Building a successful neighbourhood

Clydesdale Village Association

JANUARY 2023

Clydesdale Precinct Plan

Draft Document

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LIST OF ABBREVIATIONS

A Re Yeng	CoT Bus system
ABLAND	Developer of Loftus Park
AGM -	Annual General Meeting
AHMS -	Afrikaans Hoër Meisies Skool
APA	Afrikaanse Protestantse Akademie
BRT	Bus Rapid Transport
CBD	City Business District
CID	City Improvement District
Cmdr	Commander
CoT	City of Tshwane
CVA	Clydesdale Village Association
EMF	Environmental Management Framework
ESA	Ecological Support Area
Fig	Figure
Ha	Hectare
IMSD	Internal Municipal Improvement District
KVa	kilovolt-ampere
MEC	Member of the Executive Council
MSDF	Municipal Spatial Development Framework
NMT	Non-Motorised Transport
PHRA – G	Provincial Heritage Resources Authority Gauteng
Res	Residential
RSDF	Regional Spatial Development Framework
SAPS	South African Police Service
Str	Street
TMPD	Tshwane Metro Police Department
TOD	Transport Orientated Design
UP	University of Pretoria
SA	South Africa

CHAPTER 1: INTRODUCTION

1. BACKGROUND

The Clydesdale Village Association (hereafter referred to as the CVA) applied for permission to develop a Precinct Plan for the area in June 2019.

A precinct plan is defined as the most detail level at which spatial planning is done. The plan must ensure appropriate urban design, for the effective integration of infrastructure and facilities within a larger node or corridor. Precinct planning can also take place for specific activity corridors or Activity Streets within a Region which are not related to development corridors.[1]

The City of Tshwane approved the application on the following grounds:

- Clydesdale has been Implicated in the RSDF (Regional Spatial Development Framework) 2018 (and therefore qualified as a candidate for the allotment of a Precinct Plan).
- Clydesdale is one of the oldest townships in greater Tshwane.
- Several properties in Clydesdale are older than 60 years.
- Solutions for combining densification with properties with heritage value without migration of families are not included in the RSDF.
- Clydesdale needs balanced mixed-use zoning. Too many communes are unattended for 4 months of the year and businesses unattended at night causes security issues.
- To determine a ratio between communes, businesses, residential, and educational that will ensure good security of the area.
- At the 2019 CVA AGM, the CVA was mandated to research appropriate development in Clydesdale. Up to date, the CVA opposed any development other than residential 2 due to the lack of development guidelines on erf level.
- Investors currently living in Clydesdale are hesitant to invest due to the lack of direction regarding development for the neighbourhood - A Precinct Plan will stimulate growth and investment in Clydesdale.
- The well-integrated neighbourhood of Clydesdale has the potential of developing into a modern mixed-use neighbourhood.

[1] *Source: Regionalized Municipal Spatial Development Framework for Region 3, 2018*

2. DEFINING THE STUDY AREA

The study area comprises the Clydesdale Neighbourhood, which is the eastern portion of the Sunnyside townships. The precinct is roughly bounded by Park Street in the north, Wessels Street and the Pretoria Technical High School in the west, Walkerspruit and Jorissen Street in the south, and Loftus Stadium and Loftus Park in the east (refer to Figure 1).

Figure 1: Locality and extent of the proposed Clydesdale precinct

3. OBJECTIVES OF THE CLYDESDALE PRECINCT PLAN

The objectives of the precinct plan are the following:

- To manage alterations, development, redevelopment, construction, and demolition to retain the heritage value of the study area
- To promote conservation, restoration, rehabilitation, and renovation of the built and natural environment
- To maintain the character of the area
- To establish guidelines for new construction and alterations that are sympathetic to the heritage environment
- To regulate new land uses, densification and intensification
- To manage greenspaces and landscapes
- To communicate heritage value[2]

[2] *SOURCE: https://heritagebc.ca/learning-centre/heritage-conservation-areas-a-resource-guide/heritage-conservation-areas-objectives/*

CHAPTER 2: POLICY ANALYSIS

1. REGIONAL SPATIAL DEVELOPMENT FRAMEWORK FOR REGION 3, 2018

The study area forms part of the City of Tshwane Regionalized Municipal Spatial Development Framework for Region 3, 2018 (RSDF). The RSDF translates the higher-level plans and policies of the municipality into local development proposals and integrates all the sectoral plans of the municipality into a single, comprehensive development plan for the region.

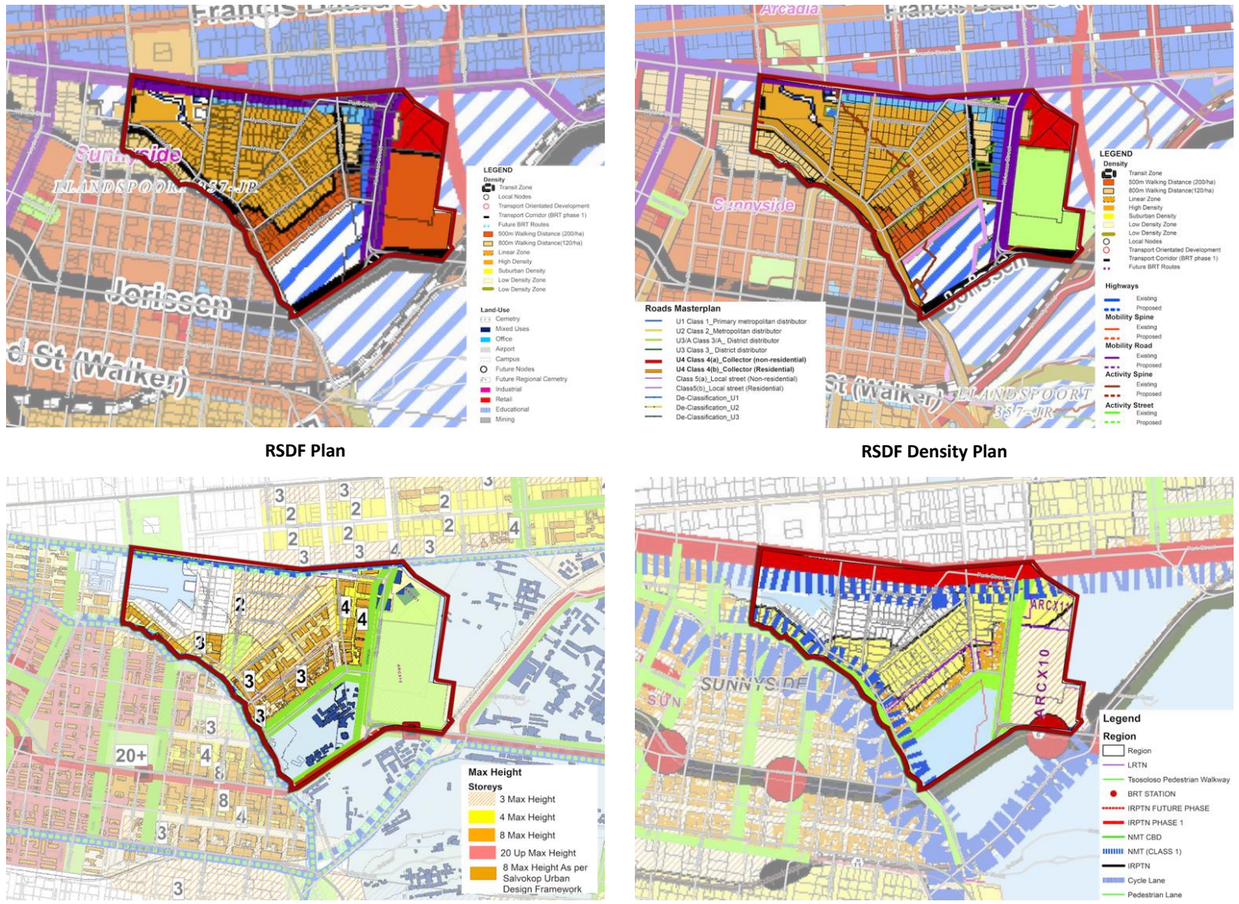
The following section looks at the land uses, residential densities, building heights and movement networks proposed in the RSDF for the Clydesdale area and the implications of these proposals on the character and functionality of the study area.

1.1 GENERAL DEVELOPMENT PROPOSALS

Figure 2 shows extracts from the RSDF maps for the Clydesdale area, while Figure 3 shows the combined land use proposals for the study area. In broad terms, the RSDF proposes residential densification for the study area since the study area is located in proximity to public transport networks (i.e. the BRT route and stations along Jorissen Street/Lynnwood Road) as well as the Hatfield Metropolitan Node and the CBD. Non-residential development is proposed along Park Street (Offices) and Kirkness Street (Mixed Use) with a Retail component on the south-eastern corner of Park and Kirkness Streets. The remainder of the study area is demarcated as either Educational or Open Space. Each of these will be unpacked and discussed in more detail below.

Figure 5 to Figure 6 show the Maximum Permissible Building Heights, Functional Road Classification, and the proposed priority Non-Motorised Transport routes in the study area, which all have an impact on the nature of development in the study area. Valley Road/Walton Jameson Avenue is demarcated as an important pedestrian and cycling route (refer to Figure 6), so developments could be required to develop in a manner that supports and facilitates safe and convenient pedestrian and cycling movement, including the provision of sidewalks and/or cycling paths as per the requirements of the municipality.

It should be noted that the RSDF does not make building height proposals for the entire study area, only for those properties located within the BRT corridor, as defined in the RSDF.



RSDF Plan | **RSDF Density Plan**

RSDF Height Plan | **RSDF Non-Motorised Transport (NMT) Plan**

Figure 2: Extracts from the RSDF maps for the Clydesdale area

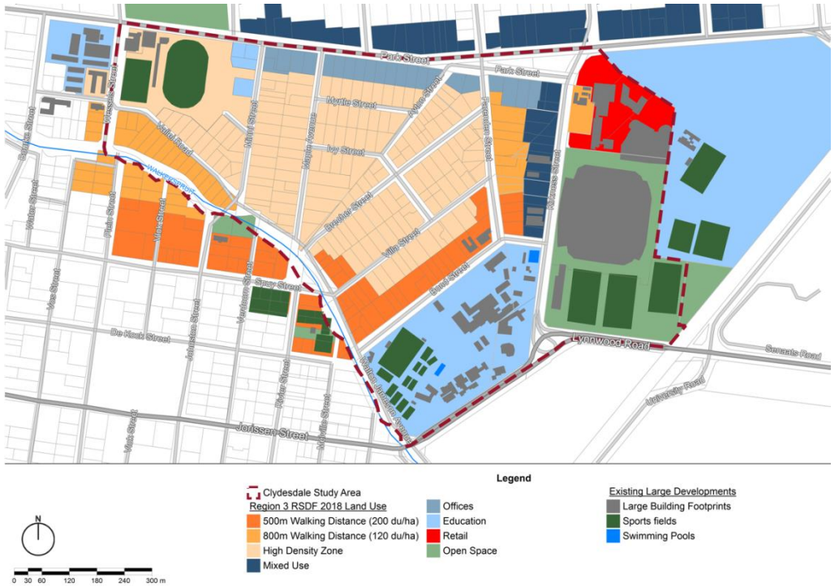


Figure 3: Land Use Proposals

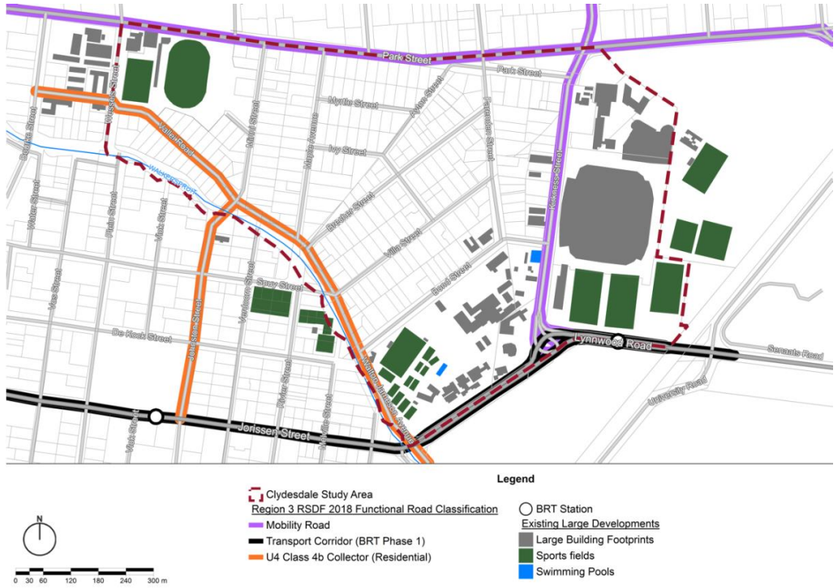


Figure 4: Functional Road Classification

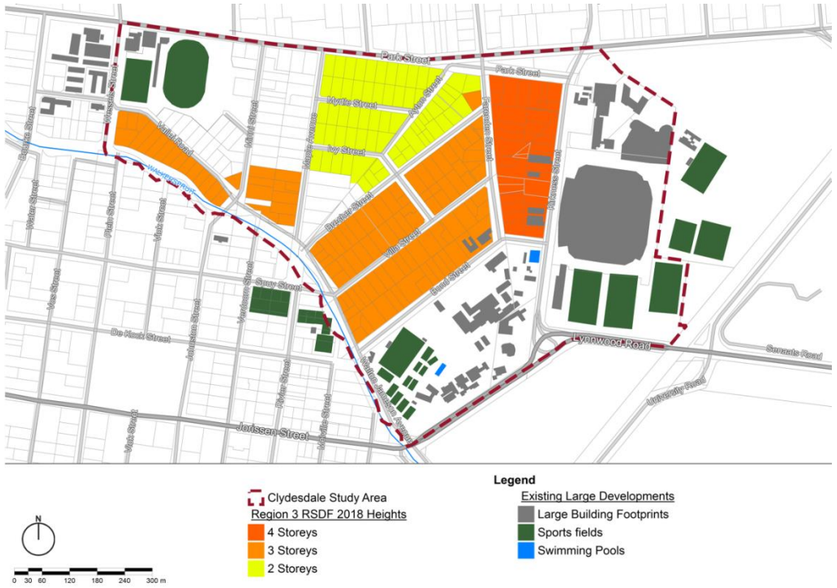


Figure 5: Permissible Building Heights

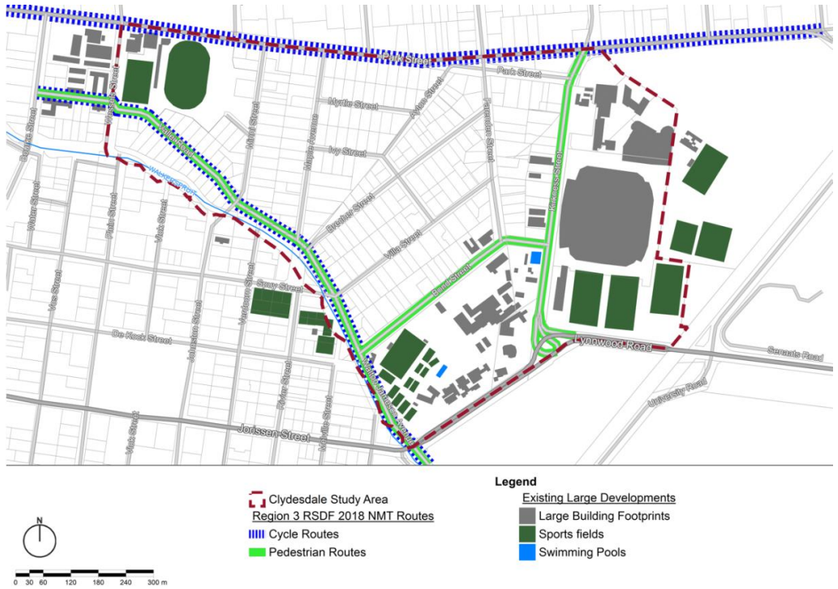


Figure 6: NMT Routes (Pedestrian and Cycling)

1.2 RESIDENTIAL DEVELOPMENT AND DENSITIES

In terms of the RSDF, the study area falls in a **Concentration Zone**. "The Concentration Zones are the primary focus areas for high-density residential developments and are centred on nodes of metropolitan importance such as Metropolitan Nodes and Urban Cores (High-Density Zones), Transit Promotion Zones and other strategic locations. The density of + 200 units/ha will only be supported on properties adjacent to the trunk routes."[3]

Concentration Zones have three (3) subcategories namely (i) Areas located within a walking distance of less than 500m to a BRT/IPTN station, (ii) Areas located between 500m and 800m walking distance to a BRT/IPTN station, and (iii) High-Density Zones. These subcategories relate to the different densities that apply to different parts of the Concentration Zone, and all three subcategories are applicable in the study area.

The densities that are proposed by the RSDF must be read together with the maximum height guidelines.

1.2.1 Less than 500m walking distance

Properties along Bond Street and the southern sections of Walton Jameson Avenue and Farenden Street fall within the area demarcated as within 500m walking distance to the BRT stops in Jorissen Street/Lynnwood Road. Generally, the RSDF promotes a density of more than 200 dwelling units/ha in this zone, ***"with buildings in the order of 6 to 8 stories parallel to the trunk route and tapering down from the trunk route into the residential area"***.[4] The scaling down of heights from the trunk route outwards to the edges of the zone therefore also implies a scaling down of densities from the trunk route to the edges of the zone.

As these properties in the study area are the last row of properties in this zone, the municipality will in all probability not support densities of 200 dwelling units per hectare, but rather densities somewhere between 180 and 120 dwelling units per hectare. The exact densities are however not indicated in the RSDF and will be determined on an individual application basis. The maximum permissible heights of buildings in this zone are between 3 and 4 storeys.

Bond Street is demarcated as an important pedestrian route (refer to Figure 6), so developments could be required to develop in a manner that supports and facilitates safe and convenient pedestrian movement, including the provision of sidewalks as per the requirements of the municipality.

Figure 7: Region 3 RSDF 2018 Density (Less than 500m walking distance)

Figure 8: Region 3 RSDF 2018 Height

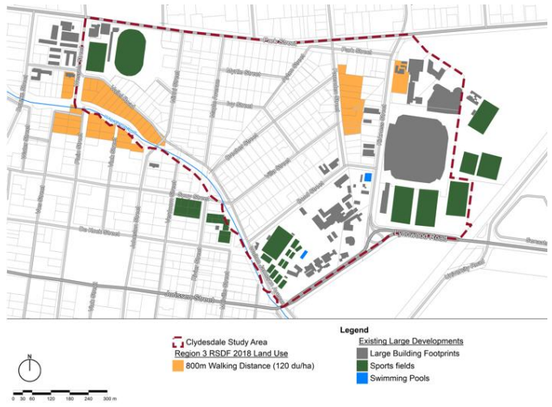


Figure 9: Region 3 RSDF 2018 Density (Between 500m and 800m walking distance)

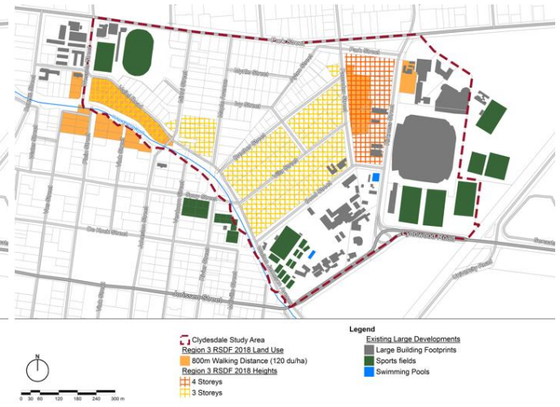


Figure 10: Region 3 RSDF 2018 Height

1.2.2 Between 500m and 800m walking distance

Properties along the eastern side of Farenden Street and the southern side of Valley Road fall within the area demarcated as between 500m and 800m walking distance to the BRT stops in Jorissen Street/Lynnwood Road. In terms of the RSDF, densities of **up to 120 dwelling units/ha** are supported in this zone. The maximum permissible heights of buildings in this zone are between 3 and 4 storeys.

[3] *Source: Regionalized Municipal Spatial Development Framework for Region 3, 2018*

[4] *Source: Regionalized Municipal Spatial Development Framework for Region 3, 2018*

1.2.3 High-density zone

The remainder of the area to the west of Farenden Street is earmarked as a High-Density Zone. High-Density Zones are those areas close to Metropolitan Nodes and Urban Cores, in this case, the CBD and the Hatfield Metropolitan Node ***"which should be developed as medium to high residential developments".***[5] The RSDF is not specific in terms of the densities supported in the High-Density Zones, other than stating ***"New Developments within Concentration Zones should preferably not be at densities of below 120 units per hectare."***[6] The maximum permissible heights of buildings in this zone are between 2 and 3 storeys. Valley Road/Walton Jameson Avenue is demarcated as an important pedestrian and cycling route (refer to Figure 6), so developments could be required to develop in a manner that supports and facilitates safe and convenient pedestrian and cycling movement, including the provision of sidewalks and/or cycling paths as per the requirements of the municipality.

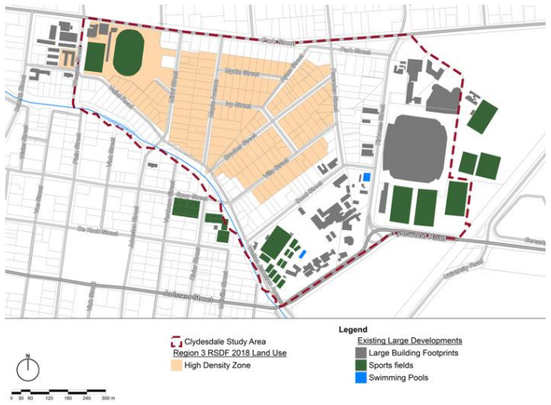


Figure 11: Region 3 RSDF 2018 Density (High-Density Zone)

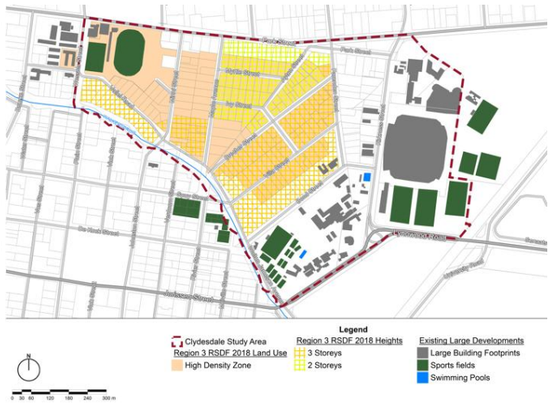


Figure 12: Region 3 RSDF 2018 (Height)

1.2.4 Density implications

The above section shows that densities of more or less between 120 dwelling units per hectare and approximately 180 dwelling units per hectare are indicated for the study area. The average permissible height for buildings in the study area is however 3 storeys, which means that realistically an average residential density of more or less 100 dwelling units per hectare is probably achievable (depending on the size of the individual units developed).

The total land area earmarked as residential development is set out in Table 1:

Table 1: Area of land earmarked for residential development

RSDF Zone	Land Area (Ha)
Less than 500m walking distance	7.8
Between 500m and 800m walking distance	5.4
High-Density Zone	16.1[7]
Total	**29.3**

This means that the study area could theoretically accommodate a total of approximately 2930 dwelling units (inclusive of existing developments). This also excludes the residential development that could take place as part of the Mixed-Use Zone along Kirkness Street.

1.3 COMMUNITY FACILITIES AND PEDESTRIANISATION IN RESIDENTIAL AREAS

Valley Road/Walton Jameson Avenue is earmarked as a Residential Collector Road (refer to Figure 4), and in terms of the RSDF, *"Low-intensity community services and as per Council consent"* can be permitted on properties along Residential Collectors. The RSDF is not specific in terms of what types of uses are considered community services.

In terms of the RSDF, "*Pedestrianisation must be included into the densification process and 1.8-meter walkways must be provided on erf boundaries in these areas by developers."* The municipality could therefore require all developers (i.e. not only those located adjacent to priority NMT routes as indicated in Figure 6) to provide pedestrian and/or cycling paths as part of their development.

1.4 NON-RESIDENTIAL DEVELOPMENT

1.4.1 Mixed Use

The properties along the western side of Kirkness Street are earmarked for Mixed Use, which *"Refers to land uses such as offices/commercial/residential/ industrial/retail/ entertainment / institutional etc. It also refers to a mix of uses within a specific area (node or corridor). … The combination depends on the specific area. Mixed uses may refer to retail at street level, institutional on the floor above and*

[5] *Source: Regionalized Municipal Spatial Development Framework for Region 3, 2018*

[6] *Source: Regionalized Municipal Spatial Development Framework for Region 3, 2018*

[7] *This excludes the Pretoria Technical High School Sports Ground and the public open space between Maple and Brecher Streets which have also been demarcated as High Density Zone, but which would in all probability not be developed*

residential on the upper floors, or only one use per erf."[8] The description of the Mixed Use Zone in the RSDF is very broad, and does not go into specific land uses for specific areas. The mix of land uses will therefore be determined on merit by the municipality per application. Buildings along the western side of Kirkness Street are permitted a maximum height of four (4) storeys.

Kirkness Street is also demarcated as an existing **Mobility Road** (refer to Figure 4). Land uses permitted along Mobility Roads include (i) medium to high-density residential as per the density map and (ii) nodal development with a mixed-use character. The RSDF Density Map does not show densities for these properties, but it can be inferred that the properties along Kirkness Street will form part of the 500m to 800m walking distance zone (or even partially part of the less than 500m walking distance zone) and will therefore be permitted densities of between 120 and 200 dwelling units per hectare.

Characteristics of Mobility Roads include *inter alia* that direct access to adjacent properties could be limited. Kirkness Street is also demarcated as an important pedestrian route (refer to Figure 6), so developments could be required to develop in a manner that supports and facilitates safe and convenient pedestrian movement, including the provision of sidewalks as per the requirements of the municipality.

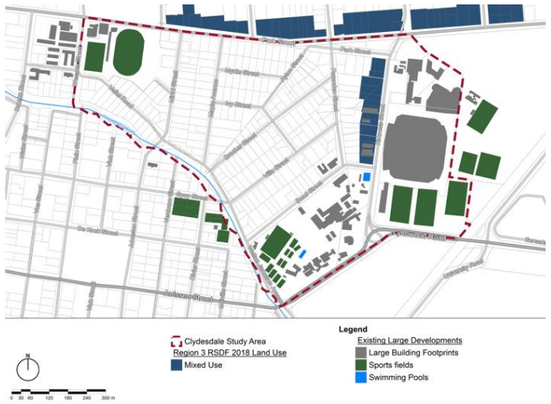


Figure 13: Region 3 RSDF 2018 Land Use (Mixed Use)

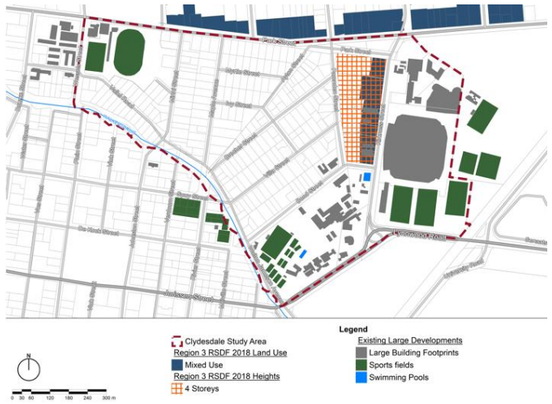


Figure 14: Region 3 RSDF 2018 (Height)

1.4.2 Offices

The properties along the southern side of Park Street are earmarked for Offices. In terms of the RSDF, *"These areas may accommodate land uses such as offices, retail industries, small places of refreshment, fitness centres, hairdressers, nail bars, medical consulting rooms, medical workshops such as a dental technician, prosthetist, orthotist, pathologists, optometrist technician and other businesses such as a beauty salon, pet salon, beauty/health spa, funeral undertaker, place of instruction and uses subservient to the main use. Land uses will be considered on merit, shall be compatible with the surrounding area and shall focus on serving the local community."* [9]

The maximum building height allowed is 4 storeys for the section between Kirkness Street and Farenden Street, and 2 storeys for the properties to the west of Farenden Street.

Park Street has also been demarcated as an important cycling route, so developments could be required to develop in a manner that supports and facilitates safe and convenient cycling movement, including the provision of pedestrian/cycling paths on the sidewalk as per the requirements of the municipality.

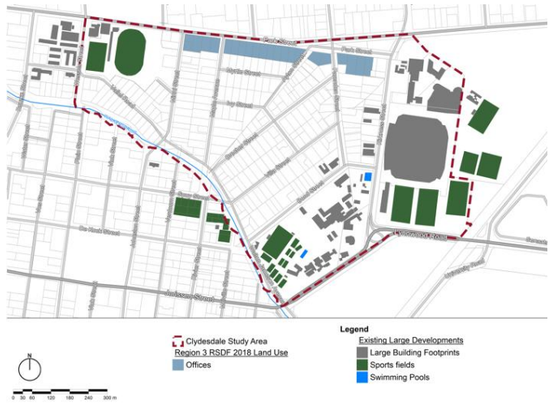


Figure 15: Region 3 RSDF 2018 Land Use (Offices)

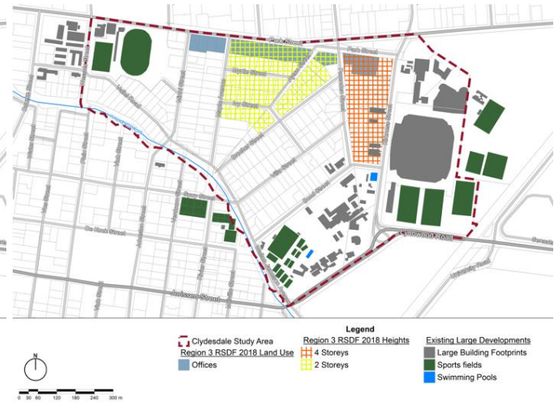


Figure 16: Region 3 RSDF 2018 (Height)

1.4.3 Retail

The property on the south-eastern corner of Park and Kirkness Streets is earmarked for Retail development, which in terms of the RSDF is defined as *"Areas of concentration of mixed land uses with the focus on retail"* [10]

[8] *Source: Regionalized Municipal Spatial Development Framework for Region 3, 2018*

[9] *Source: Regionalized Municipal Spatial Development Framework for Region 3, 2018*

[10] *Source: Regionalized Municipal Spatial Development Framework for Region 3, 2018*

Figure 17: Region 3 RSDF 2018 Land Use (Retail)

1.5 HERITAGE

The RSDF does not make any specific heritage conservation proposals for the study area, other than saying *"Future Developments within Region 3 must consider Cultural and Heritage aspects if applicable. Historical structures older than 60 years are found within Region 3 specifically in the following areas CBD, Sunnyside, Arcadia Hatfield, Hillcrest, and Brooklyn."*

Figure 18 shows the potential conflict that exists between the development proposals in the RSDF and the heritage assessment that was done for the study area as part of the Precinct Plan.

The RSDF states that when making development decisions that affect heritage resources, the following must be considered as part of the decision:

- ensure that heritage resources are conserved in their authentic state as far as practically possible, to reflect their historical and cultural value.
- acknowledge the significance of scale when making conservation-related decisions and evaluating heritage resources within broader contexts.
- wherever appropriate, ensure that a place's character (tangible and intangible) is protected based on its context and scale (rather than protecting the character of individual sites and/or objects only).
- where possible, ensure that new developments in historic precincts are of an appropriate scale and in an appropriate architectural 'language' (massing, articulation and texture).
- ensure that signage, roadways, pavements, colonnades, open and green space design, landscaping and tree-planting respect the character of historic buildings and precincts, as far as practically possible.
- encourage investment in the adaptive reuse of historical sites, facilitate integration between the conservation and adaptive reuse of heritage buildings, and promote urban regeneration strategies; and
- discourage the demolition or inappropriate alteration of historical sites where there is a possibility that these can be retained and integrated into a new development without undermining the inclusive potential of the development. When assessing development applications, the creation of views of heritage sites where no general access is provided must be encouraged.

