Western Cape Government

Department of Infrastructure

Contextual Framework

Stikland South

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GLOSSARY OF TERMS AND ABBREVIATIONS

CoCT	City of Cape Town
DoI	Department of Infrastructure
IUDF	Integrated Urban Development Framework
IPTN	Integrated Public Transport Network Plan
LUPA	Land Use Planning Act 3 of 2014
MPBL	Municipal Planning ByLaw 2019 as amended from time to time.
MSDF	Municipal Spatial Development Framework
NDP	National Development Plan
NMT	Non-Motorised Transport
NGO	Non-Government Organisation
PLA	Prioritised Local Area
PSDF	Provincial Spatial Development Framework
SPLUMA	Spatial Planning and Land Use Management Act 16 of 2013
TAPs	Transit Accessible Precincts
TOD	Transport Orientated Development
VRC	Voortrekker Road Corridor
WC	Western Cape
WCG	Western Cape Government
WWTW	Waste Water Treatment Works

EXECUTIVE SUMMARY

This report is a Contextual Framework Report for Stikland South Hospital. The entire Stikland Hospital estate extent is 140,24 Ha and comprises of Remainder (Re) Erf 6300 South portion (114.16 Ha), Remainder (Re) Erf 6300 North portion (18.28 Ha) and unregistered Erf 32103 (7,8 Ha), Bellville. This report will be referring to the Stikland South portion and will be referred to as the Stikland South Hospital Estate Special Planning Area and hereafter referred to as "Stikland South".

The primary objective of this Contextual Framework is to guarantee the alignment of the proposed development with the objectives and regulatory standards established by governmental bodies and local communities. It also provides the physical and infrastructural status quo of the area and the developable land portions. This Contextual Framework is compiled from the foundational baseline assessments conducted by appointed specialists including Planners, Engineers, Landscape Architects, Heritage Practitioners and Environmentalists. It offers a comprehensive overview designed to identify and record the development opportunities and constraints of the Stikland South site. The Development Framework that follows will take into consideration and make reference to all of the issues identified in this report.

Stikland South is located along the Provincial Main Road R101 (Old Paarl Road) linking Bellville (west) to Brackenfell and Kraaifontein (east) and is situated on the corner of Old Paarl Road, De La Hay Avenue and Midmar Rd. The site is surrounded by the established, primarily full-title, low-density residential suburbs of Thalmen, Groenvallei,and Stikland Industrial. The study area has access to various regional (i.e. R101, R300 and R102) and metropolitan (M31 and M10) roads and the N1 as well as various industrial (i.e. Brackenfell, Stikland, Sacks Circle and Kuils River) and commercial hubs (i.e. Tyger Valley, Brackenfell, Cape Gate and Bellville). The site enjoys access to various regional and metropolitan routes, employment hubs, and public transport services and ease of access to the Stikland Train Station.

The property is zoned as **Community Zone 2: Regional**, the primary uses of which include institutional, places of instruction and hospital. Other than an unregistered servitude on the north-eastern portion and an electrical servitude line along the south and west boundary of the Stikland Estate, the site is not encumbered by any title deed restrictions.

The Tygerberg District Plan (2023), indicated in section 2.3.4, identifies the Stikland Psychiatric Hospital precinct as an opportunity for extensive urban restructuring and development and therefore regards the precinct as a "Strategic Site". The precinct is considered to be an opportunity for mixed-use development in the form of commercial, office and residential development, especially on portions abutting Old Paarl Road.

This aligns with the proposed vision for future development as preliminarily established by WCG.

Existing structures are dispersed across the entire Stikland North and South Estate. There are approximately 34 structures, indicated in Figure 1.3-2, on Stikland South Re Erf 6300. The function of these structures varies from health-related facilities, and health education to technical support, administration, laundry and other facility support functions.

Due to the large extent of underuterlised land, no demolition of existing structures will be needed to accommodate newly proposed development of the Stikland South site. The existing natural environment will also be further investigated with the key principles of not disrupting existing forests and/or tree clusters found on various portions of the Stikland South Site.

All development considerations from civil to environmental have been investigated in detail through the contextual analysis process using the Baseline reports submitted by each of the specialist disciplines. Key findings from each of the Specialist disciplines are as follows:

Urban Planning : The redevelopment of the site for mixed-use residential, commercial and office development has policy support and is technically, legally and physically possible. The property is very well-located and lends itself to regeneration of the site and the broader area without any detriment to the uses currently operating on the premises. The physical proximity to the Psychiatric hospital is the most important interface to consider for the future development of the available land. This is followed by the interface with the neighbouring suburbs to the east and west.

Transport and Traffic : The transport infrastructure in the vicinity of the site is well-developed and renders the site very accessible. There is high potential for enhanced public transport as the rail service improves and additional road-based services could be added. There are various opportunities for road-based connections to the surrounding network and various options for enhanced connectivity to the broader transport network that will have to be considered through engagement with City officials.

Civil Services and Infrastructure : All the necessary Civil Infrastructure is in place. Upgrades to local sewer and water supply infrastructure may be required based on the nature and scale of the proposed development of both Stikland North and South. Stormwater will need to be managed on site to pre development levels so as not to overload the existing infrastructure.

Electrical Infrastructure : The area is well-serviced with electrical infrastructure but the local supply would require significant upgrade to meet the future demand. This can only be determined once the nature and scale of the proposed development of Stikland North and South has been determined.

Heritage : The existing Psychiatric Hospital will not be changed through the future development. The remaining area of Stikland South has no significant heritage resources that would require special protection or consideration. It is recommended that as much of the tree landscape is retained as possible.

Landscape : There are a number of trees and tree groupings or lines that have been identified that must be retained, a few that would be preferable to be retained and very few that could be removed due to condition or species. In general the future development should seek to maximise the retention of existing trees as they have the potential to enhance the built environment. The general landscape has no special features other than the wetlands that have been identified in the Environmental Assessment. Wetlands can also enhance the quality of the future built environment by being appropriately incorporated into the open space system.

Environmental : The only significant environmental consideration is the existence of a number of wetlands in the north, south and west of the site. These need to be further investigated to determine their exact extent. It is quite possible that most of them can be appropriately incorporated into the future development but two are quite extensive and the limitations on developable land may require that their extent is reduced. The final implications for development will be determined in an interactive process with the specialists when development proposals are considered.

Property Market : Given the good location in relation to Belville, Tygerberg and Kuils River the Stikland site has significant potential for property development. In particular the demand for affordable, well-located residential opportunities is high. The demand for retail and office will have to be assessed in relation to other proposed developments in the sub-metro area. As this is a relatively dynamic arena a further assessment will be made once specific development proposals are formulated.

The opportunities and constraints for development are clear, with a few detailed assessments required once actual development proposals are formulated. There are approximately 54 hectares of vacant land surrounding Stikland Psychiatric Hospital that could be developed. The exact extent and nature of that development will be determined through the consideration of all the opportunities and constraints identified in this Contextual Framework and through a consultative process with Stakeholders and Interested and Affected Parties. The result will be a Development Framework that will form the basis for the motivation for a Land Use Application to sub-divide and rezone specific land portions to enable them for development.

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1. INTRODUCTION

1.1 Background

In September 2021 ARG Design was appointed by the Special Projects Directorate of the Department Transport and Public Works (DPW), now Department of Infrastructure (DoI), to lead a team to provide a Contextual Framework and Precinct Plan for submission to the City of Cape Town in terms of s136 of the DMS: Package of Plans for the precinct known as Stikland North. In February 2023 the scope of work was expanded to include Stikland South and to formulate a Development Framework for Stikland North and South. However, as the Contextual Framework for Stikland North is already concluded and it has been agreed that separate Contextual and Development Frameworks will be compiled for each of the two sites the assessments and this Contextual Framework Report is of relevance to Stikland South only.

1.2 Site Overview

Stikland South (Re Erf 6300, Bellville) is in custodianship of the Western Cape Government under the auspices of the Department of Infrastructure. Stikland South is located along the Provincial Main Road R101 (Old Paarl Road) linking Bellville (west) to Brackenfell and Kraaifontein (east). The site is situated on the corner of Old Paarl Road, De La Haye Avenue and Midmar Road in Stikland.

Erf Number	Re Erf 6300
Registered Extent	114.16 Ha
Title Deed No	T8180/1914 dated 13 October 1914
Restrictions	It was found that there are no restrictive conditions that would prevent the development of the site for a mixed-use development. An unregistered servitude forms part of Remainder of Erf 6300. This is an electrical servitude situated along the South and West boundary of the site in favour of the City of Cape Town.
Zoning	Community 2
Land Use	Institutional and Place of Instruction

Various industrial and commercial hubs are within close proximity to the site. Established, primarily full-title, low-density residential suburbs surround the site.

Existing structures are dispersed across the entire Stikland North and South Estate. There are approximately 34 structures, indicated in Figure 1.3-2, on Stikalnd South Re Erf 6300. The function of these structures varies from health related facilities/wards, and health education to technical support, administration, laundry and other facility supporting functions.

The Regeneration Programme's mandate was authorized by the WC Cabinet. Stikland North was included in the redevelopment programme. The Change of Scope to work on Stikland South Development Framework was authorised in February 2023. It is currently a component of the Department of Infrastructure's Special Projects Directorate, whose mission is to maximize the social value of publicly held property.

1.3 Site Locality

Stikland South Psychiatric Hospital is located in the Tygerberg District, and is a medical institution serving the local community and surrounding metropolitan area. The Figures 1.3-1 and 1.3-2 provide locality context of the site and its surroundings. The area is characterized by a mix of residential, industrial and commercial zones and is well connected to major roads and public transportation networks, making it easily accessible. The hospital site being located in an urban setting ensures that it is within reach of essential amenities such as schools, shopping centres, parks, and recreational facilities.

