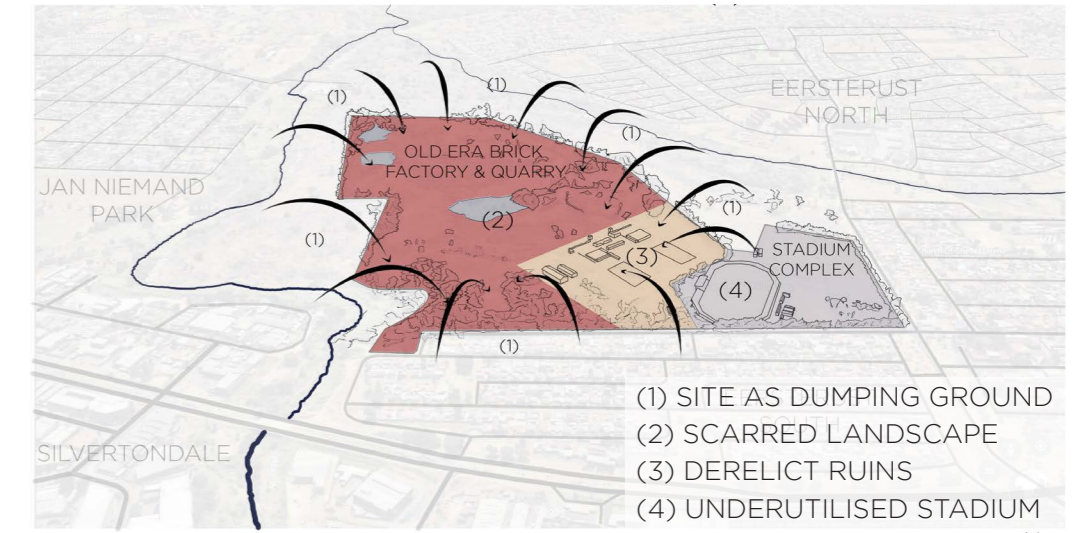

Fig 3.6 Environmental Stigma (Author, 2018)