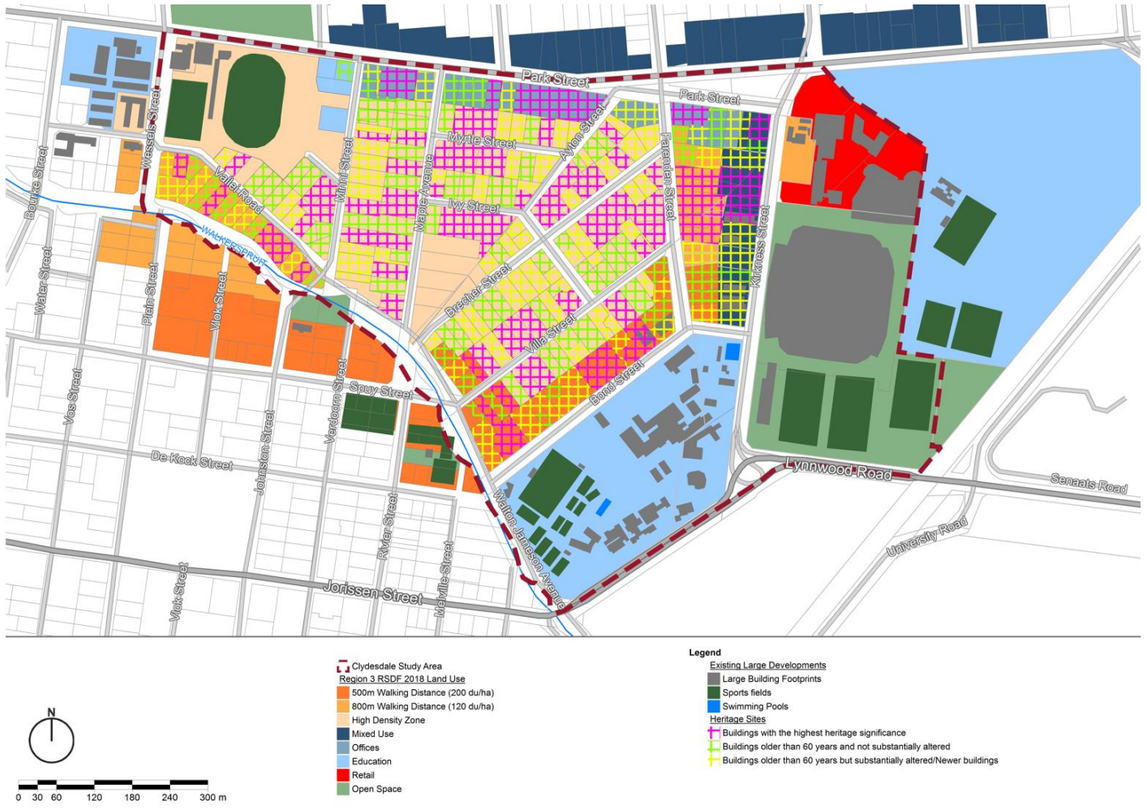


Figure 18: Heritage Sites vs RSDF Land Use Proposals

1.6 GENERAL DEVELOPMENT AND DESIGN PRINCIPLES

The RSDF contains general development and design principles in nodes, corridors, mixed-use areas and densification areas that apply to priority development areas, including the densification areas and mixed-use areas that are found in the study area.

These development and design guidelines are intended to ensure *"… the compatibility and interaction of land use changes to the abutting residential uses. The existing characteristics of an area and street play an important role in the determination of land uses that are considered appropriate and compatible with the residential component. The permitted land uses shall only be accommodated along the street up to the mid- block line of blocks running parallel to a street or adjacent service lane."*[11]

The following criteria shall determine if a particular erf is suitable to accommodate a permitted land use change:

- Acceptable safe access is possible
- Adequate on-site parking is available
- Adequate space available for landscaping purposes
- Acceptable impact on the residential component
- Site characteristics
- Availability of services

Table 2 sets out some of the development guidelines that **may** be relevant to the study area.

[11] *Source: Regionalized Municipal Spatial Development Framework for Region 3, 2018*

Table 2: General development and design principles (RSDF)

General development and design principles (RSDF)	
1.6.1 Floor Area Ratio and Height	**1.6.2 Building Lines**
• The Floor Area Ratio shall be determined by erf size, parking to be provided on-site and the influence of privacy with regards to the surrounding residential properties. • Relate building height to street width and intended character. Urban centres are characterised by a strong sense of enclosure with street spaces that are generally lined by buildings set along the front property boundary.	• Build to lines or minimum 2-meter building lines on street boundaries. • Buildings must be placed as close as possible to the erf boundary adjoining streets. • Adequate side building lines should be imposed to protect the neighbouring residential component. • The area within the building line should be used mainly for parking purposes and landscaping. A minimum of 16% of the area should be covered with soft surfaces.
1.6.3 Building Placement	**1.6.4 Solar access and overlooking**
• Building position is important in the development of the complete and liveable street concept. • Buildings must be placed as close as possible to the street boundary. • The buildings should be staggered along street boundaries to break long street frontages. • Orient buildings to sidewalks. • Place buildings on the sidewalk (perimeter blocks) • Street and building configurations should be designed to create vistas or to terminate views with a landmark feature, building, or public space. • Buildings at intersections within the corridor and activity street should provide landmark features. • Orientate new buildings to optimise sunlight and amenity for dwellings, private open spaces and adjoining public spaces. • Large buildings should be treated as aggregates of smaller components to achieve a human scale. Therefore, massive buildings should be avoided. • Variations in the setback are encouraged to respond to building function and to create visual interest. • Monolithic slab-like structures that wall off views and overshadow the surrounding neighbourhood are discouraged. • Buildings may, but are not required to, step back above the minimum height required along the street. Step-backs should be judiciously applied to minimise disruption of the overall street wall. • Breaks in the street wall should be limited to those necessary to accommodate pedestrian movement.	• Solar access to adjacent residential structures to the south of a property to be developed must be protected as far as possible (sun angle of about 36° to 41° as a guideline), measured from the adjacent structure. The slope of the site, height of windows, size of windows, roof overhang, the orientation of buildings, the height of boundary walls and existing vegetation will also influence solar access. Solar access studies can be required by the City of Tshwane if the influence on neighbouring residential properties is obscure. Solar access and overlooking in nodal areas and TOD will be evaluated on merit as solar access and the restriction of overlooking will not always be achieved due to the height of buildings promoted in these areas. To prevent overlooking the northern side of adjacent residential buildings, the following is applicable: • No balconies may be established on the southern side of the building abutting residential property. • Windows must be located at such height or distance from the boundary of a residential property that they do not enable overlooking. • A row of indigenous trees should be planted next to the wall. If the boundary is on the northern side of the residential property, only deciduous trees should be used.

General development and design principles (RSDF)	
1.6.5 Parking	**1.6.6 Physical Barriers and Crime Prevention**

• Parking ratios are an important tool in the development of corridors and TOD's.
• Parking relaxations will be applicable in TOD and Corridors.
• Parking ratio guidelines for TOD and along Transport Corridors
  • Nodal and Corridor retail: 3/100 m2
  • Nodal and Corridor offices: 2,5/100 m2
  • Nodal and Corridor residential: 0,5/unit (Ratios are only a guideline and will depend on applicable area)
• Developers should determine their parking ratio in TOD and along Transport Corridors
• Parking ratios will depend on the parking available.
• Shared parking can be allowed regardless of whether the zoning ordinance requires any off-street parking, or whether public parking is available.
• Parking ratios per area and per application.
• Parking should be provided sub-surface as far as possible.
• Carports shall be located in such a manner that it is not visible from the street.
• Avoid sprawling parking lots adjacent to transits.
• Promote shared or joint parking and structured parking.
• Parking must be placed at the back of a building, away from the street.
• Soft landscaping must form part of open parking areas.
• One tree must be provided for every two parking spaces.
• Parking areas should be broken up into small parcels and spread over the site. A break of at least 5m (soft landscaping or dwelling unit intruding and overlooking the space) should be established between two parking pockets.
• Provide safe and convenient access between car parking areas and pedestrian access to buildings.
	• Walls abutting neighbouring residential properties shall be maintenance-free on the side of the adjacent property and constructed in brickwork. The wall shall at least be 2,1m in height to offer more protection to the abutting residential activity. No prefabricated concrete walls are allowed.
	• A well-designed and articulated boundary wall of brick should be constructed on the other boundaries of the site. No prefabricated concrete walls are allowed. The boundary wall should be a minimum of 2 meters high and a maximum of 3,0 meters high and should be maintenance-free on the side of the adjacent property.
	• Physical barriers along the street boundaries shall be semi- transparent to enhance landscaping, architecture and aesthetics. Set back upper levels of tall buildings to help create a pedestrian scale at street level and to mitigate unwanted wind effects.
	• All residential developments, albeit housing complexes or new neighbourhoods, should be designed according to the principles of crime prevention through environmental design.
	• The "eyes on the street" concept must be applied.
	• Maximise informal or passive surveillance of streets and other public open spaces while protecting the privacy of properties.
	• Accentuate and identify building entrances by providing good visual and physical connections between the street and the lobby spaces.
	• Property enclosures should be permeable to allow for visual surveillance onto and from the street.
	• Use level changes, especially living areas and balcony spaces elevated above the street level, to allow views from residential units onto adjacent public spaces while controlling views into these units
	• Use low-height, transparent or partially open fences to create an impression of openness and permeability. If the site is fenced in, a palisade fence should be used for at least 75% of the length of the site. Solid boundary walls should be placed where it is critical to provide privacy or private outdoor spaces.

1.6.7 Landscaping	
• Regionally indigenous landscaping shall be incorporated. • The road reserve between the erf boundaries and the street shall be landscaped per the landscape development plan. The landscaping should include design measures to prevent on-street parking and include a walkway (at least 2 m wide) to ensure pedestrian safety. • One tree shall be provided for every two parking spaces with adequate space for tree trunks and tree roots for healthy long-term growth. • Soft landscaping shall form part of the parking areas.	

2. GAUTENG ENVIRONMENTAL MANAGEMENT FRAMEWORK

In terms of the Gauteng Environmental Management Framework, 2014 (EMF), the area along the Walkerspruit has been demarcated as Zone 2: High Urban Control Zone. The Control Zone in some instances extends onto properties situated directly adjacent to the watercourse.

In terms of the EMF, Zone 2 is described as follows: "*Sensitive areas within the urban development zone must be conserved and where linear development (roads etc.) cannot avoid these areas, a proper assessment and implementation of alternatives must be undertaken.*"

Sensitive areas within Zone 2 include:

- Conservation priority areas (CBAs: Irreplaceable areas)
- Rivers (including 32m buffers)
- Ridges
- Sensitive areas (as determined in the sensitivity assessment); and
- Protected areas.

The EMF includes several general guidelines for this Zone, which include *inter alia*:

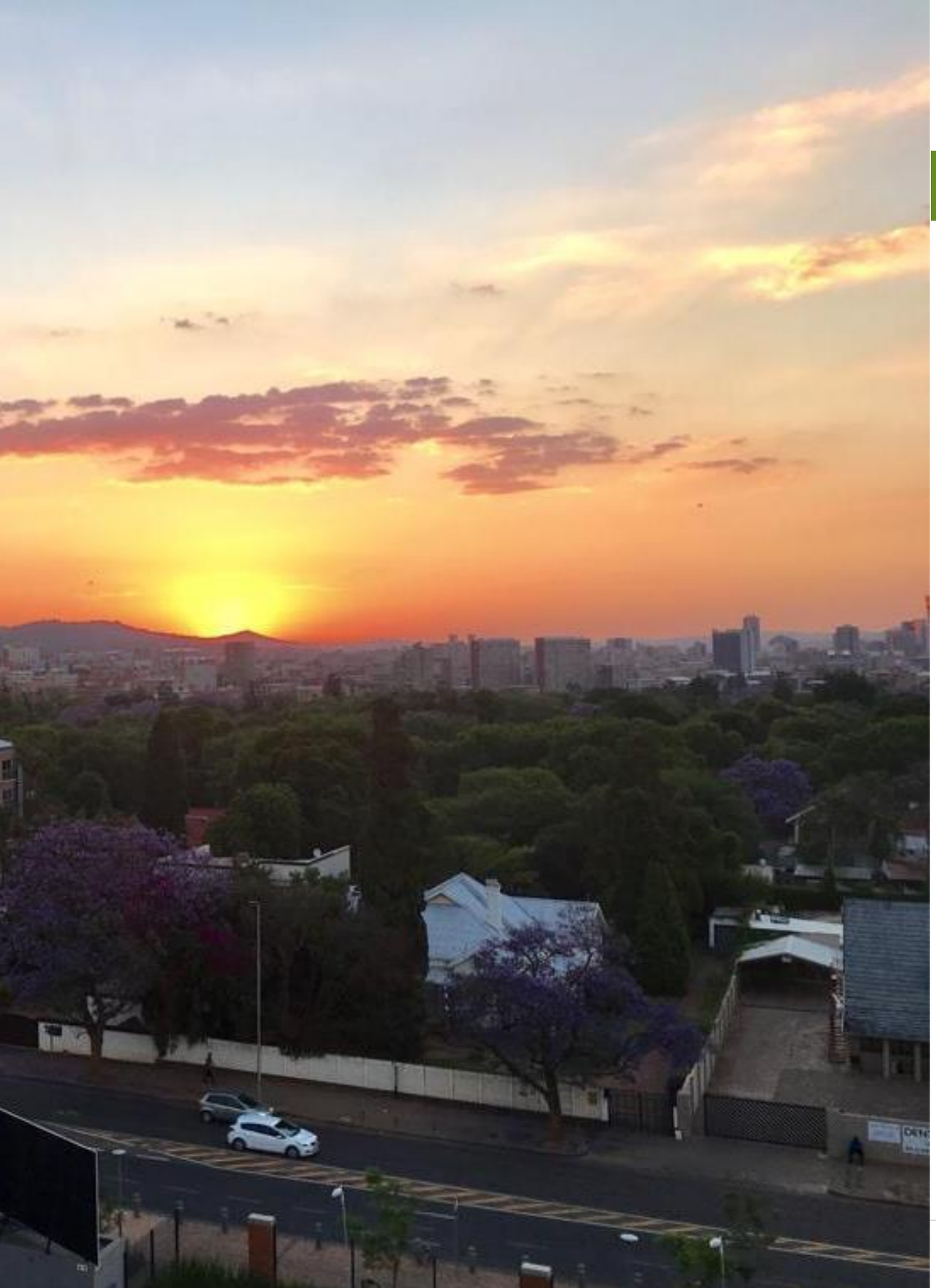
- Water utilisation from the surface natural hydrological system in this zone should be kept to an absolute minimum. Preservation of the water systems in their most natural state possible is desired as rivers and streams form the most important links with natural areas in other zones. No additional damming of rivers and streams should be allowed in this zone.
- The water quality of all rivers in this zone is unacceptable and should not be allowed to deteriorate any further due to any kind of development. Legislation to protect water quality and prevent pollution should be strictly enforced and policed.
- New development activities must comply with legislation that governs waste management in all instances
- Conservation is the primary objective in this zone and no new residential, retail, business, commercial, industrial or any other land use, except for unavoidable linear service infrastructure, may be allowed in this area.

In terms of the Gauteng Conservation Plan Version 3.3, 2014 (C-Plan), the area along the Walkerspruit is also earmarked as an Ecological Support Area, which is defined as *"Natural, near-natural, degraded or heavily modified areas required to be maintained in an ecologically functional state to support Critical Biodiversity Areas and/or Protected Areas. ESAs maintain the ecological processes on which Critical Biodiversity Areas and Protected Areas depend. Some ESAs are irreversibly modified but are still required as they still play an important role in supporting ecological processes."*

Figure 19: Gauteng Environmental Management Framework, 2014 and Gauteng Conservation Plan

3. OPEN SPACE FRAMEWORK 2005

In terms of the Open Space Framework, 2005, Walkerspruit is part of the "Blue Network" and is referred to as an area with unique placemaking opportunities.



CHAPTER 3: STATUS QUO ANALYSIS

1. INTRODUCTION

The purpose of the status quo analysis is to achieve an in-depth understanding of the study area and its social, economic and spatial characteristics. It is important to understand the local dynamics and how the development proposals can link to and enhance the character and sustainability of the area. The status quo analysis culminates in a SWOT analysis which highlights the strengths, weaknesses, opportunities and threats in the study area (refer to paragraph 9).

2. COMMUNITY SURVEY

A community survey was conducted in June 2020 as part of the status quo analysis. 99 Community members out of approximately 220 stands responded to the survey. The survey was made available to the community of Clydesdale via email correspondence, and a link to the survey was circulated on Whatsapp groups set up for every street in Clydesdale. The purpose of this survey was to capture the opinions and feelings of residents and owners. Figure 21 shows the status of respondents in the survey.

The results of the survey are included under the relevant sections of the status quo analysis.

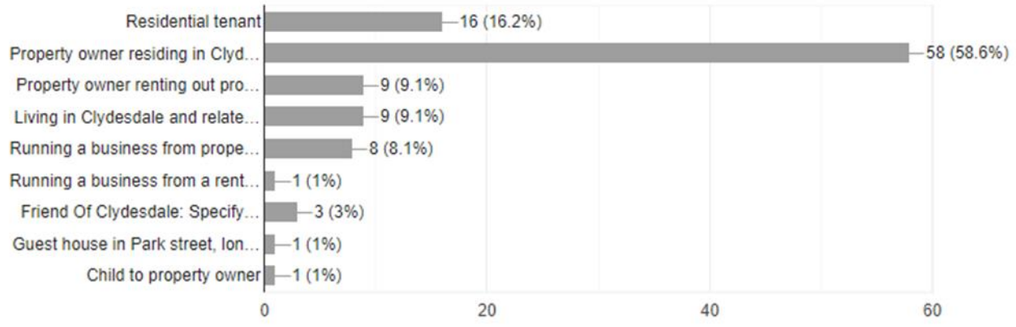


Figure 20: The status of respondents in the study area

3. DEMOGRAPHIC AND SOCIO-ECONOMIC PROFILE

Clydesdale has a diverse community comprising different demographic and social characteristics. Of the 99 respondents in the community survey, 75,8% are white, 17,2% are black and a small portion is Indian and unspecified (refer to Figure 21. Nationalities represented are German, Angolese, Bangladesh, Taiwanese, black and white African. Residents include students, young working people, diplomats, and professional white and black business owners. The majority of respondents (62,6%) felt that the demography of South Africa is well represented in the neighbourhood (refer to Figure 22).

Table 3 provides an estimated race and age profile based on current land uses. Estimations were made in February 2020.

Although the neighbourhood is within walking distance of four high schools and 2 primary schools, the demographic statistics do not indicate that families with school-going children favour the neighbourhood. Students are attracted to the area.

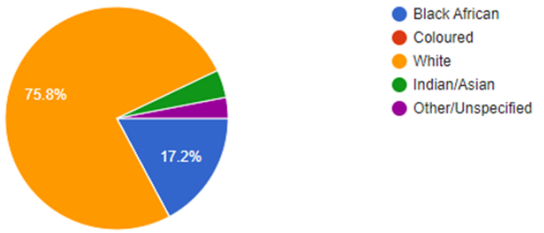


Figure 21: Race profile

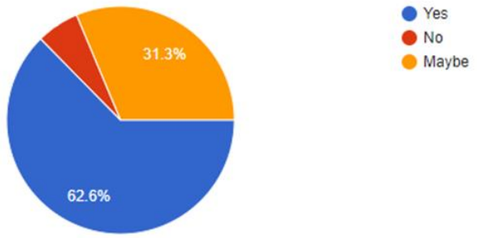


Figure 22: Residents' perception of racial representation

Table 3: Estimated demographics per street

AGE : average	35 - retirement age	20 - 30	30+			Chreches Tersiary	20 +	20+	20-30	Race		
Street name	Residential	Commune	Business	Guesthouses	Diplomatic	Educational	Flats 2 storey	Flats 3 storey	Residential 4	black	white	other
Kirkness	1	0	7	1		1	0	0	3	12	70	0
Farenden	9	7	2	2	1	1	0	0	0	58	82	20
Bond	8	2	3	1		0	2	2	0	48	62	2
Villa	22	10	1	0		0	1	0	0	43	46	2
Walton Jameson	6	1	0	0		0	0	0	0	4	6	0
Brecher	17	10	2	2		0	0	0	0	40	80	15
Maple	11	1	0	3		0	0	0	0	40	30	0
Ivy	11	5	3	0		0	0	0	0	12	15	12
Myrtle	12	2	2	2		0	0	0	0	37	30	0
Ayton	9	2	2	0		0	0	0	0	20	24	10
Minni	12	0	2	2		1	0	0	0	52	30	6
Valley	19	3	1	1		0	0	0	0	60	14	0
Linschoten	3	0	0	0		0	0	0	0	0	6	0
Park	2	0	19			1	0	0	0	69	76	0
totals	142	43	44	14	1	4	3	2	3	**495**	**571**	**67**
										estimated number of people		**1133**

4. SPATIAL ANALYSIS

4.1 LOCATIONAL CONTEXT

Clydesdale is located within Region 3 of the City of Tshwane (refer to Figure 23). To the west is the Central Business District of Tshwane, with the adjacent high-density residential area Sunnyside, and to the north, across Park Street, is the old residential area of Arcadia.

To the east Pretoria Girls High School, Pretoria Boys High School, Pretoria East Primary school, Loftus Park and the sports stadium, and the University of Pretoria lie to the east of the study area, while the Afrikaans Hoër Seunsskool lies to the south. The Pretoria Technical High School is on the north western boundary. Walker Spruit forms a natural boundary to the west (refer to Figure 24 and Figure 25).

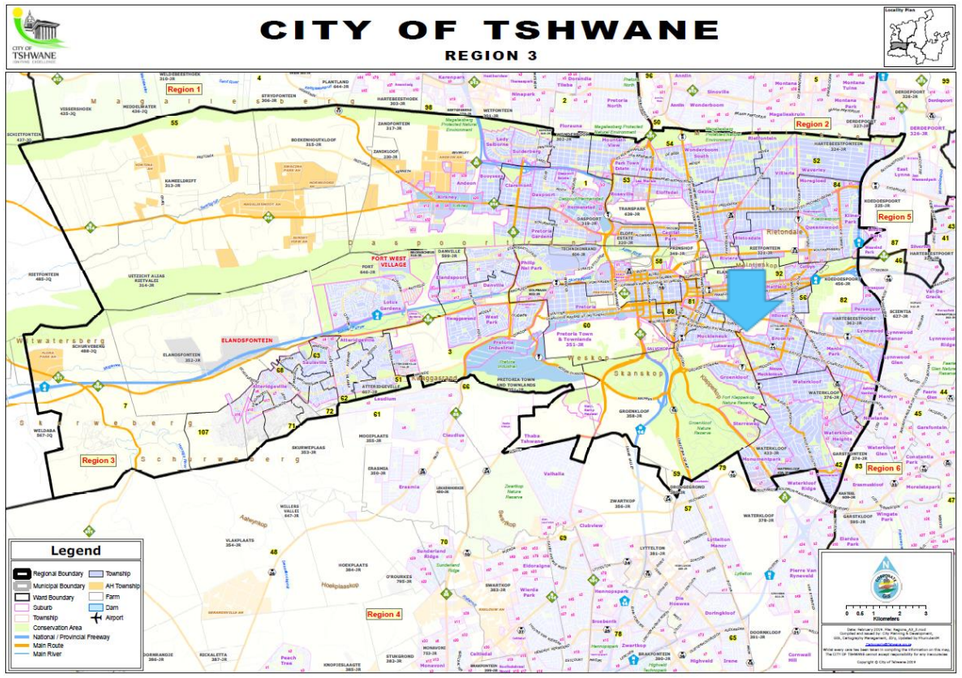


Figure 23: Position of the study area in Region 3

Clydesdale is one of the last suburbs in the old part of inner Tshwane that retained its low-density structure. Within a 1-kilometre radius of Clydesdale the surrounding areas comprise a diverse range of land uses and activities in contrast with the residential character of Clydesdale.

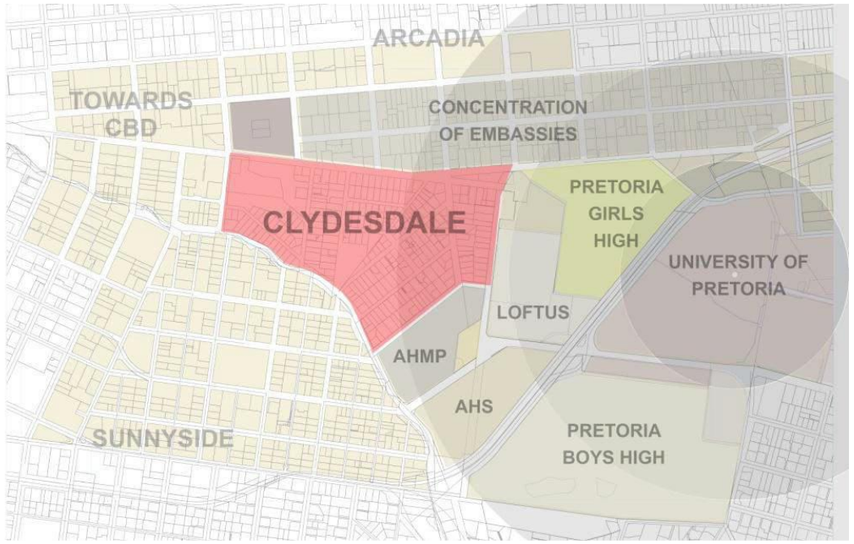


Figure 24: Clydesdale locational context[12]

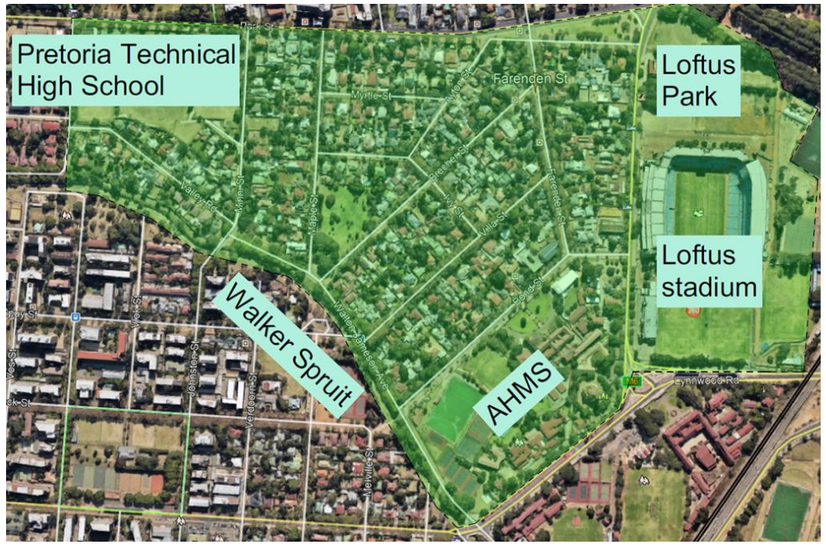


Figure 25: Local context

[12] *Holm Jordaan, 2015*

4.2 BIO-PHYSICAL ENVIRONMENT

4.2.1 Natural structuring elements

The only natural structuring element, but a key feature of the precinct, is Walker Spruit which runs along the western boundary of the study area. The natural state of Walker Spruit has been altered in the 1930's. The river was channelised and lined with concrete panels. The City of Tshwane Stormwater manages the channel. A small area next to the Gautrain bridge falls within Nature Conservation jurisdiction as this part of the stream is not channelled. As part of the development of the precinct plan, Nature Conservation officials and officials from the City of Tshwane Stormwater department were brought together on-site to assess the current status of this part of the Walkerspruit where the concrete channel meets the natural watercourse.

The flat areas along the channel are not in their natural state any more. Areas have been flattened and planted with Kikuyu grass and trees. In 2010 the areas were upgraded with brick walkways and lamp poles.

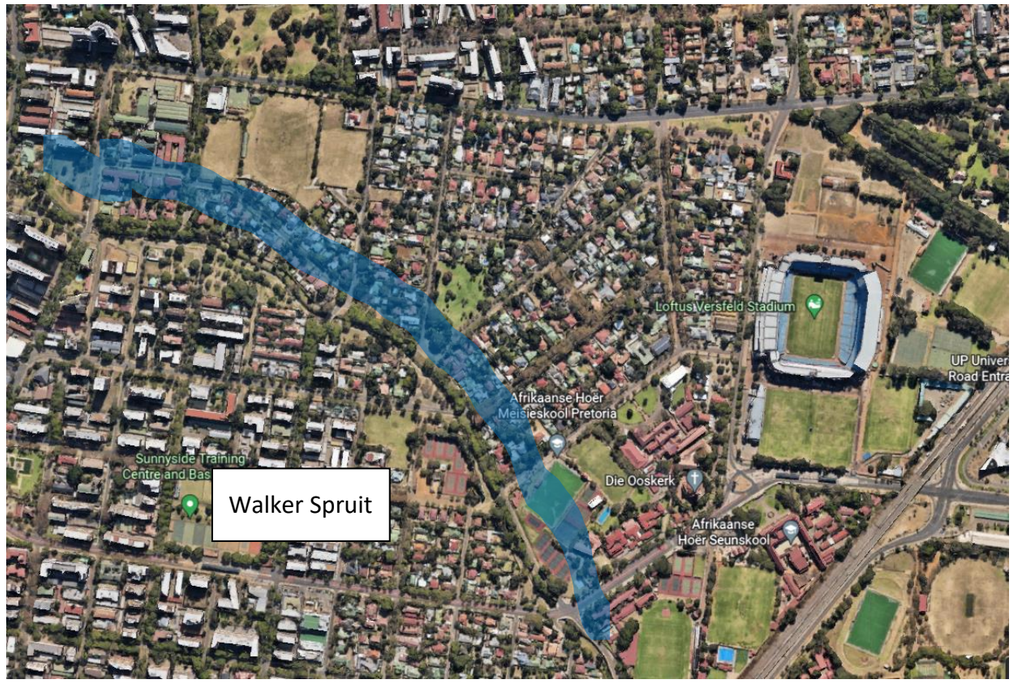


Figure 26: Open spaces

Figure 27: Walkerspruit

4.2.2 Rainfall

The study area falls within the Gauteng Highveld rainfall region and receives an average of 710mm of rain per year (refer to Table 4).

Table 4: Monthly rainfall 2003 - 2019

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
January	148	85.5	257	294	72	238.5	237	150.5	252	75.5	64.5	67	75.5	110.5	186.5	75.5	105.5
February	129	152	66	204.5	19	67	200.5	99	42	71.5	60	165	23	50	149	71.5	138
March	72	183.5	45	53	4	147.5	98.5	71.5	148.5	58	51	300.5	62.5	214	18	216	4.5
April	1.5	49.5	68.8	17.5	16.5	19	7	199	68.5	12	73	6.5	27	8	55	64	77
May	0	19	0	0	0	37	13	59	0	0	0	0	0	40	19	11.5	0
June	10	7	0	0	35	8	31	0	10	0	0	3	0	11	0	0	0
July	0	0	0	0	4	2	0	0	0	0	0	0	11	4	0	1	0
August	0	0	1.5	44	0	0	10	0	12.5	0	2	11.5	0	0	0	1	0
September	2	0	0	0	37	0	36	0	33	74	7.5	0	47	7.5	14	17	0
October	60.5	21	15.5	9.5	147.5	38	99.5	22	42	132	91.5	36.5	5	51	67	55.5	20
November	51	69.5	77	70	44	145.5	116.5	119	101	120.5	60	100	59	93	69	24.5	118.5
December	80	144	50.5	96	166	97.5	151.5	248	128.5	167	162	248	58	66.5	122	54	267
TOTAL YEARLY RAINFALL IN MM	**554**	**731**	**581.3**	**788.5**	**545**	**800**	**1000.5**	**968**	**838**	**710.5**	**571.5**	**938**	**368**	**655.5**	**699.5**	**591.5**	**730.5**

4.2.3 Trees in the study area

Dr Gwen Theron wrote an article on the trees in Clydesdale as it is 'one of the most densely treed areas in the city'. These trees transform "ordinary" streets into "special" streets that contribute to the establishment of a unique city for Tshwane as a whole. Millions are spent by other cities to establish and/or enhance the city's image as a resource and are thus not an item that can be ignored or downplayed. The trees play a significant part in the character and tranquil residential feeling of the

neighbourhood, a green lung for the surrounding densely populated areas of Arcadia and Sunnyside. Trevor Evans explains the green wedge as *" dense foliage and well-wooded properties (which) extend in the sharply angled wedge that penetrates the city at the position of the Heart Hospital."*

The trees range between Jacarandas (some of the first of its kind to be planted in Tshwane (Kirkness and Park Street as well as next to the Walkerspruit), London Plane (Platanus acerifolia) in Farenden, Villa and Ivy street, Maple trees in Maple street and White Stinkwoods (Celtis Africana) in Brecher street.[13] The City of Tshwane recently replaced dead and missing street trees with Bolusanthus speciosus (Van Wyks Hout) and Celtis Africana (White Stinkwood).

