



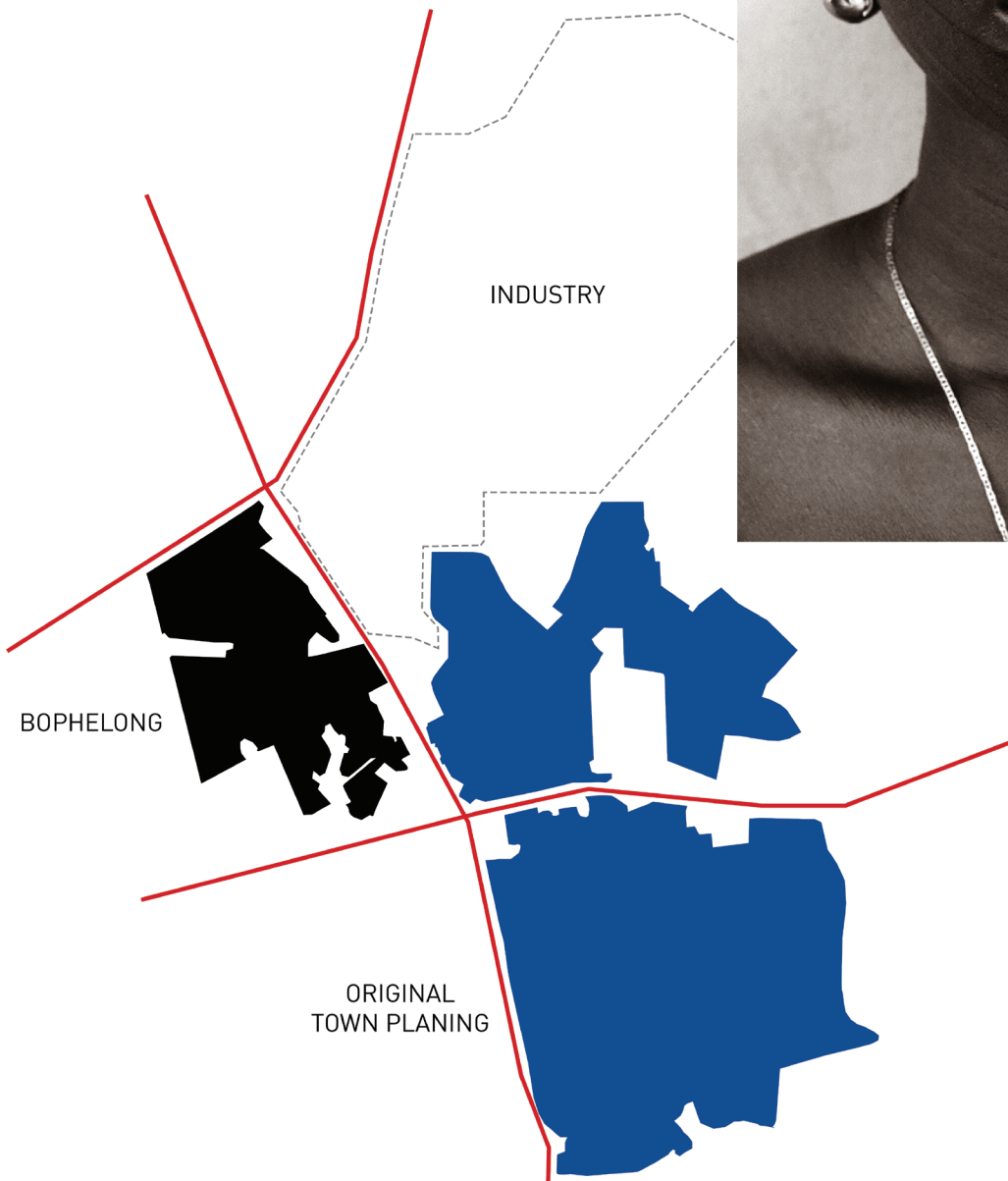
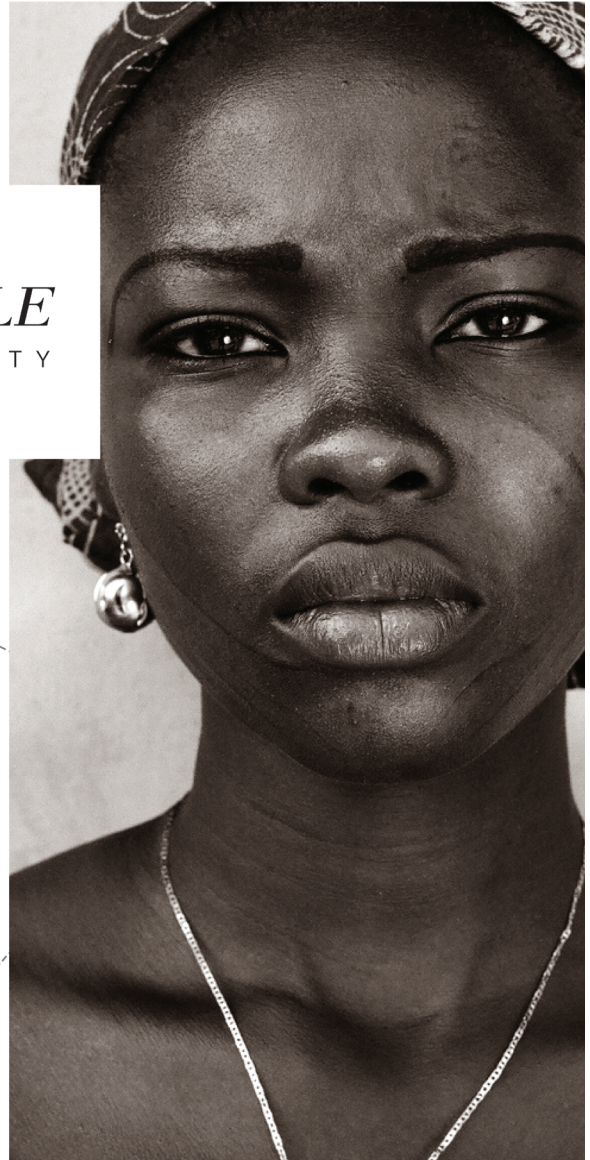
02

