**SILVER HORNS CONSULTING** PORTFOLIO OF EVIDENCE

# *A COMPREHENSIVE APPROACH TO CONSULTING SERVICES*

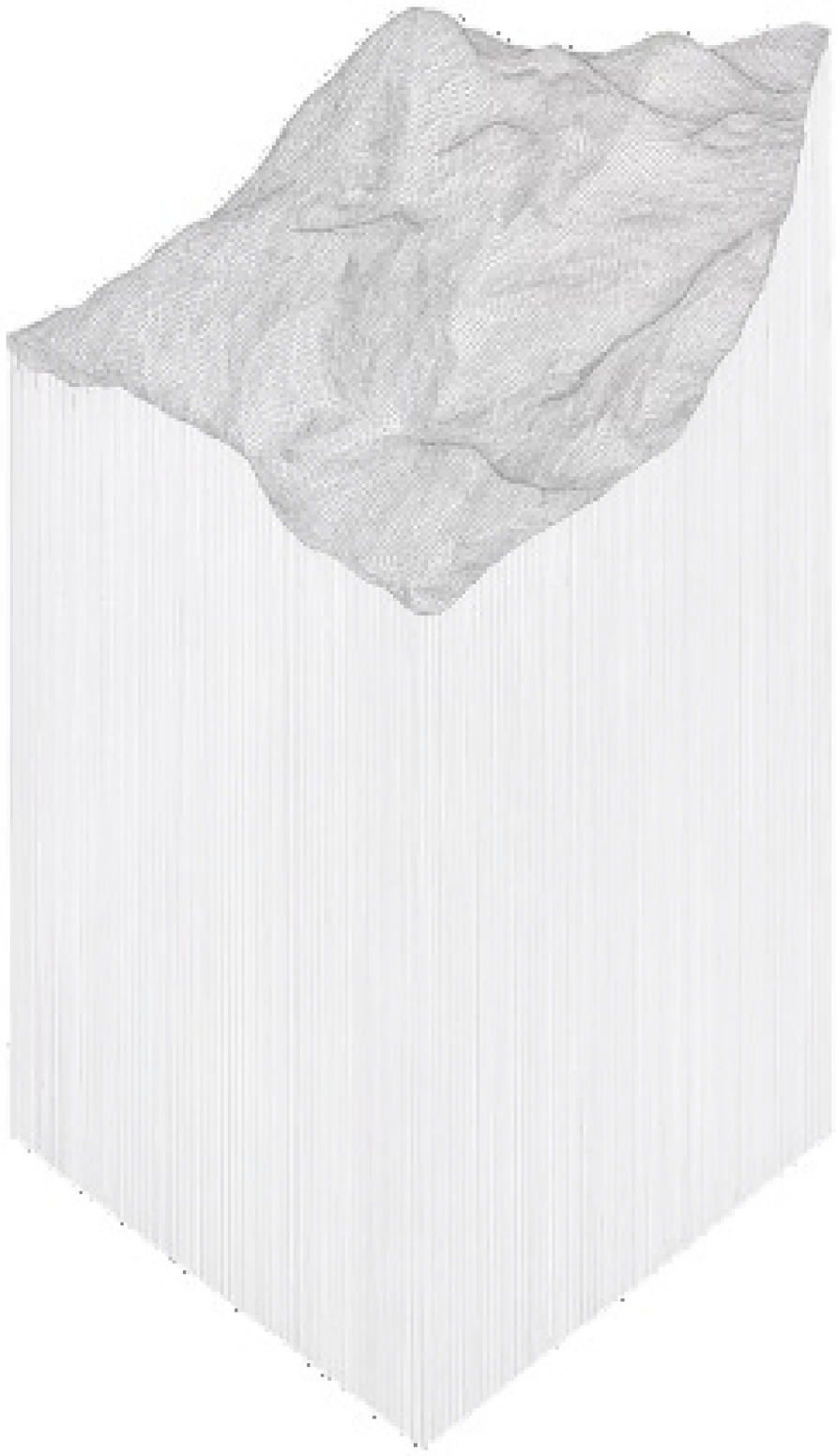
LANDSCAPE ARCHITECTURE

ENVIRONMENTAL MANAGEMENT

PROJECT MANAGEMENT

SILVER HORNS CONSULTING

CELEBRATING 20 Years IN CONSULTING



# CONTEXT

# ENVIRONMENTAL PROJECTS

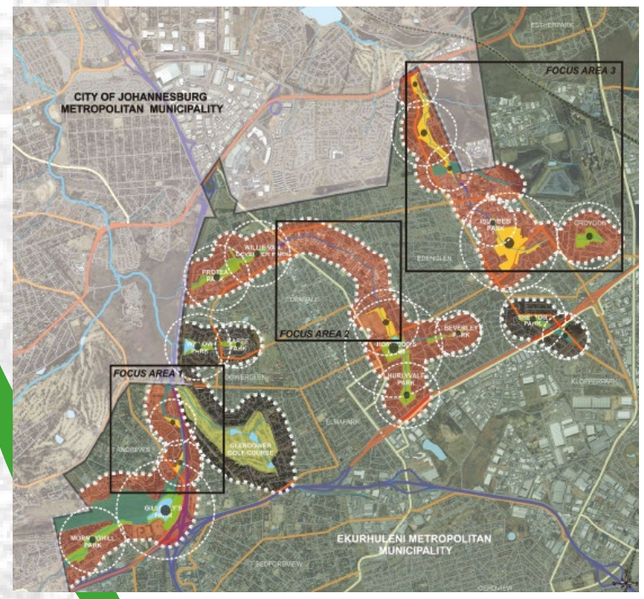
# UPPER JUKSKEI - ILLIONDALE

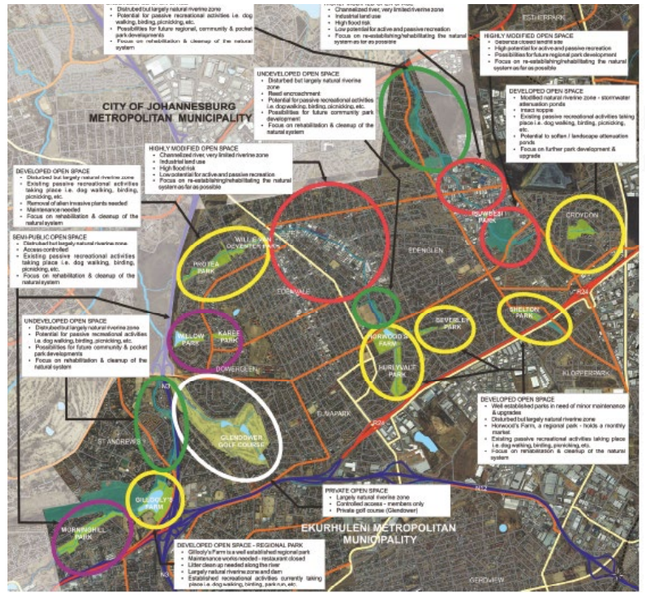

The goal of this study is to produce a development framework and master plan that will identify, describe and illustrate various riverine open space interventions aimed at the upgrading and rehabilitation of the riverine environment as well as the provision of active and passive recreational facilities within and adjacent to the riverine environment.

In support of this goal, the following study objectives were defined:

- Context and status quo and environmental assessment;
- Identification and description of opportunities and constraints, issues and responses;
- Preparation of a concept development master plan;
- Preparation of a development framework master plan; and the
- Preparation of an implementation and management framework.