4.2.4 Birdlife

Clydesdale is an urban haven for birdlife. Properties used for single residential purposes tend to have well-kept gardens with a good balance of a variety of plants trees, grass and water features, all elements which make it attractive for birds together with the trees in streets and public open spaces. Both exotic and indigenous trees provide food and habitat. The African Green Pigeon, for example, feasts on the fruits of the very large and famous old exotic Plane trees in Farenden Street. Gardens with ponds and water plants provide suitable conditions for many birds that need water plants to build their nests. Fish in the ponds attract kingfishers. The Walkerspruit provides birds with running water, trees and veld grass in an area less accessible by humans. Birds such as the Egyptian Goose and Plovers prefer the open areas of the river and Myrtle Park to roam.

Figure 28: African Green Pigeon

4.2.5 contributions and risks

Clydesdale is a very old neighbourhood that was established in 1925. Most of the houses were built before 1938 when climate responsiveness wasn't an issue yet. The study area however comprises several green open spaces, street trees and a dense concentration of trees on properties, which acts as a "green lung" within the built-up area (refer to Figure 26). There are no known energy-saving projects, such as solar projects, active in the study area, but the Loftus Park precinct development is accredited as a 4-Star Green Star Building.

The precinct holds the following environmental risks (or potential risks):

- Removal of trees will put the role of a "green lung" at risk.
- Removal of trees will put the habitat of many bird species at risk.
- Flooding of the Walkerspruit can put the surrounding built environment at risk as the concrete lining of the spruit is not maintained and other erosion control measures are damaged.
- Replacement of grassed areas with paved areas increases surface runoff which puts strain on the storm water system. Clydesdale, with Walkerspruit as the western boundary, is at the receiving end of water run-off from developments in the catchment area.

[13] *Source: Holm Jordaan*

4.3 MOVEMENT AND ACCESSIBILITY

The following section deals with the different movement networks in and around the precinct, and the level of accessibility that the precinct has in terms of different modes of transport. This section will also highlight the challenges that the precinct experiences in terms of traffic volumes and movement patterns.

4.3.1 Existing road network classification

Figure 29 shows the existing road network classification of roads in and around the Clydesdale Precinct. The larger Sunnyside/Arcadia area for the most part comprises a regular grid street pattern, with that grid distorted into an irregular grid in the Clydesdale area.

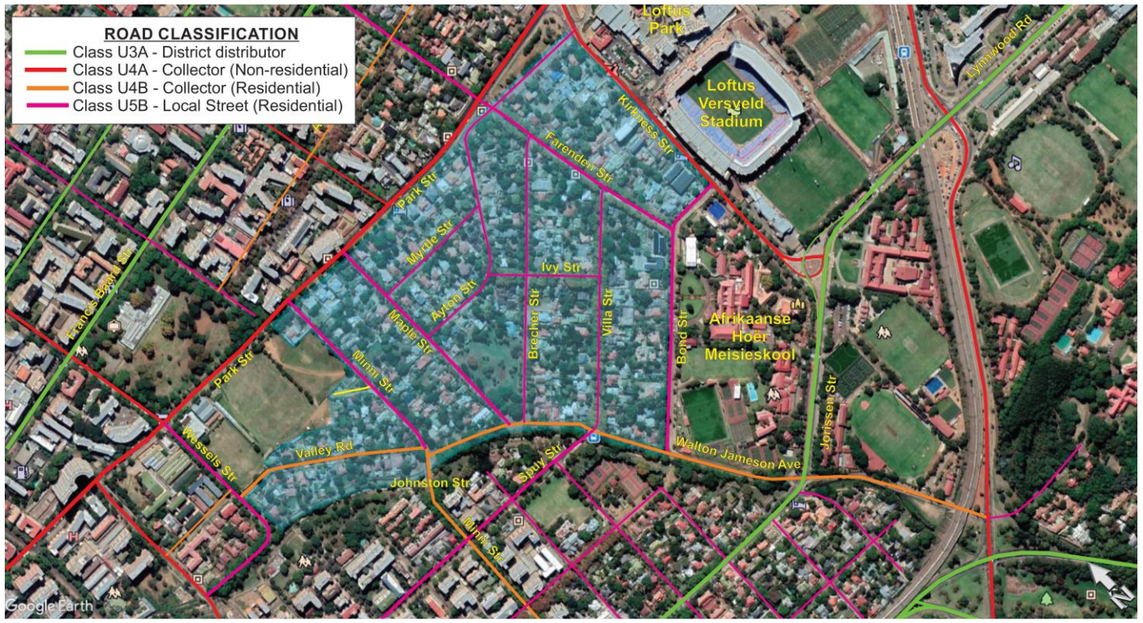


Figure 29: Existing road network classification of roads relevant to the proposed Clydesdale precinct

4.3.2 Future road proposals

The closure of Farenden Street at the Park Street intersection was proposed and the proposal is currently under investigation by the City of Tshwane Traffic (Figure 30).

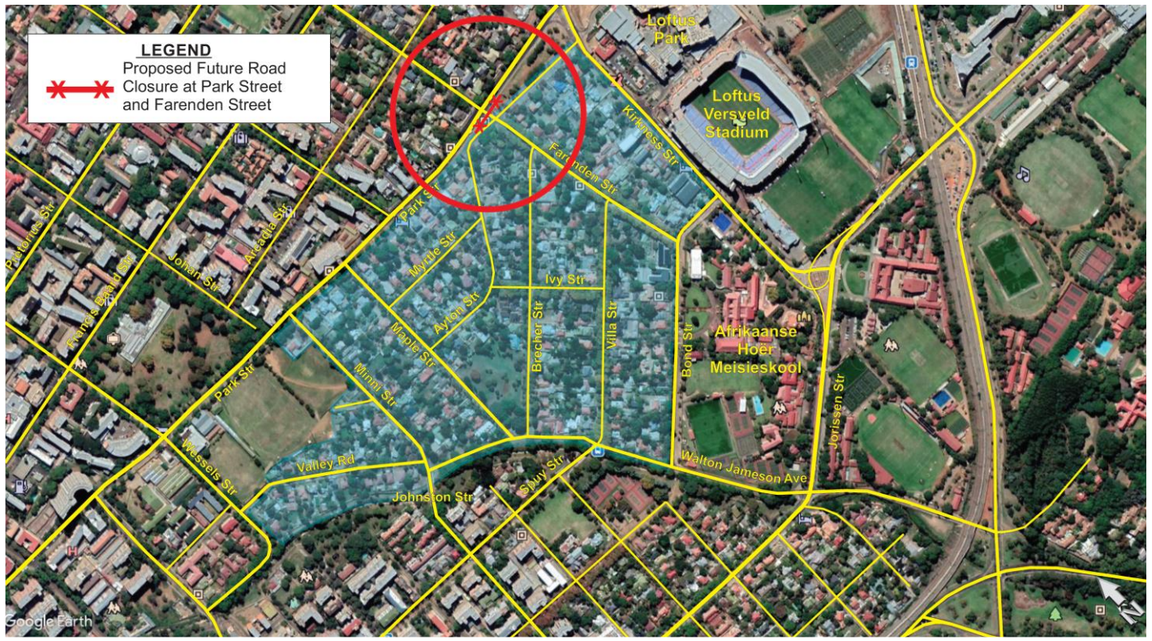


Figure 30: Proposed future road closure at the intersection of park and Farenden streets

4.3.3 Vehicle traffic volumes

12-Hour manual vehicle traffic counts were conducted on normal days (mid-week, mid-month) at strategic intersections where vehicle traffic enters and exits the Clydesdale area, to gain a better understanding of the existing traffic patterns and movements within the precinct (Figure 31).

Table 5 provides a list of the intersections which were surveyed, the dates on which the relevant surveys were conducted and the vehicle traffic peak hours. Figure 31 shows the 12-hour vehicle traffic volumes that were observed during the relevant vehicle traffic counts while the combined hourly totals of all the vehicle types for the traffic surveys conducted between 06:00 and 18:00.

Table 5: Information for relevant intersections surveyed

POINT	INTERSECTION DESCRIPTION	DATE OF SURVEY	AM PEAK		MID-DAY PEAK		PM PEAK	
			Time	Volume	Time	Volume	Time	Volume
A	Wessels Street and Valley Road	25 February 2020	07:00 to 08:00	306	12:00 to 13:00	149	15:45 to 16:45	235
B	Park Street and Minni Street	27 February 2020	07:00 to 08:00	262	13:00 to 14:00	431	16:30 to 17:30	289

POINT	INTERSECTION DESCRIPTION	DATE OF SURVEY	AM PEAK		MID-DAY PEAK		PM PEAK	
			Time	Volume	Time	Volume	Time	Volume
C	Park Street and Maple Street	5 March 2020	07:30 to 08:30	155	12:30 to 13:30	135	16:30 to 17:30	175
D	Park Street and Farenden Street	26 February 2020	06:30 to 07:30	295	13:30 to 14:30	244	16:00 to 17:00	227
E	Farenden Street and Bond Street	25 February 2020	06:30 to 07:30	653	13:30 to 14:30	502	16:45 to 17:45	366
F	Walton Jameson Avenue and Bond Street	18 February 2020	06:30 to 07:30	1 257	13:45 to 14:45	733	16:45 to 17:45	566
G	Walton Jameson Avenue, Spuy and Villa Streets	19 February 2020	07:00 to 08:00	465	13:45 to 14:45	479	16:30 to 17:30	473
H	Walton Jameson Avenue and Brecher Street	19 February 2020	06:45 to 07:45	245	13:30 to 14:30	185	16:00 to 17:00	462
I	Walton Jameson Avenue and Maple Street	19 February 2020	07:00 to 08:00	233	13:30 to 14:30	175	16:00 to 17:00	464
J	Walton Jameson Avenue, Johnston Street, Valley Road and Minni Street	26 February 2020	07:00 to 08:00	433	10:45 to 11:45	231	16:45 to 17:45	449

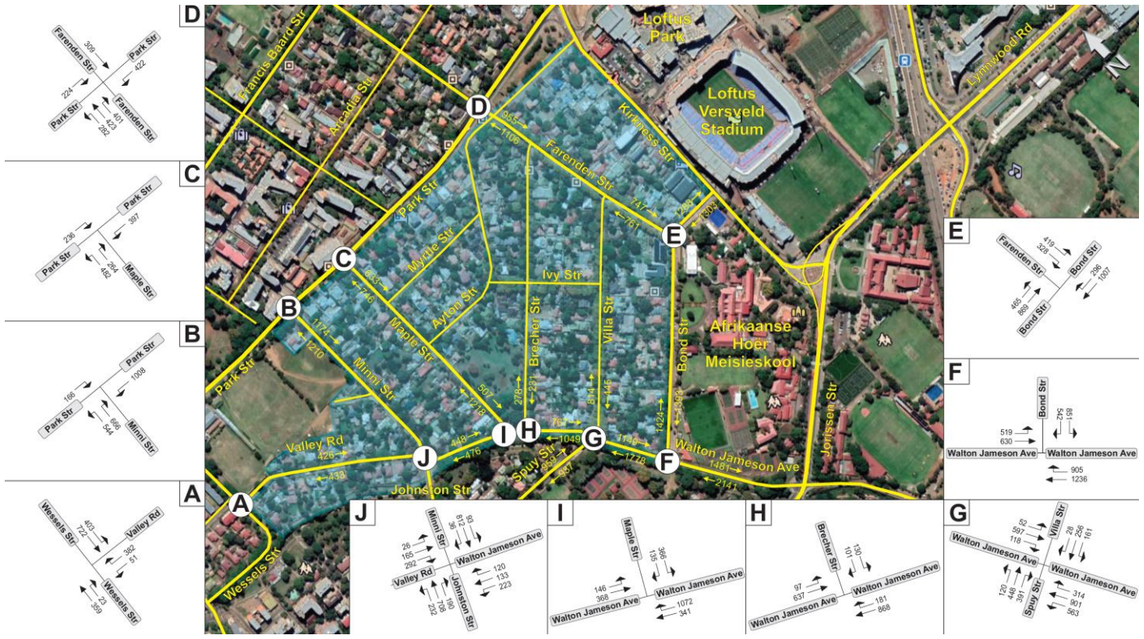


Figure 31: 12-hour vehicle traffic volumes at relevant intersections

The following could be concluded from the relevant 12-hour manual vehicle traffic counts:

- The Afrikaanse Hoër Meisies school attracts vehicle trips from outside the Clydesdale area during the AM and mid-day vehicle traffic peaks. This occurs from and to the north through Points D and E, and from and to the south through Point F.
- Vehicle traffic travelling through the Clydesdale area with origins and destinations outside of the Clydesdale area occurs as follows:
  - From Point F to A via Walton Jameson Avenue and Valley Road and vice versa;
  - From Point F to B via Walton Jameson Avenue and Minni Street and vice versa;
  - From Point F to C via Walton Jameson Avenue and Maple Street and vice versa;
  - From Point F to G via Walton Jameson Avenue and then southbound to Sunnyside CBD and vice - versa;
  - From Point B to J via Minni Street and then southbound along Johnston Street towards Sunnyside CBD and vice versa;

Figure 32 shows the through routes as determined by the relevant vehicle traffic counts. The streets most affected by traffic are Valley Road, Walter Jameson Street, Minni Street, Maple Street, Farenden Street and Bond Street. One of the reasons why the area experiences a lot of traffic is because of the grid layout pattern, which provides a lot of redundancy in the network with alternative options for access. Google maps for example show a route through Maple Street as the shortest route to town, instead of routing traffic along the main (non-residential) routes.

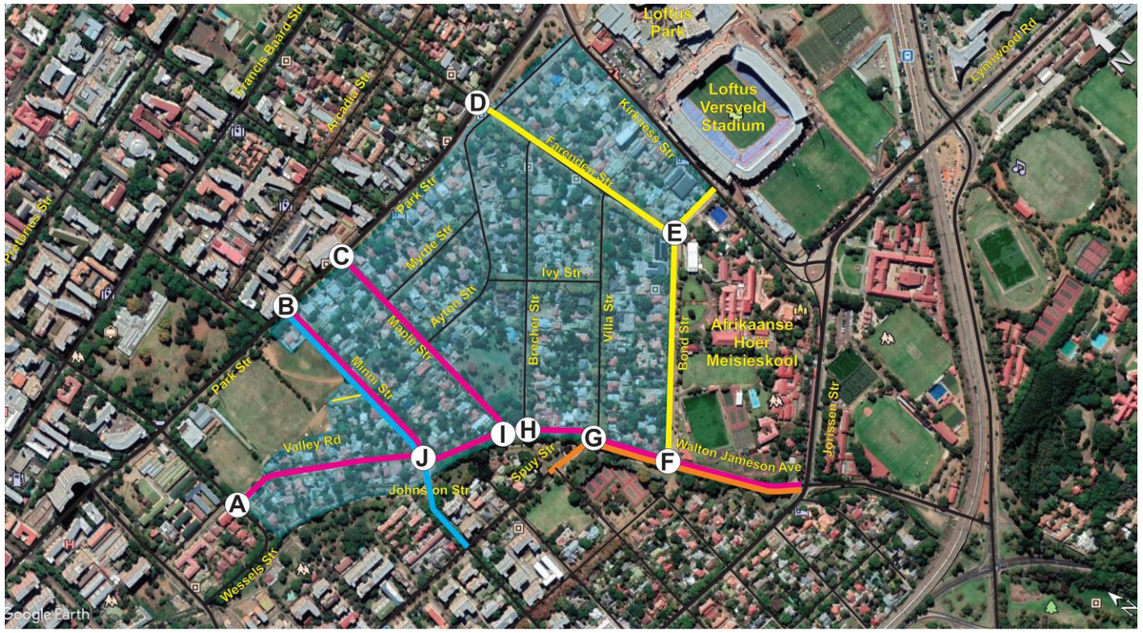


Figure 32: Through routes as determined by vehicle traffic counts

The community survey indicated that just over half of the residents are concerned about the traffic in their streets, and about a third of the residents indicated they felt threatened by traffic when walking to Loftus Park/Loftus Stadium or other amenities in the area. Some students also indicated that they felt threatened by traffic when walking to the university or schools in the area.

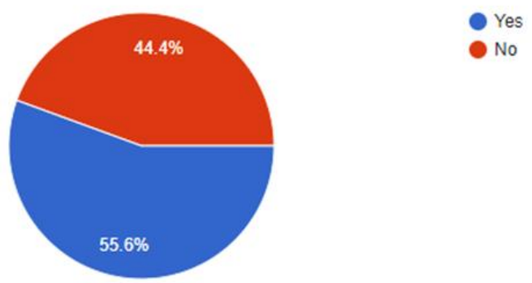


Figure 33: Resident's perceptions on whether vehicular traffic in their streets is a concern

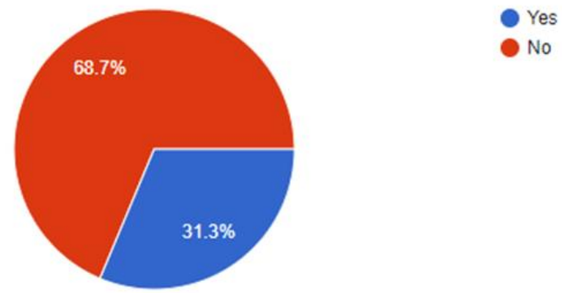


Figure 34: Residents feeling threatened by vehicular traffic when walking

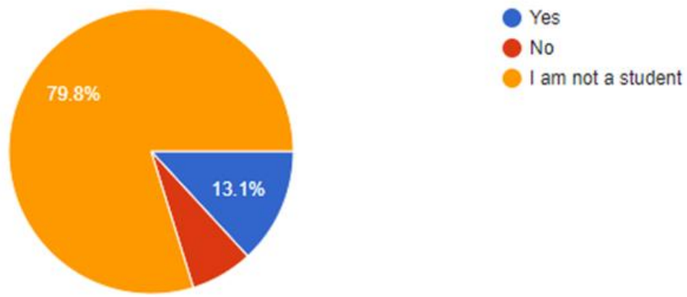


Figure 35: Students feeling threatened by traffic

4.3.4 Loftus Park and Stadium Traffic Management Plan

The Traffic Management Plan that deals with traffic management on event days has been completed and was submitted to the City of Tshwane in 2018 (refer to Figure 36). The Traffic Department indicated that the traffic management plan could guide future access control to the area.

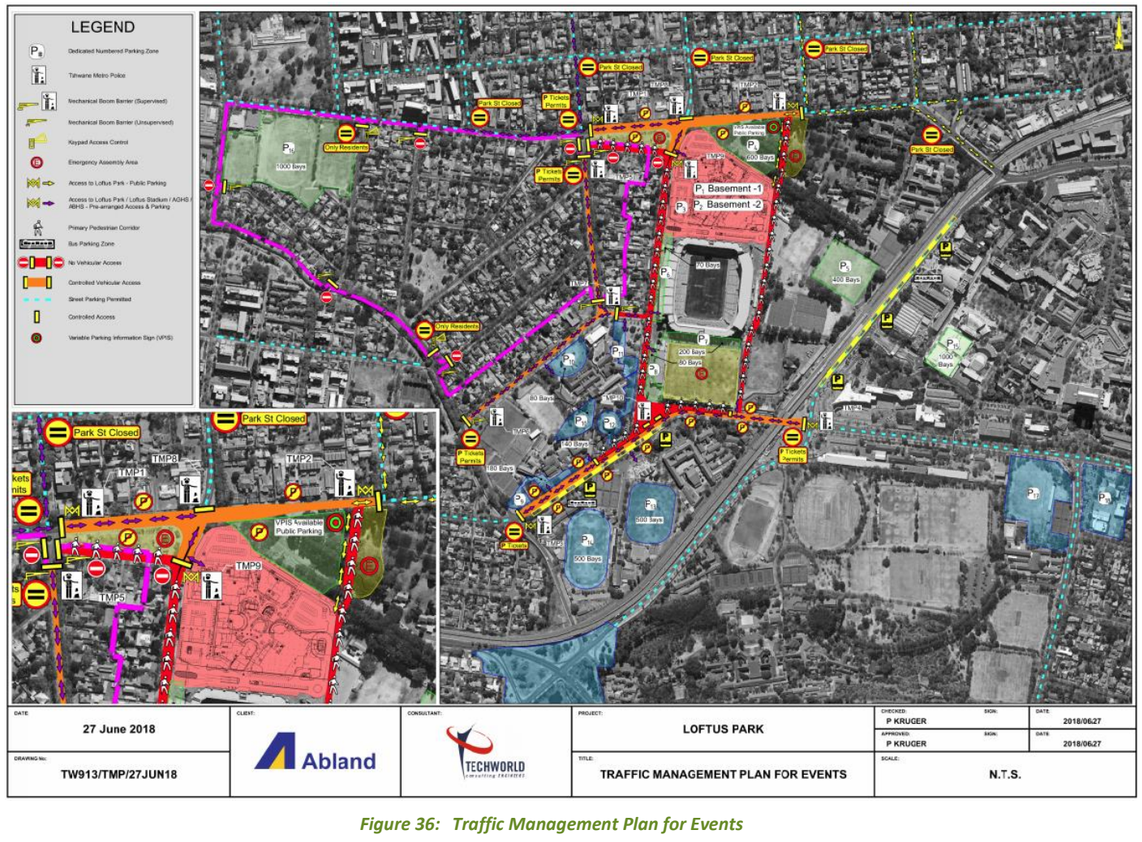


Figure 36: Traffic Management Plan for Events

4.3.5 Existing public transport services

Public transport is currently readily available within walking distance of the Clydesdale precinct (refer to Figure 37), including:

- Tshwane Bus Services;
- Tshwane Bus Rapid Transit System (A Re Yeng);
- Gautrain Bus Services along Park Street; and
- Local taxi operators along Park and Kirkness Streets.

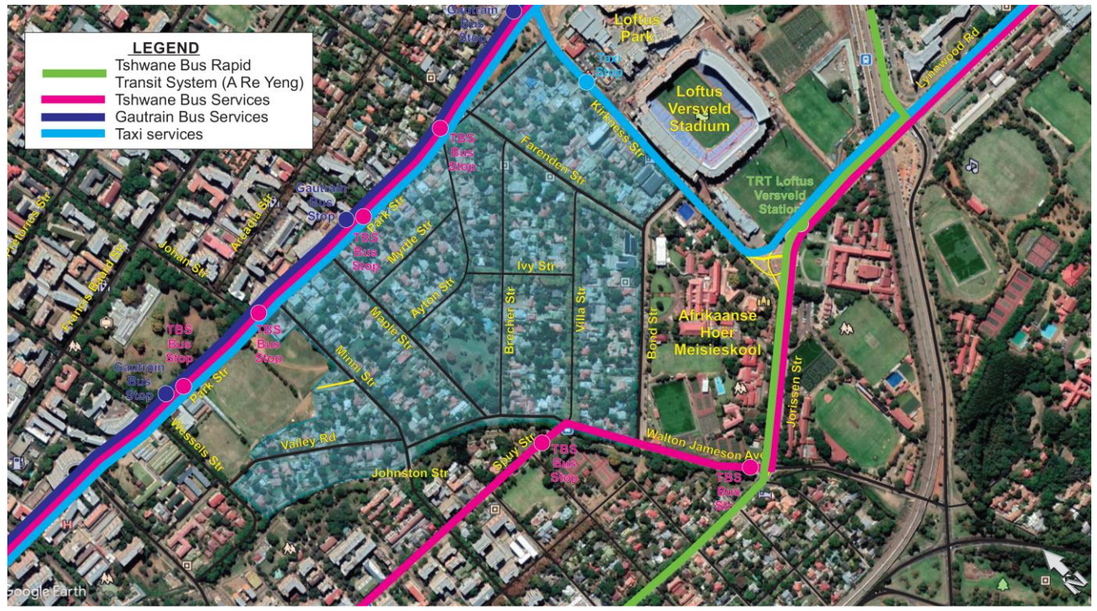


Figure 37: Available public transport services within walking distance of the proposed Clydesdale precinct

4.3.6 Pedestrian and bicycle traffic

The study area experiences a constant flow of pedestrian traffic. At the time of the study, approximately 20 pedestrians used the 2 pedestrian crossings over the Walkerspruit per hour.

The study area is within walking distance from the Pretoria High School for Girls, Laerskool Pretoria Oos, Pretoria Boys High, the University of Pretoria and Afrikaans Hoër Meisies Skool and Afrikaans Hoër Seunskool Pretoria Technical High School. Learners walk from the schools to the Loftus Park shopping centre.

4.4 LAND USE

4.4.1 Land use and zoning

Although the Clydesdale area to a large extent retains its single residential character, the area is also under threat of development pressure and several illegal activities in the neighbourhood. The central location of the neighbourhood, the high level of accessibility it enjoys, its proximity to Loftus Stadium and the University of Pretoria, as well as the proximity to Arcadia and Hatfield means that this area is desirable for new developments (non-residential as well as residential densification). Table 6 sets out the different land use that were identified as part of a land use survey conducted in February 2020 (also refer to Figure 38).

The four main types of land use in the study area are residential, communes, businesses, and guest houses.

Table 6: Description of estimated land use during February 2020

14	Guest houses	Some of which B-Guest, Intermezzo, Chancellors Court, Backpackers, 12 on Brecher, Oorkant Loftus
43	Communes	
44	Businesses	Psychologists, Dentists, Physiotherapists, Occupational therapists, Reading and remedial services, Day care centres, Attorneys, Administrative-type home-offices, Recording studios, Architects, Landscape Architects, Guest houses, Professional Musicians, Engineers, Educational Institutions, Profession editors, Estate agents
3	Diplomatic	Iran(residence), Bangladesh High Commission, Liberia(residence)
8	Flats	Klein Loftus, Corner @ Bond, Bond Courtyard, Loftus View, Villa 46, Erf 1032
24	Residential only	Council houses
118	Residential only	Private-owned houses, some with home enterprises
4	Educational	Creches and Tertiary institution, Technical High School
255	**TOTAL**	

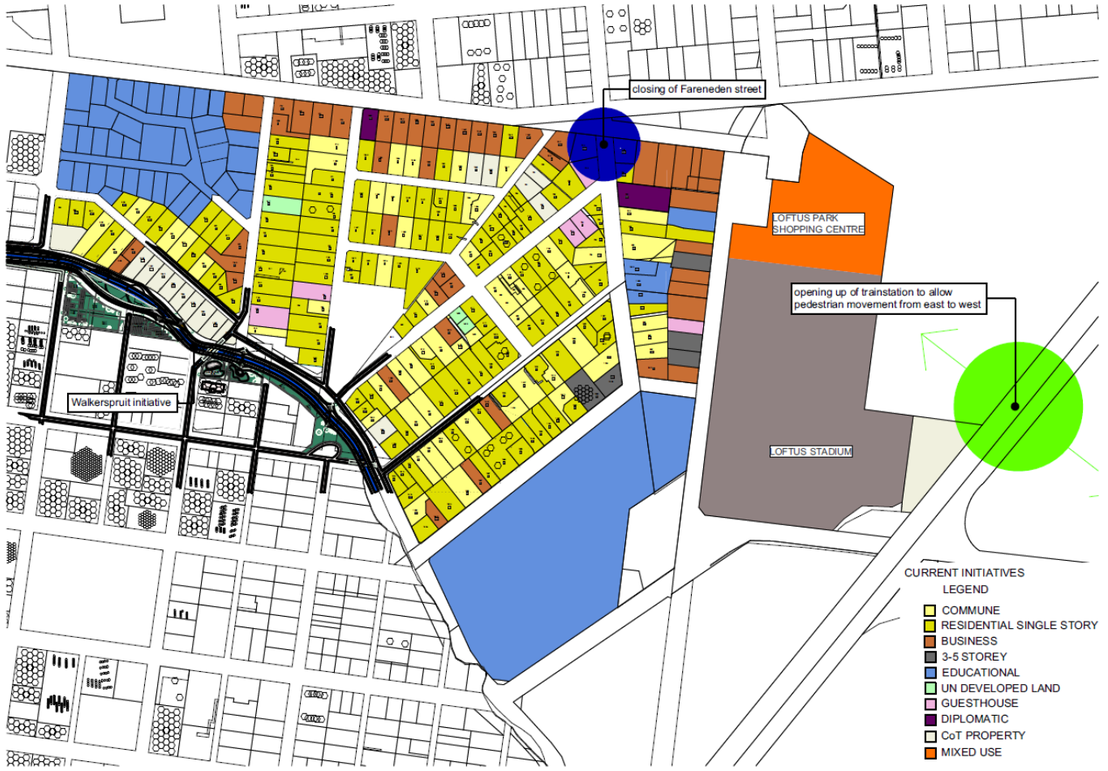


Figure 38: Existing land uses

Many of the land uses are illegal in terms of the existing zonings. Building transgressions (Building without approved building plans) and illegal land use are a problem in the area, and the City of Tshwane does not react to complaints which leave residents discouraged to invest more in properties.

Figure 39 shows the current zoning of the study area, and it is evident that the majority of properties are still zoned “Residential 1”, although a significant number of properties have also been rezoned to “Special”. Although the “Special” zonings are distributed throughout the precinct, there is a higher concentration along Park Street, Kirkness Street and Bond Street.

In terms of the community survey, more than two-thirds of the respondents indicated that they are happy with the current mix of land uses, as long as they are legal and well-maintained. Respondents are however generally against densification and an increase in the height of buildings beyond two storeys.

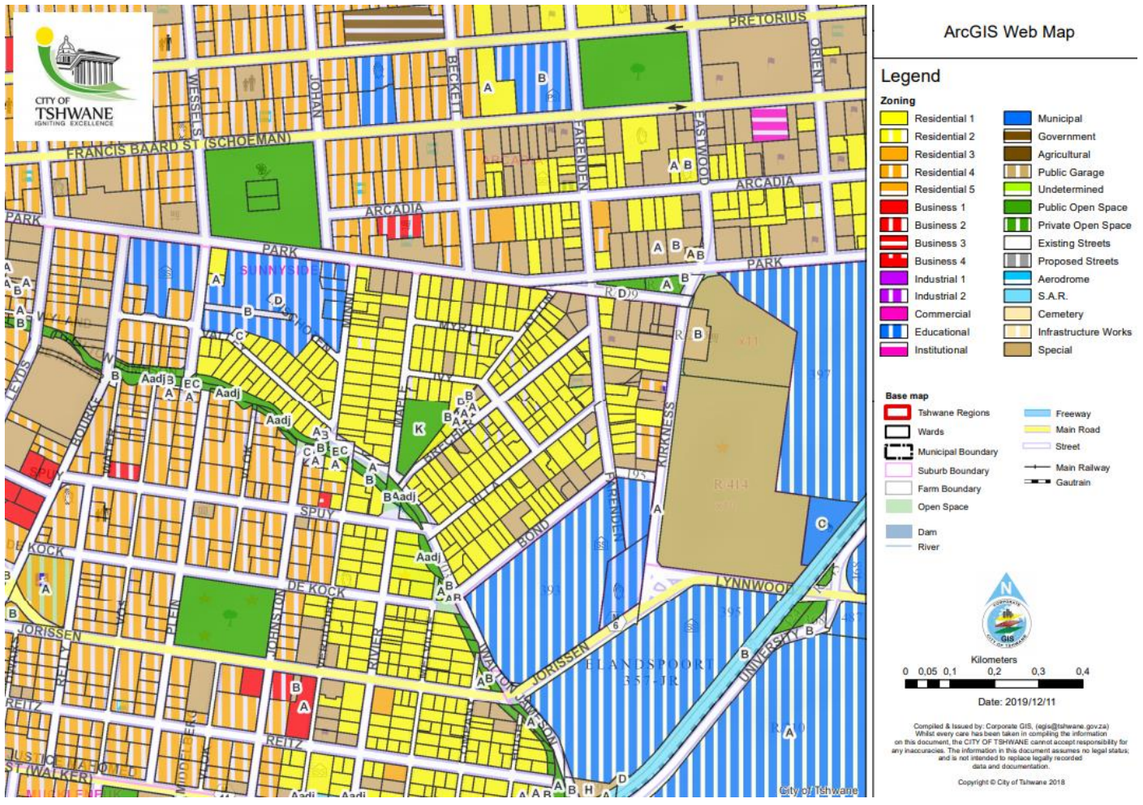
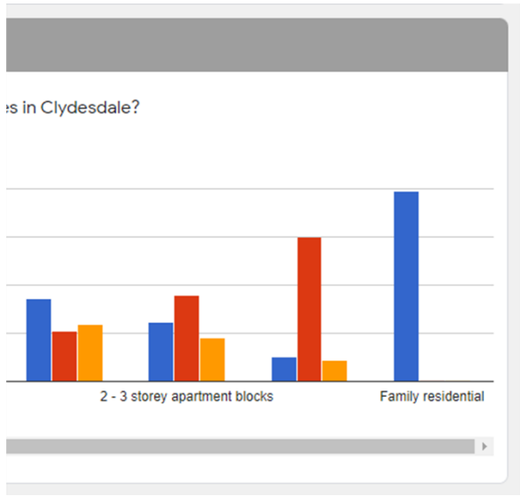
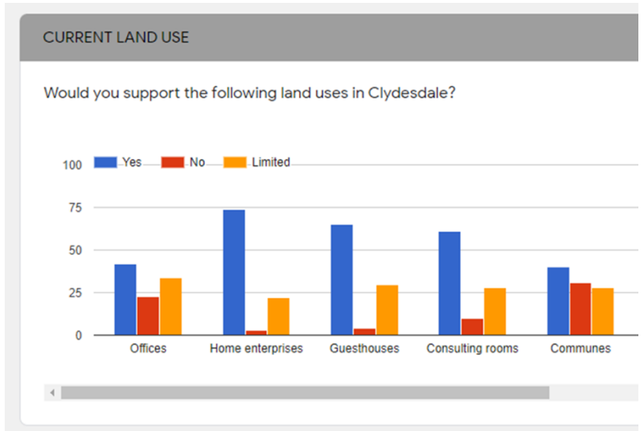


Figure 39: Current zoning

Figure 40: Resident's feelings about land use in the precinct

Figure 41: Residents' feelings about densification and building height





4.4.2 New development applications and proposals

Table 7 sets out development applications in the precinct between 2015 and 2019 (as advertised in the Government Gazette). This shows the development pressure experienced in the area, and in particular for densification (Residential 3, Residential 4, Special for student accommodation etc.)