(1) SITE AS DUMPING GROUND
(2) SCARRED LANDSCAPE
(3) DERELICT RUINS
(4) UNDERUTILISED STADIUM

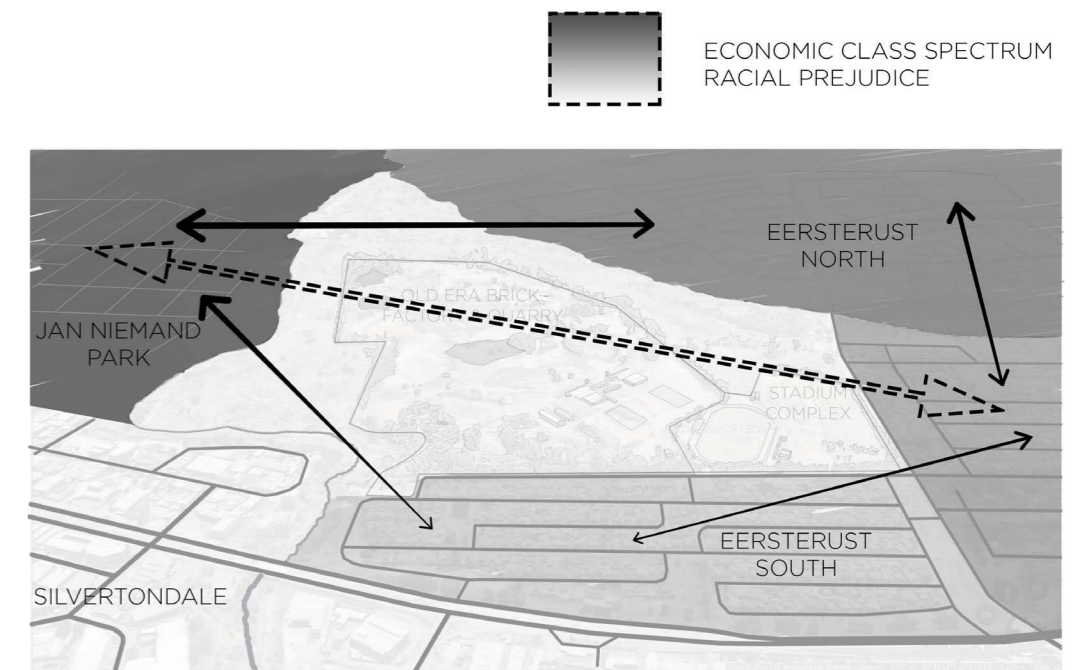ECONOMIC CLASS SPECTRUM RACIAL PREJUDICE

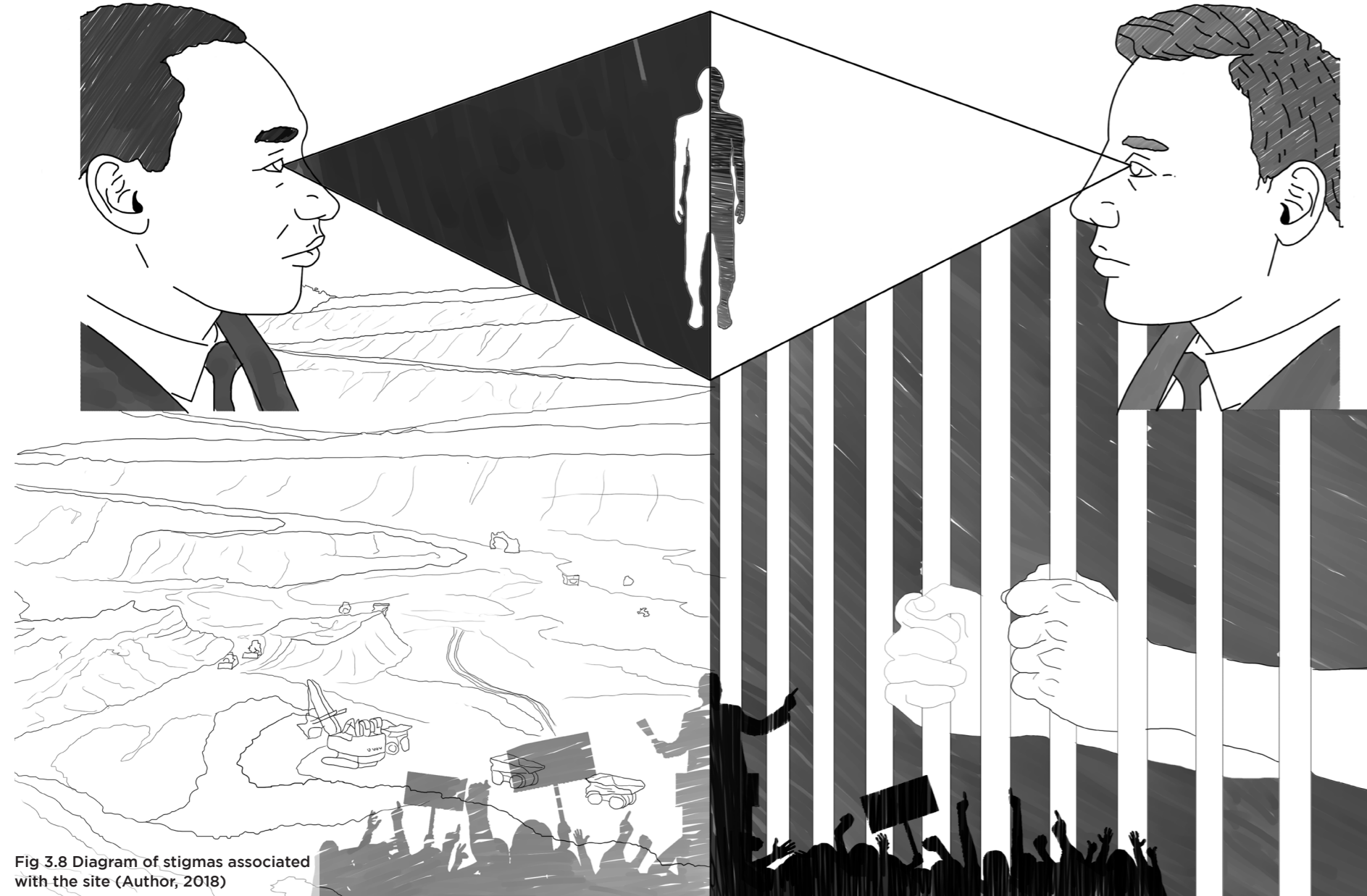
Fig 3.7 Social Stigma (Author, 2018)