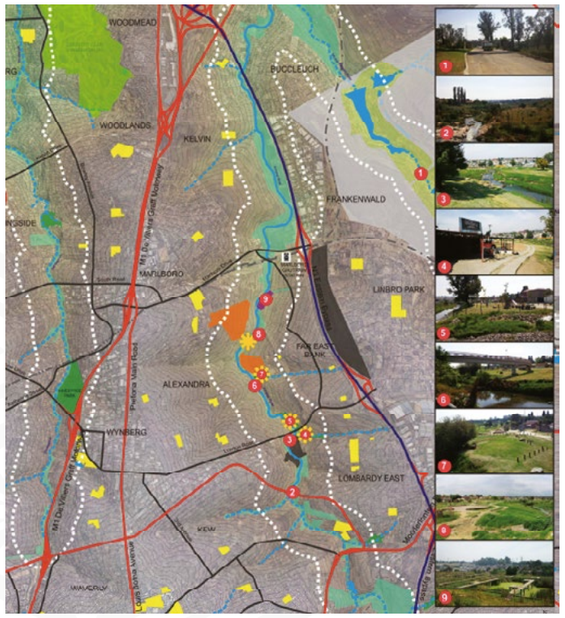
This assignment primarily focusses on the rehabilitation of terrestrial riverine environment as opposed to the aquatic environment. The latter is covered in a concurrent study by specialist wetland and river health consultants.



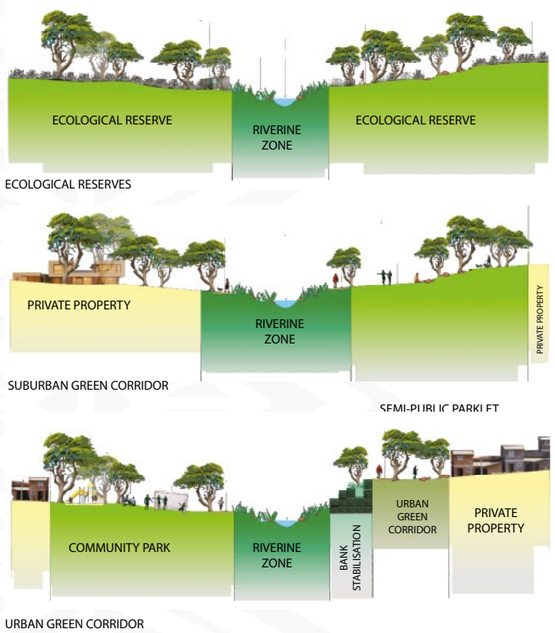
# JUKSKEI PARK

## CONTEXT



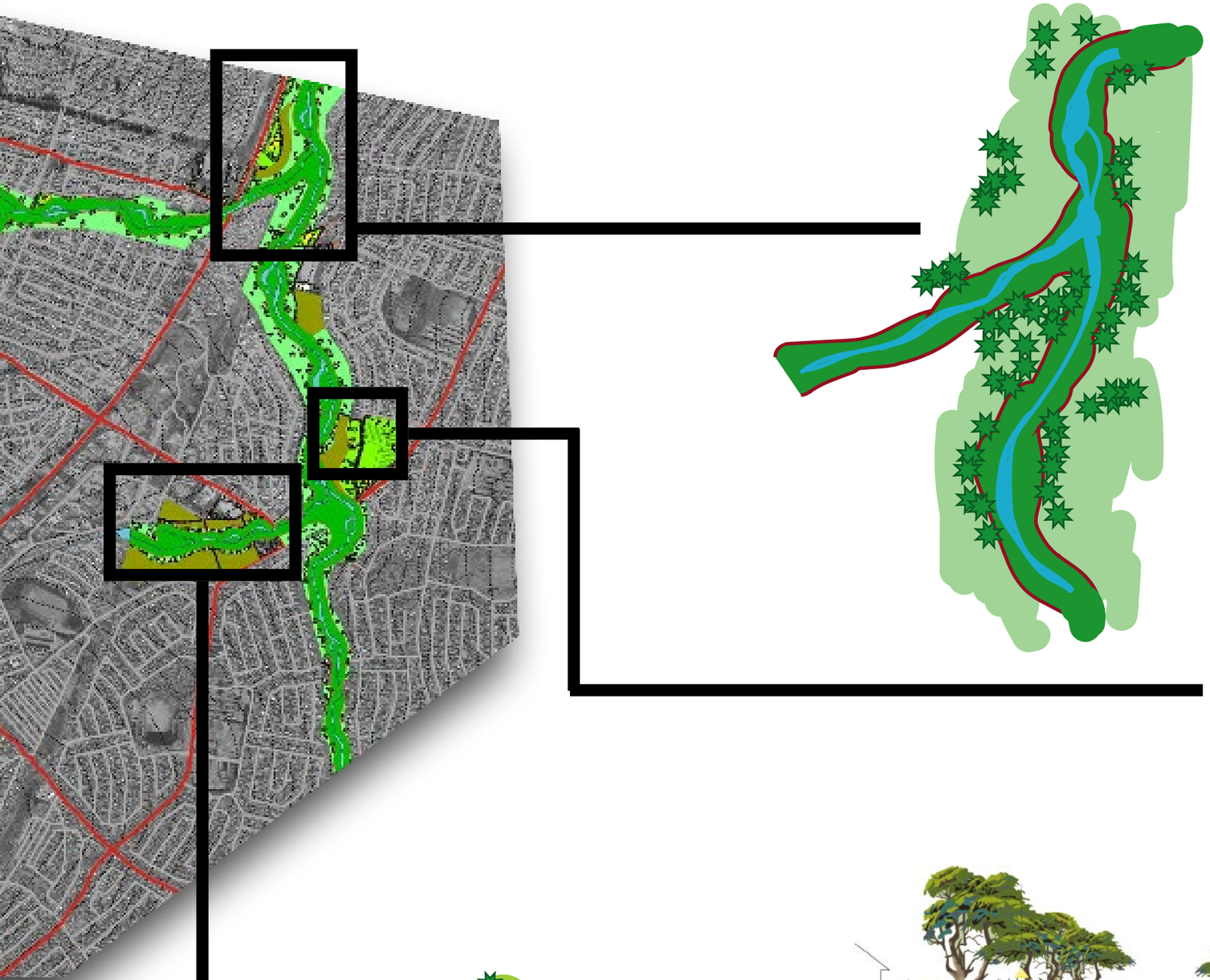

## MASTER PLAN


## SECTIONS




The vision is to create an integrated open space system that responds to the needs of the environment and the community, and which adds ecological, social and recreational value in a sensitive and appropriate manner. The open space is safe, accessible and well managed, with local community buy-in being the cornerstone of it long-term sustainability.

High-density residential and mixed land use is characteristic of Alexandra along the Juskei River. This land use is largely localised, and includes informal settlement as well, especially along the river. Structures are mostly single storey and freestanding, but building density is very high, with little green space.

