

# THE REDOLENCE OF LANDSCAPE

An Essential Oil Farm in The City



redolence

 $noun \ | \ red \cdot o \cdot lence \ | \ 're-d \neg -len(t) s \setminus$ 

an often pungent or agreeable odour



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Submitted in partial fulfilment of the requirements for the degree Master of Landscape Architecture (Professional) in the Department of Architecture, Faculty of Engineering, Built Environment and Information Technology, University of Pretoria

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Dissertation title: The Redolence of Landscape

Site description: Old Railway Maintenance Shunting yard.

Address: 71 Skietpoort Avenue, Tshwane, South

Africa

GPS Coordinates: -25.758599, 28.183973

Client: City of Tshwane and Governmental Departments such as the Department of Parks and Recreation and the Department of Environmental Affairs along with POP-UP and the Community.

In accordance with Regulation 4(e) of the General Regulations (G.57) for dissertations and theses, I declare that this dissertation, which I hereby submit for the degree Master of Landscape Architecture (Professional) at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution. I further state that no part of my dissertation has already been, or is currently being, submitted for any such degree, diploma or other qualification. I further declare that this dissertation is substantially my own work. Where reference is made to the works of others, the extent to which that work has been used is indicated and fully acknowledged in the text and list of references.



#### Abstract:

The public, especially in Pretoria Central are deprived of their right to rich accessible outdoor space, the intervention aims to enrich public life in the city by invigorating the outdoor experience by enhancing the sensory experience an individual can potentially experience in the landscape. The human sense of smell was chosen as the driver of the dissertation as it has not yet been explored to its full potential in the discipline of landscape architecture.

This is achieved though the basis of an urban park focusing on sensorial experience. The proposed location of the design is in Salvokop on the periphery of Pretoria inner city. In memory of the sites historic function as a railway maintenance shunting yard the palimpsest of the land is acknowledged in the form and details of the design

By incorporating economic and social initiatives the upliftment of the community will be catalysed. Pleasant fragrance along with a natural setting offers many physical and psychological health benefits discussed in the dissertation.



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This dissertation investigates smell in the landscape and considers the potential benefit of using productive landscapes and the manufacturing of fragrance oil to promote community upliftment and empowerment.







# CHAPTER ONE

Introduction to the Urban Essential Oil Farm

## Chapter Overview

In the following chapter the author will discuss the main research question, hypothesis and subquestions along with the delimitations of the study and a brief site introduction.



#### Introduction

There is room for a different approach to landscape architecture in a South African context. This is evident when we look at what countries like the United Kingdom, Australia and China are achieving in the landscape architectural profession. When we concider our current public parks and open green spaces in Pretoria for example Burgers Park, Church Square, Venning Park and The Union Building Gardens and compare them to the requirements that successful public parks should meet seen in figure 1.1 set up by CABE Space, a part to the Commission for Architecture & the Built Environment in the United Kingdom, South African parks lack many of these factors. Our Public parks lack many factors for example to reflect and enhance local identity, provide for choice and to provide a range of habitats, to be able to reach their full potential in providing a satisfactory service to the public.

For public parks to be able to reach their full potential in providing a satisfactory service to the public's need, they need to reflect and enhance the local identity, provide for choice and provide a range of habitats just to mention a few.

#### Thinking about design: Watch points

- Be clear about function
   Decision-makers should be sure about why they are creating or retaining a space, who will use it and how. They should carefully consider all the potential economic, social and environmental benefits
- Reflect and enhance local identity
   Parks, squares and gardens can contribute to the identity of a place, reflecting the complexity of local landscape, culture and heritage
- Integrate green spaces with building design
  Decision-makers need to consider carefully how buildings can help
  to make green spaces overlooked and well-defined. Housing areas
  should provide a range of good private and public spaces
- Consider how each space relates to the public realm network Parks, woodlands, river corridors and other green spaces should form part of an accessible hierarchy of linked green andivic spaces of different functions, scales and characters
- Provide for choice
   Green spaces should be designed to allow for choice and play, and for people to experiment with using and experiencing them in different ways
- Build for longevity and flexibility
   Consider how spaces might adapt to changing social, economic and environmental conditions
- Consider all user groups
   Public open spaces should not be dominated by any singlegroup in such a way as to make others feel uncomfortable. This means catering for a range of needs and involving a range of users
- Provide a range of habitats
   Public and private green spaces of all scales should be designed to work with nature to enhance and develop local biodiversity.

Figure 1.1: Urban Green Space Guidelines (Cabe Space 2005:85)



Landscape architects need to be constantly reaching for higher goals, to enhance the experience of the user. According to Norman Newton "the only intelligent measure of a successful design is its impact on the user" (Swaffield 2002:61). Landscape architects need to make sure that they do not stagnate in their designing capabilities. Parks need to provide proper benefits to the users, while being innovative in other areas of design for instant stimulating the users' senses.