Fig 3.8 Diagram of stigmas associated with the site (Author, 2018)

of teens using drugs in broad daylight. Crime is a major problem in the area as multiple local newspaper articles and recent service delivery protests indicate.

Thus the picture of Eersterust being put out by the media reinforces preconceived ideas of the area by outside communities. The gross **lack of interaction** between these communities and a **lack of activity** on the site hampers the creation of a so called *lebenswelt*.

03.7 STRATEGIES

So what can be done to alleviate these stigmas and create successful social structures?

As the previous section alluded to, governmental, economic and social systems need to be stabilised to give them legitimacy, through common goals and shared beliefs.

In order to do that, this dissertation will use various general stigma alleviation strategies and attempt to interpret them into spatial solutions. Relevant sources were consulted, synthesized and reinterpreted to alleviate stigmas of place based on the various stigma-alleviating strategies that exist in a general sense:

- **Encourage communication & interaction** between the opposing communities.

- **Education**, learning from and about each other.

- **Create shared spaces**, where social interaction can take place.

- **Facilitate empowerment**, through education, skills development and equal opportunity.

- **Build a community,** where competition and interaction can happen.

  (Mend the Mind. 2018, Socialist Health Association. 2018, The Mighty. 2018, Government of Western Australia. 2009, Flanagan, et al, 2017:5-8).

03.8 HERITAGE & CULTURAL LANDSCAPES

The first Era brick factory building was built between the late 1950's and the mid-1960's and, the second factory building was built during the period 1976-1980's. Thus, several of the buildings on site are actually more than 60 years old. Unfortunately the oldest factory building was decommissioned, used as storage and finally demolished by 2014.

Because the majority of the buildings on site were less than 60 years and were not protected by any heritage charter, this undoubtedly contributed to the demolition of the factory buildings.

However, this dissertation's argument is that the site has significance through what it meant to the community by providing jobs and skills. If one extends that significance to the adjacent sports stadium, it becomes clear that there is still value in the post-industrial site that is worthy of protection and re-interpretation.

As may be seen in Figure 3.1, the existing leftover physical fabric does have a certain quality that evokes a sense of intrigue. As mentioned above, this contributes to the overall *genus loci* of the site and, the argument can be made that the leftover fabric presents an opportunity for re-use that hints at a possible architectural language.

The two main charters used in this argument are the *Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas and the Nizhny Tagil Charter for the Industrial Heritage*.

The following is a summary and synthesis of the relevant theoretical information applicable to the site in question and the approaches which this dissertation used in the design. The Xi'an Declaration is focused on general heritage buildings and landscapes, while the Nizhny Tagil Charter concentrates on industrial heritage.

- One must first **acknowledge the significance of the setting**, particularly for post-industrial sites-, as even their environmental leftovers can be considered for their archaeological and ecological value. The site has significance from a functional perspective, if not particularly from an architectural perspective. The site under consideration was used as a quarry and brick factory, even before the first building was built-, and before the establishment of Eersterust itself (Xi'an 2005:2).

- Secondly, the charter calls for an **understanding of the history, evolution and character of the setting** through diverse forms of documentation, literature, interviews and media. This dissertation has mapped the development and subsequent demise of the Era brick factory and its buildings, as well as the ill-proposed future plans by developers (Nizhny Tagil, 2003:2; Xi'an, 2005:2).