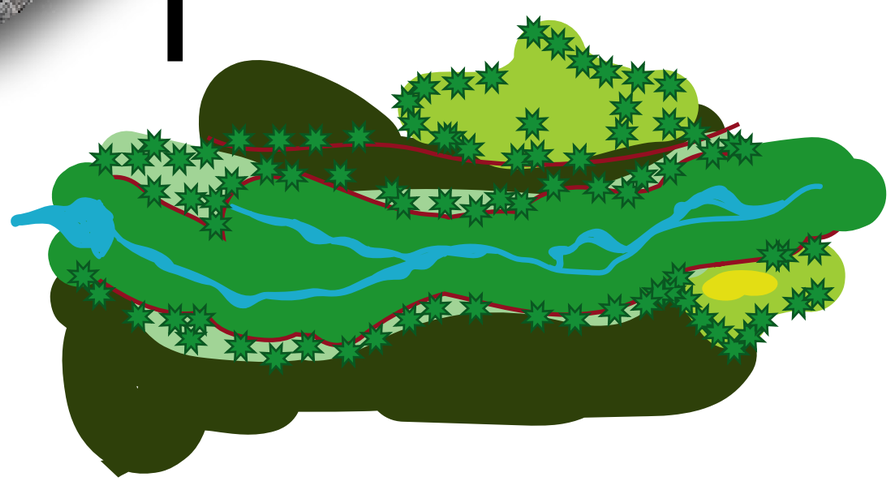


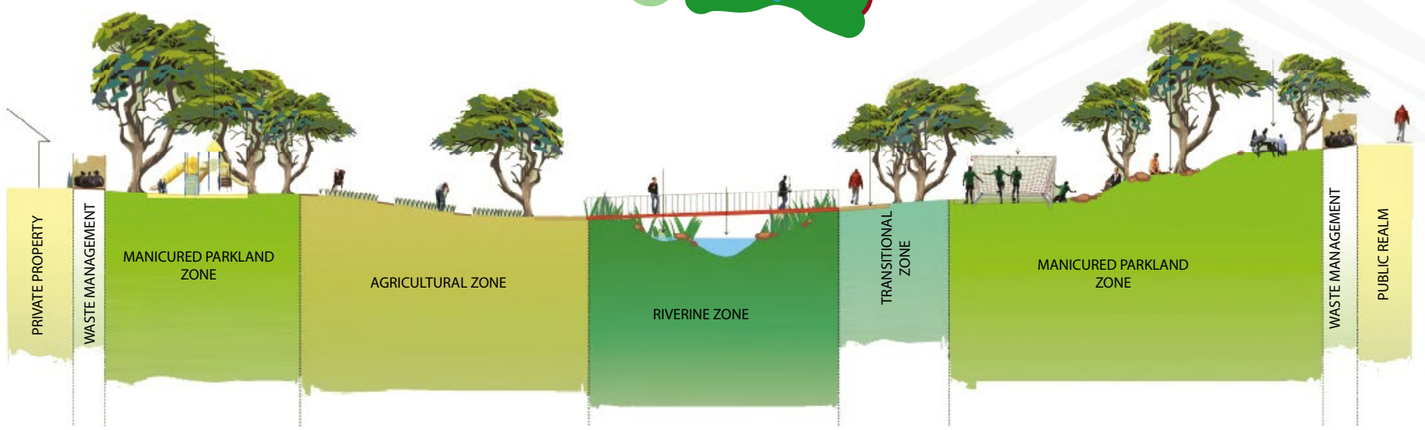


# KAALSPRUIT

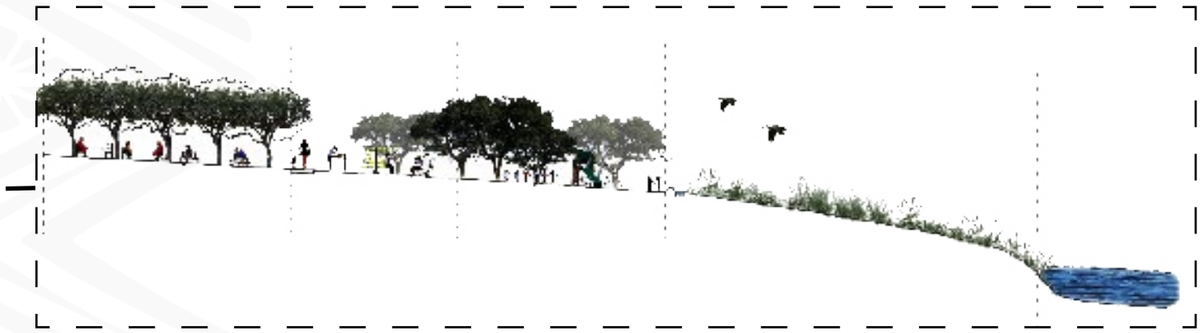
The vision is to create an open space system that is integrated into daily lives and hearts of the community – one that is safe, accessible and well managed, within which people feel at home.

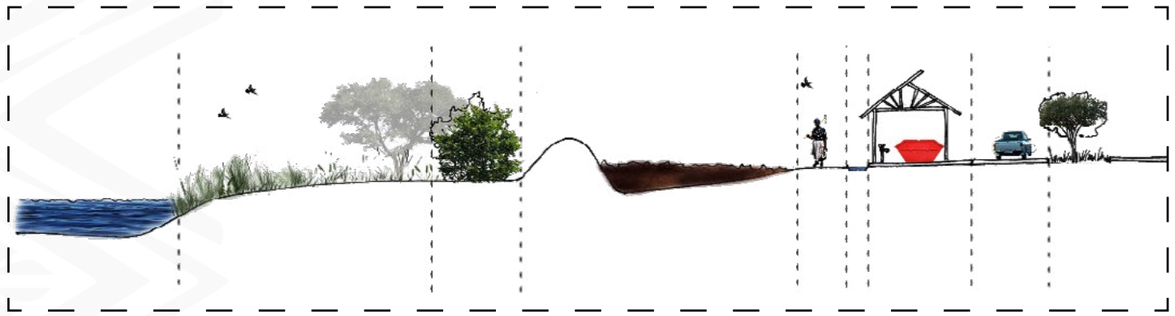
The open space not only contributes to everyday needs and the general quality of life, but also adds value to the greater environment through its integrated response to ecology and social needs.

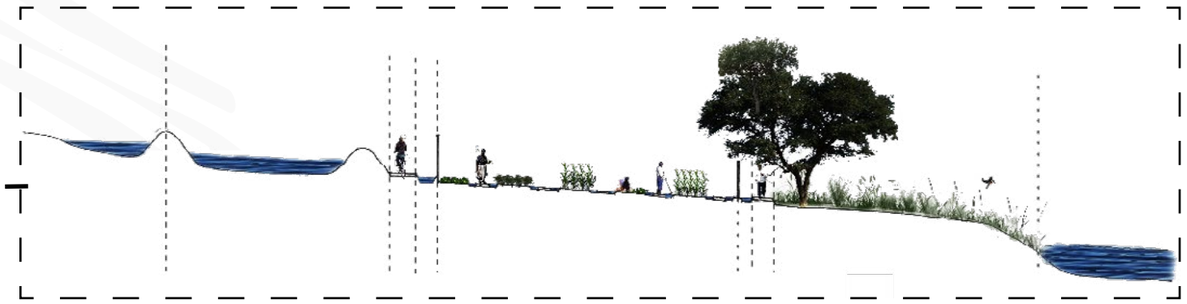




# NATALSPRUIT





# MASTER PLAN


An integrated open space system that responds to the needs of the environment and the community, and which adds ecological, social and recreational value in a sensitive and appropriate manner. The open space is safe, accessible and well managed, with local community buy-in being the cornerstone of it long-term sustainability.

In order to achieve this vision, the following issues (identified during the ecosystem synopsis), would need to be addressed:

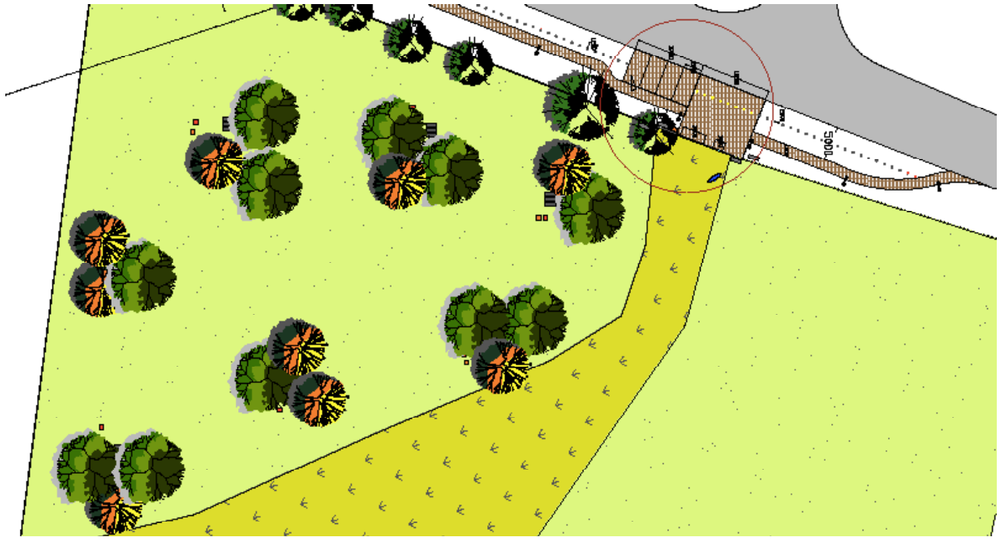
Aquatic interventions (river health & water quality):

- Address dumping, waste, alien vegetation and pollution along the river system.
- Address flooding and erosion along the river system through control of flow velocity and improvement of attenuation capacity.
- Reinstate and optimise ecological systems and environments.
- Improve hydrological function and water quality along the river systems
- Conserve and formally protect the wetland area

Terrestrial interventions (recreation):

- Optimise (maintain and repair) existing public open space along the river system and integrate new open spaces.
- Improve accessibility to open spaces and support public safety.
- Develop movement routes, access points and crossings along the river system to improve accessibility.
- Support appropriate and compatible activities within the open space, including sports and recreation activities such as dog walking, birding, picnicking, etc.