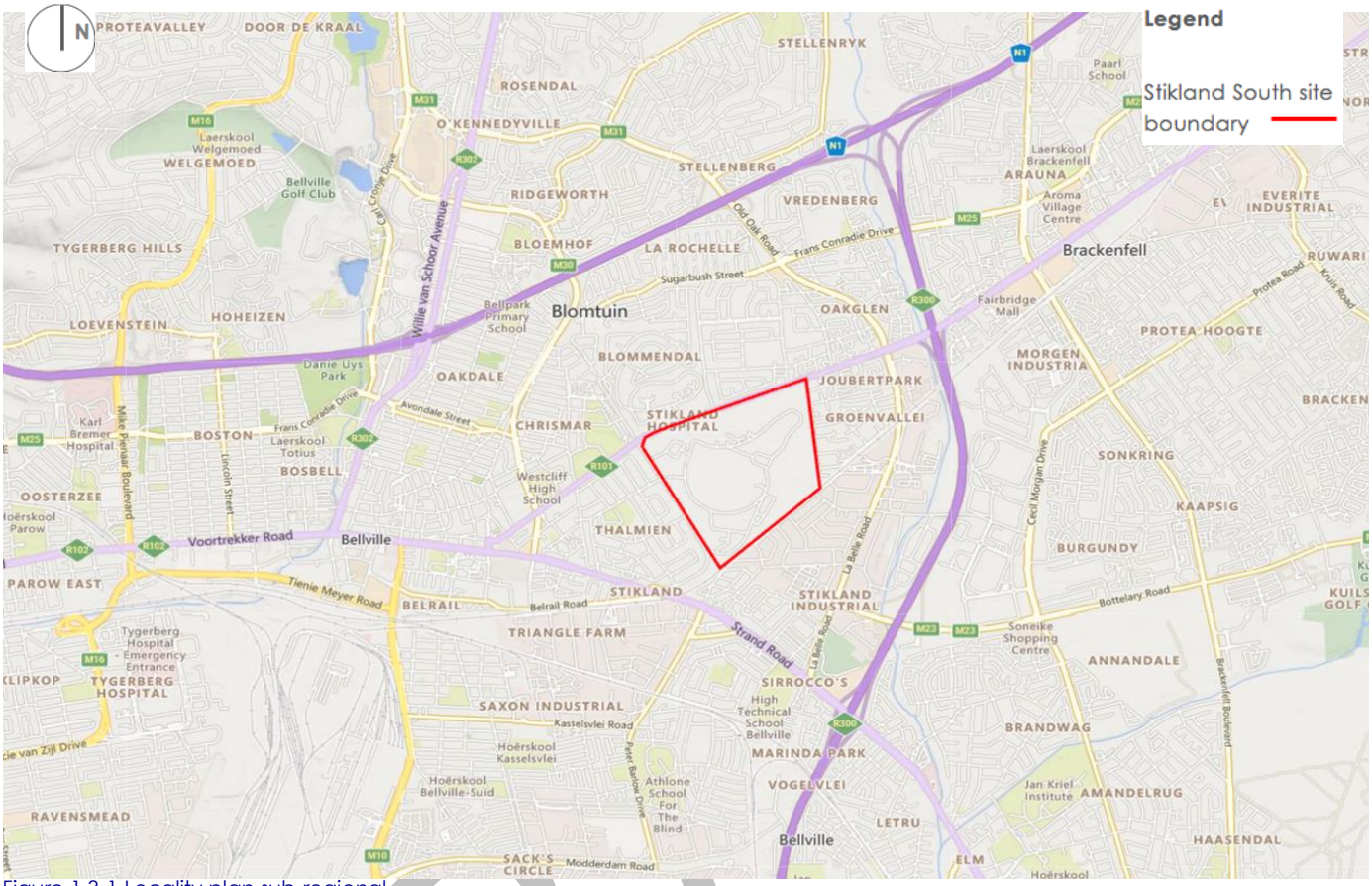


Figure 1.3-1 Locality plan sub-regional

Figure 1.3-2 Locality plan (local area)

2. POLICY CONTEXT

Legislation, policy, and framework plans are key instruments employed by government to ensure that resources are aligned across spheres of government, sectors, and spatial domains to achieve common objectives. Numerous legislative prescripts and policy frameworks – focused on the work of government holistically, the spatial arrangement of activities or specific sectors – inform the perspective of land use planning and management and the relationship between land use and transportation.

This section contains a summary of national, provincial and local, integrated, spatial, and sectorial policies, with a focus directed toward Stikland South. Key principles that could be drawn from national provincial and local, legislation, policy, and framework plans with regard to land use and the Stikland South site include:

- Developing and maintaining infrastructure (including movement infrastructure) as a basis for economic development and growth;
- A focus on undeveloped and underdeveloped land in proximity to existing concentrations of activity and people and within the existing footprint of settlements;

- The expansion of entrepreneurial opportunity (also for emergent entrepreneurs relying on enhanced thresholds of people and opportunity in association with public infrastructure such as transport interchanges);
- Focusing resources in those areas that have both high and very high growth potential, as well as high to very high social needs already being met;
- Establishing more efficient and sustainable transport linkages between informal settlements/ poorer areas and centres of commercial/ public activity;
- A richer mix of activities in or proximate to established areas (including employment opportunity);
- A focus on public transport to ensure user convenience and less dependence on private vehicles (there is a recognition that many citizens will never afford a private vehicle and that the use of private vehicles has significant societal costs);
- Establishing compact, denser development (also for efficient, sustainable public transport);
- Promoting pedestrian friendly development;
- A focus on improving and expanding existing facilities (schools, libraries, transport interchanges, and so on) to be more accessible and offer improved services;
- The significance of well-located and managed public facilities as a platform for growth, youth development, increased wellness, safety, and overcoming social ills; and
- The clustering of public facilities to enable user convenience and efficient management.

2.1 National Legislation

2.1.1 Spatial Planning and Land Use Management Act

With the enactment of the Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA), a new planning regime was introduced in South Africa. It replaced disparate apartheid-era laws with a coherent legislative system as the foundation for all spatial planning and land use management activities in South Africa. It seeks to promote consistency and uniformity in procedures and decision-making. Other objectives include addressing historical spatial imbalances and the integration of the principles of sustainable development into land use, planning regulatory tools and legislative instruments.

Chapter 2 of SPLUMA sets out the development principles that must guide the preparation, adoption and implementation of any SDF, policy or by-law concerning spatial planning and the development or use of land. These principles include the redress of spatial injustices and the integration of socio-economic and environmental considerations in land use management to balance current development needs with those of the future generations in a transformative manner. SPLUMA reinforces and unifies the National Development Plan (NDP) in respect of using spatial planning mechanisms to eliminate poverty and inequality while creating conditions for inclusive growth by seeking to foster a high-employment economy that delivers on social and spatial cohesion. The SPLUMA principles are:

- Spatial Justice;
- Spatial Sustainability;
- Efficiency;
- Spatial Resilience;
- Good Administration.

The SPLUMA principles are aligned with key international treaties and conventions, supported by South Africa, and including the UN Agenda for Sustainable Development (and its associated sustainable development goals and implementation programmes).

Adherence to SPLUMA principles in Stikland South development

The proposed development framework for the site will align with SPLUMA principles by redressing spatial injustices towards spatial justice, through better located housing and socio-economic opportunities and better access to social services.

2.1.2 National Development Plan 2030

The National Development Plan aims to eliminate poverty and reduce inequality by 2030, through growing an inclusive economy, building capabilities, enhancing the capacity of the state, and promoting leadership and partnerships throughout society.

The NDP explores solutions to combat their nine primary identified National challenges:

1. Too few people work;
2. The quality of school education for black people is poor;
3. Infrastructure is poorly located, inadequate and under-maintained;
4. Spatial divides hobble inclusive development;
5. The economy is unsustainably resourced;
6. The public health system cannot meet demand or sustain quality;
7. Public services are uneven and often of poor quality;
8. Corruption levels are high;
9. South Africa remains a divided society.

To tackle the complexity of these challenges, the NDP has set out six interlinked priorities:

1. Uniting all South Africans around a common programme to achieve prosperity and equity;
2. Promoting active citizenry to strengthen development, democracy and accountability;
3. Bringing about faster economic growth, higher investment and greater labour absorption;
4. Focusing on key capabilities of people and the state;
5. Building a capable and developmental state;

6. Encouraging strong leadership throughout society to work together to solve problems.

Relevance of the NDP to Stikland South

According to the NDP a core objective is to achieve community enhancement which includes promoting mixed housing strategies and more compact urban development to help people access public spaces and facilities, state agencies, and work and business opportunities.

This is aligned with the Stikland development as the development will advocate for providing a variety of housing, tenure options and mixed-use commercial and business opportunities, all of which are in close proximity to existing infrastructure, socio-economic nodes and transport opportunities.

The NDP is in support of key well-located interventions such as the Stikland South precinct development to address spatial transformation, as it is located within a high activity corridor on Old Paarl Road. The NDP further encourages high density along these activity corridors to support public transport and reduce sprawl.

2.1.3 Medium Term Strategic Framework 2019-2024

The 2012 NDP sets out a long-term vision for the country and provides the programme through which South Africa can advance radical economic transformation through development planning. The MTSF 2014-2019 outlined the plan and outcome-based monitoring framework for implementing the NDP during the country's fifth democratic administration.

This MTSF 2019-2024, which covers the five-year period from 2019 to 2024, outlines the implementation priorities across South Africa's national development priorities for the sixth administration.

Relevance of the MTSF to Stikland South

The policy sets a number of final and intermediate targets for growth, unemployment, employment, investment and poverty. This includes public sector investment in social housing as planned for the Stikland South site to address spatial inequality.

The strategic framework also addresses improvement of the South African health sector. It notes that emphasis must be placed on a dedicated focus on health services for vulnerable populations and those with special needs. These include women, youth, people with disabilities and the elderly. Special attention needs to be paid to improving the quality of mental health services. This should be kept as a guiding principle for Stikland South development as any and all development should not reduce the

existing environment of the current health-care facilities but rather enhance its function and utilization, though for example, locating interdependent servicers in closer proximity to one another for efficient use.

2.2 Provincial Legislation and Policy

2.2.1 The Western Cape Government Land Use Planning Act

The Western Cape Government (WCG), through the Land Use Planning Act 3 of 2014 (LUPA), has adopted its own legislation to consolidate the legal requirements that relates to spatial planning and public investment in the Western Cape. There is some overlap between SPLUMA and LUPA with regard to aspects such as the content and process of preparing and adopting a MSDF. In terms of LUPA, a MSDF must:

- Comply with other applicable legislation;
- Promote predictability in the utilisation of land;
- Address development priorities;
- Where relevant, provide for specific spatial focus areas, including towns, other nodes, sensitive areas, or areas experiencing specific development pressure;
- Consist of a report and maps covering the whole municipal area, reflecting municipal planning and the following structuring elements;
- Transportation routes;
- Open space systems and ecological corridors;
- Proposed major projects of organs of state with substantial spatial implications;
- Outer limits to lateral expansion;
- Densification of urban areas.

2.2.2 Provincial Strategic Plan 2019-2024

The Provincial Strategic Plan (PSP) sets out the Western Cape Government's (WCG) vision and strategic priorities. This Provincial Strategic Plan details how, over the next five years, province will:

1. Build safe and cohesive communities;
2. Boost the economy and job creation;
3. Empower our people;
4. Promote mobility and spatial transformation, while at the same time;
5. Driving innovation within a culture of a truly competent state.

The Provincial Strategic Plan is tactically linked to the Provincial Spatial Development Framework (PSDF), which directs strategy for spatial transformation, and identifies distinct priority regions in the Western Cape which are responsible for driving considerable economic growth and development, linked to urbanisation trends.

The Provincial Strategic Plan indicates that to successfully address the challenge to build safe and cohesive communities requires an integrated systems-thinking which considers: the supply of housing opportunities, availability of strategically located land, how people and communities move efficiently within and between urban centres at different scales, the reality of existing settlement patterns, and the sustainability of municipal service delivery.

To achieve this the Provincial Strategic Plan has identified four vision-inspired priorities 'VIP's':

- Safe and cohesive communities;
- Growth and jobs;
- Empowering people;
- Mobility and spatial transformation.

According to the Provincial Strategic Plan these priorities will be implemented through five practical and focused areas and interventions.

Focus Area 1: Citizen-centric culture;

Focus Area 2: Innovation for impact;

Focus Area 3: Integrated service delivery;

Focus Area 4: Governance transformation;

Focus Area 5: Talent and staff development.

Implications for Stikland South

A possible development regarding Stikland is in alignment with all four of the provincial VIP's as the development will provide additional housing opportunities for people to live and work in a well serviced, located and safe area. Thus advocating for positive spatial transformation by targeting well-located state-owned land for the highest and best use and providing public land as a contribution to creating economically vibrant growth points contributes significantly to the realization of the VIPs and most of the Focus Areas.