- Thirdly, the charter dictates that any development on such a site should **positively re-interpret and contribute to the character** that makes the site significant. With sites that are at risk, appropriate measures should be implemented to reduce the risk and **assist interventions that aim to repair or re-use the site.** In other words an intervention on the Era brick factory location should protect the most important buildings left on site and

utilise the productive nature of what is left without losing this significance (Nizhny Tagil, 2003:2; Xi'an, 2005:3).

- Fourthly, the historic significance should **not prevent or obstruct development** from happening on site as long as it is handled with respect. New uses should, respect, maintain, and interpret the existing fabric (Nizhny Tagil, 2003:3; Xi'an, 2005:3).

- Fifth, the charters calls for an intervention to **engage with local communities** and stakeholders to give the site a **new significance**, this is vital to protect and conserve its heritage (Nizhny Tagil, 2003:3; Xi'an, 2005:4).

- Lastly, **adaptation and re-use** should be reinforced by contributing to **sustainable development**. Industrial heritage can have an important role in **economic regeneration**, if such a re-use creates new employment opportunities (Nizhny Tagil, 2003:3).

From the charters discussed above, this dissertation will build on and interpreted the existing built fabric of the Era brick factory site. To be more specific, a new intervention must consider the various layers on site as palimpsest, to inform the design.

One of the most important documents on the subject matter is the article by R., Machado, entitled *Toward a Theory of Remodelling, Old buildings as Palimpsest, 1978.*

Machado can be used in the following ways as a strategy with which to develop a design:

- **The building as palimpsest** – The most obvious approach this dissertation took was to use the old layers of the site as a design informant for the new architecture (Machado, 1976:46). Specifically the footprint of the old factory and the leftover concrete work, as seen in Figure 3.1, was reused for the design.

- **Remodelling as rewriting** – Changing the features of a building to suit its new functions. This calls for innovation and sensitivity (Machado, 1976:46). Because the original factory does not exist anymore, the new architecture references its industrial nature, but is not be a carbon copy of the old buildings.

- **Re-funtionalising** – Or, adaptive re-use, is an approach that is an attempt to add new functions to the left over built fabric (Machado, 1976:48). The remaining functional parts of the old factory – the drainage and drying ducts (fig 3.1), the old offices, various workshops and sheds, were adapted for new functions.

- **As a repository** – the past layers of the site are a resource to draw from to inform design (Machado, 1976:48). The dormant potential of the stadium immediately beside the site, add to

the sites overall value and layers that informed the new programme and design

- **The past itself as the material** – The past layers act as a material to use or to build on top of, in a new interpretation of the site or building (Machado, 1976:49). It was hoped that a quite literal translation of this strategy- the old bricks laying scattered throughout the site, left over ruins, bricks used as paving and the like could be retrieved and used as building materials.
  This again pays homage to the old brick buildings that were present on site and the functional history of the factory.

- **Type Transformation** – The type of a building can be changed to suit new conditions (Machado, 1976:49). Obviously, while social, environmental and economic conditions differ drastically from the era in which the old factory was conceived it is expected that the programme considers contemporary issues. Thus, a sustainable building and programme in the broader sense was necessary.

The final strategies and approaches from both the charter and Machado sections above, allude to an environmentally considerate design response, one that is sustainable from a environmental, economical and social perspective. This will be discussed and substantiated with other relevant architectural theories in the following section.

03 theory

03.9 ENVIRONMENT POTENTIAL

From an ecological response position, this dissertation concentrated on regenerative design as a framework to respond to the environment potential of the site. Mostly due to the site's historic significance and scared landscape.

The following approaches support the design decisions taken in this dissertation. The approaches adopted were set out by P. Mang and B. Reed in their paper titled; *Designing from Place - A Regenerative Framework and Methodology, 2012*.