CONCEPT & ZONING
RECYCLING HUBS



# RIETVLEI

The goal of this study is to identify short term rehabilitation interventions that will assist in the upgrading and rehabilitation of the riverine environment as well as the provision of active and passive recreational facilities within and adjacent to the riverine environment.

This assignment primarily focusses on the rehabilitation of terrestrial riverine environment as opposed to the aquatic environment.

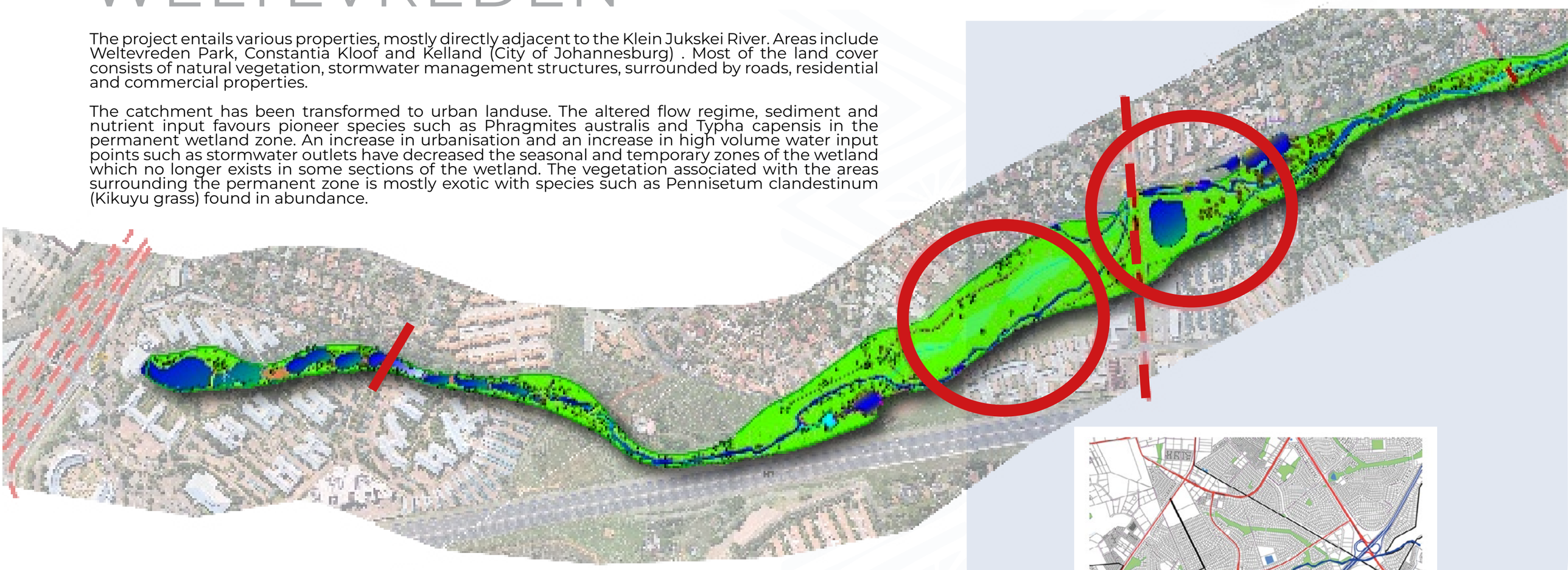
# SOWETO KLIPSPRUIT

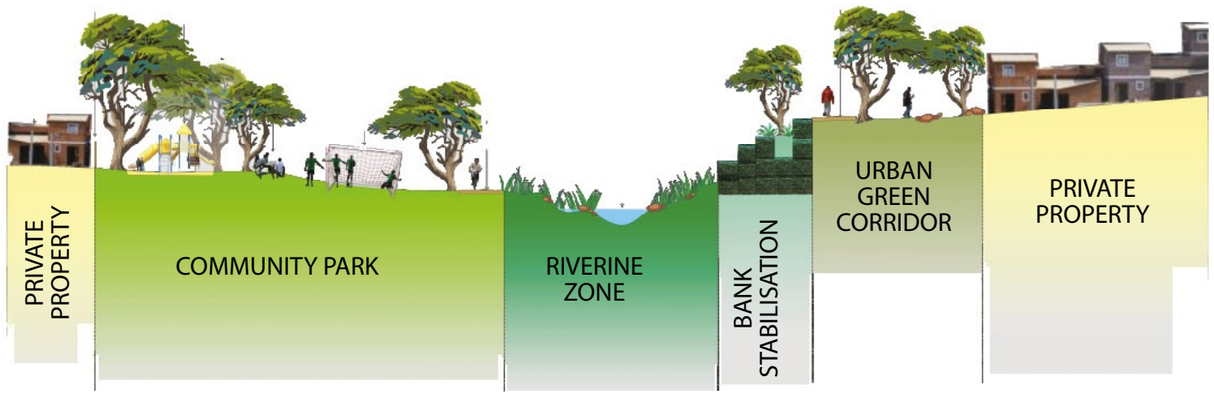
This area represents high density residential and mixed use, much close to the river's edge. Various levels of disturbance occur along these water systems, depending on the level of custodianship taken by adjacent land uses. Overall, however, the hydrological system will be moderately intact, although dumping is prolific throughout the area, encroachment by invasive species evident and localised erosion is highly likely. Due to the density of adjacent development, and the resulting elevated runoff, the system is considered to be under moderate pressure as a result of adjacent land use.

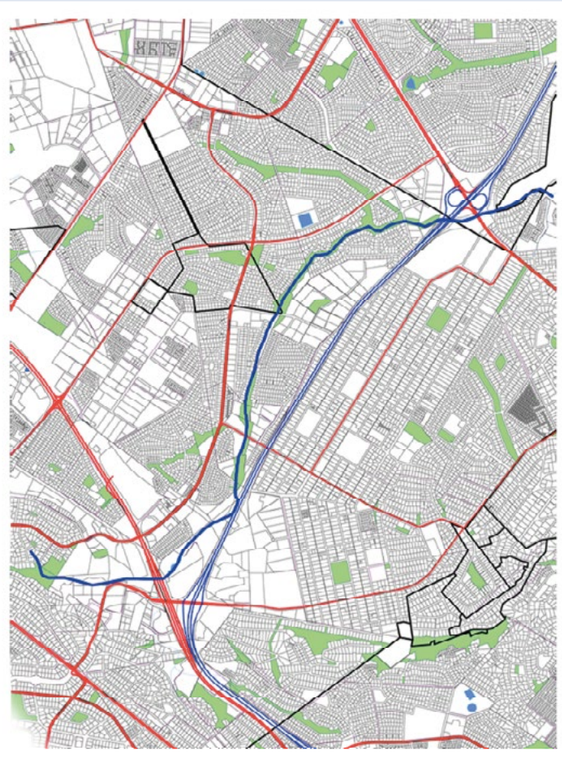
# WELTEVREDEN

The project entails various properties, mostly directly adjacent to the Klein Jukskei River. Areas include Weltevreden Park, Constantia Kloof and Kelland (City of Johannesburg) . Most of the land cover consists of natural vegetation, stormwater management structures, surrounded by roads, residential and commercial properties.