CHAPTER TWO

A VISION FOR THE PEOPLE



THE
AFFECTED PEOPLE
THE FENCELINE COMMUNITY
OF BOPHELONG



2.1

THE CLIENT

Many heavy industrial companies aspire to the highest standards of corporate social responsibility. Company visions include caring for the environment and the communities in which they operate, however contrary to corporate aspirations this is not always realised in practice. Steel production by nature is an industry which results in large amounts of pollution and requires strict management and oversight. In accordance with the various laws and environmental standards companies remain responsible for the environmental impact of their production processes. In instances where environmental damage occurs companies have both an ethical and legal responsibility to reduce the impact immediately and to restore the damaged ecosystem. Large companies tend to avoid addressing issues by paying government fees instead of introducing solutions which would improve the condition. (The Bench Marks Foundation, 2013)

2.2

THE URBAN FRAMEWORK

“Everyone has a right to an environment which is safe and not harmful to one’s health...” Constitution of SA, 1996

The dissertation’s urban framework aims to address the environmental issues associated with the industrial landscape. It is divided into three critical focus areas which need to be included in the development of the emerging node at the intersection of the R42 and R57.

- Community Health
- Agricultural Land
- Water Quality

2.2.1

COMMUNITY HEALTH

Steel production is a labour intensive industry and the majority of the communities' livelihoods depends on the income they receive from the company. The original township of Bophelong which provides the company with semi-skilled and unskilled labour was selected as the Bench Mark Foundation research area as it is closest to the heavy industry, making it the most vulnerable and affected fenceline community.

A community voice perspective on the impacts of steel works operations in Vanderbijlpark was released by the Bench Marks Foundation in 2013. The survey recorded that 49% of the Bophelong residents and workers suffer from respiratory problems, loss of eyesight and hearing. Other cases involve kidney failure, cancer, tuberculosis, manganese and cadmium poisoning and chronic bronchitis. The report's objective was to understand the community voices concerning environmental issues as well as the interventions/solutions proposed by the companies responsible. (The Bench Marks Foundation, 2013)

The Participatory Action Research Report in 2015 brought a different perspective. The report focuses on women affected by the impacts of the steel industry (Vaal Environmental Justice Alliance, 2015). The women's major concerns related to the toxic environmental conditions while working at, and living close to the steel works, was the loss of the men of the community due to sickness, disability or death.