The Provincial Strategic Plan further supports the mixed-use function of Stikland as the mix between high density, mixed-income residential and economic uses is seen as a spatial transformation tool by province to create sustainable neighbourhoods especially along high activity corridors, such as the Voortrekker Road Corridor, which Stikland forms part of. The Voortrekker Road Corridor has also been identified by the WCG as one of the 14-priority housing developments in its Strategic Plan.

Overall the site is in conjunction with the Provincial Strategic Plan as it has been identified as a mobility and spatial transformative site, where people are able to benefit from a variety of uses / mixed use development within a mixed income community, in close proximity to public transport, social facilities and economic nodes. Thus, creating an additional "safe place of equal opportunity, dignity and belonging", within the province, through a "whole of society" approach.

2.2.3 OneCape 2040 Strategy

ONECAPE2040 is a deliberate attempt to stimulate a transition towards a more inclusive and resilient economic future for the Western Cape region. It articulates a vision about how we the people of the Western Cape can work together to develop our economy and our society. The aim of the vision is stated as:

"Creating a resilient, inclusive and competitive Western Cape with higher rates of employment, producing growing incomes, greater equality and an improved quality of life."

It introduces a number of themes for development in the Cape to which the possible Stikland development should aim. In particular the thematic guidance for local level planning projects such as Stikland South is provided as follows:

- Enterprising Cape: Implement and provide supplementary funding for public and community works programmes, reducing the land development costs;
- Green Cape: Use bulk services and energy budgets to lead; green change and incentivize green building technologies;
- Living Cape: Invest in public transport and safety.

2.3 City of Cape Town Policy

2.3.1 City of Cape Town Integrated Development Plan

The CoCT is committed to addressing its settlement development and management issues and challenges – and objectives identified in national and provincial legislation, policy, and framework plans – through the five pillars and eleven transformational priorities of the Integrated Development Plan (IDP) as illustrated in Figure 2.3-1.

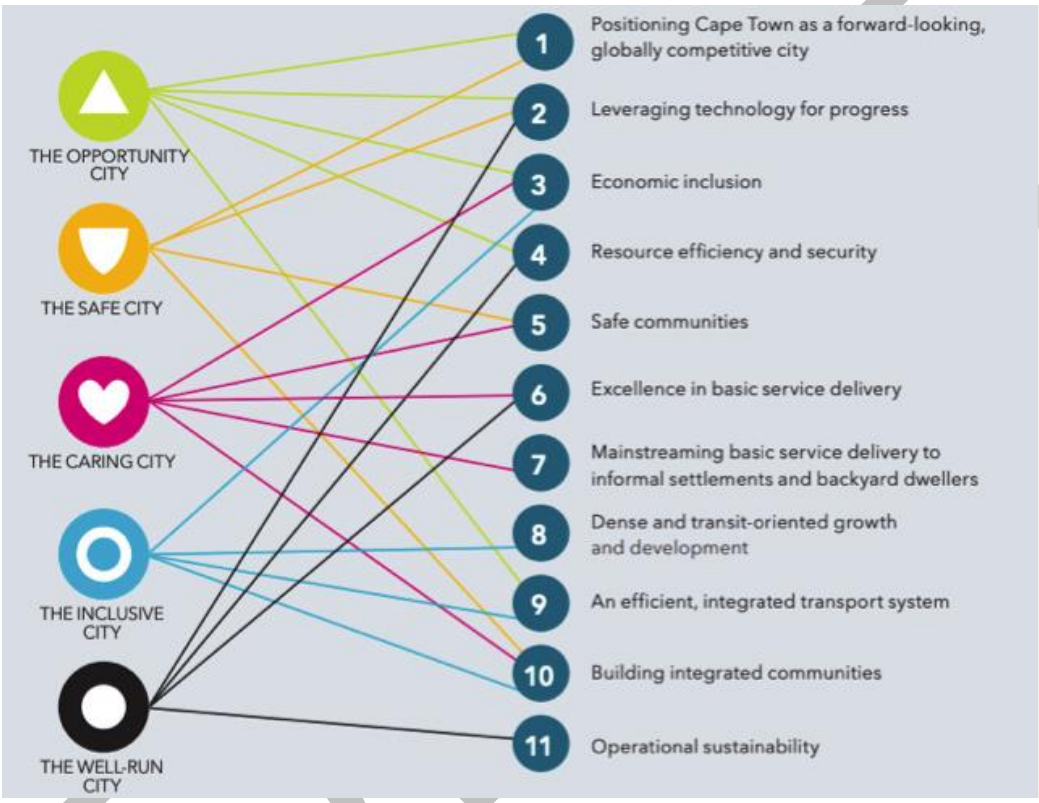


Figure 2.3-1 Five strategic focus areas of the CoCT

Ensuring spatial transformation via dense and transit-oriented growth and development, anchored by an efficient, integrated transport system; in turn, building integrated communities, are fundamental to the CoCT's governance agenda. All of which should be achieved through the Stikland South development.

2.3.2 Transit Oriented Development Strategic Framework (March 2016)

The CoCT's TOD Strategic Framework is seen as the central planning, design and implementation approach to be employed to address inefficiencies in the urban form of the City. TOD does not solely belong to one discipline but rather as a key transversal development and management premise to addressing urbanisation, urban growth and service delivery, with transport acting as the catalyst to

achieving operational efficiencies in the urban environment for both the Council as service provider and its citizens. It is an approach that enables a change in the principles of the space economy, forcing long term efficiencies through integrated implementation and service delivery.

The core TOD principles are:

- Affordability: Reduce the cost of public transport to commuters and the cost of providing public transport to the City;
- Accessibility: Facilitate equal access to social and economic activity through strategic urban development and the provision of safe public transport;
- Efficiency: Provide an environment and level of service that reduces trip lengths and dependence on private vehicles; and
- Intensification and densification: Manage the desired form, composition and location of urban development conducive to affordable, accessible and efficient public transport.

This implies that:

- New development in the city will be strategically located around public transport; will have an appropriate mix of land uses, and will be inclusive in well-located areas;
- The high quality of public space will serve to promote the use of public transport and non-motorised transport modes;
- The City will leverage its strategically located land holdings and partner with the private sector to lead by example to achieve transit-oriented development; and
- The progressive realisation of transit-oriented urban growth and development will contribute towards the City's goal of spatial transformation and other transformation priorities and outcome.

Specific TOD implications for transport and land use of relevance to Stikland South are summarised in Table 2-1.

Transport	Land Use
Reduce travel distances, in turn reducing the cost of commuter travel and improve operational viability of public transport.	Intensify and diversify urban development in close proximity to public transport stations. As Stikland South is near to Stikland Station and being situated along Voortrekker and Old Paarl gives access opportunities to car, bus and Taxi movement routes, thus allowing the site to comply TOD principles.
Optimise bi-directional flows. The introduction of both commercial and residential development on the site will optimise bi-directional flows and improve the functioning of the public transport system.	Promote an appropriate mix and form of residential, social and economic activity between urban nodes along higher-order public transport corridors. The Stikland South site will provide a higher density of development along Old Paarl Road and in close proximity to Stikland Station.

Transport	Land Use
Generate a greater level of seat renewal (balancing trip attractions and productions).	Promote an appropriate mix and form of residential, social and economic activity between district and local nodes along higher-order public transport corridors.

Table 2-1 Specific TOD implicactions for the transport and land use

Institutionalising TOD is necessitating policy and regulatory realignment across all scales and functional areas of the CoCT's work. All existing corporate strategic policy and development frameworks (for example, the IDP, SDF, Integrated Human Settlement Framework, Economic Development Strategy, etc.) must incorporate TOD principles and objectives (to the extent that they have not already been embedded) to ensure that TOD principles and objectives are key considerations in the assessment of all private sector development approvals and public sector led development across Cape Town. This requires further investigation to determine whether there are obstacles to TOD in approved City policies/ strategies and ensuring that new policies and policy reviews prioritise TOD and are consistent with TOD principles and objectives.

The TOD Strategic Framework acknowledges differentiated scales of implementation of TOD principles and opportunities to influence and achieve TOD outcomes at metropolitan, corridor, nodal and precinct scales.

For example, in practice, the focus is:

- At a metropolitan scale: On long-term visioning and policy to integrate land use and optimised travel;
- At a corridor level: On land development to promote bi-directional flow of trips and the financial sustainability of trunk public transport services;
- At a nodal, precinct and project level: On applying TOD principles to facilitate better interfaces between transport systems, land development and people;
- As part of its TOD work, the CoCT has developed a TOD "toolkit" which contains a multitude of mechanisms, interventions and tools – within and outside the City's control – to be applied at a corridor, node and precinct level to facilitate the outcome of TOD. The aim is to secure availability of the appropriate "package" of implementation tools to suit the context and appropriate scale of planning in an effective and efficient way.

2.3.3 Metropolitan Spatial Development Framework (2023)

Background

Cape Town's Municipal Spatial Development Framework (MSDF) sets out the spatial vision and development priorities to achieve a reconfigured, inclusive spatial form for Cape Town. The document is a spatial interpretation of the CoCT's Integrated Development Plan and replaces the previous MSDF.

The MSDF is informed by the requirements of the Spatial Planning and Land Use Management Act, Act 16 of 2014 (SPLUMA) and the City of Cape Town's Municipal Planning By-law as well as a range of other national, provincial and local policy and law. Key national and provincial informants are the National Development Plan, Integrated Urban Development Framework (IUDF), and Provincial Spatial Development Framework. City policy adopted post-2012 and informing the MSDF includes the Transit-Oriented Development Strategic Framework, the Integrated Public Transport Network (IPTN), the Densification Policy, and a range of social, economic and environmental policies.

Fundamental to the MSDF is ensuring spatial transformation via dense and transit-oriented growth and development anchored by an efficient transport system. The 2012 MSDF projected long-term growth along two northern corridors. The 2023 MSDF, proposes instead targeted investment and land use management based on inward growth.

MSDF vision and focus

The CoCT's spatial vision is "... building – in partnership with the private and public sector – a more inclusive, integrated and vibrant city that addresses the legacies of apartheid, rectifies existing imbalances in the distribution of different types of residential development, and avoids the creation of new structural imbalances in the delivery of services. Key to achieving this spatial transformation is transit-oriented development (TOD) and the densification and diversification of land uses."

To meet Cape Town's challenges, the MSDF focuses on sustainable job generating economic growth by supporting investment in well-located growth nodes, reinforcing transit-oriented corridors and linking growing nodes with lagging nodes through connective infrastructure.

To achieve this, connected, inward growth is emphasized. The form of inward growth promoted is land use intensification based on transit-oriented development (TOD). This implies greater land use diversification and densification (vertically and horizontally) within existing areas or properties and new developments in locations with good public transport access, concentrations of employment, commercial development and other amenities.

The City has to focus its spatial priorities in support of connected inward growth, namely:

- Inward investment in well-located growth nodes to maximise the employment benefits of urban agglomeration;
- Reinforce transit-oriented corridors linking leading growth nodes and lagging nodes through connective infrastructure;
- Spatially plan for a range of housing and accommodation types as per the IHSF inclusive of informality (including second and third dwelling), incremental and other forms of formal housing;
- Spatially prioritise and target infrastructure and asset renewal to sustain municipal fiscal health; and
- Unlock and optimise vacant and under-utilised transit-oriented land to enhance mixed-use development.