Table 7: Development applications (2015 to 2019)

YEAR AND ADRESS	APPLICATION	RESOLUTION STATUS
2019 Applications		
Villa street 68 and 70	Residential to Residential 3 with a density of 120 units per hectare, 3 storeys, to allow for 27 dwelling units on the property	Awaits date of the tribunal
Valley street 120	Commune	in process
Kirkness street 844 and 1327	Residential 1 to 4	in the process – heritage buildings
2018 Applications		
Brecher 50	Application for commune	not contested
Brecher 8, 12	Application for a guesthouse and future extensions	In process
2017 Applications		
Villa street 46, erf 1016	Rezoning application for 'consent use – guesthouse'	the application was withdrawn Small block of flats was built (8 fully equipped flats) Unresolved
2016 Applications		
Ayton street 847, erf 781	Rezoning application ''Special use'' to ''Place of instruction''	In process – Currently used as a church
Valley str 107, erf 996	Applied for the removal of restrictions, to be used as a guest house	In process
Farenden 438, portion 2 of erf 843	Application for consent use for a commune	Not contested
Villa 68 and 70	Application for permission for one additional dwelling house	In process
2015 Applications		
Portion 1 of erf 846, 444 Farenden street	Rezoning application from Residential 1 to "Special for student accommodation" Applied for demolition	CoT granted the application The property was sold – demolition permit not transferrable
R/846, referred to as 448 Farenden by CoT on a letter to the councillor and 15 Bond by the applicant	''removal of restrictions" application	Basement 4 storeys plus roof garden, granted by CoT 6 storey building advertised PHRA – G granted demolition with conditions
Erf 1172, Kirkness street 439	Rezoning application Residential 1 to Residential 4	Rezoning granted, restricted to 3 storeys
Erf 847, 427 Kirkness street	Rezoning application Residential 1 to Residential 4	CoT granted application
R/844, 427 Kirkness str	Rezoning application Residential 1 to Residential 4	Rezoning application Residential 1 to Residential 4 Rezoning Residential 1 to Residential 4 granted Demolition took place within the appeals period Unresolved
Kirkness str 409, erf 778, Portion 2 of Erf 780, Portion 1 of erf 777 and Portion 1 of erf 776 (the latter 2 is a very narrow, small strip of land)	A rezoning application, 200 units per hectare, or 4 storeys	CoT granted rezoning The property is situated next to a heritage property
Bond 63	Application for a demolition permit	PHRAG is awarded on certain conditions The applicant objected to MEC Outcome outstanding

4.5 OWNERSHIP AND SERVITUDES

4.5.1 Land Ownership

Properties in the neighbourhood are owned by private individuals and the City of Tshwane (refer to Figure 42). Other properties are owned by the Department of Education, the Dutch Reformed Church, ABLAND Redefine and the Blue Bull Company.

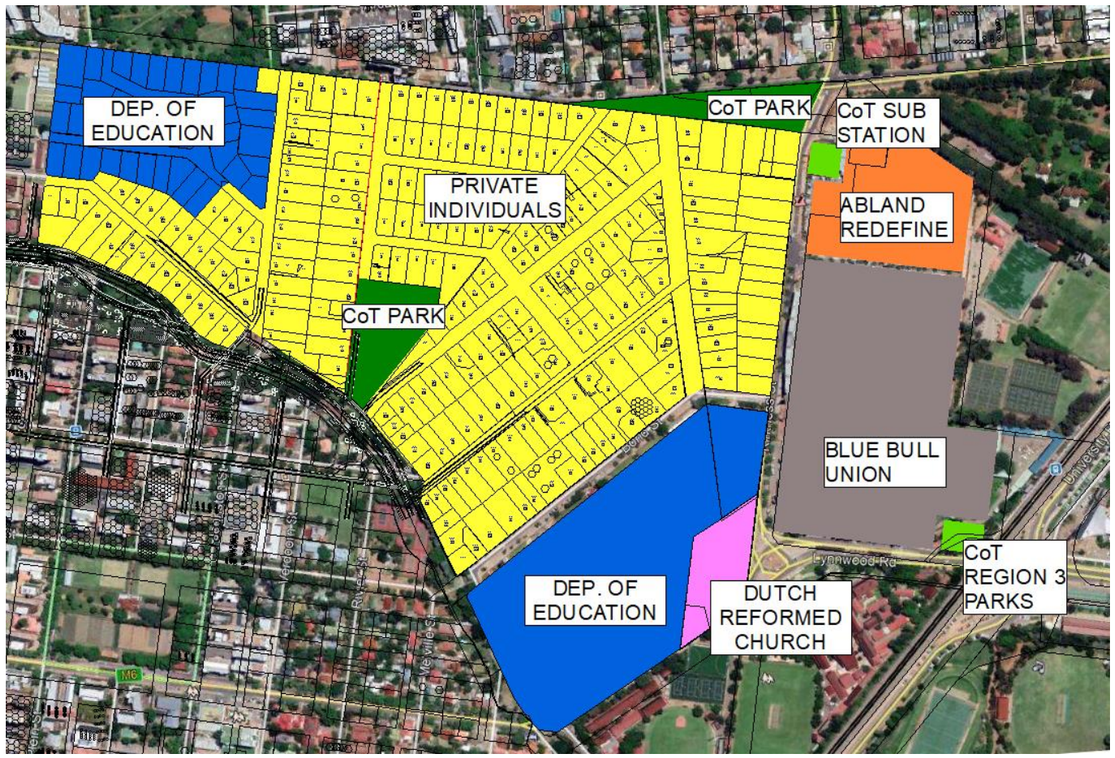


Figure 42: Land ownership

When the '1967 Freeway Scheme' was still on the table, the Municipality bought up several properties throughout the area for the development of the road. The plan has since been scrapped, but the properties have remained in possession of the Municipality. (refer to Table 8). These properties remain one of the area's major concerns. They are not well maintained or in line with the neighbourhood's generally well-kept houses. The lack of maintenance and heritage-insensitive alterations to the properties are some of the CVA's main concerns. However, these properties also present opportunities for the residents and municipality to collaborate on initiatives in the area.

Table 8: List of properties owned by the City of Tshwane

Council Housing General	Erf no		Stand no
Council Housing Dwellings	791/1	Ayton Street	12
Council Housing Dwellings	791/R	Ayton Street	14
Council Housing Dwellings	1024/R	Bond Street	75
Council Housing Dwellings	792/1	Brecher Street	11
Council Housing Dwellings	1070	Ivy Street	4
Council Housing Dwellings	768	Maple Street	23
Council Housing Dwellings	766/R	Maple Street	31
Council Housing Dwellings	1325	Maple Street	35
Council Housing Dwellings	748	Minni Street	24
Council Housing Dwellings	1125	Minni Street	54
Council Housing Dwellings	510/R	Park Street	954
Council Housing Dwellings	496/1	Park Street	996
Council Housing Dwellings	1319/4	Valley Road	73
Council Housing Dwellings	1319/6	Valley Road	83
Council Housing Dwellings	1001	Valley Road	117
Council Housing Dwellings	1003	Valley Road	121
Council Housing Dwellings	1004	Valley Road	123
Council Housing Dwellings	1005	Valley Road	125
Council Housing Dwellings	1006	Valley Road	127
Council Housing Dwellings	1320/9	Walton Jameson Street	52
Council Housing Dwellings	1320/R	Walton Jameson Street	60
Council Housing Dwellings	1319/3	Walton Jameson Street	64
Council Housing Dwellings	1319/R	Walton Jameson Street	70
Council Housing Dwellings	1086/1	Walton Jameson Street	280
Council Housing Dwellings	1086/3	Walton Jameson Street	284

4.5.2 Servitudes

Figure 43 shows servitudes in the study area. There are no major servitudes that affect the area, and servitudes are property specific, which must be incorporated when properties are redeveloped.

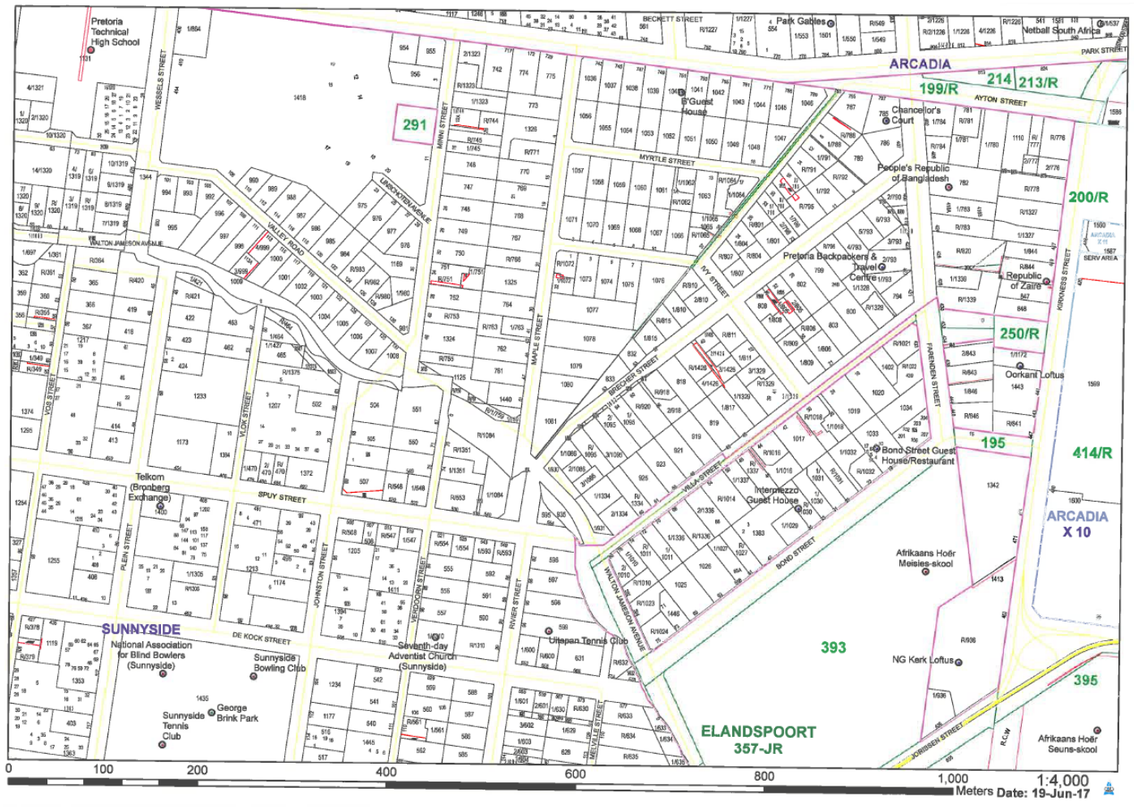


Figure 43: Servitudes

4.6 SOCIAL FACILITIES AND AMENITIES

Figure 44 and

Table 9 show the social facilities and amenities that are within a 5 minutes and 10 minutes walking distance from the precinct.

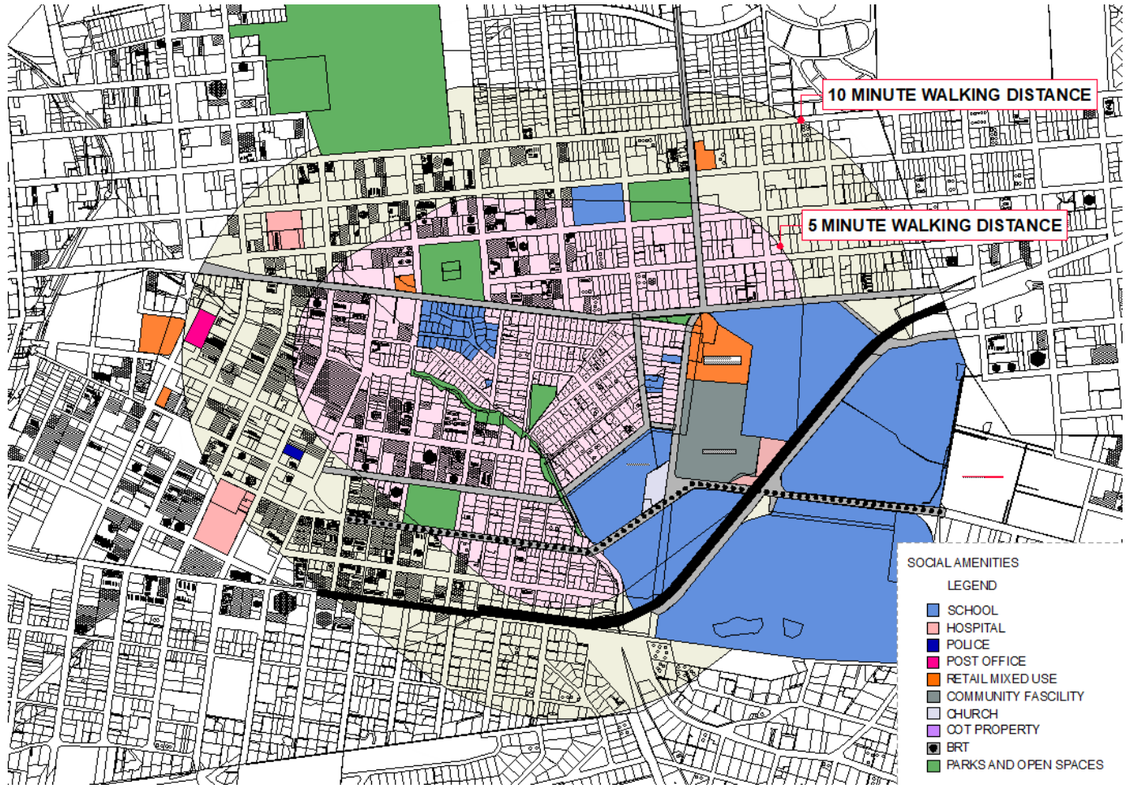


Figure 44: Availability of social amenities

In terms of the community survey, 87% of residents thought that there are sufficient social facilities and amenities available in proximity to the study area.

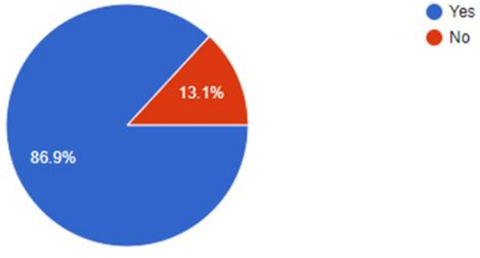


Figure 45: Residents' feelings about the availability of social amenities

Table 9: Availability of social amenities

Amenity	Availability	Within the boundaries of the study area	Within 5 min from the neighbourhood border	Within 10 min from the neighbourhood border
Hotels	Loftus Park - Hotel	✓		
Restaurants/coffee shops/food/health and beauty/shops	Loftus Park Development	✓		
Office Space	Loftus Park	✓		
Gym	Loftus Park Gym	✓		
Communes	Approximately 37 in the study area	✓	✓	✓
Guesthouses	Approximately 6 in the study area	✓	✓	✓
Hospitals/clinics	Meulmed, Zuid Afrikaanse Hospital (ZAH)			✓
Primary Schools	Arcadia Primary, Pretoria East Primary School			✓
High Schools	Afrikaans Meisies Hoër Skool, Pretoria Boys High, Afrikaans Hoër Seunskool, Pretoria Technical High School	✓		
Creech/ pre school	Sharp Kids, Minnie street Creche	✓		
Tertiary institutions	UP (University of Pretoria), APA (Afrikaans Protestants Academy)			✓
Post office	Sunnyside Post Office			✓
Police station	Sunnyside Police Station			✓
Parks and open spaces	Myrtle Park, Kirkness Park	✓		
Public transport	BRT, Gautrain busses		✓	
Sport stadium	Loftus Stadium	✓		

4.7 HERITAGE

A study of the properties with heritage value has been conducted and mapped according to significance (see **Error! Reference source not found.**).[14] An explanation of the colours used to map the h eritage is set out in Table 10: Heritage assessment

See Annexures for the complete heritage study.

Figure 46 Heritage study

Table 10: Heritage assessment

GRADE 1 - 60 years and older (buildings erected before 1959)

DESCRIPTION OF CLASSIFICATION	POSSIBLE RISKS	HERITAGE MANAGEMENT APPROACH
• These are the buildings with the highest significance. • They are older than 60 years • They contain the best-preserved architectural features of the period and style in the area. • Makes the best contribution to the historical character of the precinct	• Complete demolition • Extensions and additions • External alterations • Internal alterations • Replace by multi-story structures • Loss of original single residential classification/land use • Rezoning • Consolidation with an adjacent site(s)	• Must be prevented completely • Only at the back of the building • Protect exterior character • Sympathetic • Must be prevented completely • Must be debated seriously and protected • Must be debated seriously • Must be prevented completely

GRADE 2 - 60 years and older (buildings erected before 1959)

DESCRIPTION OF CLASSIFICATION	POSSIBLE RISKS	HERITAGE MANAGEMENT APPROACH
• These are buildings of the same age and architectural style and design vocabulary as in Grade 1 but have been altered and renovated slightly, to suit contemporary tastes. • They are older than 60 years • They contain most of the original architectural features of the period and design with changes reflecting the use of contemporary building materials and techniques. • Contribute substantially to the historical character of the precinct and support the character of the Grade 1 buildings	• Complete demolition • Extensions and additions • External alterations • Internal alterations • Replace by multi-story structures • Loss of original single residential classification/land use • Rezoning • Consolidation with adjacent site(s)`	• Must be prevented • At the back of the building • Protect exterior character • Sympathetic change • Must be prevented • Must be seriously debated • Must be prevented

GRADE 3 - 60 years and older (buildings erected before 1959) but also new buildings that are younger than 60 years.

DESCRIPTION OF CLASSIFICATION	POSSIBLE RISKS	HERITAGE MANAGEMENT APPROACH
• These buildings have been altered to the point where little of their historic or original architectural characteristics have remained. • The bulk of these buildings are older than 60 years, but this category also includes buildings younger than 60 years. • Although these buildings date from the same period as all the other buildings they have lost important architectural detailing of the original dwellings, but retained their scale, and setting and continue to blend with the Grade 1 and Grade 2 buildings, fusing with the cumulative visual character of the precinct.	• Complete demolition • Extensions and additions • External alterations • Internal alterations • Replace by multi-story structures • Loss of original single residential classification/land use • Rezoning • Consolidation with an adjacent site(s)	• Must be prevented • At the back of the building • Protect exterior character • Sympathetic change • Must be extremely selective • Must be debated seriously • Must be debated seriously • Must be prevented

SPECIAL CATEGORY

DESCRIPTION OF CLASSIFICATION	POSSIBLE RISKS	HERITAGE MANAGEMENT APPROACH
• These areas consist mainly of open spaces and semi-open spaces. • Even these spaces may be older than 60 years as they form part of the original intent of the town planning scheme, had to be respected due to the presence of a natural phenomenon, or it has become an 'odd' open space which is the result of the alignment of streets and flow of engineering design intent.	• Being rezoned • Being sold off to private individuals or developers • Have no proper management plan and no maintenance is done • Introduction of small buildings and structures • Replace open space with commercial or even residential land uses • Loss of original open spaces, mature vegetation or ground covers such as managed lawns • Consolidation with an adjacent site(s)	• Must be prevented • Must be prevented completely • Protect vegetated character • Sympathetic introduction of street signage and hard surfaces • Must be extremely selective • Must be debated seriously

The community survey showed that more than 90% of the respondents believed that (i) architectural heritage is important and (ii) Clydesdale is a significant neighbourhood in terms of heritage.

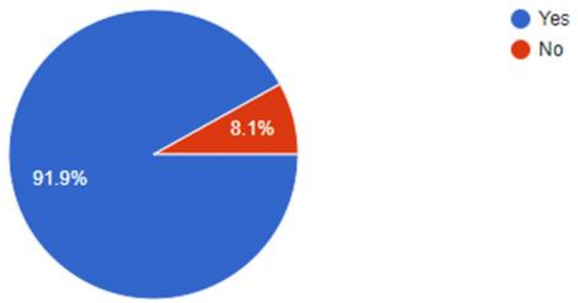


Figure 47: Community perceptions on the importance of architectural heritage

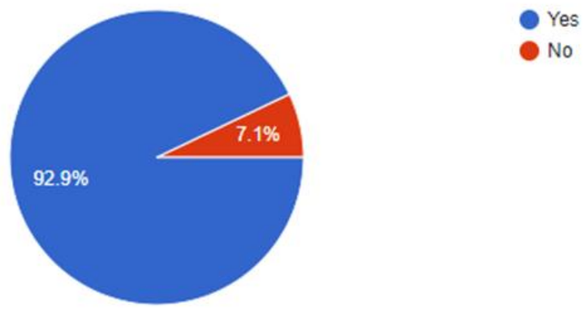


Figure 48: Residents' perceptions of Clydesdale as a significant heritage area

4.8 URBAN FABRIC

4.8.1 Character and urban fabric

This unique neighbourhood with its tree-lined streets and low-density buildings is in stark contrast with the neighbouring high-density Sunnyside and sections of Arcadia and is consequently often referred to as 'the village in the city'.[15]

The urban fabric is small-scale, residential with a definite relation to the street (a place for people). It is an old, established area with good connections to the city. The neighbourhood has its character and the community wants to preserve this character. The historical layout of the area is part of the charm of the area, and the original patterns and layout are an asset.[16]

The unique labyrinthine street block structure contrasts with the surrounding area's general check street pattern, and it is suggested that this unique structure was informed by the original farm layouts as well as the Walkerspruit which is a natural boundary of the area.[17]

4.8.2 Built Form

The area predominantly consists of single-storey houses with a unique historical character represented by the old Transvaal style dating back to as early as 1908. The area currently comprises a combination of building styles including Victorian, Art Deco and late modern architecture. Many properties still portray the architectural character and built form of that era in their layouts with the classic front and back gardens, entrance approach and site placement.

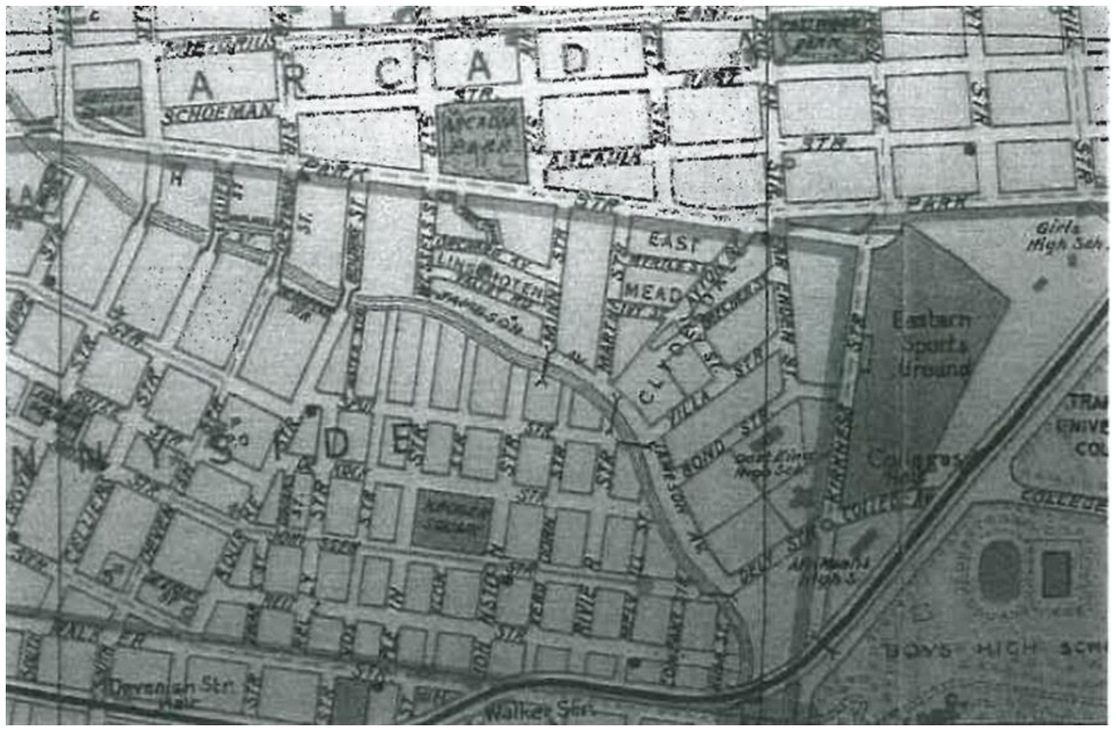


Figure 49: Paff's plan 1929

The built fabric is gradually changing in areas where new medium to high-density residential developments are taking place (for example Kirkness Street). This is incongruous with the character of Clydesdale, but also inevitable because of the development pressure that Clydesdale is facing due to its locational advantages. Thus, the urban fabric and built form of Clydesdale should be managed if the current character of the area is to be preserved.[18]

[15] *Source: Donaldson, 2001: 230*

[16] *Source: Holm Jordaan, 2015*

[17] *Source: Donaldson: 230*

[18] Source: Holm Jordaan, 2015

Figure 50: Tannie Dorothy's old house on Kirkness street

Figure 51: High-density development on Kirkness street

Figure 52: 3D Visualisation of the heights in and surrounding Clydesdale[19]

[19] *Source: Holm Jordaan, 2015*

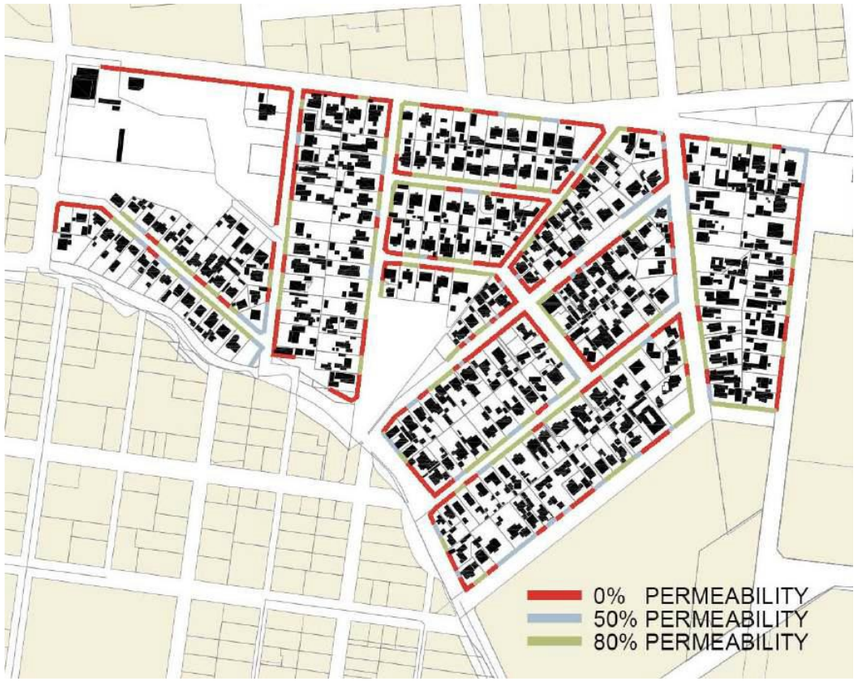


Figure 53: Visual permeability

The original built form was one of an intimate human scale with residential facades visually and functionally connected to the street. This meant that the houses were visible from the street and the fences were only indicative of the erf boundary, not a security feature as it is today. The street boundaries and edges have however changed over time, and very few of the original boundary structures are still visible.

Currently, boundary treatment disrupts this intimate scale in areas where high boundary walls have replaced the original low, visually permeable fences. Large parts of the streets are lined with boundary walls closing off the residential properties from the public environment and limiting the 'eyes on the street' of communal security. This is a threat to a residential community, as the properties are 'separating' themselves from the community and disrupting the character of the area. The boundaries and edges in the neighbourhood were documented on a scale of visual permeability ranging between 0% - 100%: some in the 80-100% range (able to see the house from the street and visually well connected to the street), some 50% visually permeable and others at 0% (refer to Figure 53).

Photos of Boundary walls in Clydesdale: Boundaries such as these above were rated as 0% visually permeable.

Photos of Boundary walls in Clydesdale: The edge conditions illustrated above fall within the 80-100% visually permeability range

Figure 54: Boundary walls in Clydesdale[20]

4.8.3 Condition of buildings

Businesses and residential properties in the study area are generally well-maintained. The challenges lie with houses owned by the City of Tshwane as well as unoccupied houses.

The images in Table 11 illustrate the state of a typical commune, residential, and business properties.

Table 11: Condition of buildings

		**TYPICAL RESIDENTIAL** • Structures are generally well maintained, some in need of restoration • Generally well-established gardens • Kept side walk

[20] *Source: Holm Jordaan, 2015*

TYPICAL COMMUNE

- Structures are generally well maintained
- Garden not well maintained
- Stand paved or swept
- Interiors "butchered" to accommodate max. number of people

TYPICAL BUSINESS

- Structures are generally well maintained
- Previously grassed areas in general replaced with paving
- Properties are in general well maintained

TYPICAL CITY OF TSHWANE OWNED

- Swept gardens
- Structures in general not well maintained
- Properties are in general not well maintained – no gardens

Kirkness street, Erf 847

Valley street, Erf 994

UNOCCUPIED BUILDINGS

4.9 PUBLIC REALM

The public realm (or public domain or public environment) refers to all parts of the built environment (predominantly outdoor areas) that have been particularly planned and developed for public use and are open and freely accessible to everyone, regardless of their economic or social status. It includes streets, pedestrian walkways, parks, playgrounds squares, markets and waterways where people are free to walk, congregate and socialise. It, therefore, does not include private properties, gardens or shopping malls. *"The parts of a village, town or city (whether publicly or privately owned), that are available, without charge, for everyone to see, use and enjoy, including streets, squares and parks... the measure of any great civilisation is in its cities, and a measure of a city's greatness is to be found in the quality of its public spaces, its parks and its squares".*[21]

As part of the community survey, respondents had to rate the Clydesdale area in terms of different aspects that make up the public realm, including walkways, road surface, lighting and street trees, with most responses indicating that these elements are between average and good (refer to Figure 55). In respect of the question of whether access to natural resources such as sunlight, soil and outside space was important during the Covid-19 lockdown, 91.5% of respondents answered yes (refer to Figure 56).