The catchment has been transformed to urban landuse. The altered flow regime, sediment and nutrient input favours pioneer species such as Phragmites australis and Typha capensis in the permanent wetland zone. An increase in urbanisation and an increase in high volume water input points such as stormwater outlets have decreased the seasonal and temporary zones of the wetland which no longer exists in some sections of the wetland. The vegetation associated with the areas surrounding the permanent zone is mostly exotic with species such as Pennisetum clandestinum (Kikuyu grass) found in abundance.





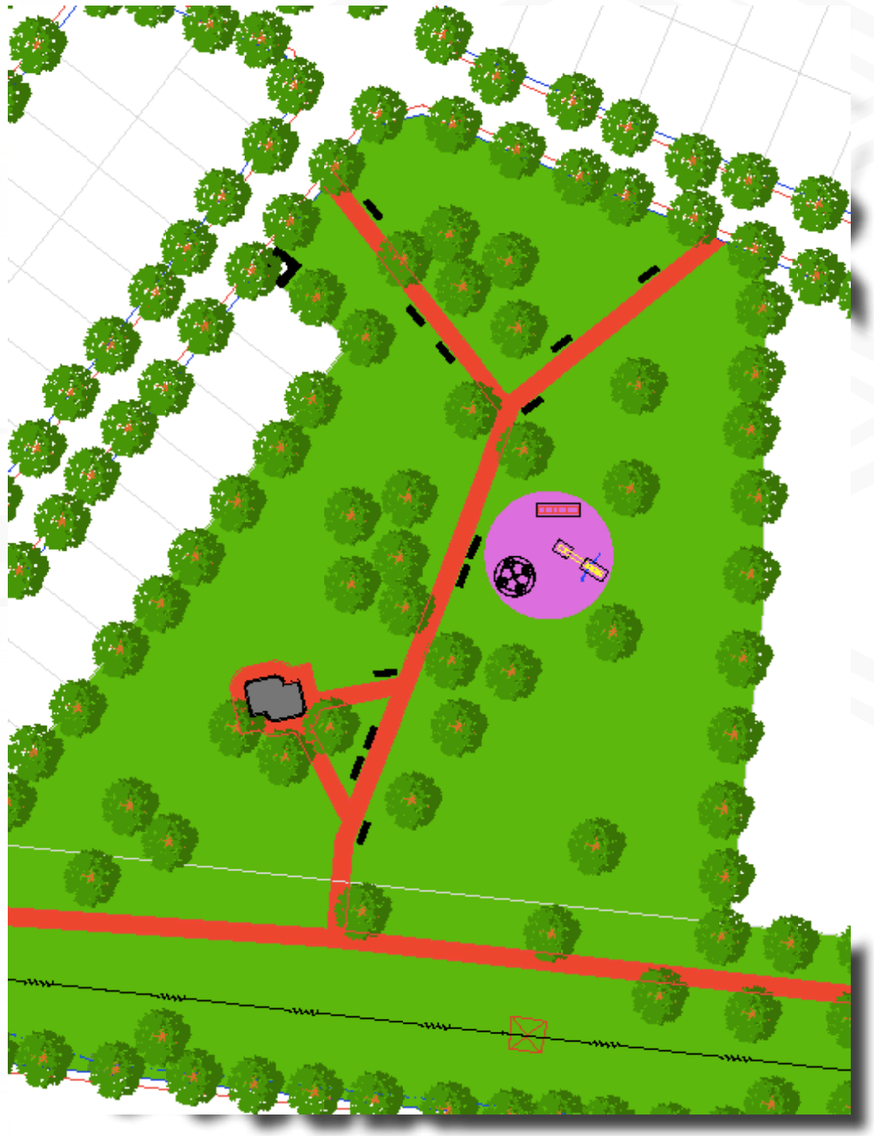
# HOUSING PROJECTS

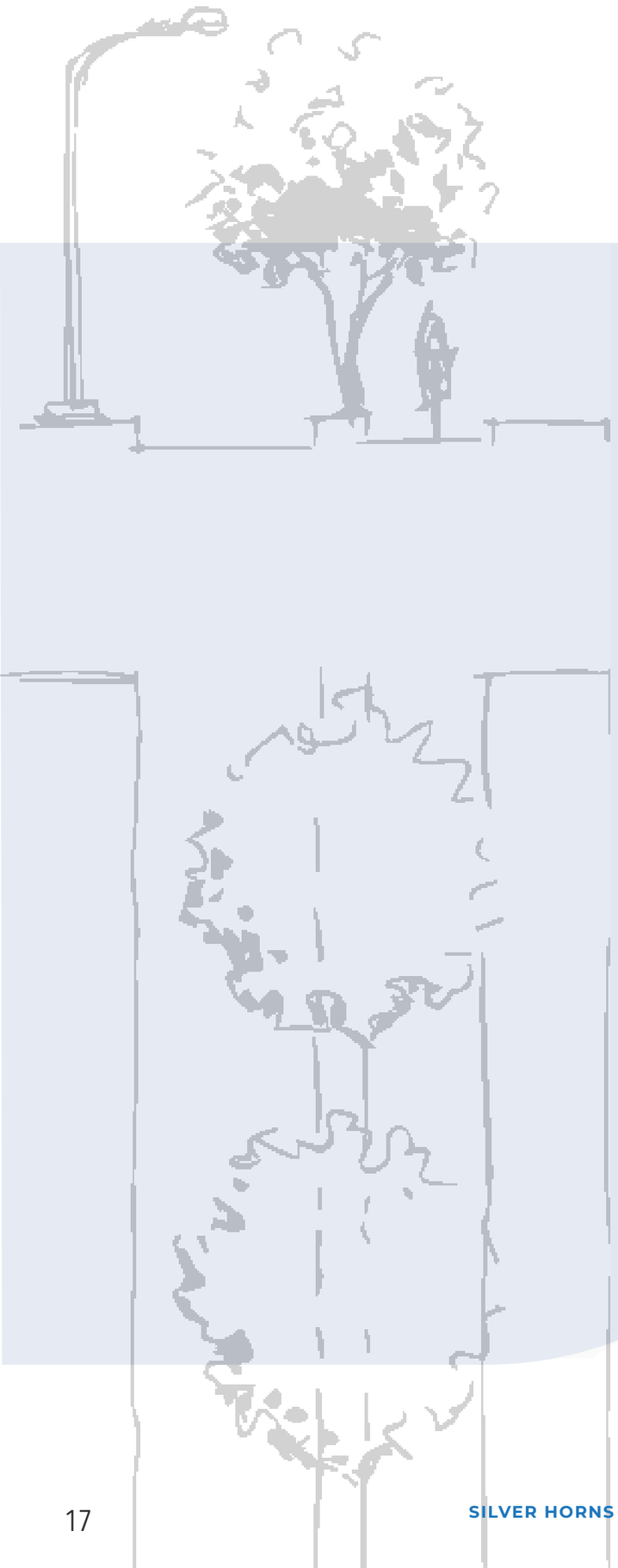
# BAKENPARK

# BRANDWAG

# JABULANI

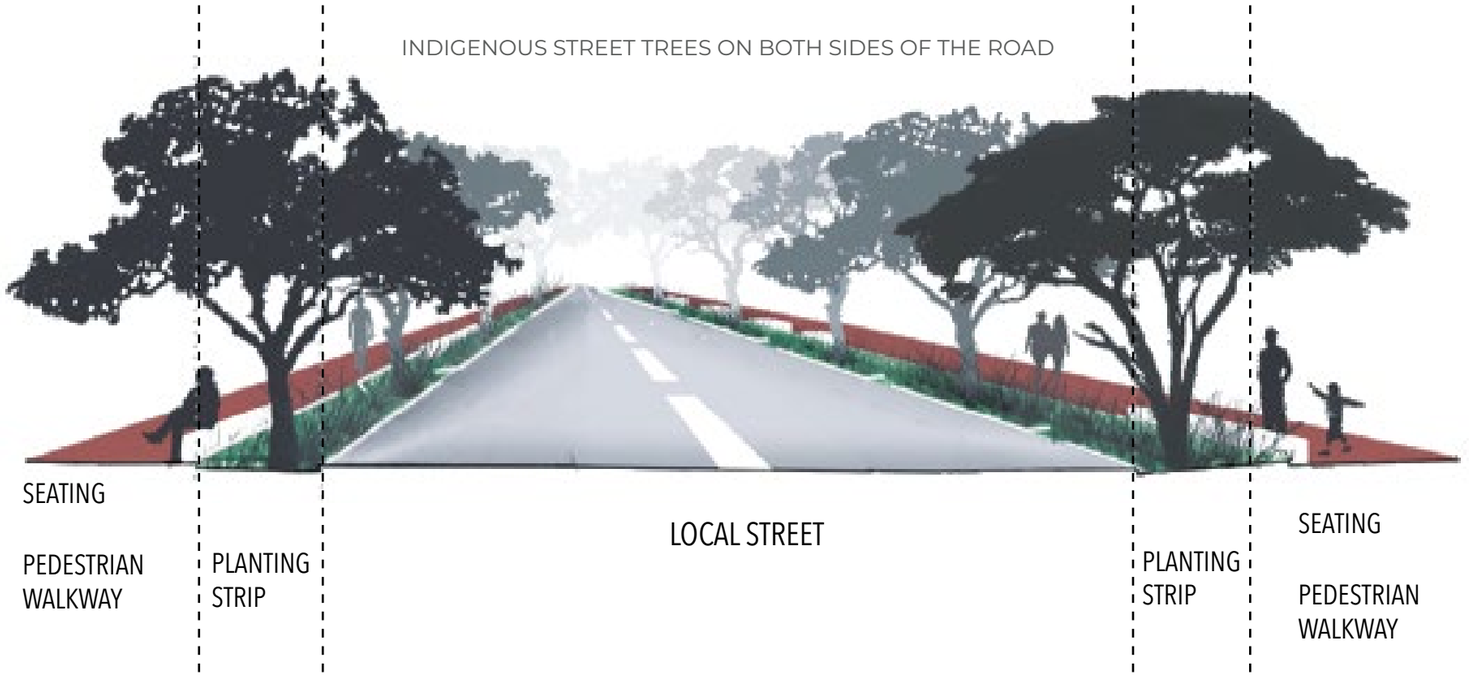
# VISTA PARK

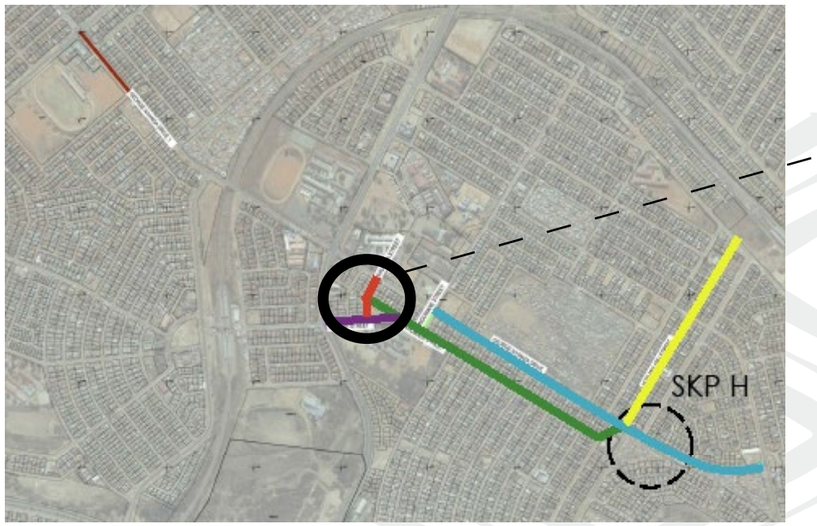



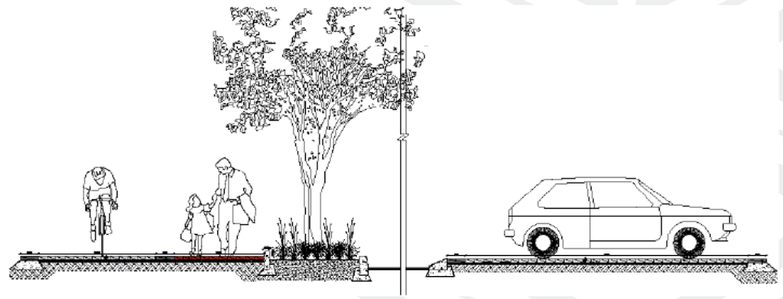


# LINEAR DEVELOMENTS NMT

# TEMBISA PEDESTRIANIZED



CHARACTER:

- Make use of bioswale position (i.e. within the central median or along the street edge), width and design to help characterize different road hierarchies.

- The high street is to be lined with trees on either side as well as along a planted median.

- The other streets are to be lined with trees on either side. A planted median may be present, but will not be lined with trees. All traffic circles along the high street are to be designed and landscaped wit a mix of hard, soft and landscape features.

- The design of each circle is to be different, but continuous in terms of overall design character. Traffic circle design should be conservative, to ensure a simple, easily read landscape and should not represent a diversion. Too many elements in a circle landscape should be avoided.

PLANNING:

- In all cases, the landscape may not interfere with traffic functioning, minimum visibility, safe vehicle passage and traffic organisation must be ensured. Provide for the required ratio of disabled parking located appropriately close to building entrances. Maintain visibility and required lines of sight at intersections, pedestrian crossings and other pedestrian caution areas (i.e. bus stops, drop off's etc.).