Mechanisms: Key mechanisms to implement the MSDF's objectives include:

- Cape Town's Integrated Public Transport Network (IPTN) 2032, encompassing both road and rail-based public transport (including non-motorised transport access and park-and-ride facilities at modal interchanges);
- Promoting development corridors and transit accessible precincts (TAPS), which act as generators and attractors of people and trips;
- Infrastructure capacity, renewal and provision aligned with projected land use intensification; and

- The key nodes, corridors, IPTN, and TAPS, which forms the backbone of the MSDF are illustrated in Figure 2.3-2 & Figure 2.3-3, the 2012 MSDF and can be compared with the proposed revision

Figure 2.3-2 TAP's shown in relation to existing and planned IPTN (2023)

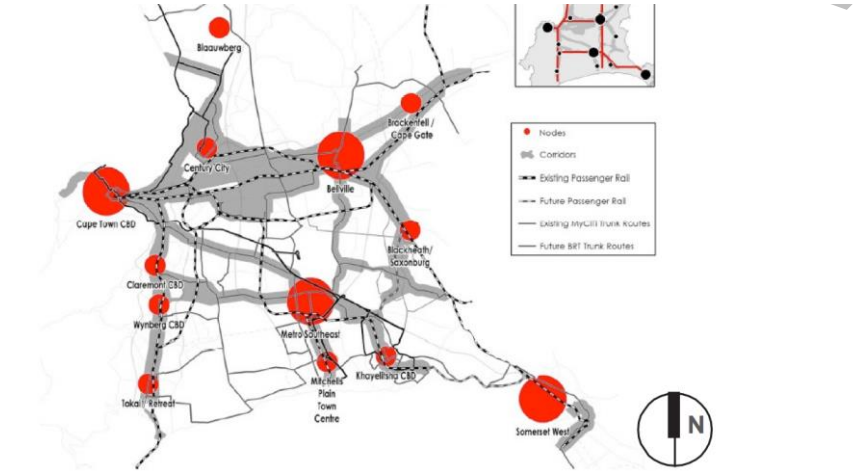


Figure 2.3-3 Conceptual development corridors and existing and emerging urban nodes

for 2022 in the figures on the following page Figure 2.3-4 & Figure 2.2-5.

Relevance to Stikland South

Spatially, the MSDF defines four primary areas of varying investment and urban change support; outlined in Table 2-2 and Figure 2.3-6.

The Northern Corridor forms part of the City's Urban Inner Core, the area prioritised for investment and co-investment in a manner, which supports TOD objectives. The Stikland South site is located within the Urban Inner Core as described in the table below. Therefore, the City will prioritise this area for investment and co investment. This implies that future bulk services and public transport investment will be prioritised within the urban inner core and by extension for the site.