- "Organize activities on site that continuously **feed and are fed by the living systems** within which they occur." Thus man as part of nature, not above nature. This of course refers to the growing of fresh produce, capture and use of water, and lastly harnessing the sun's energy for electricity generation and day lighting (Mang & Reed, 2012:28,31).

- From a **regeneration potential** standpoint, the design has to take **maintenance and operation** in to consideration (Mang & Reed, 2012:27).

- "Consider **permaculture** as a design informant, in other words, shifting from dominance to a close relationship with nature, through mutually beneficial interactions. Weave the human and natural together into a dynamic whole" (Mang & Reed, 2012:29,31).

- The notion of story of place, was referred to in section 03.4 above as well, that by creating a new significance one creates an incentive for the community to take ownership of a place. In this way they are more likely to take care and maintain such a facility (Mang & Reed, 2012:30).

- When looking at a new design it is imperative that one considers the **potential** it has from a larger perspective, specifically how it can integrate into and enhance the existing systems in and around the site. This, in turn, will contribute to the viability and vitality of a project (Mang & Reed, 2012:30).

- As stipulated in section 03.4 above, by **engaging with the community and relevant stakeholders** the project will have greater significance, making a stronger case for it's very existence (Mang & Reed, 2012:31).
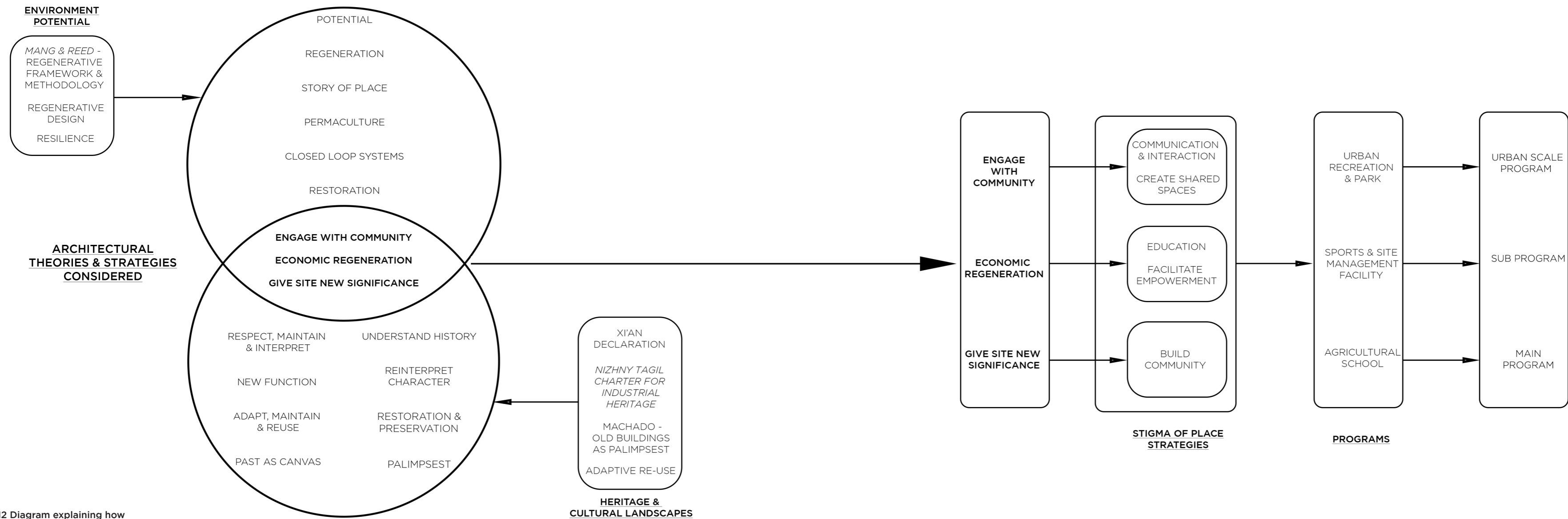
ENVIRONMENT POTENTIAL