Dawid Howe remind us: "We relate and create environments through all of our senses." (in Choudhury 2015:2)

It is very beneficial to consider the sensory enhancement that could be incorporated in the design through using the natural environment (Choudhury 2015), to make the best of a range of different design scenarios. Sensory experiences are also crucial for the proper development of children (Gainsley 2012:2). Steven Spears national leader in performance-based design notes that there is an immense opportunity for landscape architects to advance theory and the practical implementation of designing by keeping "the human senses in mind"

"Our world is a sense scape and both physical and ambient environments are provided by the things we can smell, hear, touch and feel" (Choudhury 2015;2)

Working or living in the CBD can be exhausting and draining if one does not regularly come in contact with nature. The scheme for this

dissertation seeks to enable the community to experience nature daily and reinvigorate their senses and restore their mind and heart. According to Richard Ryan (2010), a professor of psychology, psychiatry, and education at the University of Rochester, being outside in nature makes people feel more alive.

"Nature is fuel for the soul" says Ryan. "Often when we feel depleted we reach for a cup of coffee, but research suggests a better way to get energized is to connect with nature". In recent years, numerous experimental psychology studies have linked exposure to nature with increased energy and a heightened sense of well-being (Ryan 2010).

The findings, adds Ryan, are important for both mental and physical health. "Research has shown that people with a greater sense of vitality don't just have more energy for things they want to do, they are also more resilient to physical illnesses. One of the pathways to health may be to spend more time in natural settings" (Ryan 2010).

There is a need for a new way of design and a new way of experiencing Urban Parks as mentioned above. According to Nishimura (2011) smell has potential to invigorate design. The author will seek to further prove this in the dissertation, as a way to improve user experience in South African public parks. It is a proven fact that pleasant smells make you happier, "smelling a fragrance you perceive as pleasant has a positive effect on the mind (Wyatt 2014)." Smell is one of our strongest senses and is deeply connected to memory and emotion (Wyatt 2014). Palmer (2013) states that "Smell is

the most sensitive of the senses. People can remember smells with 65% accuracy after a year, while visual recall is about 50% after three months". Smell used in design plays an important part in place making and the unique identity of places (Henwshaw 2014:52).

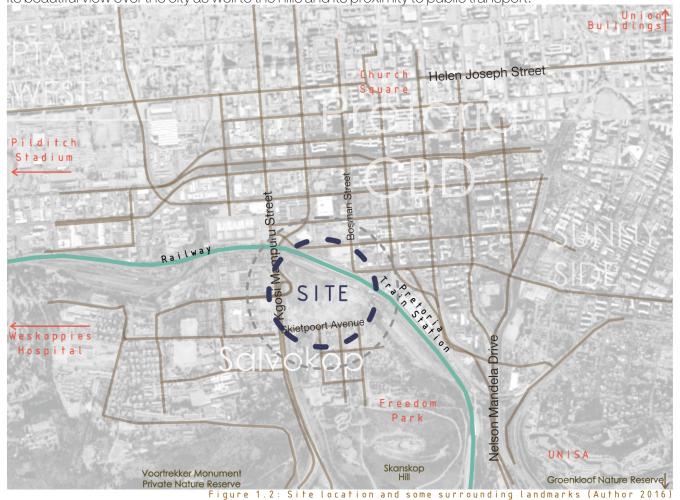


#### Site Introduction

The site is located in Salvokop, situated West of the Pretoria Train Station bordering the strong city grid, but disconnected from it due to the train tracks running through the northern part of the site. The site is grounded in an important railway heritage layered in industrial reminiscence and time.

The site is bordered by Kgosi Mampuru Street on the west, Skietpoort Avenue of the south and the PRASA railway lines on the north. The author considered the area which is in dire need of green open space and economic empowerment.

The site was chosen because of its proximity to the CBD, the poetic and programmed nature of the site, its beautiful view over the city as well to the hills and its proximity to public transport.





#### Research Question

How can smell guide landscape design to enhance the overall user experience of spaces as well as uplift and empower the surrounding community?

#### **Sub Questions**

- 1. How can the sense of smell and fragrance inform landscape design?
- 2. How can landscape design through smell uplift a community (spiritually)?
- 3. How can landscape design through smell lead to economic empowerment?

# Aims of the study - The dissertation aims to:

- Seek out new approached to design that are not only visually driven.
- Explore ways in which there may be dealt with smell in the landscape.
- Be an example of an inclusive landscape for all people with any disability.
- Achieve a design where all can experience and gain something from the landscape.
- Promote productive landscapes to uplift and empower the community
- Improve accessibility to recreational facilities and add value to the surrounding environment and community.

### Research Methodology

The following research methods were used to gain understanding:

- 1. Literature review
- On the history and recognition of smell in the landscape
- On our human sense of smell
- On the design capability of smell in the

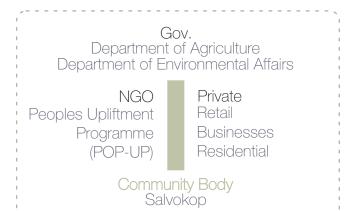
#### landscape

- 2. Investigation
- Precedents relating to the topic or any aspects of the study
- 3.To explore the design possibilities of smell (tangibly)
- In depth research of chosen plants
- Tangible interaction with fragrant plant material Making of own essential oils

#### Limitations

Assumptions were made on the fertility of the soil on site because there were no opportunities to chemically test soil samples.

#### Client Profile



# Methodology Diagram