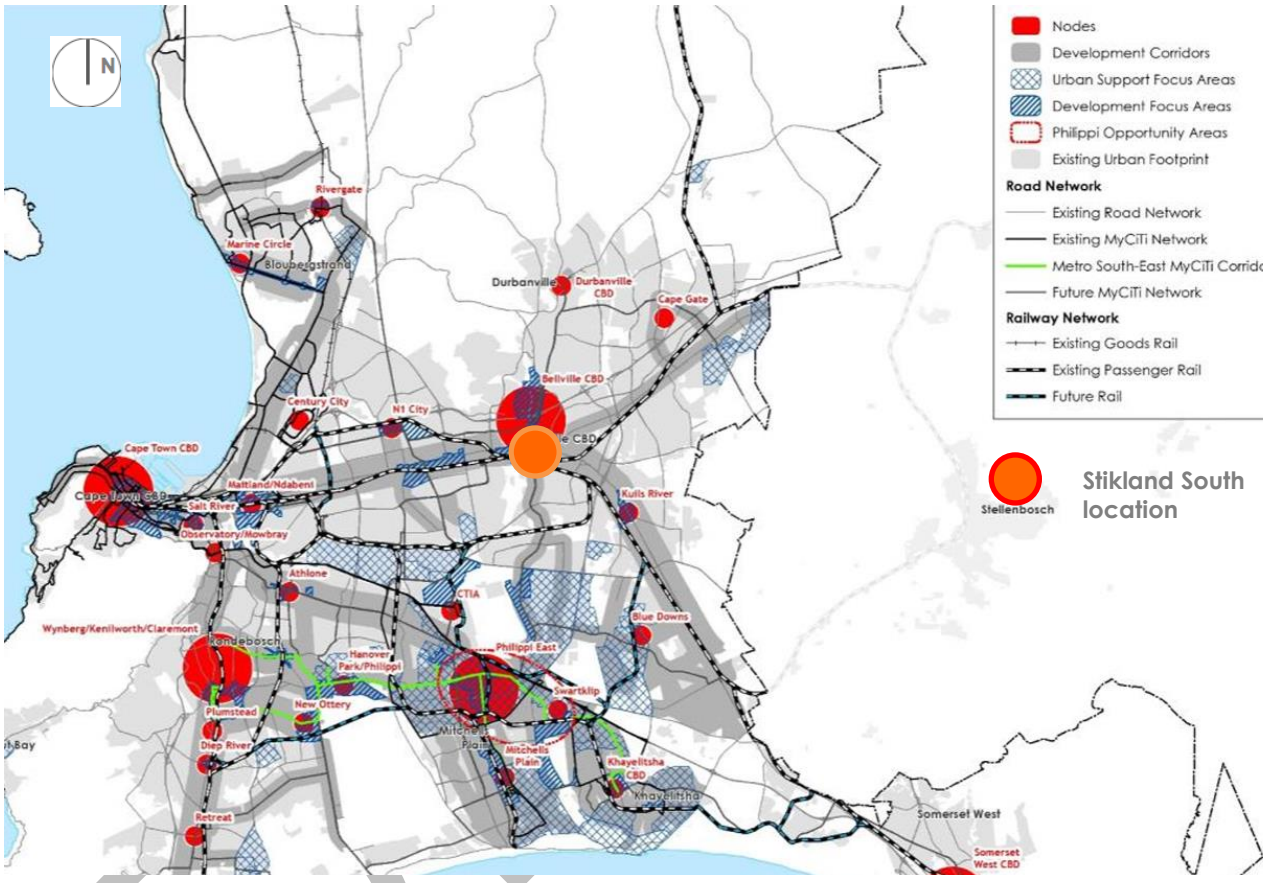


Figure 2.3-4 MSDF Development corridors and nodes

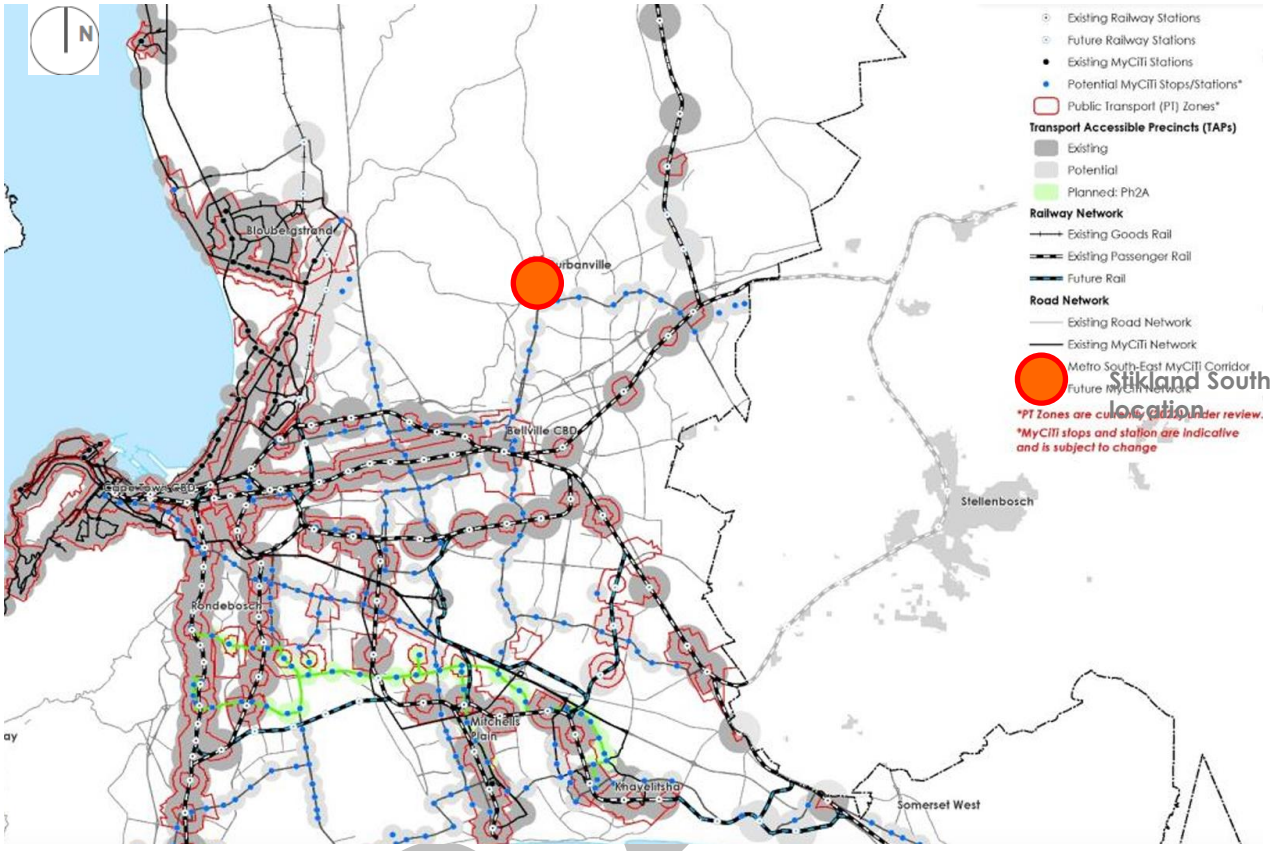


Figure 2.3-5 MSDF TAPS

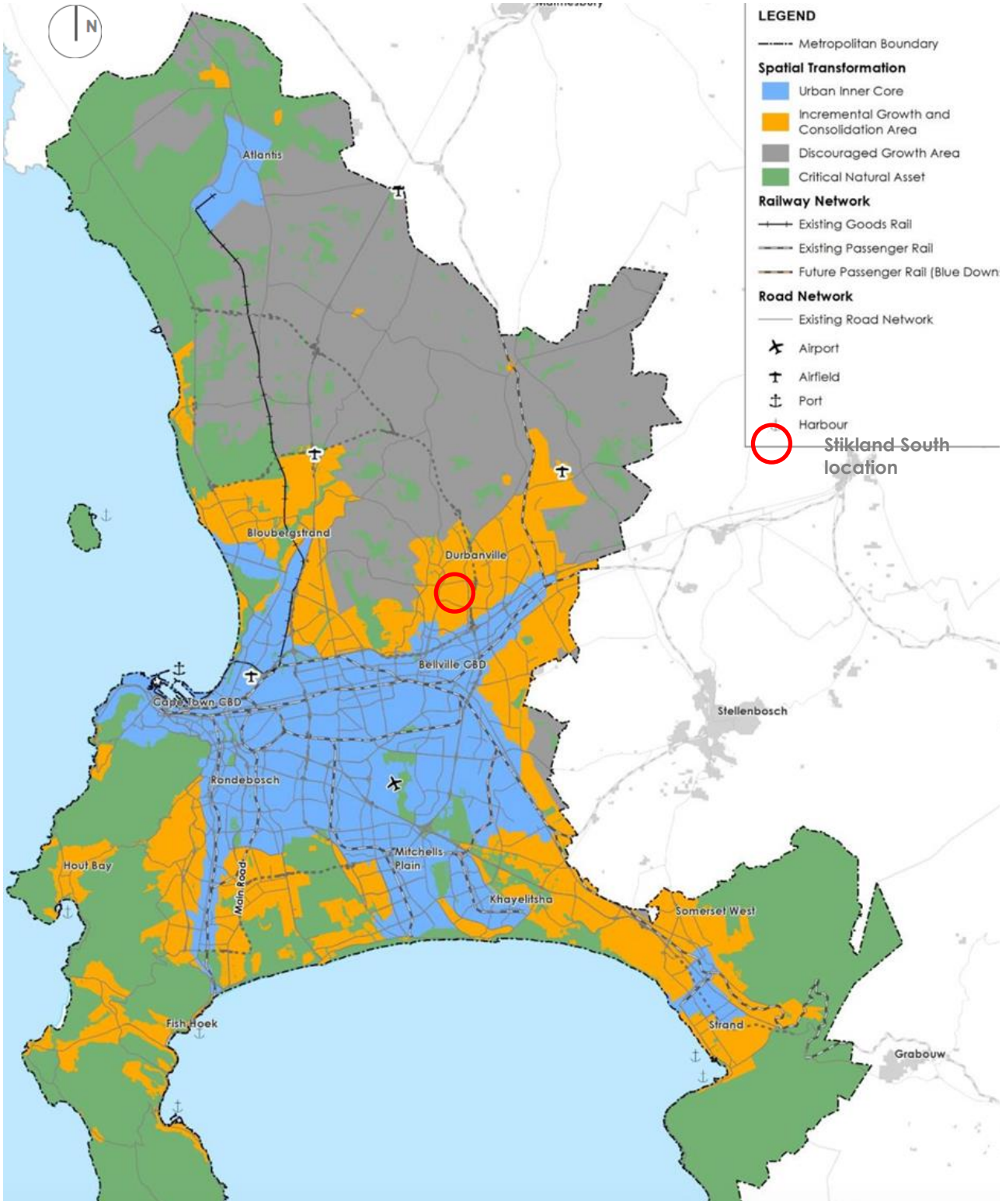


Figure 2.3-6 2023 Review of the MSDF

Area	Description	Land Use
Urban Inner Core	Most of the city's existing industrial and commercial nodes, the airport, ports and primary freight infrastructure, the three Integration Zones, IPTN corridors and TAPS.	The City will prioritise these areas for investment and co-investment
Incremental Growth and Consolidation areas	Existing settlement areas outside the urban core.	The City is committed to servicing existing communities while new development will be subject to infrastructure capacity.
Discourage Growth Areas	Protected areas based in natural and agricultural assets, areas with a lack of social and physical infrastructure and areas that do not contribute to spatial transformation.	The City will not invest in settlements in these areas.
Critical Natural Asset Areas	Areas that contribute significantly to the City's future resilience and/ or have protected status in law, including a number of protected natural environments and conservation areas outside the urban inner core or incremental growth areas.	The City will not invest in settlements in these areas.

Table 2-2 Areas of varying focus

2.3.4 Review of the Tygerberg District Plan (2023)

The District Plan (2023) highlights the importance of the Stikland South site and elevates its potential for medium density development. According to the District Plan report (2023), Stikland Hospital falls within sub district 2 of the Tygerberg District Plan which includes Goodwood, Parow West, Parow East, Boston, Bellville Central & East, Stikland; While the Tygerberg integrated DSDF and EMF promotes general intensification across the district and in particular along the Voortrekker Road corridor, further specific areas identified for mixed use intensification and significant new development areas in the Tygerberg District includes this site ,i.e. Stikland hospital. (Refer to Figure 2.3-7) In particular the technical document notes the following:

- In accordance with the Tygerberg DP, high-density mixed-use development (excluding industrial) to be considered for the Stikland Hospital site along Old Paarl Road. A range of housing typologies should be provided including more affordable housing.
- Encourage redevelopment for mixed land uses and high-density residential development along high accessibility streets such as De La Haye and Old Paarl Road.

The precinct provides an opportunity for extensive urban restructuring and development for mixed-use development in the form of commercial/ office /residential development. It is important that new developments are designed to integrate and have a positive interface with the existing urban fabric, i.e., the existing residential developments and public open space. The following factors impact on the development potential of the Hospital precinct:

- The precinct provides a significant opportunity for redevelopment and infill through the rationalisation of the existing footprint of hospital buildings;
- Stikland Hospital abuts Old Paarl Road, which connects directly with Voortrekker Road, La Belle Road and the R300 Freeway. Stikland Station is situated adjacent to the south of the site and is within walking distance of the whole site. WCG has indicated intent to develop the site and has conducted an assessment of bulk service infrastructure provision with regard to various development proposals. The following is proposed as appropriate for the site should development be realised in future;
    - Proposed mixed use development in the form of commercial / office / residential development along portions abutting Old Paarl Road;
    - It is proposed that residential components should include a range of housing typologies including more affordable and inclusionary housing;
    - Medium to high-density residential development to be investigated/considered on portions of the precinct, which are available for development. Portions of land, which front onto De La Haye Road should be considered for residential development.

The current performance and future potential of functional areas were assessed. Stikland was identified as one of the functional areas accommodating strategic sites with potential catalytic development potential. The study therefore identifies Stikland as one of the Pre-Prioritised Local Areas (PLAs) along the corridor. PLAs are focal points within the VRC Integration Zone for the location of catalytic projects and other spatially targeted interventions, with the intention of developing a critical mass of intervention that will both signal confidence in an area and provide the necessary support to leverage private sector investment.

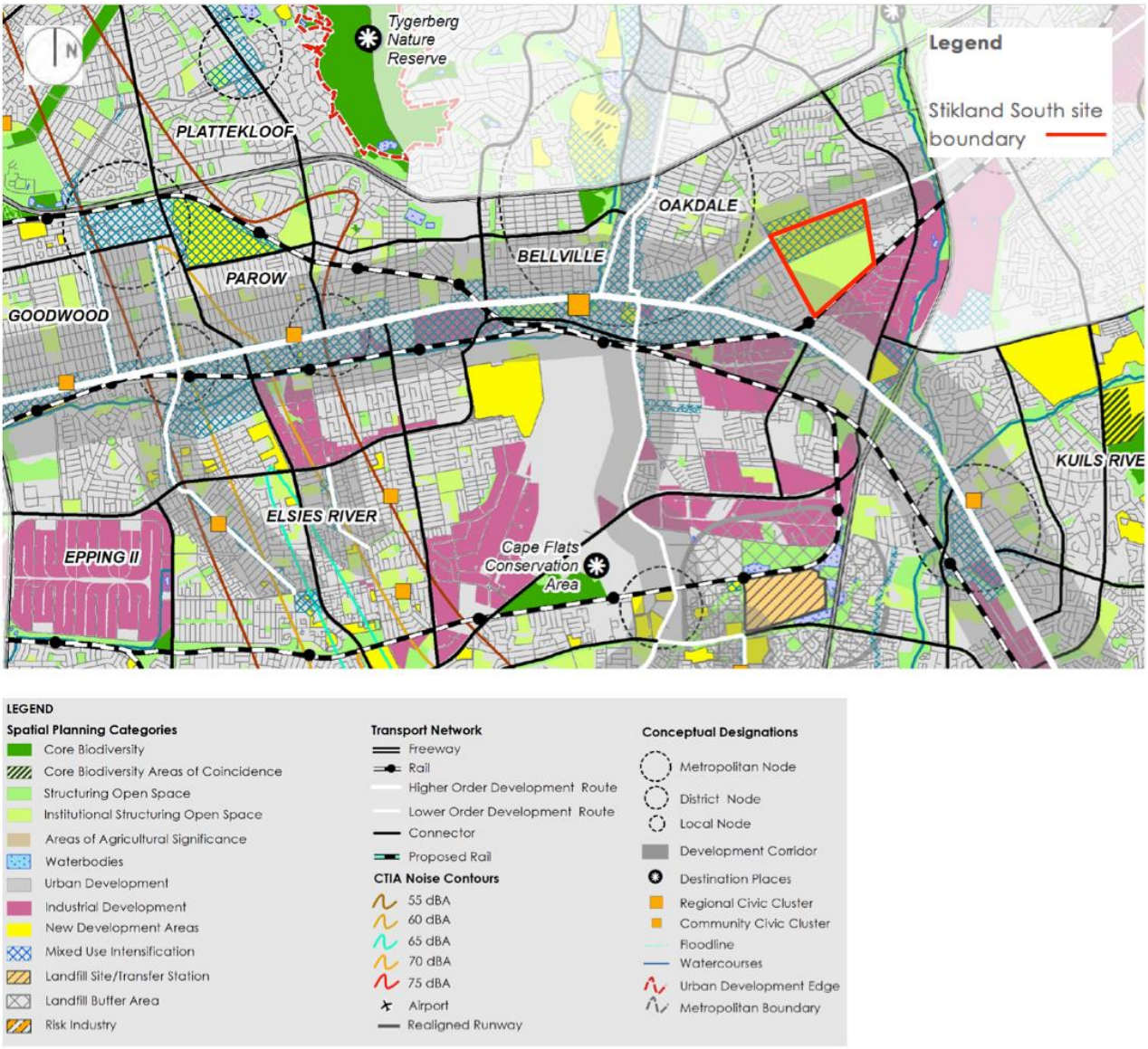


Figure 2.3-7 Tygerberg District 2023 plan review extract

2.3.5 Bellville CBD Local Spatial Development Framework

Bellville is one of three priority Catalytic precincts of the City's approved Catalytic Land Development Programme (CLDP). The Bellville LSDF map is indicated in Figure 2.3-8.

The planning work on the Bellville catalytic precinct aims to set out the long-term development vision for the respective area, as well as identify various spatial and other interventions and an investment pipeline to support the implementation of the vision.

"To re-establish Bellville CBD as the second metropolitan node of Cape Town through transforming it into a vibrant, attractive, sustainable and efficient transit-oriented development (TOD) node."

Two aspects of the Bellville CBD LSDF impact the proposals for Stikland. Firstly, the project could involve a suggested government precinct. Consequently, the proposals for a government-related precinct at Stikland South might compete with the proposals for the CBD in the near to mid-term, given its mixed-use nature. Secondly, alternative transport networks are being investigated to improve congestion in the CBD. One of the proposals includes a possible movement route across the Stikland North Site.