Figure 2.1: Sebokeng Wellness Centre/Clinic. (news&media, 2013)

THE COMMUNITY'S VOICE

Selected stories from the Bench Marks Foundation and Participatory Action Report are included to frame the individuals of the immediate area and to provide context.

Bophelong Community Member

"There is contaminated water in the gardens. People are getting sick and children are dying because of water pollution"

Ex-worker of Arcelor Mittal

"I lost my eyesight and I don't have a job anymore. I can't provide for my family - I have no money for my children to go to school"

Wife of Deceased

"It was very difficult for the family when my husband died. The children had to leave school and there was no money for food"

The main issue voiced by the community was one of health. These community members are reminded on a daily basis of their powerful neighbour by a series of devastating changes that have affected their immediate environment including the air and water quality, affecting their land, livestock, crops and in turn their health. The prevalence of respiratory illnesses among workers, ex-workers and the community members, in particular children, is indicative of the extent of pollution in the area. The steelworks has an onsite clinic for employees, yet the environmental issues are the root causes for the fence-line communities failing health. It would seem logical for the community to focus on resolving the root cause of these issues, however due to the complex relationship of co-reliance the community and Companies consciously abdicate the need to address the toxicity of the situation. This state of unresolve has led to the constant decline and deterioration of the health of the community. The report explores the fear of the communities that are reliant on the industry as they note that as soon as their health fails they are retrenched or fired. Those who still have their health remain cautious to report any health issues in fear of losing their jobs.

Over the years 3 clinics have been established in Boipatong, a comparable township in the vicinity of Vanderbijlpark, however Bophelong remains with limited health facilities. On the 15th of June 2015 the Department of Health announced its intention to construct 5 new health facilities in the Vaal Triangle, Bophelong has been earmarked to house one of these health facilities. (Health Budget Speech, 2015: online) The urban framework for this dissertation includes the new Bophelong Clinic which will allow the people of the community to fearlessly address health issues.

2.2.2

CONTAMINATED AGRICULTURAL LAND

The economy of the Vaal Triangle has been dominated by two manufacturing sectors of metal and chemical production. The steel industry in Vanderbijlpark and the chemical industry in Sasolburg.

A major concern is the soil contamination caused by these sectors. A high concentration of these pollutants in the soil is harmful to humans and the environment. The steel and mining industry in Vanderbijlpark has affected the land directly leaving traces of heavy metals, along with other contaminants, in the soil. These heavy metals cannot be broken down and enter the food chain through plants, animals and agricultural produce. In 2011, the largest of the steelworks won the Environmental Excellence Award for the remediation of 80 hectares of land in Vanderbijlpark. The land had been contaminated for just over 40 years. The remediation method used was a mixture consisting of micro-organisms, nutrients and water that was sprayed onto the aerated soil. The before and after soil tests show that the process was successful in removing organic chemicals. On March 2015, the steelworks submitted a notification of contaminated land to the department of Environmental affairs in terms of Section 36(5) of the Environmental management Waste Act, 2008. The steelworks is required to submit a remediation plan.

The urban framework will include an agricultural soil remediation centre which will supply the micro-organisms and nutrients required to treat the soil condition.

2.2.3

WATER QUALITY

The urban framework also introduces the focus of this dissertation which is the water treatment infrastructure to protect the Vaal River from the impact of the steel industry thereby retain the ecological diversity of the site. The current polluted condition of the Vaal River has led to an understanding of the importance of protecting the existing wetlands and biodiversity.

2.2.4

A RECONCILING LANDSCAPE

The vision for the emerging node is an ecosystemic strategy which addresses the topics of health, water and land as a movement towards a new urban infrastructure. The site and majority of the surrounding area of the declared node has been identified by the author as uncultivated land which supports the environment by performing complex environmental tasks. The urban framework proposes infrastructure and interventions which will strengthen the site's ecological role of treating water prior to it joining the Vaal river system as well as improve the living conditions of the community. The urban vision also addresses a much needed clinic for the adjacent township Bophelong, as well as an agricultural soil remediation Centre that will provide the Vaal Triangle industries with environmental remediation support.



Figure 2.1: Urban vision planning to address the issues of land, water and health (Author, 2016)