- Ensure mid-block accessibility for pedestrians where on-street parking is provided. Articulate interfaces between vehicular streets and pedestrian areas through subtle and permeable boundaries (i.e. ker lines, low planting, tree avenues, landscape elements, bollards etc.). Line parking areas with a planting buffer, separating the vehicular zone from the pedestrian zone wherever possible.

- Make use of implied boundaries (i.e. planting buffers, dump rock features etc.) rather than phys railings, walls) wherever possible. Planted bioswales for storm water management and.

- Kerb inlets to be designed to allow surface flow to enter the median at selected points. Hard lan discharge storm water into rain gardens (at circles).

HARD LANDSCAPE:

- Align bulk services along the street alignments beneath on-street parking areas rather than with zone. Where parking areas are absent, lay services within a dedicated zone demarcated by a sp and pattern. Servitudes to be finished with low-value, low-tech landscape finishes, which may be replaced following maintenance.

- Cycling surfaces (where separate cycle lanes are included) should be depicted as separate from the pedestrian surfaces to ensure legibility and safety for pedestrians and cyclists alike.

- Traffic calming should be effected through design interventions such as change in road surface, change in road level, pinching of the road reserve and change in landscape character.

- Make use of paving type and pattern to define on-street parking spaces, cycle lanes, pedestrian crossings and other pedestrian caution areas. Materials to be permeable wherever possible, at the very least within on street parking areas.

SOFT LANDSCAPE:

- Tree avenues to be used to create visual continuity along streets and medians.