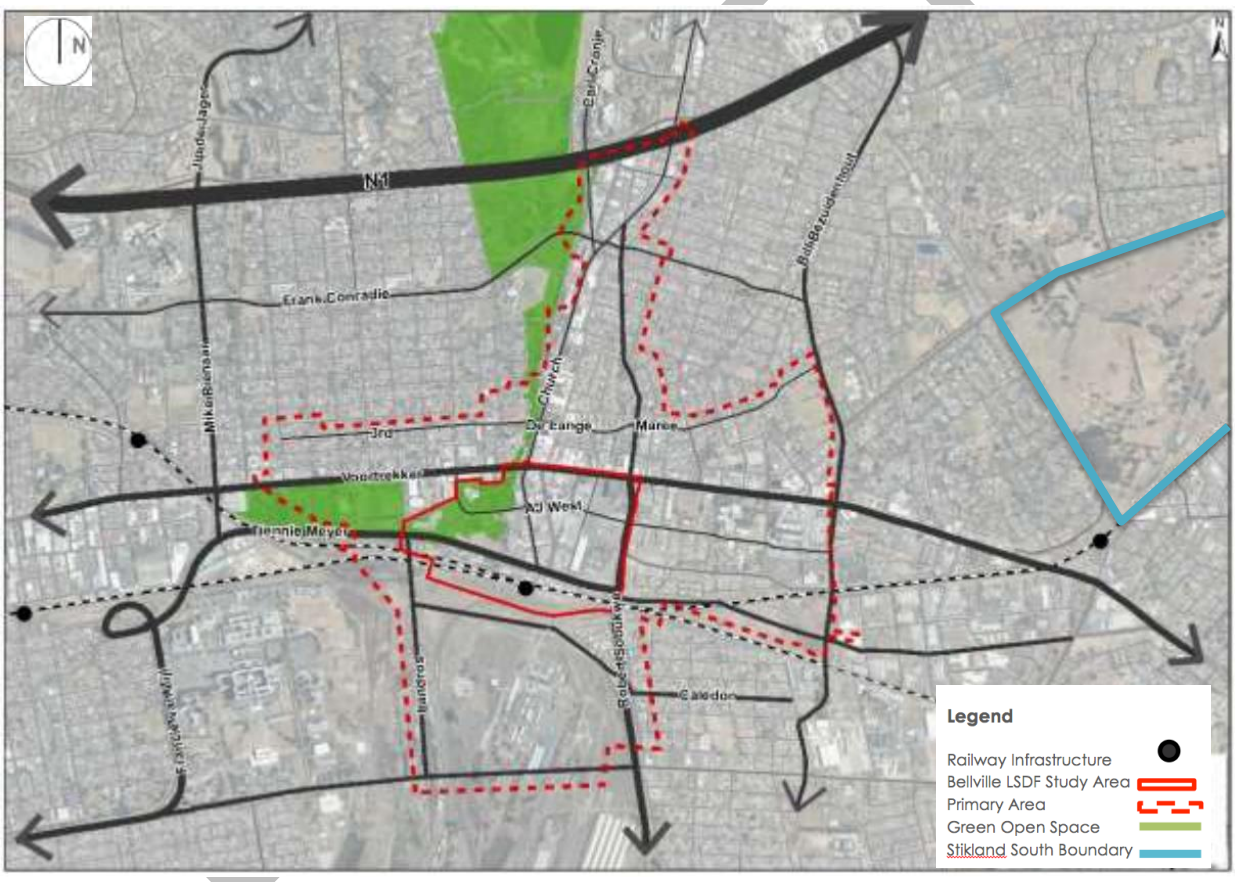


Figure 2.3-8 Bellville CBD LSDF extract

2.3.6 The CCT Heritage Audit

Heritage audits are typically conducted by municipalities or organizations to assess and document the historical and cultural heritage within a city or region. They may include surveys, assessments, and documentation of heritage sites, buildings, artifacts, and other items of historical or cultural significance.

The CCT Heritage Audit does not identify any heritage resources on or in the vicinity (the closest being a Grade IIIA "cemetery and suspected cemetery" to the south and a mid 20thC church to the west in the suburb of Del La Haye, both at a considerable distance). There is no existing or proposed Heritage Protection Overlay. However, it may be that the area has not yet been fully audited as only a few properties have been specifically identified as Not Conservation Worthy. The immediately adjoining suburb of De La Haye has been identified in the 2023 Tygerberg District Plan as a proposed NHRA exemption area (refer to Figure 2.3-9).

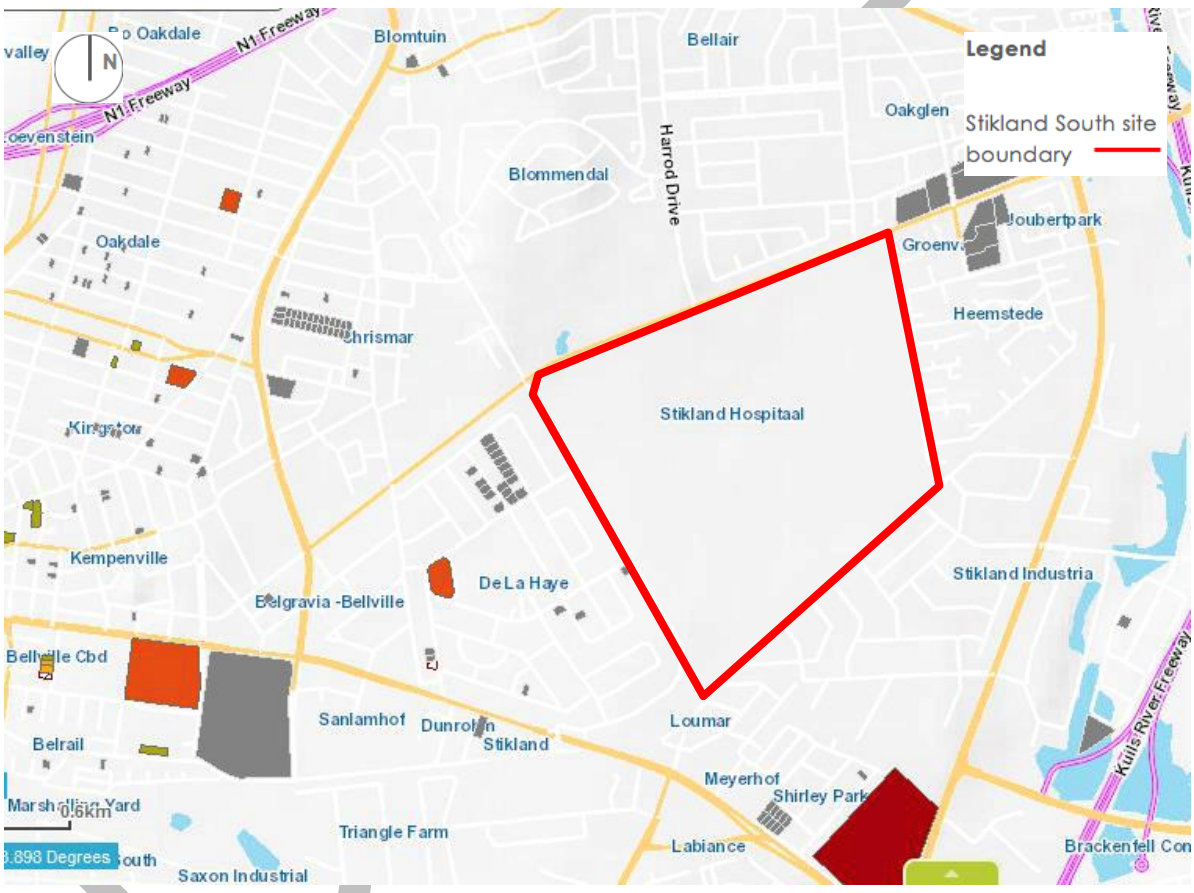


Figure 2.3-9CCT Heritage Audit, site bordered red, overall landholdings bordered black (CCT City Map Viewer accessed 15 June 2023)

2.3.7 National Heritage Resources Act (NHRA)

The National Heritage Resources Act (NHRA) is a South African law aimed at conserving and protecting the country's cultural and natural heritage. Enacted in 1999, it establishes a framework for the identification, management, and safeguarding of heritage resources, including historic sites, artifacts,

and natural landmarks. The NHRA outlines procedures for declaring national heritage sites, regulating activities that could affect these sites, and promoting public awareness of their significance. It also establishes a national heritage council to oversee and advise on heritage matters. The NHRA plays a crucial role in preserving South Africa's diverse heritage and promoting its cultural and historical richness.

Relevance to Stikland South

Any proposed development of the Stikland South site would trigger the requirement for the submission of A Notification of Intent to Develop (NID) to Heritage Western Cape (HWC) in terms of the National Heritage Resources Act No. 25 of 1999 (NHRA).

In view of the assessment within this report, it is reasonable for any such NID to recommend that no further studies should be required in terms of the NHRA i.e. no Heritage Impact Assessment is warranted. However, HWC is the final arbiter of these decisions, as well as the grading of heritage resources (other than those deemed to be of national significance).

Bearing this in mind, it should be noted that on 9 September 2020, HWC issued a response to a NID for Stikland North (which NID recommended that no HIA be required) requiring a Heritage Impact Assessment (HIA) that satisfies the provisions of section 38(3) of the NHRA. This HIA is to have specific reference to the following:

- A comparative study of other institutional buildings including related built environment;
- A social study focusing on the historical analysis12 with assessment of impact to the built environment and surrounding context; and
- It is therefore recommended that should a development framework for this site (Stikland South) be prepared, a NID should be submitted as soon as possible to establish HWC's requirements in this regard. Should HWC require an HIA despite a recommendation to the contrary, it is recommended that a Phased approach to the HIA be requested in order to submit the identification of heritage resources and heritage indicators for support or otherwise, as their support for a grading of Not Conservation Worthy may limit the requirement for an impact assessment.

Alternatively:

- If the Phase 1 HIA for Stikland North is submitted to HWC for interim comment (with their prior agreement), this should establish the precedent for Stikland South, which may then obviate the need for an HIA; or
- HWC could be informed that the site boundaries for the Stikland North HIA have been expanded to include Stikland South, and the impact assessment be conducted simultaneously, avoiding unnecessary duplicate work.

2.3.8 Civil Services

Numerous legislative prescripts and policy frameworks applicable to the civil services are listed below.

- Cape Town Water Strategy;
- CoCT's Management of Urban Stormwater Impacts Policy.

Key tenets that could be drawn from national and provincial legislation, policy and framework plans with regards to the civil services and Stikland South contextual framework study include:

a) Providing safe access to water and sanitation;
b) Promoting the wise use of water;
c) Ensuring sufficient reliable water from diverse sources;
d) Creating shared benefits from regional water resources;
e) Cultivating a water-sensitive city;
f) Improving the quality of stormwater runoff;
g) Control the quantity and rate of stormwater runoff;
h) Encouraging natural groundwater recharge.

2.3.9 The National Environmental Management Act (NEMA) and the EIA Regulations

In terms of the National Environmental Management Act (NEMA) Environmental Impact Assessment (EIA) Regulations (2014, as amended), the following activities, which relate to developments in close proximity to watercourses require prior environmental authorisation:

- Activity 19 of Listing Notice 1: Excavating or depositing 10m³ or more of any material within a watercourse; and
- Various activities in Listing Notice 3 due to the geographic location of the site.

In both of the above cases a Basic Assessment process should be undertaken. These processes would typically require a detailed level of aquatic biodiversity specialist input.

For all developments that trigger the requirement for prior environmental authorisation and for which, as a result of the application of the national web-based Environmental Screening Tool, have been determined to be associated with a VERY HIGH, HIGH or MODERATE sensitivity for the aquatic biodiversity theme, the Protocol for specialist aquatic biodiversity assessment must be complied with. This protocol prescribes the scope of the assessment and is particularly exhaustive in its requirements. However, if following ground-truthing by an aquatic biodiversity specialist the site is found to have a LOW aquatic

biodiversity sensitivity then a specialist-prepared Aquatic Biodiversity Compliance Statement is required. If the site is found to have a zero/negligible aquatic biodiversity sensitivity then the findings can inform the Site Sensitivity Verification study and be used to motivate that no Compliance Statement is required.