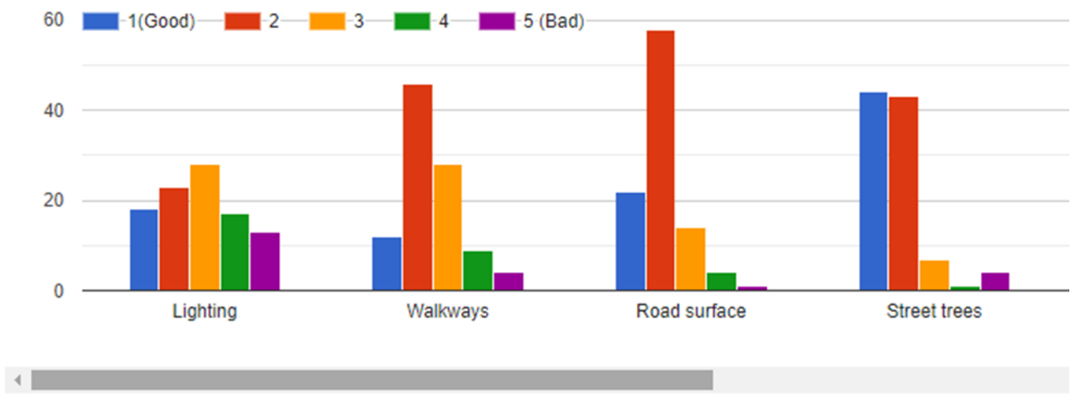


Figure 55: Residents' perceptions of environmental quality

[21] *Source: Dictionary of Urbanism*

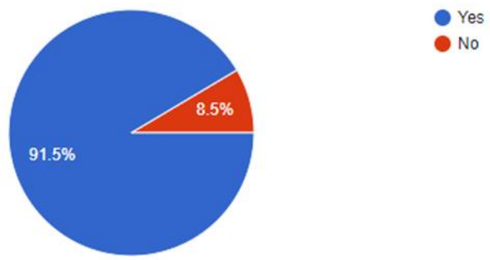


Figure 56: The importance of open space during lockdown

4.9.1 Public open spaces

CHAPTER 1: There are three major public open spaces in and around the precinct, namely (i) Walkerspruit, (ii) Myrtle Park and (iii) Kirkness Park. The following section deals with the condition of these open spaces. The problems experienced in these areas have consequences for (i) the overall character and sense of place, (ii) safety and security, (iii) environmental integrity, (iv) environmental health and safety, and (v) people's ability to enjoy these open spaces.

Walkerspruit

The following are some of the key problems with the Walkerspruit area between the train bridge and Wessel Street:

- Lamp poles are out of order
- Walkways built in 2010 are overgrown
- Street furniture is broken
- No rubbish bins
- Illegal dumping
- Informal squatter housing
- People wash in the channel
- People live in the storm water inlets
- Presence of rats
- The fence has been stolen and is generally unkept

The images in Figure 57 show the conditions along Walkerspruit.

Figure 57: Condition of open spaces along Walkerspruit

Myrtle Park

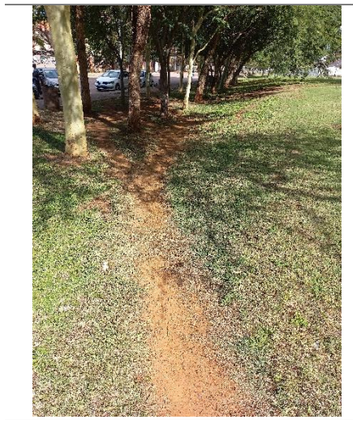
The structures in Myrtle Park are not well maintained. The columns of the canopy structure are rusted and do not support the structure sufficiently. The grass and trees in Myrtle Park are relatively well maintained. (Figure 58).

Figure 58: Images of Myrtle Park

Kirkness Park

GENERAL

- The park is covered in Kikuyu grass
- Generally well established
- Trees are generally in good condition

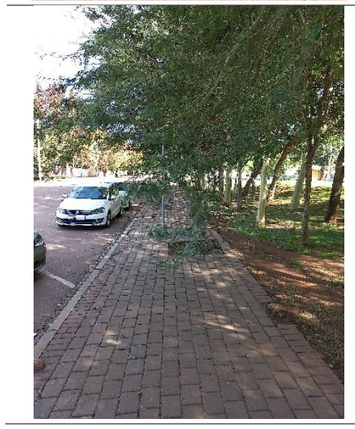


FORMED WALKWAYS

- People walk in specific pathways connecting the bus stop and Loftus Park
- No structured walkways here

PLANT BEDS

- No plants, just open ground

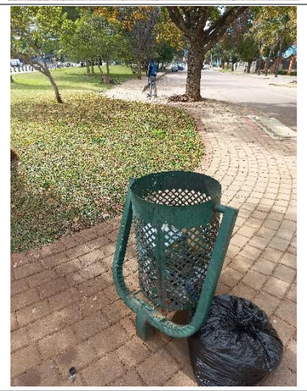


BUILT WALKWAYS and AMENITIES

- Paving needs fixing
- Bus shelter broken

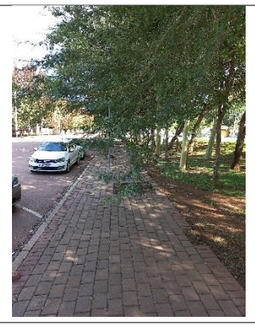
TREES IN PAVING

- Trees disappeared



BINS

- Enough bins
- Concrete bins need to be moved to the intended openings
- Metal bins need to be adjusted and painted for rust protection



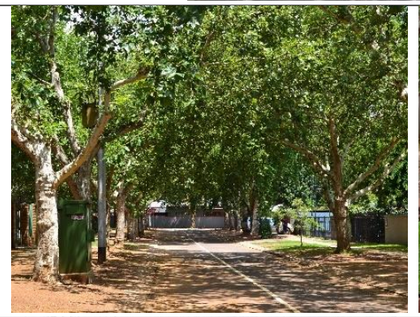
FEVER TREES

- Low-hanging branches with thorns scratch pedestrians

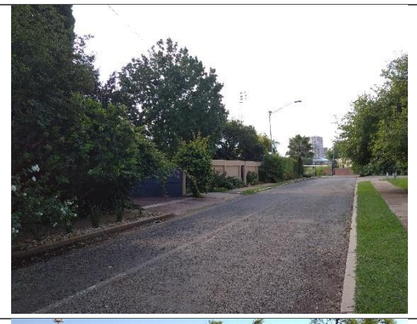
4.9.2 Streetscape elements

This section deals with the condition of streetscape elements, which make an important contribution to the overall quality of the public realm and the image and legibility of the precinct. The streetscape elements include road and sidewalk surfaces, road markings, signage, cleanliness, street furniture, street trees and lighting.

Table 12: Condition of street trees

	STREET TREES	NOTES
Farenden	 	Plane trees Good condition Dead trees were replaced by CoT in 2018 with *Celtis Africana*
Bond	   	Street trees are in a fairly good condition Some trees missing
Villa		Plane trees Good condition Dead trees replaced by CoT 2018 with *Celtis Africana*
Ivy	 	Plane trees Good condition Dead trees were replaced by CoT in 2018 with *Bolusanthus speciosus*
Ivy	 	"Pride of India" street trees Dead and missing trees were replaced by CoT with *Bolusanthus speciosus*
Brecher	 	Fairly good condition Dead trees were replaced by CoT in 2018 with Celtis Africana

	STREET TREES		NOTES
Ayton			A mix of street trees planted by owners Dead and missing trees were replaced by CoT with *Bolusanthus speciosus*
Myrtle			"Pride of India" street trees Dead and missing trees were replaced by CoT with *Bolusanthus speciosus*
Maple			Good condition
Minnie			Good condition One dead next to Myrtle Park

	STREET TREES		NOTES
Valley			New trees, *Celtis africana* were planted by CoT in 2018
Walton Jameson			Jacaranda trees Good condition Some missing along the river
Linschoten			Trees are sufficient
Kirkness			Jacaranda street trees Some trees were transplanted by ABLAND New Jacarandas were planted

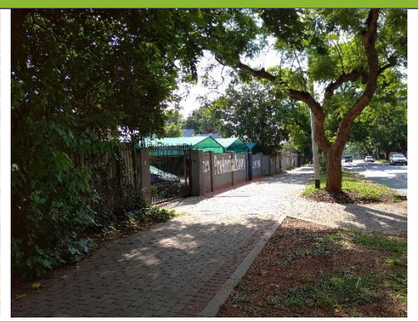
STREET TREES		NOTES
Park		

Table 13: Condition of street lights

OVERHEAD SERVICES LAMP POLES		CONDITION
Farenden	 	Bond 
Villa		Ivy 
Brecher		Ayton 

Lamp poles are skew

Trees need to be pruned to prevent power outages during wind and rainstorms

Some cables are hanging too loose

OVERHEAD SERVICES LAMP POLES		CONDITION
Maple		Minnie 
Valley		Walton Jameson 
Linschoten		Kirkness 
Park		

Trees need to be pruned to prevent power outages during wind and rainstorms

Some cables are hanging too loose

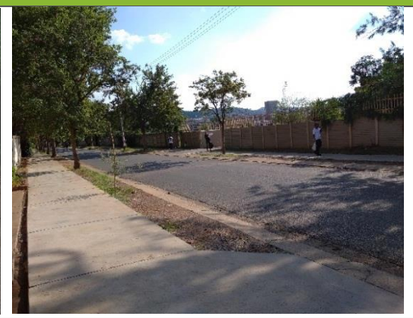
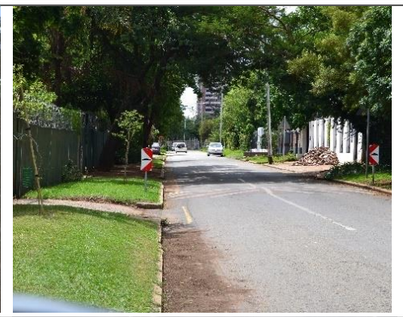
ditto

Some poles are vandalised

Table 14: Condition of sidewalks/road reserve

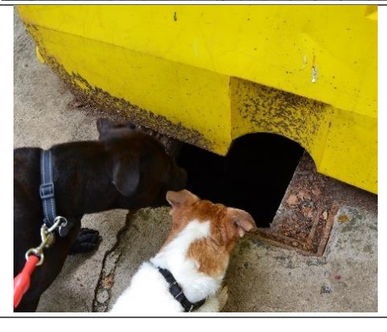
	SIDE WALKS/ ROAD RESERVES		CONDITION
Farenden			Sidewalks are uneven at places due to the roots of the plane trees
Bond			Fairly good condition
Villa			Sidewalks are uneven at places due to the roots of the plane trees
Ivy			Fairly good condition

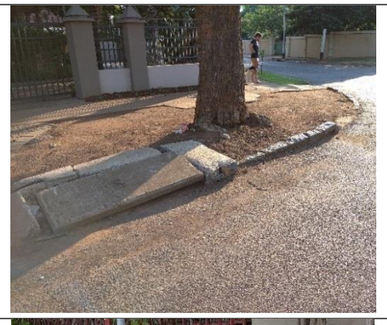
	SIDE WALKS/ ROAD RESERVES		CONDITION
Brecher			
Ayton			The sidewalk is in fairly good condition
Myrtle			The sidewalk is in fairly good condition
Maple			The sidewalk is in fairly good condition

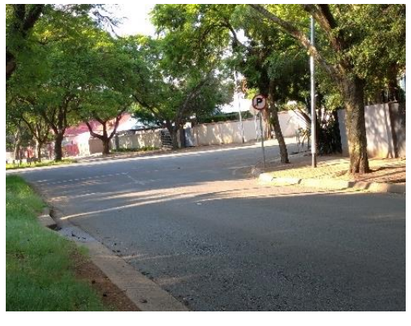
	SIDE WALKS/ ROAD RESERVES		CONDITION
Minnie			Sidewalks were replaced recently by CoT Good condition
Valley			No sidewalk
Walton Jameson			Broken concrete
Linschoten			Fairly good condition

	SIDE WALKS/ ROAD RESERVES		CONDITION
Kirkness			The sidewalk is in good condition
Park			

Table 15: Condition of inlets and manholes

	INLETS AND MANHOLES		CONDITION
Bond			New inlets
Villa			

	INLETS AND MANHOLES		CONDITION
Ivy			
Brecher			New covers Good condition
Ayton			Old granite heritage kerbs
Myrtle			

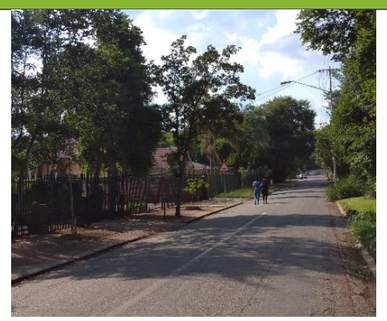
	INLETS AND MANHOLES		CONDITION
Maple			
Minnie			Condition not good
Valley			
Walton Jameson			Manhole cover on the corner of Bond and Walton Jameson, protruding

	INLETS AND MANHOLES	CONDITION
Linschoten		
Kirkness	 	
Park	 	

Table 16: Condition of road markings

	ROAD SURFACE / ROAD MARKINGS		CONDITION
Farenden			Road markings are not clear
Bond			White road markings are readable Yellow markings on the sides have faded
Villa			Road service good Road markings faded With shade from trees difficult to read
Ivy			Faded road markings

	ROAD SURFACE / ROAD MARKINGS		CONDITION
Brecher			Faded road markings
Ayton			
Maple			Cracks in the tar are visible Road markings are faded
Minnie			Cracks in the tar are visible Faded road markings

	ROAD SURFACE / ROAD MARKINGS		CONDITION
Valley			
Walton Jameson			Faded road markings
Linschoten			Faded road markings
Kirkness			Faded road markings

	ROAD SURFACE / ROAD MARKINGS		CONDITION
Park			Cracks in tar

5. MARKET ANALYSIS

Key economic factors in the study area are the Loftus Park development, the Loftus Versfeld sports stadium and related activities, the businesses operating on both residential and stands zoned for business within the residential area and the residential property sales in the past few years. The effect of the Covid 19 epidemic on the economy of the area is not currently clear.

5.1.1 Residential

Except for 2 buildings, 1 on Kirkness Street (Erf no 847) and 1 on Valley Street (Erf 994), all residential properties are occupied. Vacancy rates were determined by observation and by knowledge of the neighbourhood through active community participation.

5.1.2 Loftus Park Development

The key economic sector in the area, Loftus Park Development, is still in the developing phase as the complex only opened its doors in April 2019. Loftus Park Management is in the process of signing contracts with tenants to reach 98% let by March 2020.[22]

Market research done by ABLAND indicates that Loftus Park provides Lifestyle needs for Clydesdale (refer to Annexures). The total development area is 33,000m^2 and comprises:

- Gym: 3500m2 (11% of the total development area)

[22] *Source: Loftus Park management*

- Hotel: 6400m2 (19% of the total development area)
- Retail: 9200m2 (28% of the total development area)
- Offices: 14000m2 (42% of the total development area)

5.1.3 Loftus Versfeld Stadium

The Loftus Versfeld sports stadium complex consists of the stadium and related space, a gym, a restaurant and a small retail area (only one shop). With a capacity of 50 000 the stadium frequently hosts large-scale rugby and soccer matches. The stadium as well as the fields on the side of the stadium are also used to host events such as music concerts.

5.1.4 Property Sales History

Table 17 shows the property sales in the residential area since 2016 as per Windeed property information search.

Table 17: Property sales 2016 - current

Street	Size (m²)	Sales Price (R)	R/m²	Sold	Year Transferred		
					2017	2018	2019
12B MINNI STREET SUNNYSIDE	731	700,000	R 957.59	2016/12/12	2017/02/14		
37 MINNI STREET SUNNYSIDE	591	1,620,000	R 2 741.12	2017/04/12	2017/08/10		
average	**661**	**R 1 160 000.00**	**R 1 849.35**				
27 LINSCHOTEN AVENUE SUNNYSIDE	1 036	1,550,000	R 1 496.14	2017/04/12	2017/10/26		
112 VALLEY ROAD SUNNYSIDE	821	1,500,000	R 1 827.04	2019/06/04			2019/10/03
110 VALLEY ROAD SUNNYSIDE	687	1,500,000	R 2 183.41	2019/06/03			2019/09/03
111 VALLEY ROAD SUNNYSIDE	1 177	2,200,000	R 1 869.16	2018/07/24			2019/10/15
120 VALLEY ROAD SUNNYSIDE	1 031	1,600,000	R 1 551.89	2018/01/04		2018/05/24	
119 VALLEY ROAD SUNNYSIDE	818	1,270,000	R 1 552.57	2017/09/07	2017/11/21		
average	**906.8**	**R 1 614 000.00**	**R 1 796.81**				
Maple 21 ERF 769 327/1995, 1	600	1,575,000	R 2 625.00	2018/08/21		2018/11/13	
41 MAPLE AVENUE SUNNYSIDE	600	2,000,000	R 3 333.33	2019/02/28			2019/10/21
51 MAPLE STREET SUNNYSIDE	1 096	1,600,000	R 1 459.85	2019/03/29			2019/08/30
13 MAPLE AVENUE SUNNYSIDE	1 053	1,900,000	R 1 804.37	2017/08/30		2018/02/05	
8 MAPLE STREET SUNNYSIDE	1 024	2,000,000	R 1 953.13	2017/07/03	2017/10/25		
average	**874.6**	**R 1 815 000.00**	**R 2 235.14**				
			R 2 075.23				
27 IVY STREET SUNNYSIDE	500	1,835,000	R 3 670.00	2018/09/05		2018/11/01	
IVY STREET SUNNYSIDE	1 008	1,680,000	R 1.67	2018/08/27			2019/02/06
20 IVY STREET SUNNYSIDE	520	1,500,000	R 2 884.62	2018/03/20		2018/07/11	
7 IVY STREET SUNNYSIDE	1 029	1,680,000	R 1 632.65	2019/04/11			2019/09/03
average	**764.25**	**R 1 673 750.00**	**R 2 047.23**				
21 BRECHER STREET SUNNYSIDE	396	1,500,000	R 3 787.88	2018/05/09		2018/07/04	
57 BRECHER STREET SUNNYSIDE	665	1,900,000	R 2 857.14	2017/11/20		2018/03/26	
55 BRECHER STREET SUNNYSIDE	637	1,495,000	R 2 346.94	2017/06/27	2017/09/05		
average	**566**	**R 1 631 666.67**	**R 2 997.32**				
425 FARENDEN STREET SUNNYSIDE	1 097	2,700,000	R 2 461.26	2018/07/30		2018/10/15	
444 FARENDEN STREET SUNNYSIDE	992	2,600,000	R 2 620.97	2019/04/29			2019/08/20
416 FARENDEN STREET SUNNYSIDE	1 324	2,500,000	R 1 888.22	2018/01/09		2018/06/06	
436 FARENDEN STREET SUNNYSIDE	1019	2,200,000	R 2 158.98	2018/06/08		2018/08/29	
438 FARENDEN STREET SUNNYSIDE	1 042	2,000,000	R 1 919.39	2018/03/09		2018/05/11	
average	**1094.8**	**R 2 400 000.00**	**R 2 209.76**				

61 VILLA STREET SUNNYSIDE	1 301	1,700,000	R 1 306.69	2018/04/14		2018/08/16	
43 VILLA STREET SUNNYSIDE	1 091	2,350,000	R 2 153.99	2018/02/18		2018/05/08	
15 VILLA STREET SUNNYSIDE	1 301	2,285,000	R 1 756.34	2017/09/19	2017/12/19		
42 VILLA STREET SUNNYSIDE	1 093	2,650,000	R 2 424.52	2018/01/09		2018/02/27	
average	**1196.5**	**R 2 171 250.00**	**R 1 910.38**				
753 PARK STREET SUNNYSIDE	1 029	2,736,000	R 2 658.89	2017/08/30		2018/02/28	
761 PARK STREET SUNNYSIDE	1 029	3,000,000	R 2 915.45	2017/10/20		2018/01/10	
average	**1029**	**R 2 868 000.00**	**R 2 787.17**				
Bond street - units							
CORNER@BOND 111/2015, 107	67	1,400,000	20,896	2019/06/12			2019/08/07
CORNER@BOND 111/2015, 103	63	1,350,000	21,429	2018/06/08		2018/09/13	
CORNER@BOND 111/2015, 202	63	1,350,000	21,429	2018/05/08		2018/06/21	
CORNER@BOND 111/2015, 201	63	1,395,000	22,143	2018/05/15		2018/06/29	
CORNER@BOND 111/2015, 203	63	1,350,000	21,429	2018/01/11		2018/05/30	
BOND COURTYARD 1047/2006, 4	37	570,000	R 15 405.41	2019/04/28			2019/08/28
BOND COURTYARD 1047/2006, 6	36	640,000	R 17 777.78	2017/12/13		2018/04/09	
415 KIRKNESS STREET SUNNYSIDE	1 909	2,875,000	R 1 506.02	2019/03/15			
451 KIRKNESS STREET SUNNYSIDE	997	3,500,000	R 3 510.53	2019/07/17			2019/04/30
419 KIRKNESS STREET SUNNYSIDE	1 258	3,500,000	R 2 782.19	2018/09/03	2019/05/03		
425 KIRKNESS STREET SUNNYSIDE	1 059	6,250,000	R 5 901.79	2017/11/16	2018/03/19		
average	**1305.75**	**R 4 031 250.00**	**R 3 425.14**				
Kirkness street - units							
441 @ KIRKNESS 32/2016, 109	51	1,050,000	20,588	2019/09/18			2019/10/29
441 @ KIRKNESS 32/2016, 228	51	1,150,000	22,549	2019/06/19			2019/10/25
441 @ KIRKNESS 32/2016, 111	51	960,000	18,824	2018/11/13			2019/09/26
441 @ KIRKNESS 32/2016, 217	51	960,000	18,824	2018/09/04		2018/12/12	2019/02/07
441 @ KIRKNESS 32/2016, 112	51	960,000	18,824	2018/08/31		2018/12/19	
441 @ KIRKNESS 32/2016, 118	51	960,000	18,824	2018/04/09		2018/06/05	
441 @ KIRKNESS 32/2016, 116	51	960,000	18,824	2018/02/02		2018/05/14	
LOFTUS VIEW 335/2017, 32	41	945,000	23,049	2019/08/15			2019/11/15
LOFTUS VIEW 335/2017, 43	41	995,000	24,268	2017/10/23		2018/01/30	
LOFTUS VIEW 335/2017, 41	41	945,000	23,049	2019/03/25			2019/05/06
LOFTUS VIEW 335/2017, 35	41	945,000	23,049	2019/01/21			2019/02/28
LOFTUS VIEW 335/2017, 33	41	995,000	24,268	2018/05/17		2018/06/25	
LOFTUS VIEW 335/2017, 42	41	985,000	24,024	2018/03/08		2018/06/05	

6. ENGINEERING SERVICES AND INFRASTRUCTURE

This area is well-serviced and connected to the Tshwane infrastructure. The capacity of the infrastructure is sufficient to service the Clydesdale precinct as it is currently zoned, and most likely, according to the City of Tshwane Sewer Water and Stormwater infrastructure planning department division, up to 35 units per hectare or Residential 2.

6.1.1 Water

The area is served by the Salvokop reservoir. Figure 59 shows the regional distribution and

Figure 60 shows the local distribution.

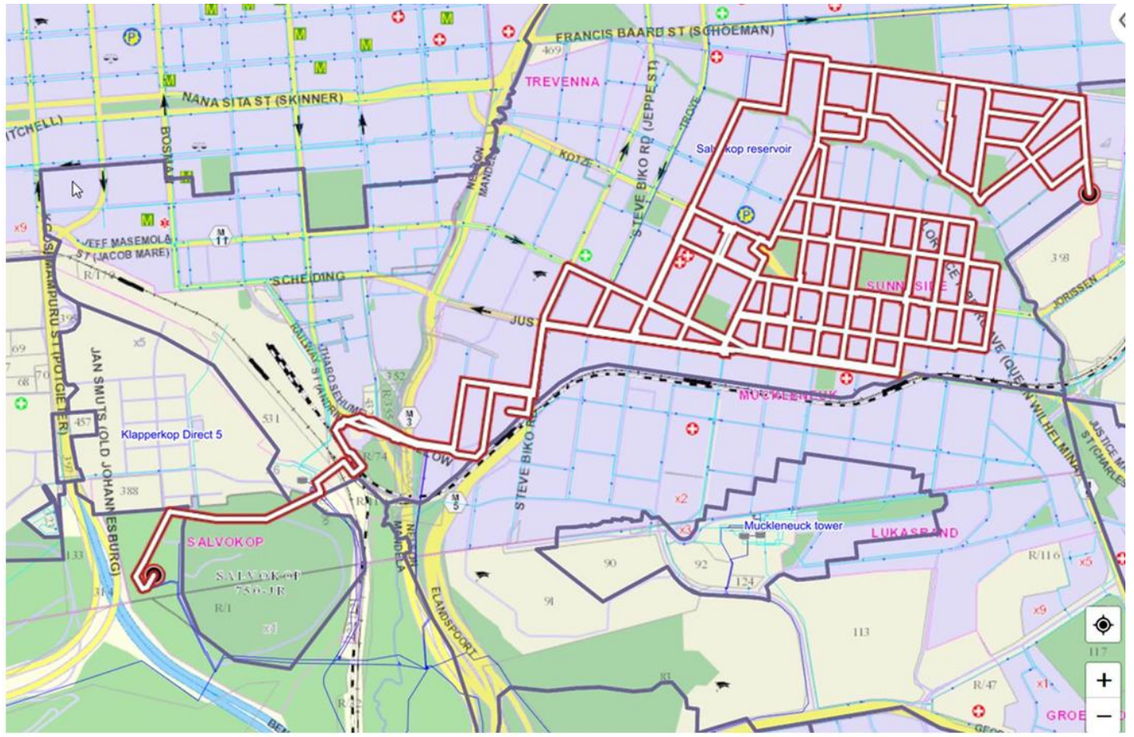


Figure 59: Salvokop reservoir area of distribution

Figure 60: Local water distribution

6.1.2 Sewerage system

The sewer line carrying sewer from Hatfield and Lynnwood turns into Clydesdale on the corner of Park and Farenden streets. See Figure 61 and Figure 62. Sewer overflows occur often in the rainy season, due to the following reasons:[23]

- **Root intrusion** into sewer pipelines due to trees/plants planted in or close to sewer servitudes. The only two (2) ways of resolving root intrusion permanently are by either removing the tree/plant causing the problem or renewing/replacing the pipeline. Any pipeline with a joint could be affected by root intrusion and once roots have intruded into a pipeline, they will continue being a problem from time to time.

- **Fat** from mostly restaurants flushed down the sewer system, mostly due to no fat traps installed at restaurants and fat traps not being effective due to poor or no maintenance. Very little can be done by the Waste Water Collection section to prevent/mitigate.

- **Sand and stones** (and also larger stones/rocks/bricks) either washed into the sewer system by rain or deliberately thrown into the sewer system. Can be effectively removed by sewer blockage removal teams.

- **Foreign objects** such as rags, nappies, sanitary pads/towels, blankets, toys, etc., are either flushed down the sewer system by residents or deliberately thrown into the sewer system at manholes.

- **Broken/damaged ramps, connections and pipelines**. These can be effectively dealt with by WWC teams by repairing.

"Any of the causes listed above could be the cause of recurring blockages, but there is nothing WWC teams can do to prevent any of them from happening, whilst property owners, residents and customers can prevent a number of them from happening, especially root intrusion, fat and foreign objects. Property owners, residents and customers can assist in preventing many blockages by being mindful of where plants are planted, which plants are planted and what is flushed down the sewer system. An awareness campaign to inform residents of the causes and consequences of sewer blockages in my opinion is a very good idea and will hopefully assist in preventing blockages from occurring.

Please also note that sewer spillages often occur during or after heavy rains, but it is important to realise that these spillages are not a result of blockages, but the sewer system overflows as a result of the capacity of the existing pipelines being too little to cope with the volume of water entering into the system. It is commonly referred to as storm water ingress and it is either accidental, water entering at manholes, gulley or cleaning eyes, or deliberate where property owners, residents or customers are diverting storm water into the sewer system for whatever reason. There is nothing that can be done by the municipality to prevent this from happening and once again residents can assist to alleviate the problem by not diverting rain/storm water into the sewer system."[24]

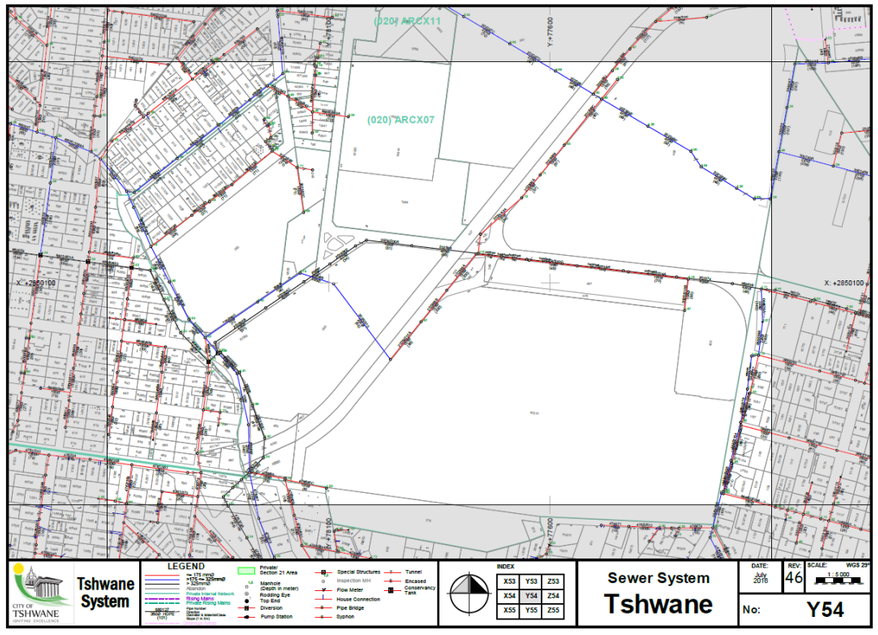


Figure 61: Sewer (Southern area of Clydesdale)

[23] *Source: City of Tshwane Water and Sanitation*

[24] *Source: City of Tshwane Water and Sanitation*

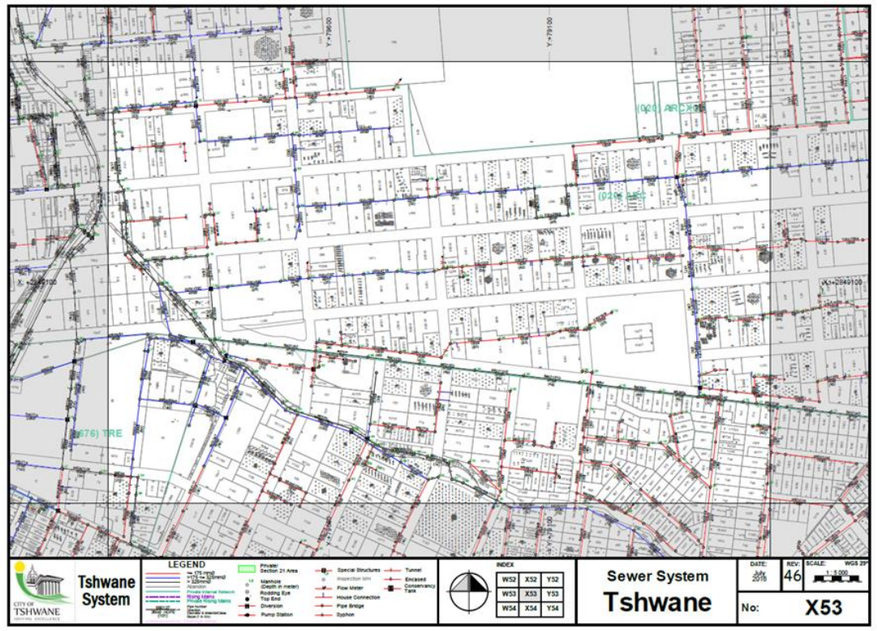


Figure 62: Sewer (Northern area of Clydesdale)

6.1.3 Electricity

11 Kv Infrastructure

In 2009 all old and dangerous 11 KV (medium voltage) switchgear were replaced. An example of 11KV switchgear is the electricity box on the corner of Bond and Farenden street. All overhead conductors were also replaced (Figure 63).