MANG & REED - REGENERATIVE FRAMEWORK & METHODOLOGY

REGENERATIVE DESIGN

RESILIENCE

POTENTIAL

REGENERATION

STORY OF PLACE

PERMACULTURE

CLOSED LOOP SYSTEMS

RESTORATION

ENGAGE WITH COMMUNITY

ECONOMIC REGENERATION

GIVE SITE NEW SIGNIFICANCE

ARCHITECTURAL THEORIES & STRATEGIES CONSIDERED

RESPECT, MAINTAIN & INTERPRET

NEW FUNCTION

ADAPT, MAINTAIN & REUSE

PAST AS CANVAS

UNDERSTAND HISTORY

REINTERPRET CHARACTER

RESTORATION & PRESERVATION

PALIMPSEST

HERITAGE & CULTURAL LANDSCAPES

XI'AN DECLARATION

NIZHNY TAGIL CHARTER FOR INDUSTRIAL HERITAGE

MACHADO - OLD BUILDINGS AS PALIMPSEST

ADAPTIVE RE-USE

Fig 3.12 Diagram explaining how stigma strategies and architecture theory can be merged (Author, 2018)

ENGAGE WITH COMMUNITY

ECONOMIC REGENERATION

GIVE SITE NEW SIGNIFICANCE

COMMUNICATION & INTERACTION

CREATE SHARED SPACES

EDUCATION

FACILITATE EMPOWERMENT

BUILD COMMUNITY

STIGMA OF PLACE STRATEGIES

URBAN RECREATION & PARK

SPORTS & SITE MANAGEMENT FACILITY

AGRICULTURAL SCHOOL

PROGRAMS

URBAN SCALE PROGRAM

SUB PROGRAM

MAIN PROGRAM

03.10 CONCLUSION

From the diagram in Figure 3.13, it is evident that there is a confluence of ideas from the *Heritage and Cultural Landscapes and Environment Potential* discourses. This confluence of these ideas was the focus of this dissertation as the main theoretical drivers and the rest as supportive ideas to influence and strengthen the design. The most important notions being:

• **Engagement with the community**

• **Economic regeneration**

• **Giving the site a new significance**

This represents what has to be done, the aspects that are related to stigma of place strategies represents how it must be done. They can be grouped together in the following way:

• **Communication & interaction** + **Create shared spaces**

• **Education** + **Facilitate empowerment**

• **Build a community**

By engaging with the community this dissertation intend to consider the needs of these people, by creating the opportunity for communication and interaction between the neighbouring communities, while facilitating a building and landscape that can be used by both.

03 theory

Fig 3.13 Existing ruins of the old
Era Brick Factory (Author, 2018)

To generate economic growth it is vital to educate and facilitate empowerment for both communities, in other words the people need to learn new skills, which can be used to generate an income.

Perhaps the most important is to give the site a new significance, without the community taking ownership of the new intervention it will fail. The intention is to make the new facility a place where the different communities can come together.

The premise that makes this dissertation unique, is that it argues that architecture can be a viable solution to solve stigmas associated with place. By combining theories on stigma of place and merging those with architectural theory this dissertation intended to find a program and architecture that alleviates stigmas, which respects the site's history/heritage and considers the environment when making design decisions. The three solutions above were approached and addressed on different scales, as follows:

• **Engagement with the community:**
  Urban vision scale

• **Economic regeneration:**
  Site vision & programmatic scale

• **Give site new significance:**
  Architectural scale

The specific programs and how they relate to the theories will be discussed in the next chapter.

03.11 ENDNOTES

Various definitions of a stigma: (See 03.2)
A mark of disgrace associated with a particular circumstance, quality, or person (Oxford Dictionaries, 2018).

A strong feeling of disapproval that most people in a society have about something, especially when this is unfair (Cambridge Dictionary, 2018).

If something has a stigma attached to it, people think it is something to be ashamed of (Collins Dictionary, 2018).

Stigma is a perceived negative attribute that causes someone to devalue or think less of the whole person. (Gluck, 2018).