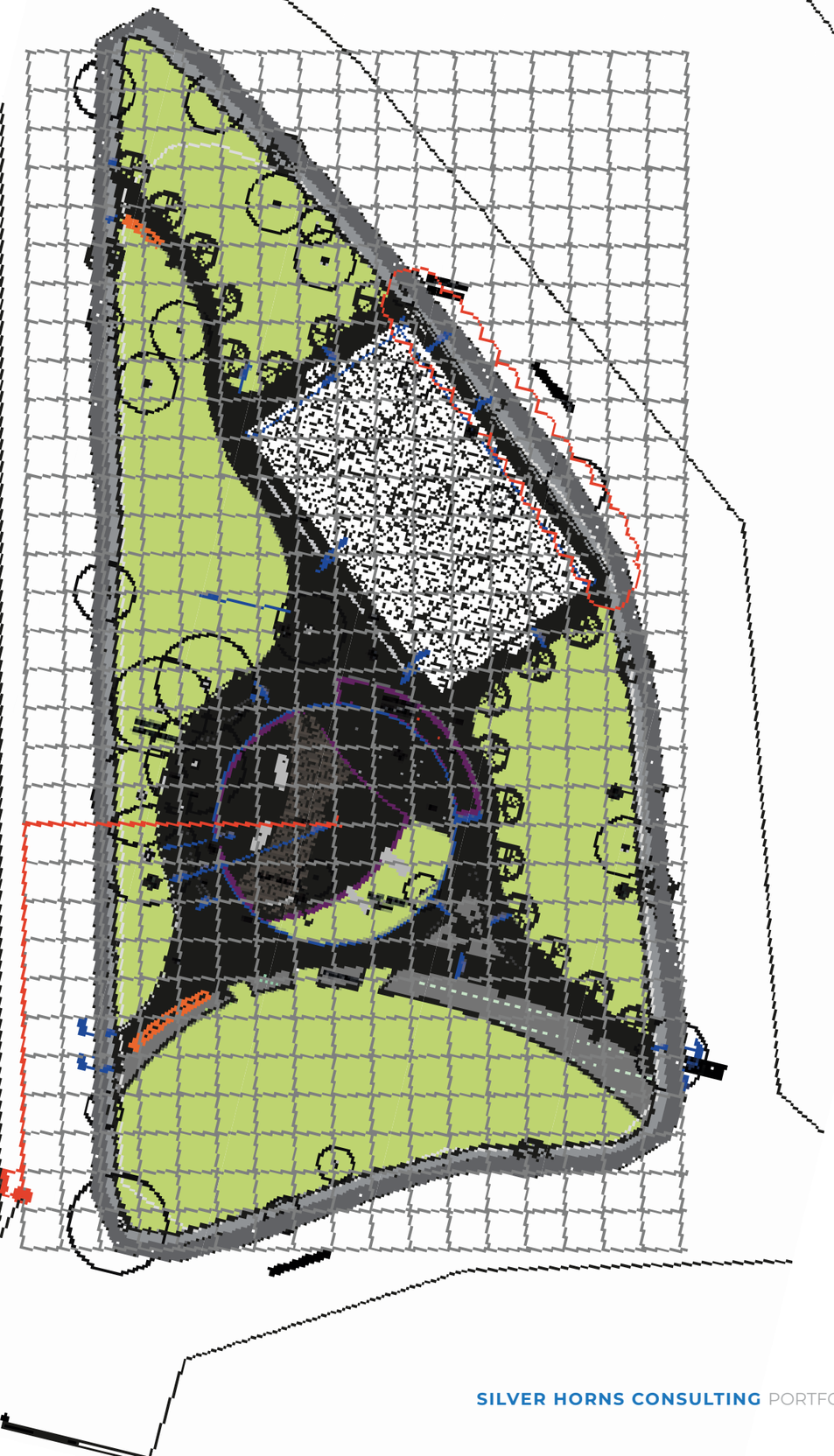
- Avoid the use of continuous single specie tree avenues at regular spacing. Favour the use of diverse species at varying rhythms, responding to adjacent uses and the street.

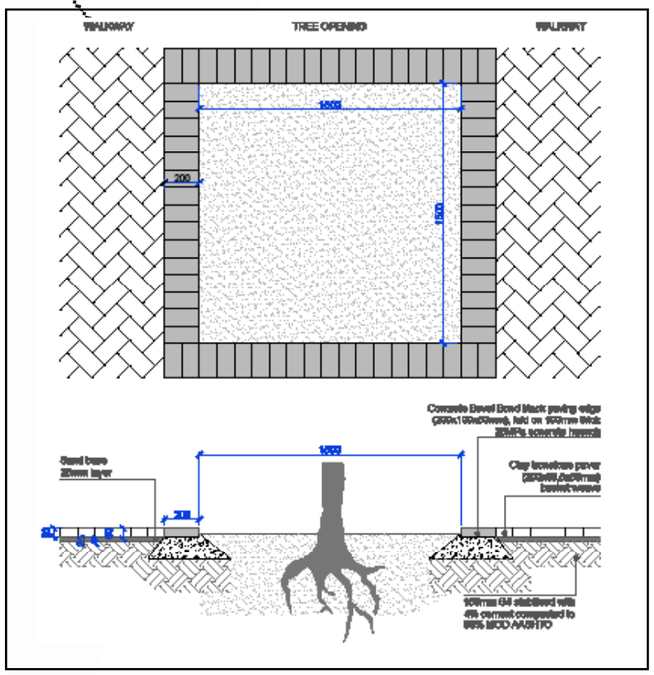
- Density and configuration of tree planting may be higher at activity and interest areas.

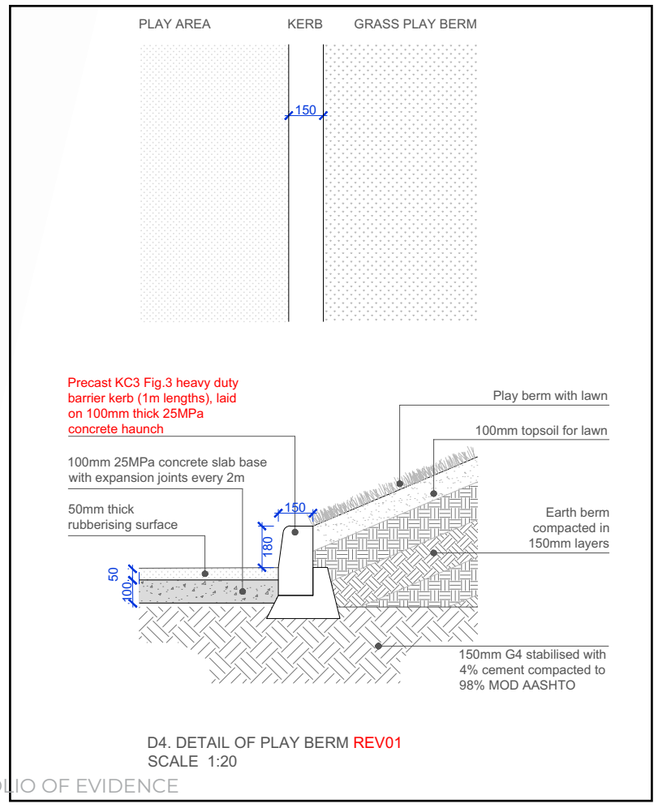
- All on street parking bays must be provided with suitable shade trees. Each parking bay mustbe shaded. In general, a ratio of one tree per 2 parking bays should be allowed for, depending on the size of the tree. All traffic circles, medians and swales to be planted with appropriat vegetation. Hard landscape is discouraged.