In 2017 all 11KV infrastructure as well as the substation in Kirkness street was relocated and replaced to accommodate the Loftus Park Development as well as the new storm water channel. All services are underground.

Figure 63: 11KV Switchgear

This infrastructure services Clydesdale and there are five supply lines to the neighbourhood.

An additional panel was added to the system during the 2017 upgrade to accommodate any future developments and to strengthen the network. Figure 63 illustrates the 11KV infrastructure. The area marked in red shows the spare panel. The area in blue in Figure 64 indicates the area between Loftus stadium and Bond street which will be fixed once this part of the road is widened and upgraded. The cables will have to be moved out of the way. All underground cables will be replaced.

The condition of the 11KV infrastructure has been described as good by the City of Tshwane officials.

Figure 64: 11KV Google image

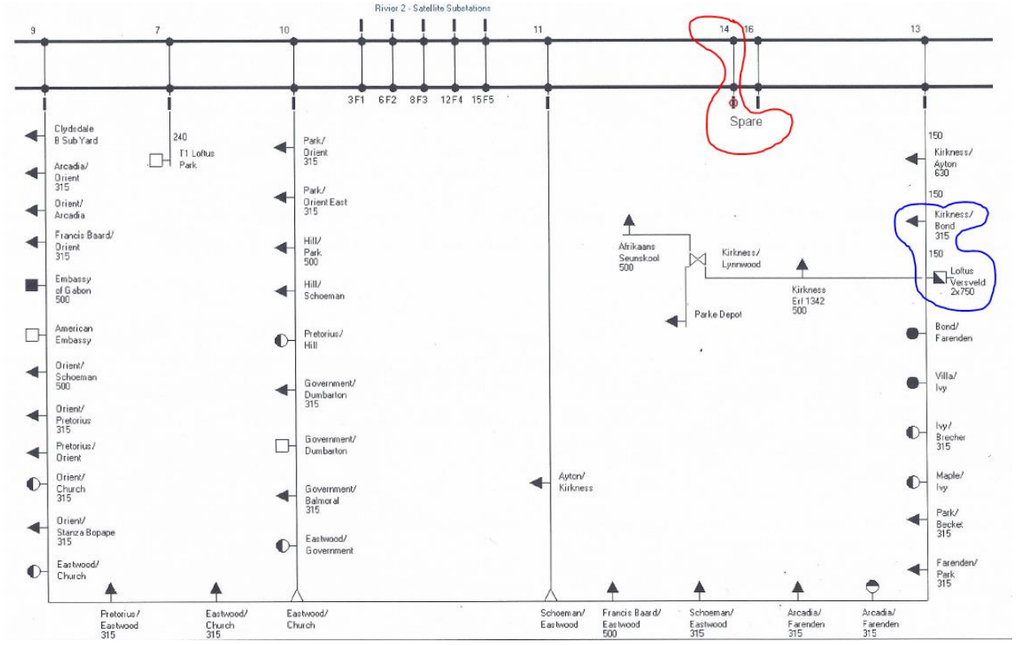


Figure 65: Schematic diagram: Medium Voltage Infrastructure

Low Voltage Infrastructure

Low voltage electricity supply to Clydesdale is in general in good condition. Electricity is supplied by overhead cables. Big Plane trees cause trouble during rainy/windy seasons. Branches interfere with loose hanging lines. Replacement of sub stations in Bond and Villa street is planned as part of the upgrading of the infrastructure.

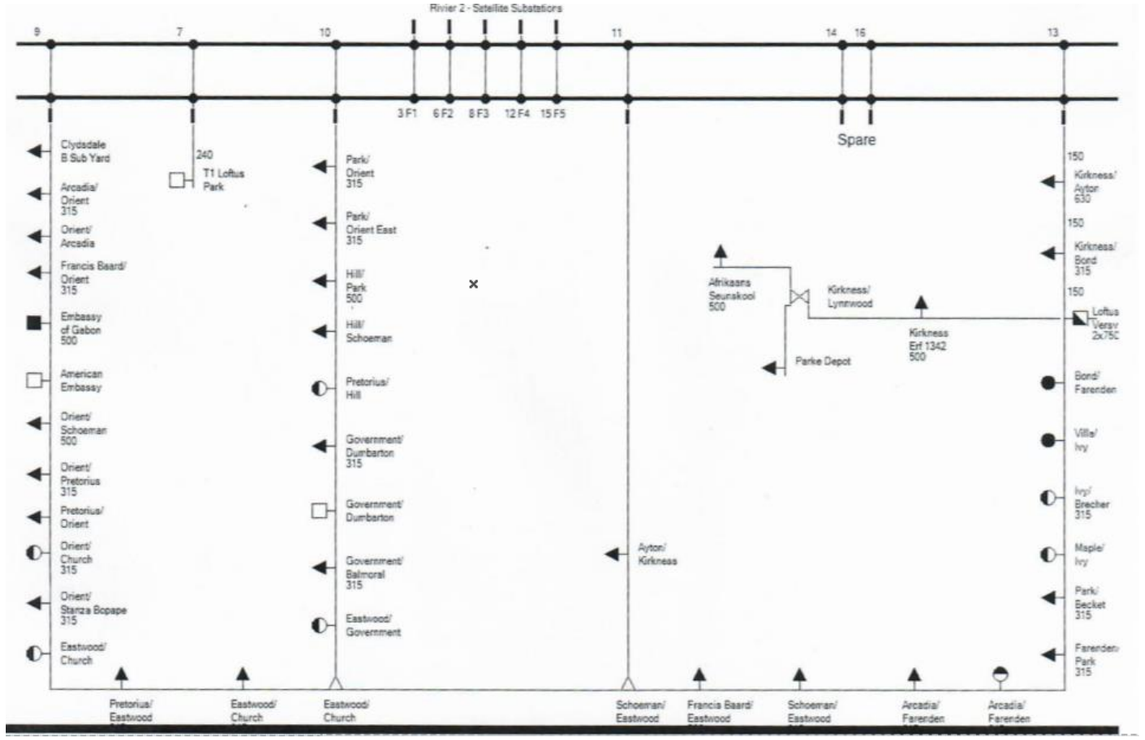


Figure 66: Schematic diagram: Low Voltage Infrastructure

6.1.4 Storm water

Figure 68 shows the position of the study area within the Walkerspruit catchment area. Runoff water from the precinct is all disposed of via stormwater pipes and canals into the Walkerspruit canal. The condition of the canal is described in paragraph 6.1.4. Storm water inlets in Villa street and Farenden street often overflow due to blockages (Figure 67).

Figure 67: Blocked storm water inlet

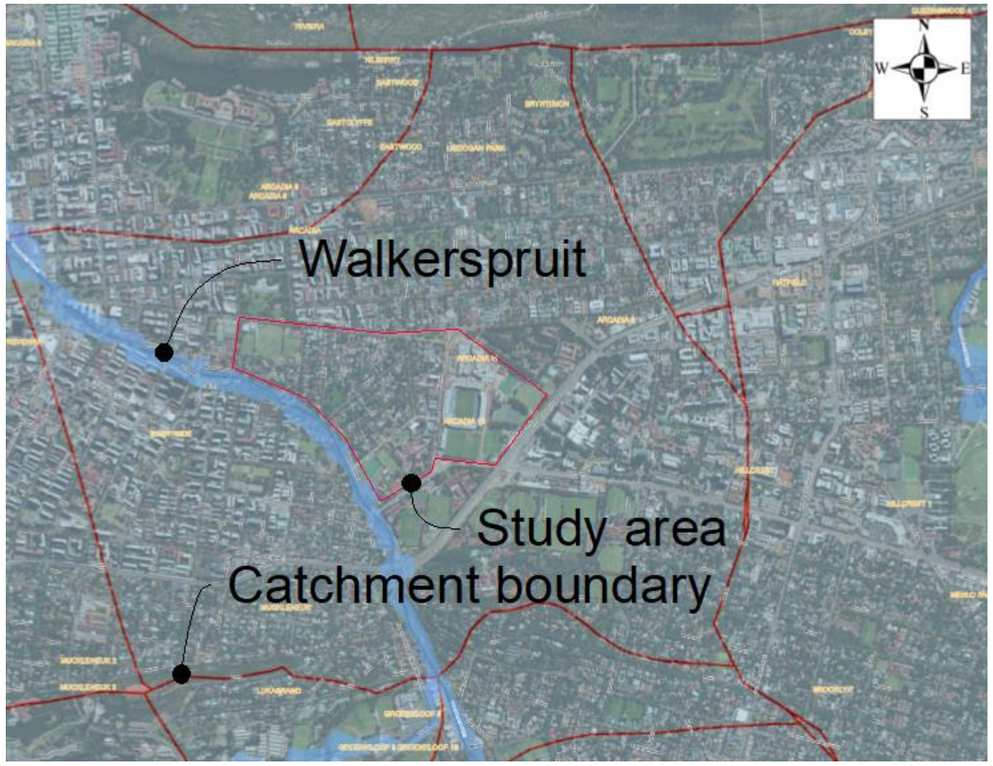


Figure 68: Walkerspruit Catchment Area

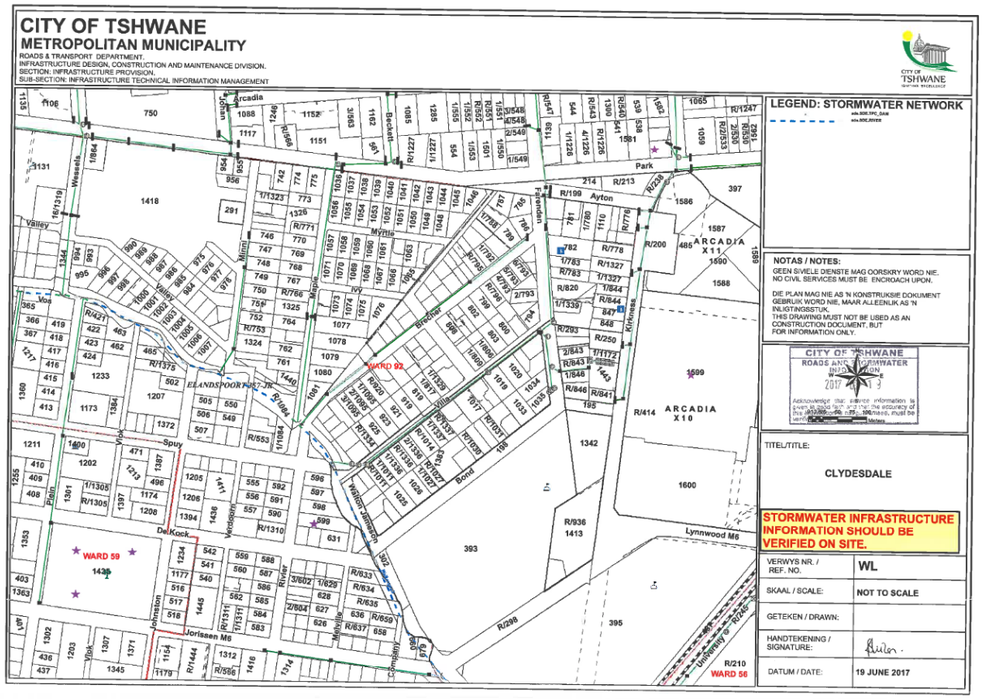


Figure 69: Stormwater infrastructure. Pipes are marked in green.

6.1.5 Condition of the Walkerspruit canal

The City of Tshwane's Infrastructure Asset Management: Stormwater Maintenance Region 3, is responsible for inter alia the maintenance and repair of the Walkerspruit canal. Following a site meeting with the City of Tshwane on 14 September 2021, the municipality confirmed that the maintenance and repair of the section of the Walkerspruit between the railway line and Jorissen Street are on the project plan for execution this current financial year (July 2021 – June 2022). The proposed work will include:

- The repair of the existing gabion baskets on the eastern side of the spruit and;
- The construction of new gabions on the western embankment as well as on the eastern embankment just upstream of the existing gauging station where the erosion is threatening Walter Jameson Street.

The Infrastructure Asset Management: Stormwater Maintenance Section is also in the process to obtain Environmental Authorization as well as a General Authorization from DW&S with an application under the Critical River Maintenance Framework (Approved EMPr) for the proposed maintenance work in the Walkerspruit.

Some of the problems experienced with the condition of the channel include:

- Cracked concrete panels
- Vegetation growing in cracks
- Some concrete panels washed away
- Roots penetrating concrete slabs
- Some handrails of the bridge are missing
- Structural cracks in bridges
- Column at bridge entangled by rubbish around bottom ancho
- Illegal dumping

Problems experienced with the river bed include:

- Cracked concrete panels
- Vegetation growing in cracks
- Extreme and dangerous erosion between Walton Jameson road and the un protected riverbank
- Extreme and dangerous vertical erosion between the stands on the western river bank

The images in Figure 71 show the condition of the Walkerspruit between Johnston and Jorissen Streets (that is the area marked in red in Figure 70).

Figure 70: Section of Walkerspruit between Johnston and Jorissen Streets

Figure 71: Pictures of the Walkerspruit canal between Jorissen and Johnston streets

The images in Figure 73 show the condition of the Walkerspruit between University Road and Jorissen Street (that is the area marked in red in Figure 72).

Figure 72: Section of Walkerspruit between Jorissen and University Road

Figure 73: Pictures showing the condition of the Walkerspruit canal between Jorissen street and University road

6.1.6 Streetlights

Streetlights are indicated in Figure 46. Day-to-day issues identified by residents regularly are as follows:

- Villa street numbers B 6 – B12 and Walton Jameson
- Bond Street B10
- Maple Street B11 and B12 have no fittings
- Plane trees in Villa Street and Farenden Street need yearly pruning to prevent interference with the electricity supply to lights

The City of Tshwane's electricity department blames outages on bad replacement components and possible sabotage.

Figure 74: Street lights

6.1.7 Waste Management Plan for the study area

Waste on the streets and waste dumped in the Walker spruit is a constant problem and is a huge contributing factor in the dilapidation of the area.

Street tree leaves in Villa street and Farenden street especially in autumn and winter causes stormwater inlets to block. These inlets are never cleaned by the CoT despite numerous reports of blocked inlets and inlets overflowing. Residents have to rake up leaves and obtain yellow CoT bags for disposal by CoT waste management.

REGION 3

Tel: 012 358 9467/0540/0515

Email: patriciade@tshwane.gov.za or sarahb@tshwane.gov.za

Physical address: 1 Von Wielligh Street, Pretoria West

7. SAFETY AND SECURITY

To assist the (Clydesdale Village Association) CVA's residents in discussions regarding crime prevention strategies, an attempt was made to understand crime trends in and around the precinct. Clydesdale forms part of sector 3 in the Sunnyside precinct of the South African Police Service (SAPS).

The Sunnyside Police station services a total of 6 sectors, with varying demographics and private security initiatives (Figure 75).

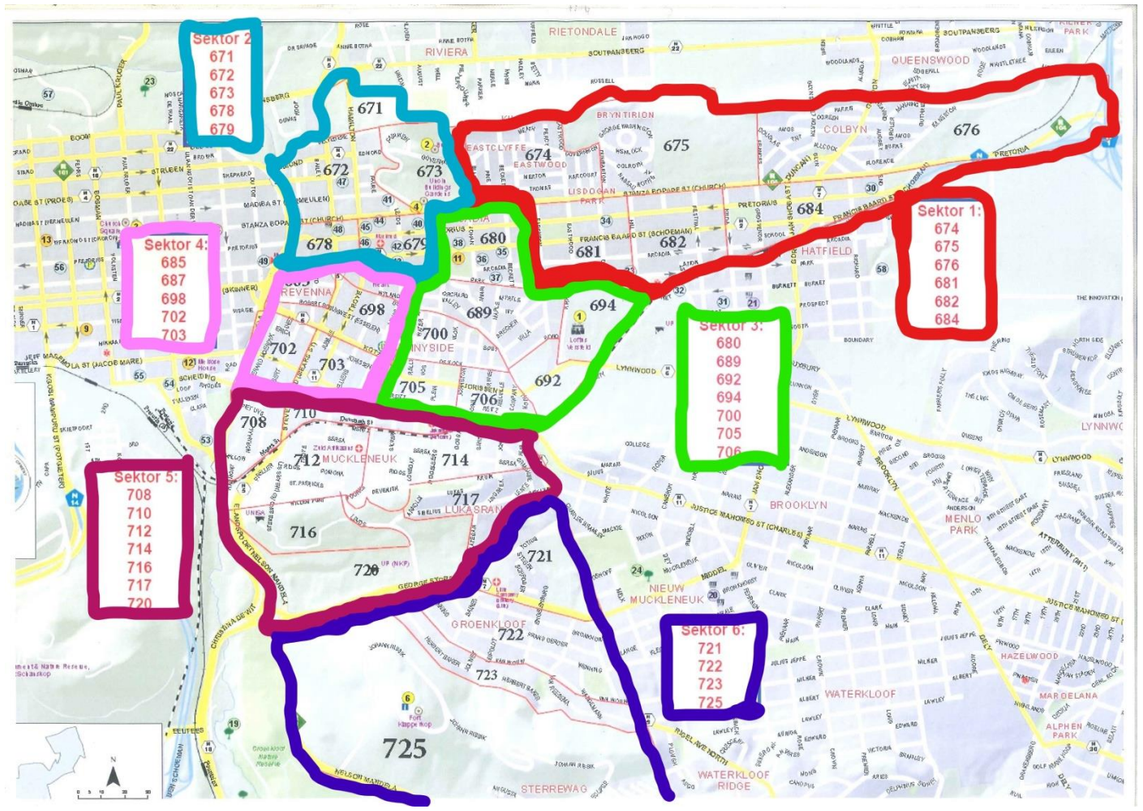


Figure 75: The 6 sectors of the Sunnyside Police station

Private security initiatives vary from individual households or blocks-of-flats using different private security companies (all sectors - mainly sectors 2, 4, & 5); to coordinated camera surveillance (sector 1); a gated community (sector 6); Hatfield CID (part of sector 1); and community WhatsApp groups in a working relationship with the Police (sector 3).

7.1 SUNNYSIDE AS ONE OF THE TOP 30 WORST PRECINCTS

Sunnyside is one of the worst-performing areas nationally when it comes to crime statistics:

- Sunnyside ranked as no 10 out of 1138 Police stations nationally in the category "Community-Reported Categories of Serious Crime".
- Sunnyside ranked no 29 for Common Assault, no 6 for Common Robbery, no 28 for Robbery with Aggravation Circumstances, and no 28 for sexual assault.
- Sunnyside did not make it to the top 30 list for:
  - Murder, Sexual Offences, Attempted Murder, Assault GBH.
  - Contact-related crime, including Arson, and Malicious Damage to Property.
  - Trio crimes (Trio crimes consist of the following types of crime: Carjacking, Robbery – Residential, and Robbery – Non-Residential).
  - Sub-categories of trio crimes, including Robbery of cash in transit, Bank robbery and Truck hijacking.
- Sunnyside ranked no 5 for property-related crime, and ranked as follows for each category:
  - Theft of motor vehicle and motorcycle (no 6), and Theft out of or from motor vehicle (no 2)
  - Sunnyside did not make it to the top 30 list for Burglary at Residential premises, Burglary at Non-Residential premises, or Stock theft.
- Under "Other Serious Crimes", which includes all Serious Crimes not mentioned in the above categories, Sunnyside ranked no 18 for Other Serious Crimes and no 14 for All Theft not mentioned elsewhere.
- Sunnyside did not make it to the top 30 list of worst precincts for the category "Crime Detected as a Result of Police Action" which includes crimes usually recorded after the apprehension of suspects in connection with the following offences: (i) illegal possession of firearms and ammunition, (ii) drug-related crimes, (iii) driving under the influence of alcohol and/or drugs, and (iv) sexual offences detected as a result of police action.

In summary, according to national statistics, Sunnyside's problems are contact crime (Common Assault, Common Robbery, Robbery with Aggravation Circumstances, and sexual assault); and property-related crime (Theft of motor vehicle and motor cycle, Theft out of or from a motor vehicle, and All Theft not elsewhere mentioned), probably targeting more young people.

In layman's terms – the precinct's biggest crime problem is the *snatch and grab/person-to-person*, with/without a weapon [with firearms (and knives) most often used as weapons].

7.2 CRIME HOT SPOTS OF SUNNYSIDE IN RELATION TO NEIGHBOURING PRECINCTS

The national crime statistics (2018/2019) of the Sunnyside precinct were compared with the 5 precincts around us, i.e. Pretoria Moot, Pretoria Central, Garsfontein, Villieria and Lyttleton. Of these 6 precincts,

it was clear that Pretoria Moot and Villeria had the lowest crime incidence by far. Contact crimes, sexual offences, and vehicle-related crimes were most prevalent in Pretoria Central and Sunnyside.

However, it seems that the incidence of burglaries and robberies at residential properties was higher in Brooklyn, Garsfontein and Lyttleton than in the high-density areas of Pretoria Central and Sunnyside. What is most significant is the high incidence of drug-related crime in Sunnyside and Pretoria Central, detected as a result of Police action (refer to Table 18).

Table 18: Comparison of crime statistics of 6 neighbouring precincts

South African Police Precinct	CONTACT CRIMES AND SEXUAL OFFENCES								PROPERTY-RELATED CRIMES			SUB CATEGORIES OF AGGRAVATED ROBBERY		OTHER SERIOUS CRIMES	CRIME DETECTED AS A RESULT OF POLICE ACTION	
	Murder	Attempted murder	Assault with the intent to inflict grievous bodily harm	Common Assault	Common robbery	Common Robbery with Aggavating circumstances	Rape	Sexual offences	Burglary at residential premises	Theft of motor vehicle and motorcycle	Theft out of or from motor vehicle	Robbery at residential premises	Carjacking	All theft not mentioned elsewhere	Drug-related crime	Driving under the influence of alcohol, or drugs
Pretoria Moot	4	4	13	76	20	70	6	16	112	193	111	18	16	273	193	205
Villieria	3	5	22	137	50	164	23	3	345	310	246	18	20	1046	199	78
Brooklyn	1	7	32	262	310	359	25	43	583	654	915	77	21	1809	216	229
Garsfontein	6	3	43	182	37	166	15	24	612	315	529	68	9	826	125	101
Lyttleton	6	9	55	316	167	360	23	53	716	497	1088	50	33	1202	211	191
Pretoria Central	32	32	434	656	921	712	77	94	83	442	1395	5	53	2725	1655	166
Sunnyside	11	17	79	687	656	717	63	97	338	511	1914	38	93	1679	1001	385

7.3 CRIMES INFORMALLY REPORTED BY RESIDENTS IN CLYDESDALE

Almost 90% of properties in Clydesdale have been represented on the Clydesdale street WhatsApp groups. These residents, representing approximately 1300 residents in 220 houses, post their experiences of crime-related incidents on their street's WhatsApp groups, from where it is captured into a central data base. A total of 53 incidents were reported in 2018, and 59 in 2019. Although this is informal data, reflecting only the experiences of residents (and not visitors/passers-by), analysing it in terms of the place of the crime (inside residential property/on street), time of year, and time of day guides in terms of crime prevention habits and strategies.

7.3.1 Time of the Year

In Figure 76, it seems that the proportion of incidents inside residential properties and in the streets is inversely proportional to each other. Overall, it is higher during the first half of these two years, and lower during December. From the original data, it was interesting to note that there were no incidents at all during October and December 2018.

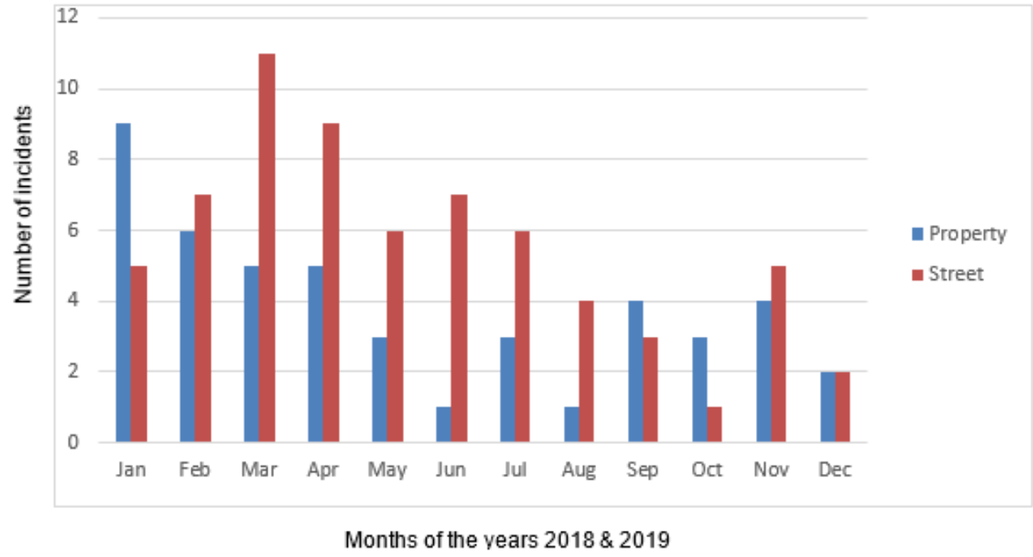


Figure 76: Monthly incidence of crime-related incidents

7.3.2 Place of incident

The reason why the average amount *of residential property-related incidents* for the two years of 2018 and 2019 are higher than the number of *incidents in the streets*, might be that the members of these community WhatsApp groups are all residents in the residential neighbourhood of Clydesdale, and a significant amount of them commute by using own cars. Compared to residents in the flat buildings in other sectors in the Sunnyside precinct where parking is limited, the Clydesdale resident's exposure on the streets might be less – therefore give this impression in Figure 77. (Proportion crime-related incidents inside residential property/on street - reported by Clydesdale residents on WhatsApp groups during the years 2018 and 2019.)

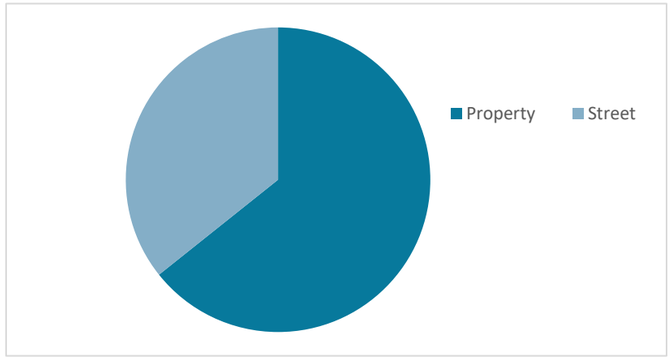


Figure 77: Proportion crime related incidents

7.3.3 Time of the Day

According to Figure 78, the safest time during a 24h cycle in Clydesdale, is early morning. This might be contributed to the number of joggers, and doggy patrollers who flood the streets before work. Compared to the situation in 2015, this is a major improvement. On the contrary, most incidents happened during working day-time hours.

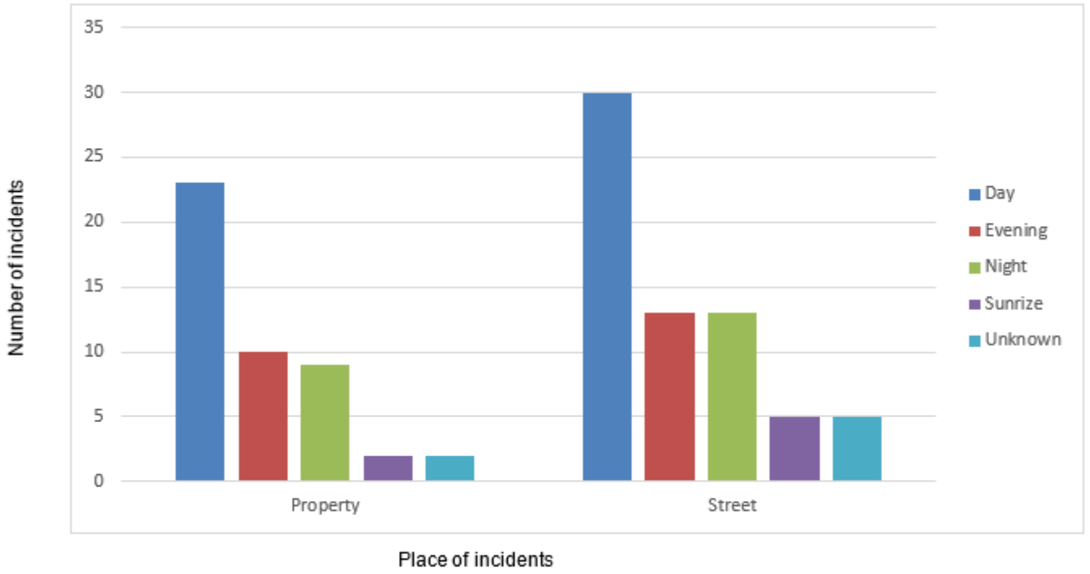


Figure 78: Circadian incidence of crime-related incidents

7.3.4 Safety and security risk factors in the precinct

Crime is one of the largest concerns and threats in the neighbourhood, and this was confirmed as part of the community survey.

One of the concerns is pedestrian safety and how the area can be made safer for pedestrians. The area has been targeted by armed robbers in the past few years. Pedestrians are often robbed on the streets. The perception of an unsafe environment (faulty street lights, resulting in dark streets, street muggings reported on Whatsapp groups, reported armed robberies of properties) discourages people to use the "within walking distance" opportunity of the precinct in full. As far as *a feeling of safety* is concerned, the design of pedestrian walkways around Loftus Versfeld Stadium and Loftus Park improved recently, public transport is used frequently, but maintenance of streetlights is an ongoing problem.

One of the possibilities is to investigate access control in and around the precinct.

Another challenge is that on-street parking is not possible due to high theft incidents.

In terms of the community survey, almost 60% of respondents indicated that they were the victims of crime in the precinct during the last three years (Figure 79). Approximately two-thirds of the respondents felt that safety in the neighbourhood was average to bad (Figure 80). Almost 90% of respondents indicated that they felt unsafe walking around the neighbourhood at night (Figure 81), while approximately 60% indicated that they felt safe walking around during the day (Figure 82).

Although the majority of respondents were not students, of those that were, most indicated that they felt unsafe walking to schools and universities (Figure 83).