2.4 Conclusions from the Policy Analysis

The following conclusions can be drawn from the policy analysis for the broader context of the Stikland South Contextual Framework study area.

The entire Stikland hospital site, which includes both Stikland North and South site is seen as part of the City's Inner Core, prioritised for investment and co-investment towards meeting TOD objectives.

The entire Stikland site, which includes the Stikland South, is part of the VRC Integration Zone, earmarked as a key employment area, well-located residential environment accommodating a range of income groups, and an area of concentration for higher order (metropolitan and sub-metropolitan) institutional uses (particularly health and tertiary education).

Within the VRC Integration Zone, the larger Stikland site – including Stikland South – is seen as part of a functional area with high development potential.

The larger Stikland site – including Stikland North – is seen as a strategically located catalytic area within the City and VRC Integration Zone identified for future area-based intervention opportunities. If unlocked, these sites would fundamentally impact on the development landscape of the VRC Integration Zone and contribute to the City's TOD objectives.

Table 2-3 contains a summary of each policy including the most relevant implications for the future development of the Stikland South site. The conclusions can be drawn from the policy analysis for the broader context of the Stikland South.

Table 2-3 Summary of legal and policy implications

Legislation / Policy Title	Summary of Implications
SPLUMA (2013)	Future development to be guided by SPLUMA principles such as redressing spatial injustices towards spatial justice, through better located housing and socio-economic opportunities and better access to social services.
National Development Plan 2012	Aims to eliminate poverty and reduce inequality by 2030, through growing an inclusive economy, building capabilities, enhancing the capacity of the state, and promoting leadership and partnerships throughout society. Stikland supports this by being strategically located for densification and for providing a variety of housing and mixed-use opportunities.
WCG LUPA (2014)	Future land use planning for the site should follow guidance as stipulated in LUPA according to procedures and criteria for deciding on land use applications.
One Cape 2040 The long-term vision and plan for Western Cape Draft 1	ONE CAPE 2040 is an attempt to stimulate a transition towards a more inclusive and resilient economic future for the Western Cape region. It seeks to set a common direction to guide planning and action and to promote a common commitment and accountability to sustained long-term progress. The Stikland development will provide a range of collaborative opportunities with a variety of stakeholders through its mix-used functions, which will encourage a more inclusive, and resilient development plan.
MEDIUM TERM STRATEGIC FRAMEWORK 2019–2024	The MTSF 2019-2024 is built on three foundational pillars: a strong and inclusive economy, capable South Africans, and a capable developmental state. The MTSF further states that these three pillars will be achieved through catalyzing development opportunities and removing structural impediments to equality, opportunity, and freedom. Stikland is aligned with the MTSF as it will assist with bridging the gap of spatial injustice, through Spatial Integration and strategic state land investment.
Provincial Strategic Plan 2019-2024	The Provincial Strategic Plan (PSP) sets out the Western Cape Government's (WCG) vision and strategic priorities. This Provincial Strategic Plan details how, over the next five years, province will: 1. Build safe and cohesive communities, 2. Boost the economy and job creation; 3. Empower our people; 4. Promote mobility and spatial transformation, while at the same time; 5. Driving innovation within a culture of a truly competent state. Overall Stikland is in conjunction with the Provincial Strategic Plan as it has been identified as a mobility and spatial transformative site, where people are able to benefit from a variety of housing opportunities for a mixed income community, in close proximity to public transport, social facilities and economic nodes.
CoCT IDP (2017 - 2022)	Land uses to be guided by the goal of spatial transformation through increased densities and transit-oriented growth and development.
CoCT TOD Strategy (2016)	Transversal development and management to address urban growth and service delivery in a consolidated manner, with transport acting as the catalyst - structure of precinct guided by access and new transport movement infrastructure.

Legislation / Policy Title	Summary of Implications
CoCT MSDF (2018)	Stikland is positioned within the MSDF's Northern Corridor, which forms part of the City's Urban Inner Core - area prioritised for investment and co- investment in a manner, which supports TOD objectives. This implies that the City will prioritise these areas for investment and co-investment - potential partnerships should therefore be explored.
Tygerberg District Plan (2023)	Stikland identified as opportunity site for extensive urban restructuring and development, seen as opportunity for mixed-use development in the form of commercial/ office/ residential development. Current District Plan in drafting process - new proposals to be incorporated into future planning of Stikland South.
VRC Integration Zone (2018)	Identifies Stikland as one of the Pre-Prioritised Local Areas (PLAs) along the corridor - implying that catalytic projects and other spatially targeted interventions are prioritised. Future development to include connections (NMT, Public Transport) with broader VRC Zone.
Bellville Local Area LSDF	Two aspects of the Bellville CBD LSDF impact the proposals for Stikland. Firstly, the project could involve a suggested government precinct. Consequently, the proposals for a government-related precinct at Stikland South might compete with the proposals for the CBD in the near to mid-term, given its mixed-use nature.. Secondly, alternative transport networks are being investigated to improve congestion in the CBD. One of the proposals includes a possible movement route across the Stikland North Site.
National Heritage Resources Act (NHRA)	The site is currently zoned CO2 and will need to be rezoned to support new land uses. This means that section 38(d) of the NHRA will be applicable and therefore the responsible heritage resource authority must be notified at the earliest stages of development. A NID will be submitted to Competent Authority.
The CCT Heritage Audit	The CCT Heritage Audit found no heritage resources in the area, with the closest being a cemetery and a mid-20th century church at a distance. There's no Heritage Protection Overlay, and the area may not be fully audited. The neighboring De La Haye suburb is a proposed NHRA exemption area in the 2023 Tygerberg District Plan.
Civil Services	The civil services in the Stikland South area are governed by various legislative and policy documents, including the Cape Town Water Strategy and CoCT's Management of Urban Stormwater Impacts Policy. These regulations emphasize safe water access, efficient water use, and improving stormwater quality and control in order to create a water-sensitive city.
National Environmental Management Act (NEMA)	If any of the delineated wetlands are infilled as part of the development, then Activity 19 of Listing Notice 1 (GN 327 of 2017) becomes applicable. A basic assessment report will need to be completed should these activities be applicable.
Specific Environmental Management Acts (SEMAs)	None are applicable.

Legislation / Policy Title	Summary of Implications
National Water Act (NWA)	A risk assessment in terms of GN 509 of 2016 must be undertaken to determine the degree of risk posed to the watercourse by the development. Should the development pose a low risk, registration of the water use under a General Authorisation would be required. Should the development pose a moderate to high risk, application for a Water Use Licence would be required. It needs to be determined whether the General Authorisation or the Water Use Licence for section 21(c) and (i) activities is applicable and, subsequently, applied for from the Department of Water and Sanitation. Such a determination can only be made once a draft conception development plan is available.

3. PROPERTY INFORMATION

3.1 Site Description

The subject site is Remainder Erf 6300 and referred to in this document as Stikland South. The total extent of the Southern portion of Re Erf 6300 is 114.16 Ha. The site is registered in the name of the Western Cape Government. (Please note that this section is supported by appendix 1.a)

Erf Number	Re Erf 6300
Registered Extent	114.16 Ha
Title Deed No	T8180/1914 dated 13 October 1914
Restrictions	It was found that there are no restrictive conditions that would prevent the development of the site for a mixed-use development. An unregistered servitude forms part of Remainder of Erf 6300. This is an electrical servitude situated along the South and West boundary of the site in favour of the City of Cape Town.
Zoning	Community 2
Land Use	Institutional and Place of Instruction

3.2 Zoning and Land Use

The Stikland South site is zoned Community 2 (See Figure 3.2-1): The primary uses for this zoning include: Institution, hospital, place of instruction, place of worship, place of assembly, rooftop base telecommunication station, minor free-standing base telecommunication station, minor rooftop base telecommunication station, open space and filming. Consent uses include: Institution, hospital, place of assembly, cemetery, free-standing base telecommunication station, urban agriculture and veterinary practice.

The current use for Rem. Erf 6300 is Institution/hospital (Stikland Psychiatric Hospital) and Place of Instruction (Western Cape College of Nursing Metro East Campus)

Presently, the land use of the Stikland South site aligns with its existing zoning, with the surrounding zonings being residential, industrial, general business, and open space. The current land use of the Stikland South site harmonizes with the neighboring land uses, serving as a valuable resource for the local community to address mental health-related issues and creating a buffer zone between the industrial and residential zones.

The possible development of the site for mixed-use will constitute a rezoning application. Given the site's proximity to a wide range of land uses, introducing a proposed mixed-use zoning will enhance the

existing diversity of land use activities in the area, especially the proposed residential activities, which would take place under the mixed-use zoning scheme, as the existing area is predominantly residential.

Figure 3.2-1 Zoning map of Stikland South zoned as CO2

3.3 SG Diagram

Although there is an approved SG diagram for Erf 32103, the property has not yet been legally subdivided off Erf 6300 Bellville with a separate title deed. Re Erf 6300 North therefore needs to be subdivided from Erf 6300 (the southern portion). The future proposals for the area will determine whether the site will be subdivided into smaller portions in the future or not. (See Figure 3..3-1, & Figure 3.3-2)