# SMALL PARKS

# GRESSWOLD PARK






D4. DETAIL OF PLAY BERM REV01
SCALE 1:20

The Works to be carried out by the Contractor under this Contract comprises mainly the following:

A) Minor clearing and removal

B) Earthworks and contour manipulation

C) Landscaping:
- i. Planting of trees
- ii. Planting of shrubs an groundcovers
- iii. Planting of lawn

D) Installation of hard landscaping:
- i. Paving
- ii. Walls
- iii. Tree openings

E) Installation of multi-purpose court with fencing

F) Installation of outdoor gym equipment

G) Installation of custom play equipment

H) Installation of custom steel pergola structures

I) Installation of signage

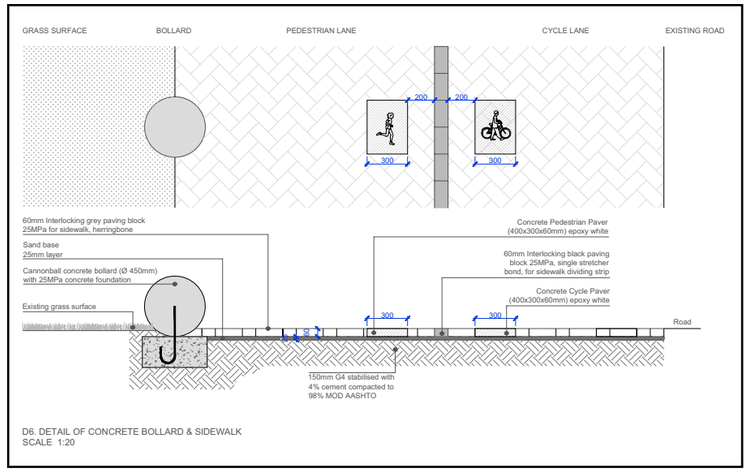
J) Installation of lighting

K) Installation of turf valve irrigation system

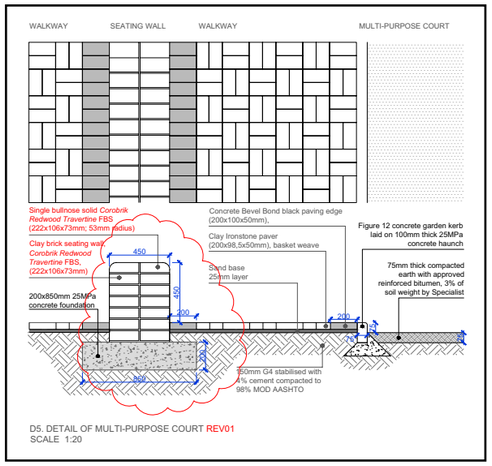
L) Installation of site furniture:
- i. Benches
- ii. Bollards
- iii. Litterbins

M) Maintenance of completed work

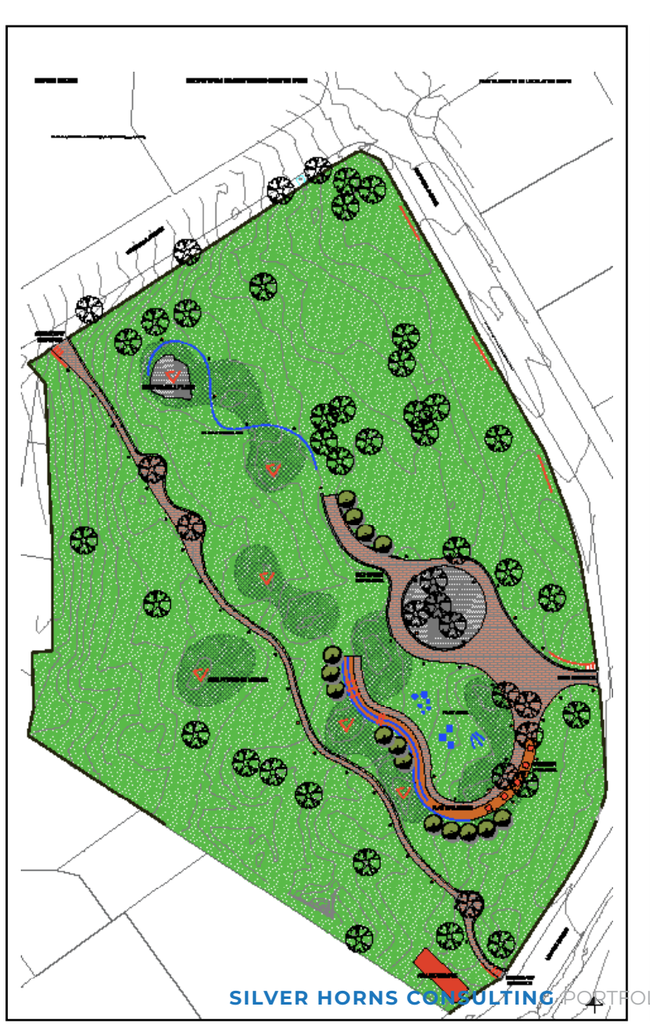
# WEINBERG FAMILY PARK




D6. DETAIL OF CONCRETE BOLLARD & SIDEWALK
SCALE 1:20




D5. DETAIL OF MULTI-PURPOSE COURT REV01
SCALE 1:20



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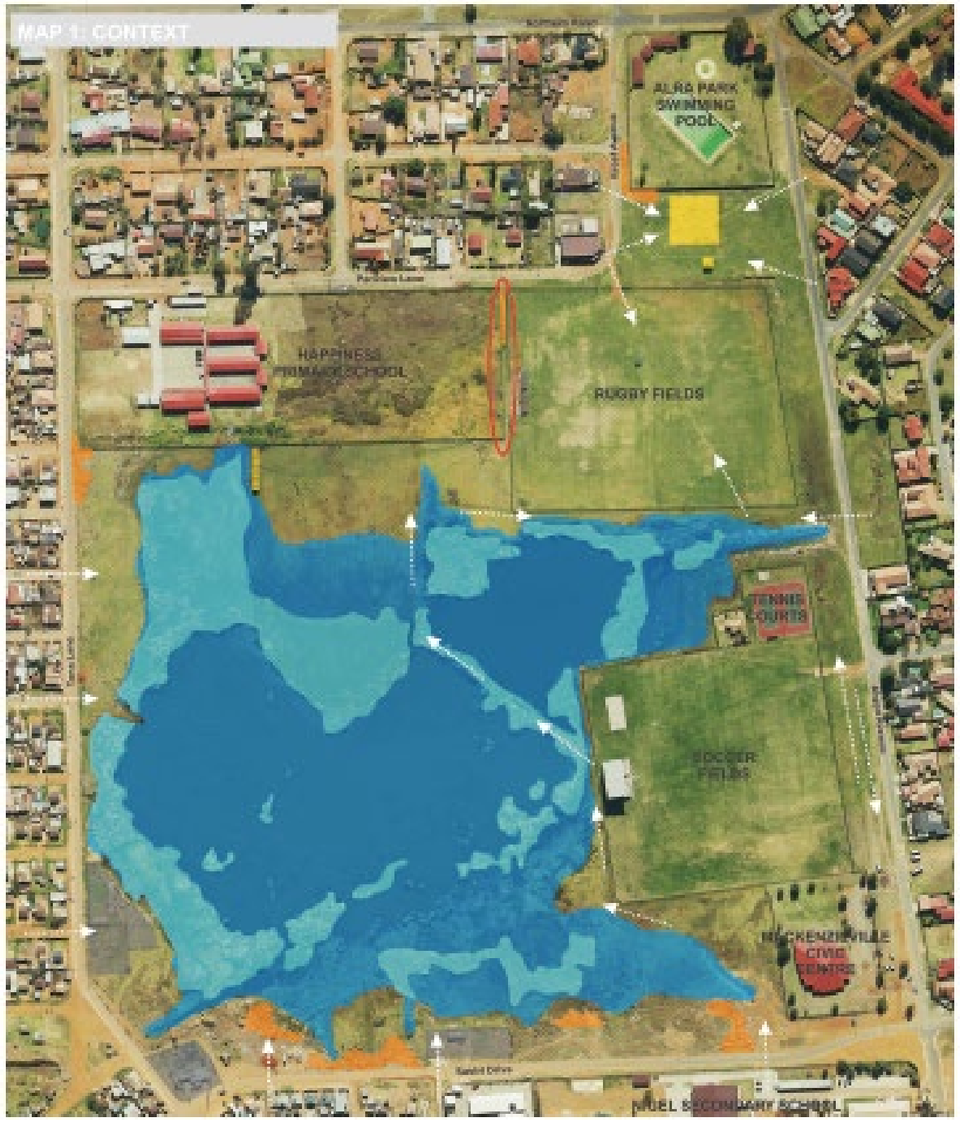
M) Maintenance of completed work

# TUNA PARK CONCEPT

## CONTEXT




## CONCEPT