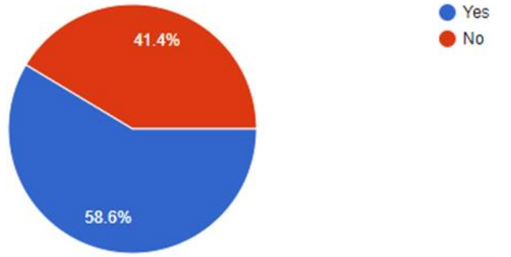


Figure 79: Residents that were victims of crime in Clydesdale over the last three years

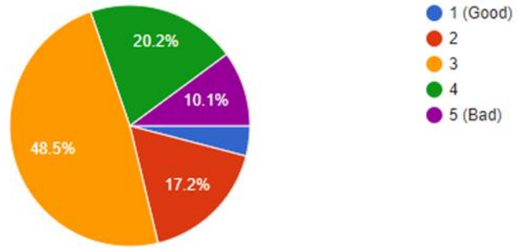


Figure 80: Residents' perception of the level of neighbourhood safety

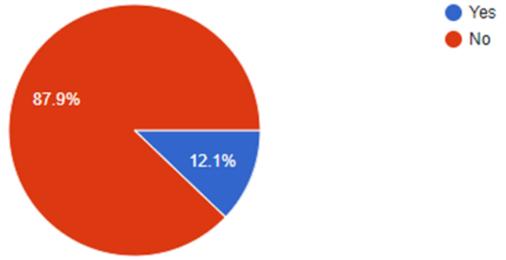


Figure 81: Residents' feelings of safety walking in the neighbourhood at night

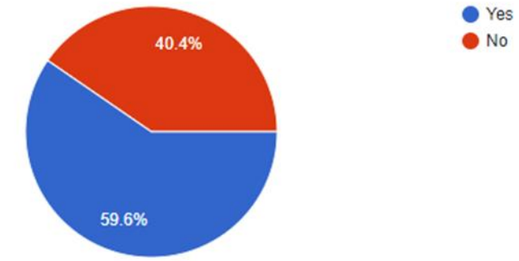


Figure 82: Residents' feelings of safety walking in the neighbourhood during the day

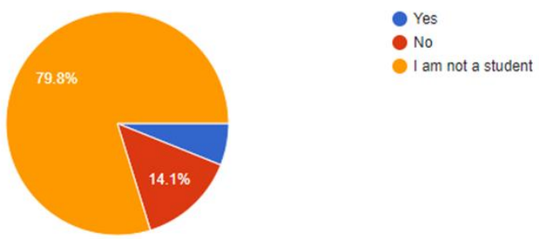


Figure 83: Student's perception of safety walking to and from schools/university

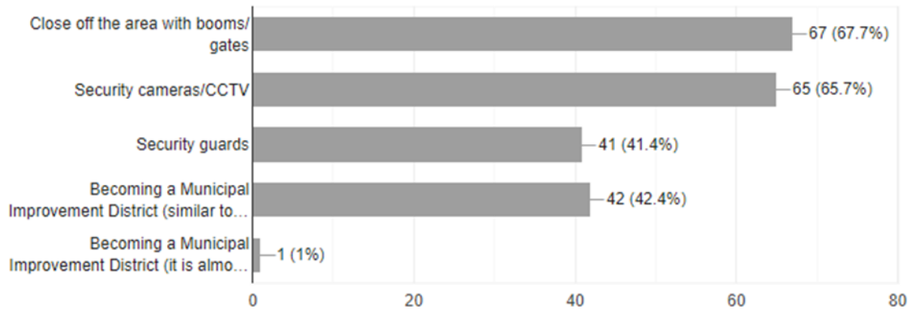


Figure 84: Residents' choice of safety and security interventions

8. NEW INITIATIVES IN THE PRECINCT

Current initiatives in and around Clydesdale which might have an impact on future development are as follows:

- Initiative to extend the Western boundary of the Hatfield CID to include Loftus Park, Loftus Stadium, Meisies Hoër and Pretoria Girls High
- The implementation of the IMSD bylaw: The CVA is an active participant in the Public Participation Process.
- The Walkerspruit Rejuvenation Project. (See Annexures)
- Clydesdale Village Association's application to PHRA – G to declare the area as a Protected Area. PHRA – G requested additional site-specific information – ongoing process
- The initiative by ABLAND and the Blue Bull/s company/union to open pedestrian traffic through the Loftus train station.
- Parking at Gautrain bridge – Afrikaans Hoër Seunskool.
- The Affies Circle Project: Re-instatement of the infrastructure damaged by BRT contractor.
- Phase 3 of the Loftus Park Development.
- Spontaneous Land Use initiatives. Currently, communes, businesses and guest houses operate on properties typically zoned as Residential 1.
- Resolution on the future of council houses (the City of Tshwane requested information regarding the location of properties)
- Investigation for the closure of Farenden Street.

9. DEVELOPMENT POTENTIAL AND CONSTRAINTS

The following sections provide a summary of the status quo analysis in the form of Strengths, Weaknesses, Opportunities and Threats.

Table 19: SWOT: natural environment

STRENGTHS	WEAKNESSES
MYRTLE PARK • Public open space that can be used by the Community WALKERSPRUIT • Natural boundary • Spruit connects the area to other nodes	MYRTLE PARK • Litter • Vagrants • Dark at night WALKERSPRUIT • Litter • Vagrants • Dark at night
OPPORTUNITIES	**THREATS**
MYRTLE PARK • With better security and lights, the park can become a place where the community gathers • Open space is an asset in a community WALKERSPRUIT • Develop cycle route • Connecting to other • open space areas	MYRTLE PARK • If ignored, this will become an even greater problem • Removal of gardens and trees to accommodate parking and the transformation from soft to hard landscaping will destroy natural habitats WALKERSPRUIT • If ignored, this will become an even greater problem

Table 20: SWOT: demographic and socio-economic profile

STRENGTHS	WEAKNESSES
• Well-integrated, multicultural community • Presence of families	• Students move in and out from year to year. Not necessarily interested in community building
OPPORTUNITIES	**THREATS**
• Opportunity to build on already well-integrated relationships	• Cultural differences can cause segregation • Unbalanced student residency together with businesses without residing owners/tenants

Table 21: SWOT: contextual and spatial analysis

STRENGTHS	WEAKNESSES
• The suburb is embraced by a green belt amidst an urban jungle • Unique environmental character, residential living quality and sense of place. • Current: large gardens, residential feel (scarce) • Short walking distances between work school and other social amenities	• The area is a soft target for developments that do not respect the urban form of Clydesdale • Any disruptions in the urban form start to unravel the urban fabric, making it even easier for the next disruption to occur.
OPPORTUNITIES	**THREATS**
• The character of the area must be protected by guidelines, as this is one of the leading motivators for people to move there • Opportunities to transform the area into a walkable zone	• Haphazard and insensitive development • Boundary treatment (high walls, fences) • High-density Development • Tall buildings • Illegal development

Table 22: SWOT: movement networks

STRENGTHS	WEAKNESSES
• Central to amenities and major transport routes • Easy access to CBD and other business centres • Quiet internal streets	• Increased movement occurs on all streets through residential areas (rat-running). • Sections of these roads (especially Kirkness) are operating close to capacity during peak periods, causing reduced mobility. • The value of properties for residential purposes decreases. • Illegal uses increase • Pedestrian through traffic from Sunnyside • Speeding • Closed routes during events - difficult access for some owners
OPPORTUNITIES	**THREATS**
• Development of alternative transport routes past the area • Bicycle routes along Walker Spruit can bring a new type of movement to the area • Focus on pedestrian and cycle movements in the area	• The major threat is that Clydesdale will lose its character, and become just another drive-through area was the automobile dictates movement and not the needs of the residents • Clydesdale to become a 'parking garage' for Loftus

Table 23: SWOT: built environment

STRENGTHS	WEAKNESSES
• Quiet neighbourhood • Strong sense of community • Investment opportunities (student accommodation, guest houses) • Proximity to schools, University of Pretoria, Brooklyn • Central to amenities and major transport routes • Easy access to CBD and other business centres.	• Unmanaged land use change imposes on the residential character. • Access and parking problems result in a harsh environment. • Lack of enforcement of policies and regulations • New residents do not necessarily have the same values as established community members • The Inner City has lost its position which has led to urban decay especially along the fringes of the core and in the high-density residential areas. • Council-owned properties are not well maintained and regarded as crime hotspots • Insensitive development of student accommodation (Wendy houses etc.) • Dark properties after business hours • Not 24-hour uses
OPPORTUNITIES	**THREATS**
• Opportunities for the residents and Council to collaborate on initiatives in the area. • Maintain fine grain • Celebrate environmental character through complimentary uses such as small art galleries, restaurants and educational facilities along with a community centre	• Land use transformation as in Arcadia with a mix of embassies, businesses, and residential homes. • Decay of some buildings (often council owned) • Tshwane Inner City decay • Saturation of business opportunities in other major arterials in Arcadia (e.g. Pretorius and Church Streets), results in an influx of business activities in Clydesdale • Increased traffic. • Lack of adequate provision of student housing. • Increased noise

Table 24: SWOT: social amenities

STRENGTHS	WEAKNESSES
• Well-connected within walking distance from most amenities	• The area is not safe enough for pedestrians to reach amenities without fear of being mugged
OPPORTUNITIES	**THREATS**
• Great opportunities for NMT applications connecting amenities	• Security threats and urban decay are imminent threats to the quality of amenities

Table 25: SWOT: current building condition and vacancy rates

STRENGTHS	WEAKNESSES
• Low vacancy rate • Most buildings are well kept	• Buildings are mostly 60 years and older • High maintenance buildings
OPPORTUNITIES	**THREATS**
• Council houses	• Uncertainty about the direction of development • Weak law enforcement on illegal building and land use

Table 26: SWOT: land ownership

STRENGTHS	WEAKNESSES
• A large percentage of land is still privately owned	• Landowners do not all live in the study area
OPPORTUNITIES	**THREATS**
	• Developers buying land to develop land in an insensitive manner

Table 27: SWOT: heritage

STRENGTHS	WEAKNESSES
• Special character in the area • Houses with Heritage Status	• Lack of enforcement of • policies and regulations
OPPORTUNITIES	**THREATS**
• A proposal for an integrated conservation strategy to preserve residential character.	• Illegal communes are a big threat to heritage houses as owners butcher the interiors to fit in as many as possible people. • Most houses were built to accommodate a regular-sized family. Commune owners often, without the correct approvals alter interiors and exteriors to fit in as many possible tenants • Lack of enforcement of • policies and regulations

Table 28: SWOT: quality of the environment

STRENGTHS	WEAKNESSES
• The study area has strong clear boundaries • The study area is well-connected to all social amenities • The study area has access to open spaces • The study area has a strong heritage character	• Closeness to areas affected by urban decay creates uncertainty for investors • Security of the area harms the quality of the urban environment
OPPORTUNITIES	**THREATS**
• With all its strengths the study area has the potential to become a flagship neighbourhood	• Urban decay • CoT-owned houses are not maintained • Lack of maintenance of public open spaces by CoT • Lack of law enforcement by CoT

Table 29: SWOT: market analysis

STRENGTHS	WEAKNESSES
• The up-to-date market research available on Loftus Park development	• There are many illegal businesses in the study area. Information on exactly what is available is limited

OPPORTUNITIES	THREATS
• A well-planned, well-balanced mix of business, and residential can lead to more vibrant and safe community living	• An unbalanced, (for example too many communes in relation to normal family-orientated residency) neighbourhood threatens a 12-month cycle business year

Table 30: SWOT: infrastructure assessment (Water)

STRENGTHS	WEAKNESSES
• The capacity of the water supply system is sufficient to service the Clydesdale precinct as it is currently zoned, and most likely up to 35 units per hectare or Res 2	• Infrastructure in this area is old and the condition of all pipes is not known
OPPORTUNITIES	**THREATS**
• The system is supplied by the Salvokop reservoir. Applicants of high-density buildings will upgrade parts of the system through bulk contributions • It can be written into the Precinct Plan that developers should contribute money to a trust fund which can, when the demand reaches the tipping point, be added together to do the total upgrade needed for the RSDF to realise. The creation of such a trust fund is something that will have to be accepted by Treasury Department, as the administration thereof will need to be advised. The spending of the Trust money via the correct channels needs to receive special attention.	• Densification as desired by the RSDF 2018 will trigger sporadic applications. It is most unlikely that all possible densification will take place at once by a single developer. • The sporadic additional demands on the system will reach a tipping point where contributions on new applications will not be enough to upgrade the total system. • To ensure sustainable development the system will hence have to be upgraded before development can take place. (development of more than 35 units per Ha) • A major influence on development is the availability of water in future, as all recourses are either utilized fully (Vaal system) or own resources in the region are not developed. (Rietvlei and Roodeplaat dams.)

Table 31: SWOT: infrastructure assessment (Sewer)

STRENGTHS	WEAKNESSES
• The capacity of the sewer system is sufficient to service the Clydesdale precinct as it is currently zoned, and most likely up to 35 units per hectare or Res 2	• The condition of old clay pipes is not good. • Large plane trees in Clydesdale are planted very close to sewer pipes and cracks in the pipes are easily penetrated by roots, the replacement of some of the systems will need to receive attention
OPPORTUNITIES	**THREATS**
• Applicants of high-density buildings will upgrade parts of the system through bulk contributions. • There are service providers who have done major investigations into pipes by using sophisticated video equipment. This footage can be obtained to help with upgrades. • It can be written into the Precinct Plan that developers should contribute money to a trust fund which can, when the demand reaches the tipping point, be added together to do the total upgrade needed for the RSDF to realise. The creation of such a trust fund is something that will have to be accepted by Treasury Department, as the administration thereof will need to be advised. The spending of the Trust money via the correct channels needs to receive special attention.	• The threats are the same as for the water infrastructure: Densification as desired by the RSDF 2018 will trigger sporadic applications. It is most unlikely that all possible densification will take place at once by a single developer. • The sporadic additional demands on the system will reach a tipping point where contributions on new applications will not be enough to upgrade the total system. • To ensure sustainable development the system will hence have to be upgraded before development can take place. (development of more than 35 units per Ha)

Table 32: SWOT: infrastructure assessment (storm water)

STRENGTHS	WEAKNESSES
• There is currently still a considerable amount of residential properties with gardens where stormwater can drain naturally	• Clydesdale is at the bottom of the storm water catchment area. The system cannot in its current state handle any more run off

OPPORTUNITIES	THREATS
• There are still enough penetrable open areas available in the area which can be transformed into natural stormwater infiltration systems	• Previously residential gardens are being replaced more and more with impenetrable surfaces. • Businesses tend to pave the total garden area • Owners of communes try to save money on maintenance by paving the whole stand • CoT does not enforce the policy as indicated by LDP to ensure maximum infiltration of storm water in the site • Development in the total catchment area must be taken into account: Increased volumes of stormwater threaten the local capacity

Table 33: SWOT: infrastructure assessment (electricity)

STRENGTHS	WEAKNESSES
• This area is well-serviced and connected to the Tshwane infrastructure	• Lines to street lights are affected by wind from time to time
OPPORTUNITIES	**THREATS**
	• Although performing adequately, the infrastructure is old and might need upgrading in the years to come

Table 34: SWOT: infrastructure assessment (Walkerspruit canal)

STRENGTHS	WEAKNESSES
• Opportunity for NMT applications in the canal reserve • Provides green belt • Natural boundary • Spruit connects the area to other nodes	• The floor of the canal is prone to dilapidation • Litter • Vagrants • Dark at night
OPPORTUNITIES	**THREATS**
• NMT application • Develop cycle route • Connecting to other open space areas	• Poor maintenance • If ignored, this will become an even greater problem

Table 35: SWOT: safety and security

STRENGTHS	WEAKNESSES
• Sense of community	• The costs of permanent street closure and application process • Proximity to Sunnyside • Council owned properties • Through traffic • Driving schools • Walkerspruit • Boundary treatment • The area is not safe for pedestrians at night
OPPORTUNITIES	**THREATS**
• Closing the suburb by restricting public access on event days at Loftus • Residents need to reclaim the streets	• Low land values • Crime is a threat. If not addressed people cannot be motivated to walk instead of drive

CHAPTER 4:DEVELOPMENT FRAMEWORK

1. INTRODUCTION

1.1 VISION

- A safe neighbourhood where people can walk on the streets day and night without the fear of getting mugged.
- A neighbourhood where people can live without fear of armed robbers and hijackings.
- A neighbourhood where people can enjoy walking along a clean walkerspruit along well-kept walkways, without the fear of encountering dumped rubbish, rats and human secretions
- A neighbourhood where people can expect a return on investment
- A neighbourhood showing respect for heritage

1.1 OBJECTIVES

- Proposal for access control and other safety and security measures to lower the occurrence of criminal activities
- Proposals for densification which will not be detrimental to the historic residential character of the neighbourhood
- Proposals of building controls that will benefit both new development and existing residential properties
- Proposals for the beautification and the safe making of open spaces in the study area
- Proposals for a healthy balance of land uses
- Proposal for the management of the Council Houses in Clydesdale

2. BEST PRACTISE STANDARDS

2.1 CASE STUDIES

2.1.1 Utilization of heritage buildings in mixed-use zoning

Locally, in Arcadia, good examples can be found of well-preserved heritage buildings, applied for business use. Properties are generally well-kept and this type of application should be encouraged.

Figure 85 Heritage building utilised as business I Arcadia

Figure 86 Heritage building utilized as a business in Stellenbosch

2.1.2 Midblock densification

Consolidated stands provide opportunities for midblock densification. See Figure 87

Figure 87 Midblock densification with central social area

2.1.3 Zoning ratios

The ratio of business/student/ lower income orientated housing (with fewer eyes on the properties over weekends and holidays) versus family-orientated residential properties (With occupation 12 months of the year) should be kept in balance to avoid what typically happened in the Hatfield area: an 8-month economy was created with students migrating over holiday periods, leaving businesses without clients.

Communes tend to be noisy and less well-kept than residential properties where families live. Criminals are attracted to these communes as there tend to be a variety of electronics to steal. With no primary responsible person (communes are often illegal, most of the communes in Clydesdale are illegal) these properties are easy prey.

All these factors tend to put buyers off, or only to buy properties, converting them into communes, just causing the problems to snowball.

This lesson has been learned in the study area, therefore it is proposed in this Precinct Plan that a healthy ratio between student/young adult and family accommodation should be determined.

Figure 88 Residential property versus typical commune

2.1.4 Noise-free environments through noise control

According to the Hatfield CID CEO, Lucas Luckhof, noise is a big problem in the Hatfield area. Taxis hoot to attract potential customers, causing noise issues. Taxi loading zones should be provided on the edges of densified neighbourhoods.

Currently, in Clydesdale and Arcadia, there are many complaints reported to the CoT through the local councillor, Leeanne de Jager, regarding noise emanating from guesthouses (which are mostly illegal, according to CoT zoning information) student housing, and properties illegally occupied by large groups of adults who are not related.

The rooftop restaurant on top of the hotel in Loftus Park has to control sound waves by making sure speakers are turned away from the neighbourhood of Clydesdale.

Lessons learned from these examples are that buildings should be designed to accommodate social areas central to the buildings, avoiding the projection of sound to neighbouring properties.

Socialisation areas should be central to new developments to prevent the outward projection of sound. Sound from the Eastwood Village student housing complex socializing area gets projected to Clydesdale

Figure 89 Eastwood Village Social area projecting noise

The sense of scale and well-proportioned mix of building heights found in the historic neighbourhoods of Stellenbosch has been used as good examples of densification.

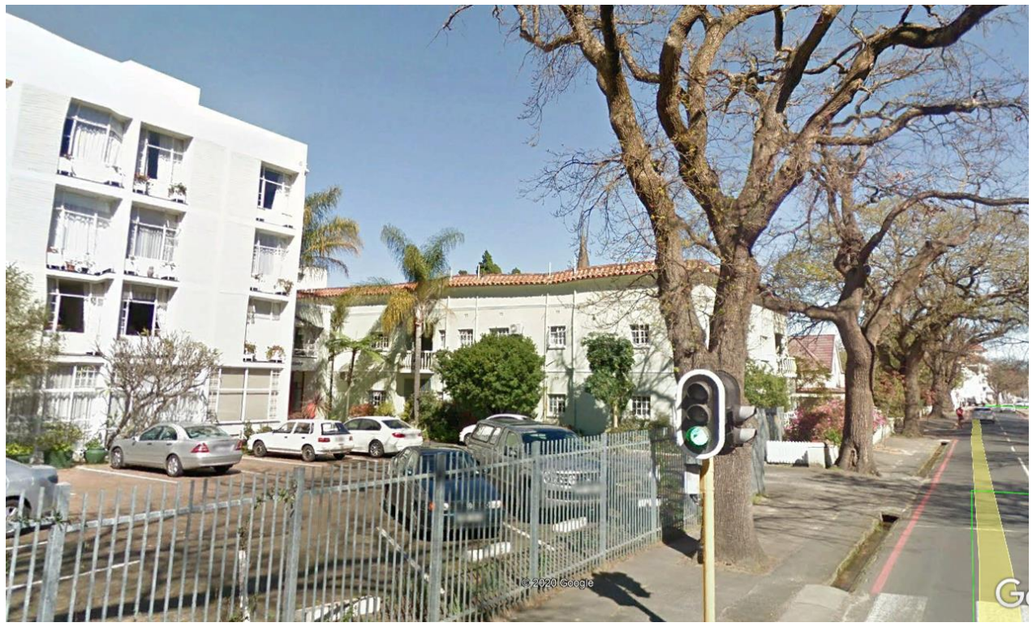


Figure 90 Max capacity, min-height

2.1.5 Densification without visual dominance

Visual dominance implicates the loss of privacy of the dominated property. The submissive property tends to lose its attraction as residential property.

Melbourne, Australia, had been ranked by the EIU (Economist Intelligence Unit) (as the world's most liveable city for many years. (Wikipedia) The City of Melbourne Development Guidelines advocates strict rules regarding visual dominance.

New buildings are in keeping with 'key attributes of the heritage precinct as identified in the precinct Statement of Significance and:

- *Do not obscure views from the street(s) and public parks of the front or principal part of adjoining significant or contributory places or buildings.*
- *Do not visually dominate or visually disrupt the appreciation of the heritage place.*
- *Maintain a facade height which is consistent with that of adjoining significant or contributory buildings, whichever is the lesser.*
- *Set back higher building components so as not to dominate or reduce the prominence of an adjoining significant or contributory place or building.*

Source: https://www.melbourne.vic.gov.au/pages/contact-us.aspx

Figure 91 Example of visual dominance in Beatrix street, Pretoria

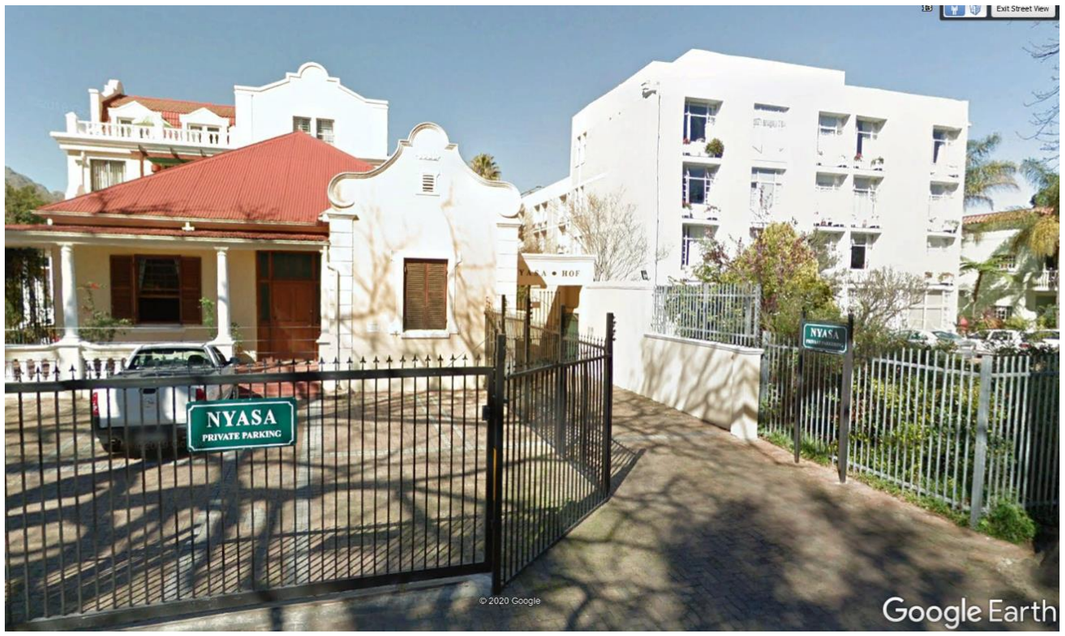


Figure 92 Stepped heights, enough distance between buildings

Figure 93 Densification without visual dominance with streetscapes maintained

Figure 94 New building lining up with historical building on the west

2.1.6 Façade interaction/Continuity of street frontage

The articulation of facades is very important in buildings, as this ensures a lively interchange between the built environment and public space. The interface of the ground floor level and the surrounding movement network and/or open space should be well-designed and must receive priority. Incorporate principles of Crime Prevention Through Environmental Design

Facades of buildings must be articulated in such a way as to correspond and interact with the surrounding spaces.

To achieve this defined public space, continuous building lines along the block edges are required. These block edges should have 'active frontages', with frequent doors and windows animating the public realm. An active frontage assists commercial viability and street vitality

Figure 95 Active street frontage for crime prevention

2.1.7 Hedges/Fences/Boundary walls/Sidewalks

Muggings in Clydesdale often happen in front of derelict properties with no apparent "eyes on the street. The lack of eyes on the street works in favour of criminal activity.

Hedges, fences, and sidewalks which are neat indicate some kind of ownership, implicating "eyes on the street". Criminals think twice if they know they are being watched.

'Showing people in the neighbourhood and the city that there's somebody here paying attention and they care about the place, that is sending a message to all sorts of people

MARC A. ZIMMERMAN, PHD. https://www.nbcnews.com/better/lifestyle/i-wanted-make-my-community-safer-more-neighborly-advice-i-ncna1037396

2.2 CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

The CSIR developed a model of Crime Prevention through Environmental Design (CPTED)

2.2.1 Surveillance and visibility

Objective: Optimise visibility and maximise opportunities for observance of public and private areas by users or residents during their normal activities (passive surveillance) and/or police or other security personnel (active surveillance).

2.2.2 Territoriality

Objective: Encourage a sense of ownership of, and responsibility for, a space by employing mechanisms that will allow residents or users to identify with the space, and experience it as legible.

Figure 96 Unkept pavement versus well-kept pavement

with a sense of ownership

2.2.3 Access and Escape Routes

Objective: Limit opportunities for offenders to utilise access and escape routes such as vacant land, and enhance the level of ease with which potential victims could find and access escape routes.

Figure 97 Green belt and culvert as an escape route

2.2.4 Image and aesthetics

Objective: Ensure that the physical appearance of an environment creates a positive image and instils feelings of safety in users.

The image of spaces and facilities can be improved by ensuring human scale in design, using attractive colours and/or materials and providing adequate lighting Effective maintenance of the physical environment and infrastructure is a critical aspect of this principle.

Figure 99 This unkempt area does not create the impression that this is a safe neighbourhood.

Figure 98 This clean area creates a positive image of the neighbourhood.

Information on Crime Prevention through Environmental Design (CPTED)with credit to CSIR

CSIR CPTED Document Website.

2.3 PUBLIC REALM

2.3.1 The Eight Principles of the Sidewalk

Proper sizing

Sidewalks are made of up three zones: the free zone, where people walk; the service zone, where street furniture like benches or trashcans are located; and the transition zone, which gives those on the sidewalk access to buildings lining the street.

Quality surfaces

The material used to construct sidewalks needs to be consistent, firm, stable and slip-resistant.

Efficient drainage

Waterlogged streets, paths, or sidewalks are unsuitable for walking

Universal accessibility

The public sidewalk should be accessible to all, including wheelchair users, pregnant women, the elderly and others with special mobility needs. A sidewalk that is intuitive and easy to use incorporates curb ramps, tactile surfaces to help people with impaired vision, and a consistent running slope – or the slope of the sidewalk in the direction people walk – that isn't too steep.

Secure connections

Pedestrians often transition to other modes of public transport and need to be able to safely access stations. Sidewalks must be connected and integrated within larger transport networks.

Attractive spaces

Streets are a fundamental part of the urban environment. Sidewalks can play an important role in making the urban experience more enjoyable. Interesting, vibrant sidewalks that can captivate people and make walking more attractive will ultimately facilitate more physical activity while reducing traffic congestion.

Permanent security

Day or night, weekday or weekend, sidewalks are always open for us. However, there are fewer people out on foot during certain times of the day and week, leading to potentially unsafe situations given the lack of friendly eyes on the street. Adopting strategies to positively influence safety and security can further encourage walking and help all city dwellers feel more at home in their city.

Clear signage

Just like drivers of motor vehicles, pedestrians need clear information so that they can both orient themselves in the city and understand the rules and guidelines of particular sidewalks.

SOURCE*:* ***https://www.smartcitiesdive.com/ex/sustainablecitiescollective/eight-principles-sidewalk-building-more-active-cities/1061606/***

https://thecityfix.com/blog/8-principles-better-sidewalks-hillary-smith-paula-manoela-dos-santos/

Figure 100 Example of a well-designed public walk and rest area in Stellenbosch, SA

The method implies that the building is taken down brick by brick (deconstructed) while being carefully documented. All the building material is then numbered, placed in boxes for safekeeping and stored in a secure facility until reconstruction can commence.

Figure 101 The old clubhouse before reconstruction

2.4 RESTORATION AND RECONSTRUCTION

Demolition or inappropriate alteration of historical sites should be discouraged. Where there is a possibility that these can be retained and integrated into a new development without undermining the inclusive potential of the development restoration and reconstruction should be encouraged.

When assessing development applications, the creation of views of heritage sites where no general access is provided must be encouraged.

Investment in the adaptive reuse of historical sites should be encouraged. Integration between the conservation and adaptive reuse of heritage buildings should be facilitated, and urban regeneration strategies promoted.

A good example of the reconstruction of a heritage building is that of the old “sin bin”(the old clubhouse that used to be on the sports grounds of Loftus Versveld).

The method of ‘deconstruction and reconstruction’ was recommended by Mr Anton Jansen, a reknown restoration as well as Cultural and Industrial Heritage Advisor.

Figure 102 The old clubhouse after reconstruction

2.5 ADDITIONS AND NEW BUILDINGS

- Adopt high-quality and respectful contextual design.
- Avoid direct reproduction of the form of historic fabric.
- Adopt an interpretive design approach to other details such as verandahs, fences, and shopfronts.
- Maintain the streetscape
- Repeat materials like red clay bricks, corrugated iron sheets, and wooden louvres in the new design. (Or any other frequently used materials in the neighbourhood)

Figure 103 Good example of a repeat of historical materials in the new design. Ora's House Ivy street, Clydesdale

Figure 104 Example of a repeat of materials in the addition to the historical house. Melbourne, Australie

3. PHRA-G JUDGEMENT ON HEIGHT IN CLYDESDALE

New developments should not go higher than 3 storeys above – ground including parking

Refer to PHRA – G judgement on erf 1026 (Bond street) PHRA – G (See Annexure 1, Reference B435/16 and judgement on portion 1 of erf 846 Farenden street (See Annexure 2, Reference B435/16)

PHRA – G did approve the height of the building on the remainder of erf 846, Bond street.

In 2012 the building on the corner of Bond and Farenden reportedly burned down. The Clydesdale Village Association worked closely together with the developer and the Provincial Heritage Authority – Gauteng to ensure that the new building fits in with the environment. The height of the building was determined by the height of the neighbouring building, which is called Bond Courtyard. The two buildings line up at the top. See Figure 105

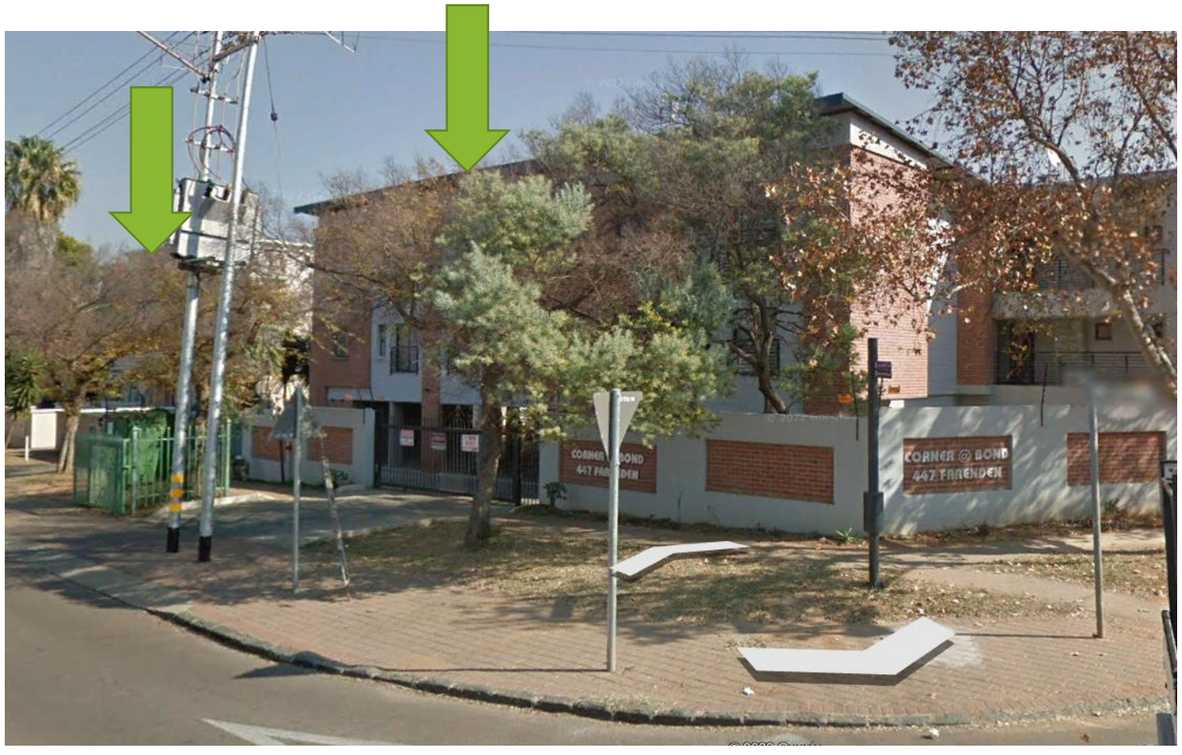
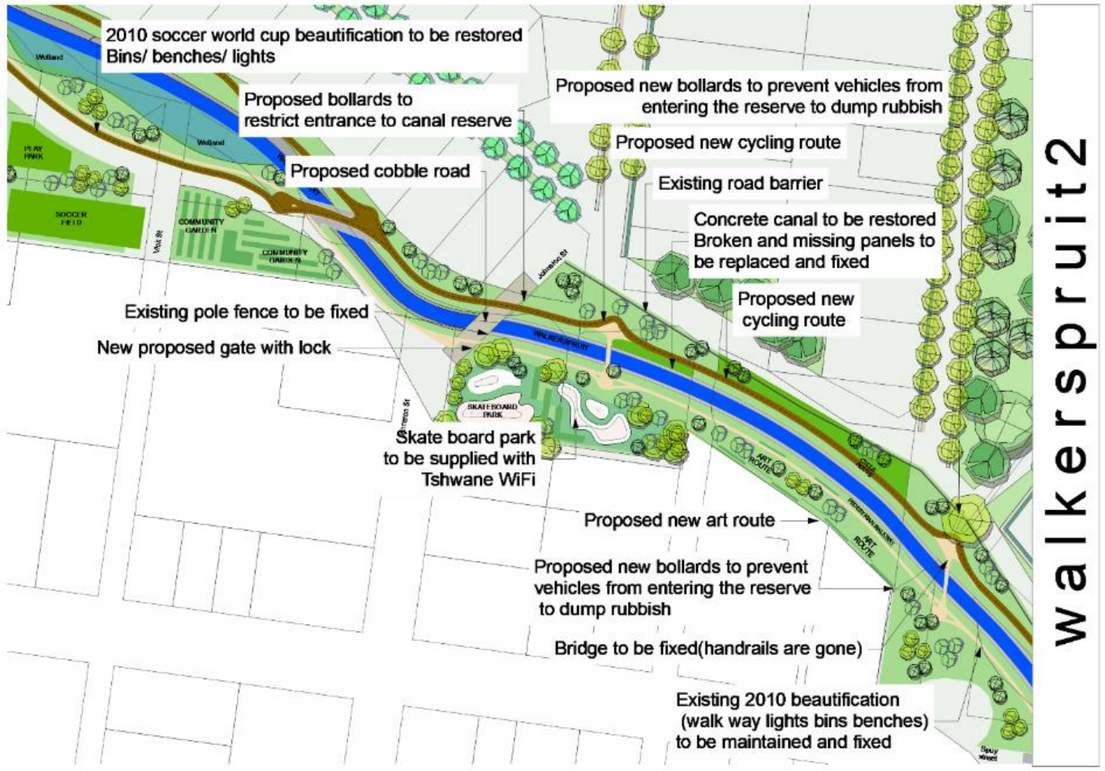
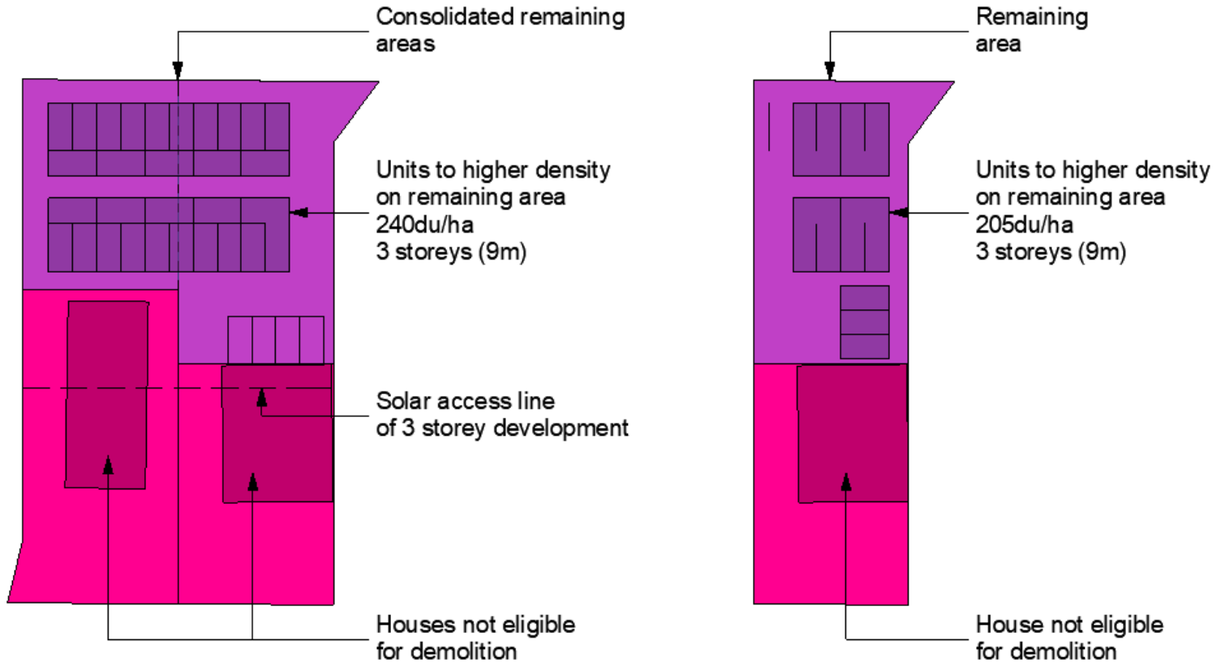


Figure 105 Corner@Bond and Bond court Yard lines up in height

4. PERTINENT ISSUES AND PROPOSED SUSTAINABLE SOLUTIONS

Pertinent Issues	Proposed Sustainable Solution
4.1 NATURAL ENVIRONMENT	
"Ownership" of the areas next to the canal: It could not be established who needs to maintain the walkways, lights, bins and benches and general maintenance after the 2010 beautification. Lack of management activity here (no eyes on the street) leads to: • Vagrants settling in the reserve • illegal dumping	• Responsibility of maintenance to be clarified between Roads and Storm Water, Parks and Nature Conservation • Walkways to be cleared • Lights to be fixed • Bins and benches need to be fixed or replaced • Bollards to be installed to prevent access to the canal • The proposed access control (See safety and security) will • The following is an example of proposed plans for the safe making of Walkerspruit (for further detail, see xxx): 

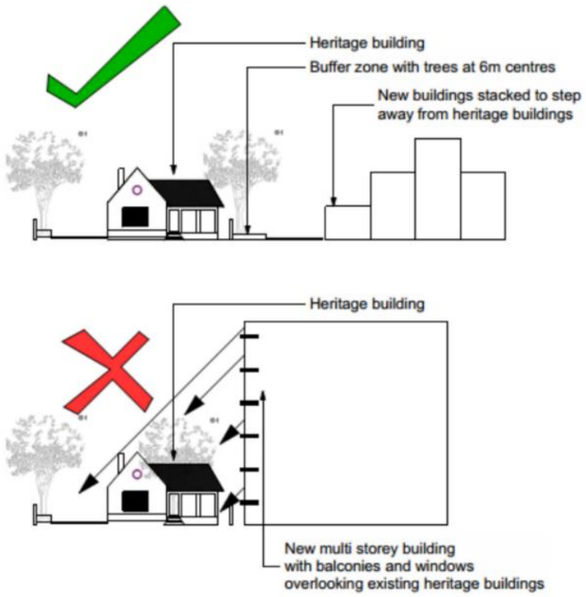
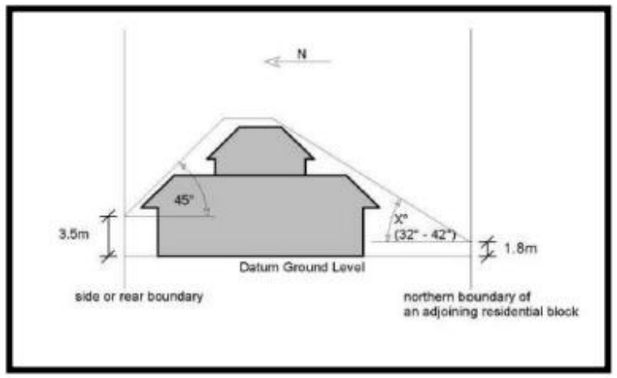
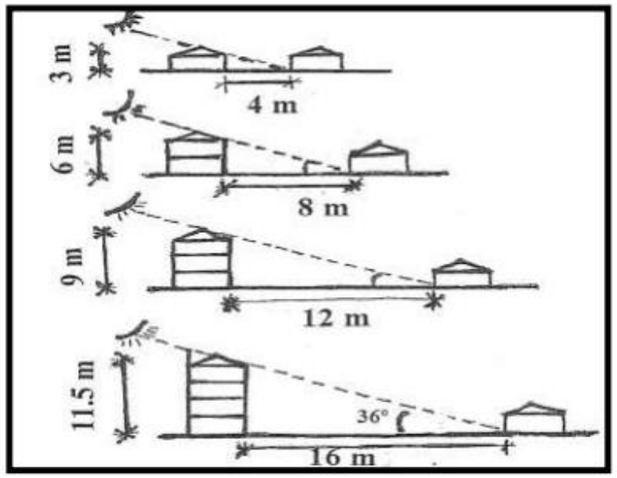
Pertinent Issues	Proposed Sustainable Solution
4.2 DEMOGRAPHIC AND SOCIAL AND ECONOMIC PROFILE	
Students move in and out from year to year. Not necessarily interested in community building. Further, a demographic which is heavily reliant on a student population tends to create a 9-month economy (such as experienced in Hatfield)	Communes are to be limited to 10% of the houses on a street Family-orientated residential living is to be encouraged by the proposed safety and security plan and by the thorough application of building controls.
4.3 CONTEXTUAL AND SPATIAL ISSUES	
4.3.1 Contextual and Spatial - Urban Regeneration	
• The area is a soft target for developments that do not respect the urban form of Clydesdale. • Any disruptions in the urban form start to unravel the urban fabric, making it even easier for the next disruption to occur.	• A well-considered, publically participated Precinct Plan as a tool for positive development. • Thorough application and enforcement of the Precinct Plan.
4.3.2 Contextual and Spatial - Heritage Impact On Densification	
Individual stands are often very narrow and where buildings high in heritage value are situated on these stands (property unlikely to obtain a demolition permit), it is unlikely to achieve the height and densification as in the RSDF on such property. The picture below shows a heritage significance map for Clydesdale as identified by Mr Mauritz Naude, a heritage consultant. The vision for Clydesdale is to apply densification but to maintain the historic residential integrity and overall character as per global heritage protection precedents.	Raise density on the usable remaining area of properties occupied by a house for which a demolition permit can not be obtained. Therefore, raised to 240du/ha in the 200du/ha zone; and raised to 180 du/ha in the 120du/ha zone.

Pertinent Issues	Proposed Sustainable Solution
 heritage mapping Four storeys, as per RSDF is the height of a six-story building (Parking plus 4 plus a roof garden which often gets a roof on) – This height causes visual dominance over adjacent residential buildings The picture below describes the issue with visual dominance: The purpose of a residential property changes where a multistorey building visually dominates the property. These properties often become businesses. The high heritage zone in Farenden street is not zoned for business	 Consolidation is encouraged – density figures are more easily achievable on larger land parcels while respecting building lines, solar access, overlooking and open space requirements. Midblock densification is proposed to aid in densification. See the picture below which illustrates: • Properties identified as of high heritage value within the two higher-density zones • Areas ideal for midblock development

Pertinent Issues	Proposed Sustainable Solution
	

4.3.3 Contextual and Spatial – Height

Four storeys, as per RSDF often becomes effectively the height of a six-story building: • Parking plus 4 residential storeys plus lately often a roof garden – This height causes visual dominance over adjacent residential buildings. • A common issue in urban design is that the use of a residential property flanked by visually dominating adjacent buildings tends to change. These properties often become businesses, whereas most of the zones in the Clydesdale Precinct where high heritage value houses have been identified are not zoned for business. The picture below describes the issue with visual dominance:	The heights mapped as per the RSDF are proposed to be clarified for Clydesdale: 3 storeys = ground floor (whether parking or units) plus two storeys is 9 m 4 storeys = ground floor (whether parking or units) plus three storeys 11,5m

Pertinent Issues	Proposed Sustainable Solution
	 

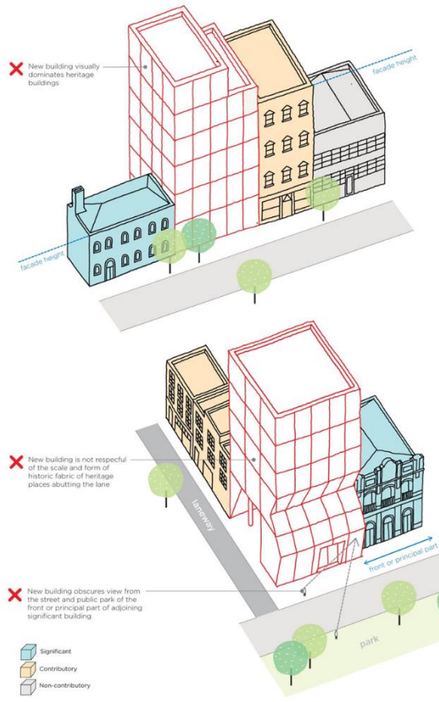
4.4 MOVEMENT NETWORKS

• Increased movement occurs on all streets through residential areas (rat-running). • Sections of these roads (especially Kirkness) are operating close to capacity during peak periods, causing reduced mobility. • The value of properties for residential purposes decreases. • Illegal uses increase • Pedestrian through traffic from Sunnyside • Speeding • Closed routes during events - difficult access for some owners	Refer “safety and security” proposal below

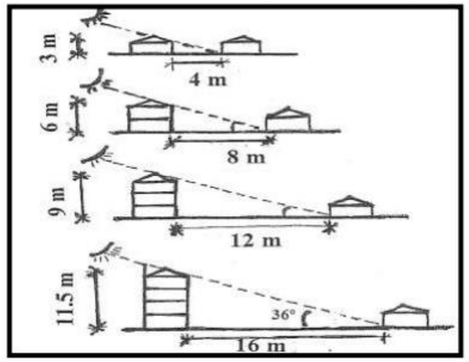
Pertinent Issues	Proposed Sustainable Solution

4.5 BUILT ENVIRONMENT – BUILDING CONTROLS

- Access and parking problems result in a harsh environment.
- New residents do not necessarily have the same values as established community members
- The Inner City has lost its position which has led to urban decay especially along the fringes of the core and in the high-density residential areas.
- Council-owned properties are not well maintained and regarded as crime hotspots
- Insensitive development of student accommodation (Wendy houses etc.)
- Dark properties after business hours
- Not 24-hour users

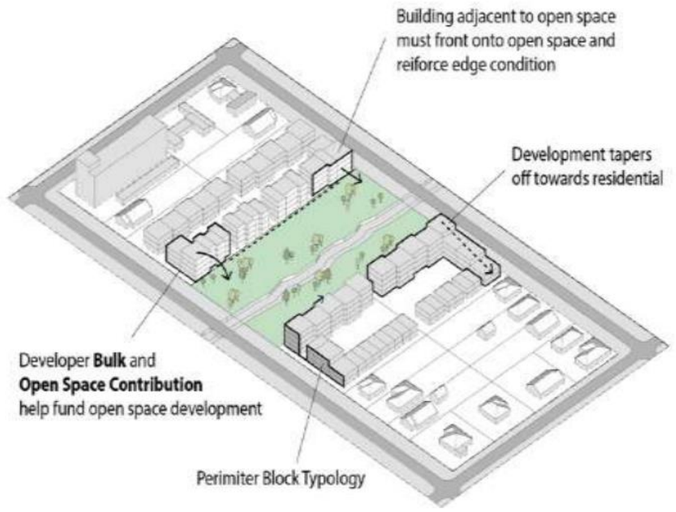


- Solar access according to the RSDF prescripts



- ADVERTISING
- Advertisements and/or sign boards shall not be erected or displayed on the erf without the approval of the Municipality first being obtained in terms of Municipal By-laws for Outdoor Advertising
- HEALTH MEASUREMENTS
- • Air-conditioning units or compressors shall not be mounted to the exterior walls of buildings without the prior consent of the Municipality.
- • Any requirements for air pollution-, noise abatement- or health measures set by the Municipality shall be complied with to the satisfaction of the Municipality without any costs to the Municipality.
- • All refuse areas and service yards shall be screened off with a solid wall and /or landscaping. Refuse areas shall be placed as far as possible from any residential property
- URBAN OPEN SPACE AND INTERFACE GUIDELINES

Pertinent Issues	Proposed Sustainable Solution

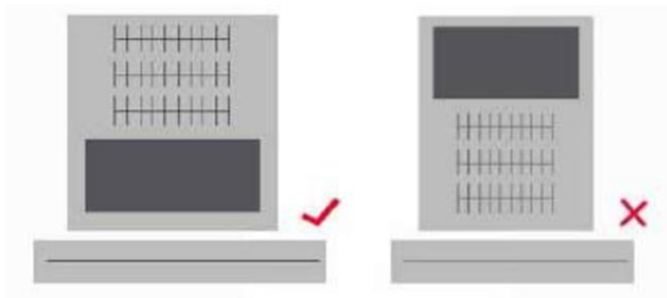


- Source: Open Space Development Guidelines, PG Smit, C Davey, Dec 2017
-
- MAXIMUM COVERAGE
- As per scheme

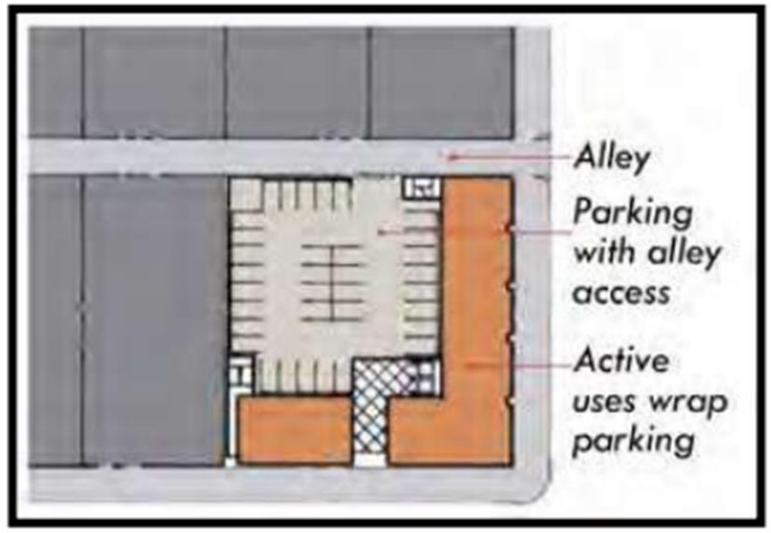
- BUILDING LINES ETC.
- Building openings should be planned in such a way as to not encroach on the privacy of the neighbouring development or residence. Care should be given to the treatment of window heights, balconies, boundary walls, back and side building lines, and viewing distances. No balconies are to be established on the side of the building abutting a residential property
- Building lines along South boundaries, where these do not adjoin streets, to be determined by Solar Access and Overlooking guidelines

- OPEN SPACE REQUIREMENTS
- The owner of any property in any use zone, excluding Residential 1 that is used for sectional title Dwelling – units or blocks of flats shall develop and maintain at least 4 square meters per Dwelling = unit with a minimum of 50 square meters on the property as a children's playground.
- Recreational open space provisioning is required for increased residential developments of 10 units and the above as follows:
- Residential 1: 24m/2 per dwelling unit
- Residential 2 (density of 1 dwelling per erf): 24m/2 per dwelling unit
- Residential 2 (high density) 24m/2 + 4m/2 children’s play area per dwelling unit
- Residential 3: 18m/2 per dwelling unit + 4m/2 children’s play area per dwelling unit
- All other Zonings with residential components (e.g. Special for retirement centres, Special for Block of tenements or communes etc.) 18m/2 per dwelling unit + 4m/2 children’s play area per dwelling unit

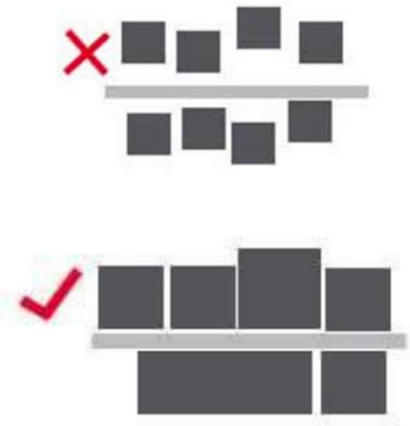
- PARKING

Pertinent Issues	Proposed Sustainable Solution
	• Adequate on-site parking should be provided for all new buildings. • All new buildings must provide enough parking for their users. Parking should be located behind the buildings (not visible from the outside) or be provided as basement parking. • Where parking must be provided on the ground floor level (i.e. parking garages), special care must be taken in designing an 'active' façade around the edges to ensure that the interface between the building and public space is active. • One tree shall be provided for every two parking spaces. • Soft landscaping shall form part of the parking areas. • Unsightly elements associated with the redevelopment of residential to businesses such as car shades are not allowed to be visible from the street. • Land uses should enliven the street and ensure surveillance of it. Parking structures should not dominate street frontages. • Parking should preferably be located away from the street at the back of buildings.  • Carports are to be located in such a manner that it is not visible from the street. • Parking must be placed at the back of a building, away from the street. • Soft landscaping must form part of open parking areas. • One tree must be provided for every two parking spaces. • Parking areas should be broken up into small parcels and spread over the site. A break of at least 5 m (soft landscaping or dwelling unit intruding and overlooking the space) should be established between two parking pockets. • Provide safe and convenient access between car parking areas and pedestrian access to buildings.

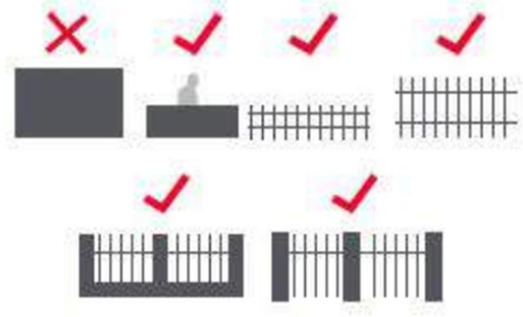
Pertinent Issues	Proposed Sustainable Solution



- FACADES
- lively internal uses visible from the outside, or spilling onto the street;
- views from the inside out ensure ‘eyes on streets’, and contribute to safety through passive surveillance.
- Facades should be broken into smaller elements such as windows, doors and balconies to stimulate visual variety on the street interface
- Continuous frontages should be used as far as possible, by adhering to a common building line. Projections and setbacks from the building line can be used to add emphasis, but the function of resulting spaces must be clearly defined



- LANDSCAPING
- Landscaping guidelines to be finalised, largely to be similar to the Arcadia Street Plan

Pertinent Issues	Proposed Sustainable Solution
	• BOUNDARY WALLS, FENCES AND HEDGES • Passive surveillance is also enhanced through permeability (eyes on the street). • To not conceal views of the building or heritage places and to be more than 50% transparent  • PUBLIC REALM : • Streetscape guidelines • No exposed soil • Residents are encouraged to plant hardy indigenous plants between the sidewalk and fence • road reserve between the erf boundaries and the street to be landscaped per the landscape development plan. • Inside the erf boundary, the interface with the street should be softened by a landscaping strip of at least 2m wide. • Every development should include hard and soft landscaping to be included on a landscape development plan. • The area within the building line should be used mainly for landscaping. • Lighting and uninterrupted lines of sight are important to ensure increased visibility. The following design measures increase the safety of an environment: • Visually permeable fences or boundary treatments increases visibility and passive surveillance of the street. • The design of and location of trees and shrubs, boundary walls, utility structures and infrastructure must avoid creating areas or pockets where undesirable elements can gather or practice anti-social behaviour unnoticed. • Maintain the urban and natural open space to illustrate that the area is cared for and regularly monitored.
4.6 SOCIAL AMENITIES	
• The area is not safe enough for pedestrians to reach amenities without fear of being mugged	Refer “safety and security” proposal below
4.7 CURRENT BUILDING CONDITION AND VACANCY RATES	
• Buildings are mostly 60 years and older • High maintenance buildings • The condition of CoT-owned houses is bad – no maintenance on these buildings	Building conditions will improve when safety and security measures are in place. (reversal of urban decay) Refer “safety and security” proposal below

Pertinent Issues	Proposed Sustainable Solution

4.8 LANDOWNERSHIP

- Landowners do not all live in the study area: Owners move out due to safety and security issues. Houses often become communes, mostly illegal
- CoT-owned houses are not maintained, and gardens are nonexistent

Council Housing to be sold	Erf no (CoT)		Stand no according to the postal address
Council Housing Dwellings	791/1	Ayton Street	12
Council Housing Dwellings	791/R	Ayton Street	14
Council Housing Dwellings	1024/R	Bond Street	75
Council Housing Dwellings	792/1	Brecher Street	11
Council Housing Dwellings	1070	Ivy Street	4
Council Housing Dwellings	768	Maple Street	23
Council Housing Dwellings	766/R	Maple Street	31
Council Housing Dwellings	1325	Maple Street	35
Council Housing Dwellings	748	Minni Street	24
Council Housing Dwellings	1125	Minni Street	54
Council Housing Dwellings	510/R	Park Street	954
Council Housing Dwellings	496/1	Park Street	996
Council Housing Dwellings	1319/4	Valley Road	73
Council Housing Dwellings	1319/6	Valley Road	83
Council Housing Dwellings	1001	Valley Road	117
Council Housing Dwellings	1003	Valley Road	121
Council Housing Dwellings	1004	Valley Road	123
Council Housing Dwellings	1005	Valley Road	125
Council Housing Dwellings	1006	Valley Road	127
Council Housing Dwellings	1320/9	Walton Jameson Street	52
Council Housing Dwellings	1320/R	Walton Jameson Street	60
Council Housing Dwellings	1319/3	Walton Jameson Street	64
Council Housing Dwellings	1319/R	Walton Jameson Street	70
Council Housing Dwellings	1086/1	Walton Jameson Street	280
Council Housing Dwellings	1086/3	Walton Jameson Street	284

Pertinent Issues	Proposed Sustainable Solution
4.9 HERITAGE	
• Lack of enforcement of policies and regulations • Expensive to maintain old buildings	• The conservation of cultural resources within the corridor is controlled by the National Heritage Resources Act, 1999 (Act 25 of 1999). In terms of the Act, structures and sites older than 60 years must be protected. Section 34(1) of the Act indicates that no person may demolish any structure or part thereof that is older than 60 years. It is proposed that buildings with high heritage value should not be rebuilt or demolished and reconstructed. Buildings with medium heritage can be demolished but with the following conditions: • The method of 'deconstruction and reconstruction' must be followed when reconstructing buildings ➢ The method implies that the building is taken down brick by brick (deconstructed) while being carefully documented. All the building material is then numbered, placed in boxes for safekeeping and stored in a secure facility until reconstruction can commence. • Restoration or reconstruction of a building is to be based on evidence of what a building originally looked like. It may be assisted by reference to elements of nearby identical buildings, other parts of the building or early photographs and plans. • ensure that heritage resources are conserved in their authentic state as far as practically possible, to reflect their historical and cultural value. The following elements must be retained and re-used: ✓ Chimneys ✓ Roof tiles ✓ Celebrated entrances ✓ Gables ✓ Red Kirkness bricks ✓ Special historic lead glass windows and doors ✓ Lead glass ✓ Historical columns ✓ Clay roof tiles • ensure that heritage resources are conserved in their authentic state as far as practically possible, to reflect their historical and cultural value. **The aesthetic concept of new buildings**

Pertinent Issues	Proposed Sustainable Solution
	• The design of new buildings and houses should be in response to the historic building styles and materials in Clydesdale. • No white plastered walls. chrome handrails would not be deemed appropriate • Building styles of new buildings should be representative of the (then) current trend in design (cutting edge design) without 'overpowering' the existing buildings. The local character should be emphasised through the built form. For example, white plastered walls with chrome details to staircases are not considered sensitive to the heritage of Clydesdale. • Building styles in the area must stay differentiated to illustrate the growth of the neighbourhood over time. However, within the chosen style of the new buildings, the rest of the building guidelines should still be followed (i.e. placement, façade design, etc.) • Facades should be broken into smaller elements such as windows, doors and balconies to stimulate visual variety on the street interface • Building forms must be simple, rectangular or composite rectangular and frontages facing the street should be parallel to the street along the building line as far as possible. Cylindrical 'silo' forms are permitted provided that are well proportioned, not dominant and integrate well with the other buildings and structures. No double-volume rounded glazing atriums to protrude from the exterior of the building will be considered. • Buildings must be designed to blend with their surroundings and not dominate them. As such, buildings must be stepped along slopes instead of creating platforms - being "of the hill not on the hill". Verandas and pergolas are encouraged. • Balconies are to be placed and designed in such a way as not to compromise the privacy of the adjoining homes. All balconies require the consent of the neighbour. • Balconies on the first floors will not be allowed on the South, West or Eastern side of the stand without the consent of the affected neighbour. Sensitivity to Northern exposure of living areas and bedrooms must be addressed.
4.10 QUALITY OF ENVIRONMENT	
• Closeness to areas affected by urban decay creates uncertainty for investors • Security of the area hurts the quality of the urban environment	Urban decay to be reversed by safety and security measurements and development plan proposed

Pertinent Issues	Proposed Sustainable Solution
4.11 MARKET ANALYSIS	
There are many illegal businesses in the study area. Information on exactly what is available is limited	
4.12 INFRASTRUCTURE ASSESSMENT	
• Water: ➢ Infrastructure in this area is old and the condition of all pipes is not known • Sewer: ➢ The condition of old clay pipes is not good. ➢ Large plane trees in Clydesdale are planted very close to sewer pipes and cracks in the pipes are easily penetrated by roots, the replacement of some of the systems will need to receive attention ➢ Clydesdale is at the bottom of the catchment area for sewer lines from Arcadia/Hatfield. The sewer overflows constantly. Stormwater: ➢ Clydesdale is at the bottom of the stormwater catchment area. The system cannot in its current state handle any more runoff Electricity: ➢ Lines to street lights are affected by wind from time to time Electrical boxes explode during wind storms Walkerspruit canal: ➢ The floor of the canal is dilapidated ➢ Litter ➢ Vagrants ➢ Dark at night	The area is well connected to the CoT systems. No new layouts are nessascary The maintenance of infrastructure will be addressed at a later stage in the Precinct Plan
4.13 SAFETY AND SECURITY	
• Pedestrians are often mugged, day and night on the streets (Keep in mind that this area is central to Sunnyside, Hatfield, Arcadia and Muckleneuk and Brooklyn) Many pedestrians pass through Clydesdale.	• The movement of pedestrians will not be restricted – Movement will be improved by making the area safer to use. The movement will be enhanced because people will feel safer walking through the neighbourhood • The movement of traffic will not be restricted – Armed robbers will be discouraged to speed through the area because of gates opening and closing, combined with camera surveillance

Pertinent Issues	Proposed Sustainable Solution
• The costs of access control • Proximity to Sunnyside - vagrants • Council owned properties • Through traffic – often the target of armed robberies during the day • Driving schools • Walkerspruit – escape route • Boundary treatment • The area is not safe for pedestrians day and night • Security at rental properties is not good	• The safety and security plan below has been discussed with CoT Transport. 

CHAPTER 5: MANAGEMENT AND IMPLEMENTATION FRAMEWORK (TBC)

1. INFRASTRUCTURE UPGRADING

1.1 TBC

2. CAPITAL INVESTMENT AND CATALYTIC PROJECTS

2.1 TBC

3. OPEN SPACE NETWORK

3.1 TBC

4. DEVELOPMENT FACILITATION

4.1 TBC

5. URBAN MANAGEMENT

5.1 TBC

6. PRIORITIZATION AND PROGRAMMING

6.1 TBC

7. MONITORING AND EVALUATION

7.1 TBC

REFERENCE DOCUMENTS

1. RSDF 2018 Region 3
2. Clydesdale Urban Design Framework - Holm Jordaan Architects and Urban Designers

https://www.melbourne.vic.gov.au/pages/contact-us.aspx

The City of Melbourne