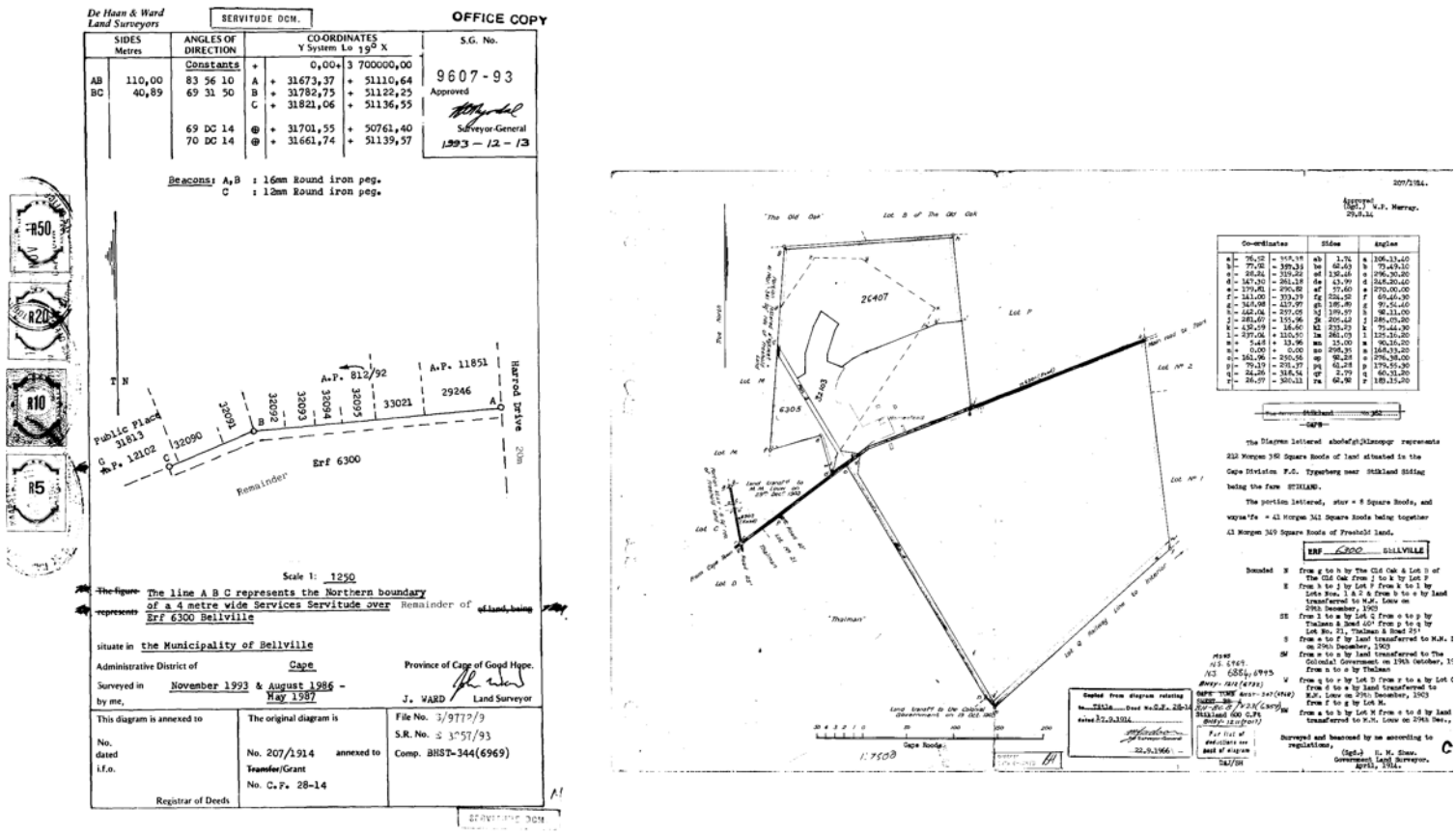


Figure 3.3-1 SG Diagram for servitude and Erf 6300, which includes Stikland North and South

7795-91

SYE METER		RIGTINGS-HOEKE		KOÖRDINATE STELSEL Lo - 19°	Y	X
		Konstante			+ 0,00	+ 3700 000,00
AB	87,98	311 00 00	A		+ 32 261,90	+ 51 057,72
BC	35,00	26 09 40	B		+ 32 195,50	+ 51 115,44
CD	101,40	16 07 30	C		+ 32 210,93	+ 51 146,85
DE	24,73	357 38 10	D		+ 32 239,09	+ 51 244,26
EF	65,43	293 25 20	E		+ 32 238,07	+ 51 268,97
FG	13,91	293 36 00	F		+ 32 178,03	+ 51 294,98
GH	26,26	33 56 00	G		+ 32 165,28	+ 51 300,55
HJ	26,16	24 55 10	H		+ 32 179,94	+ 51 322,34
JK	26,25	16 15 40	J		+ 32 190,96	+ 51 346,06
KL	32,45	6 30 40	K		+ 32 198,31	+ 51 371,26
LM	32,94	355 21 00	L		+ 32 201,99	+ 51 403,50
MN	9,86	316 14 00	M		+ 32 199,32	+ 51 436,33
NP	18,75	279 10 30	N		+ 32 192,50	+ 51 443,45
PQ	25,32	276 08 40	P		+ 32 173,99	+ 51 446,44
QR	113,14	332 16 40	Q		+ 32 148,82	+ 51 449,15
RS	114,02	248 59 30	R		+ 32 096,19	+ 51 549,30
ST	83,57	340 31 40	S		+ 31 989,75	+ 51 508,42
TU	89,51	66 02 50	T		+ 31 961,89	+ 51 587,21
UV	77,28	60 26 30	U		+ 32 043,69	+ 51 623,55
VW	69,43	101 21 20	V		+ 32 110,91	+ 51 661,67
WX	353,79	149 22 30	W		+ 32 178,98	+ 51 648,00
XY	38,02	239 22 00	X		+ 32 359,21	+ 51 343,56
YZ	88,53	180 52 50	Y		+ 32 326,50	+ 51 324,19
Za	124,50	196 09 40	Z		+ 32 325,14	+ 51 235,67
aA	65,00	206 05 50	a		+ 32 290,49	+ 51 116,09
		122DC14	⊕		+ 32 162,09	+ 51 706,50
		123DC14	⊕		+ 31 898,25	+ 51 567,21

Bakens.

A,B,C,D,E,F,X,Y,Z,a = 15mm ronde ysterpen langs sement muur.

G,H,J,K,L,M,N,P,Q,R,S,T = 20mm x 800mm ysterpen.

V = 20mm x 800mm ysterpen in teer.

W = 12mm ysterpen

U = 20mm ysterpen in beton.

Die figuur A B C D E F G H J K L M N P Q R S T U V W X Y Z a

stel voor 7,8412 Hektaar grond, synde

Erf 32103 (Gedeelte Erf 6300) Bellville

geleë in die Munisipaliteit Bellville

Administratiewe Distrik Kaap Provinsie Kaap die Goeie Hoop.

Opgemeet in September 1991

deur my.

B.I. VAN ZYL Landmeter

Hierdie kaart is geheg aan	Die oorspronklike kaart is.	Lêer No. 3/9772/9
No. gedateer	207-1914	M.S. No. 2499/91
t.g.v.	No. geheg aan Transport/Grondbrief	Komp. ~~BHST-344~~ BHST-344 6969 BHST-347 6968
Registrateur van Aktes	No. 1914- -C.F. 28-14	

KANTOORAFSKRIF

L.G. No. 7795-91

Goedgekeur

Adjunk Landmeter-generaal

1991. 10. 28

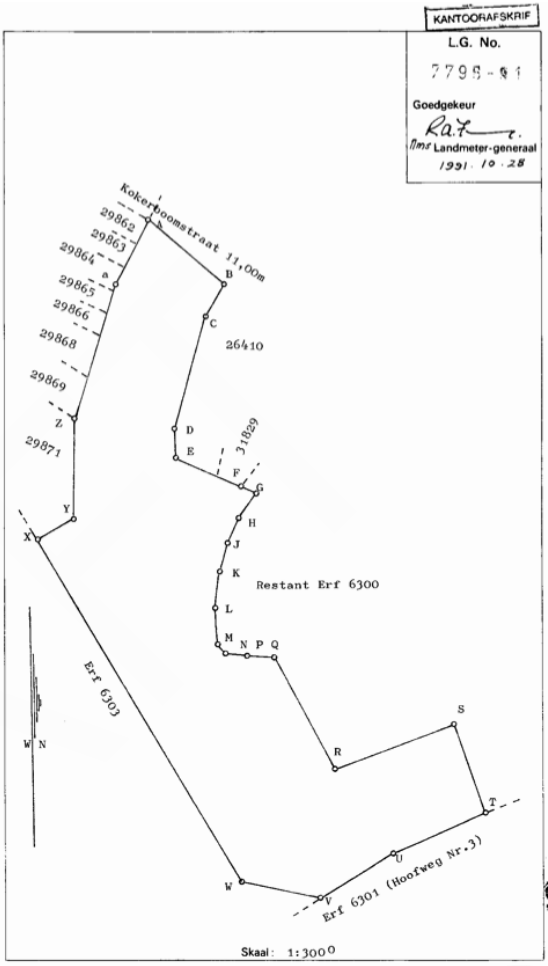


Figure 3.3-2 SG diagrams for unregistered Erf 32103

3.4 Title deeds, Property Restrictions & Servitudes

The following list of deeds were scrutinized by the conveyancer:

- T8180/1914 dated 13 October 1914
- Deed of Grant Cape Freeholds Volume 28 Folio 14 dated 17 September 1914 T2207/1913 dated 9 August 1913
- T10533/1904 dated 19 September 1904
- T5082/1903 dated 16 April 1903
- T1930/1891 dated 12 May 1891
- Deed of Grant Cape Quitrents Volume 20 Number 18 dated 12 November 1884 T72/1884 dated 6 March 1872
- T159/1873 dated 11 July 1873 T373/1872 dated 13 March 1872 T246/1868
- Dated 27 April 1868 T75/1868 dated 16 June 1868 T270/1861 dated 20
- March 1861 T1 78/1860 dated 11 October 1860 T176/1860 dated 11
- October 1860 T1 7 4/1860 dated 11 October 1860 T170/1850 dated 18
- June 1850 T91/1848 dated 8 February 1848
- T173/1811 dated 29 March 1811
- T128/1811 dated 15 March 1811
- T201/1808 dated 13 May 1808
- T170/1801 dated 18 May 1801
- T17 4/1782 dated 14 November 1782
- T2/1764 dated 14 January 1764
- T55/1733 dated 7 May 1733
- T10/1733 dated 23 January 1733
- Deed of Grant Cape Quitrents Volume 2 Folio 282 dated 14 October 1714

It was found that there are no restrictive conditions that would prevent the development of the site for a mixed-use development.

Legend

Administrative Registration
Allotment Township
Public Place
Erf
Servitude Area
Servitude Line
Street Parcels
Unalienated State Land
Contours 5m

Figure 3.4-1 Stikland South electrical servitudes

4. EXISTING LAND USES

4.1 Surrounding Land Uses

The aerial photo below, Figure 4.1-1, shows the Stikland Psychiatric Hospital surrounded by a variety of Land Uses.

- To the south of the site, over the railway line, is the Stikland Industrial Area, which is a light industrial area with many small to medium scale warehouses and factories. This is a significant job centre in the area. The railway line forms a hard barrier as it has a solid concrete wall along its entire length. The only crossing is at Stikland Station at the south west corner of the Stikland Hospital site.

- To the east are the suburbs of Groenvallei, Heemstede and Joubert Park which are each made up of a number of small to medium size group housing developments, of a double and single storey scale. Groenvallei consists of homes in the affordable market valued between R750,000 and R1,500,000. Groenvallei has an unusual layout in that the main connecting street, Midmar Road, runs north-south on the western side of the development, alongside the Stikland Hospital boundary. This raises the question of how or whether any lateral connection could or should be made between possible new development in Stikland and this suburb. This should be investigated in the design phase as the interface between a large vacant portion of Stikland land and Groenvallei along an 850m boundary is significant.

Figure 4.1-1 Aerial view of Stikland South and surrounding built environment

- To the north, on the opposite side of Old Paarl Road, is the suburb of Oakglen. This suburb is mainly single residential with a few apartment complexes and is a step up in property values from Groenvallei. The suburb backs onto Old Paarl Road is only accessed via the St Harrod and Meerlust Road intersections;
- To the west of Oakglen is the Stikland North portion of the Stikland Hospital land. This lends itself to a medium density mixed use development and a similar development on Stikland South would be complementary on opposite sides of Old Paarl Road; and
- To the west of Stikland South, for the entire length of De la Haye Ave, is the suburb of Thalmen. This is an older single residential suburb and very well established. Property values range from R1,500,000 to R3,000,000. The properties on De la Haye access directly off that street so this is an important interface to be considered for future development of the vacant land on the western side of Stikland South.

4.2 Land Uses and Buildings within Stikland South

Buildings and Land Uses of Erf 6300 Stikland South are mapped below with the respective land uses discussed in table 4-1, with information provided by the hospital.

Table 4-1 Building uses in Stikland Psychiatric Hospital

Ward no.	Ward Function	Ward Sensitivities / Routines Noise, light etc.
Ward 1-3		No specific requirements
Ward 4	Sub-Acute male unit	Clients are transferred in from ward 5 and are more stable. Clients remain unpredictable with some that still require seclusion due to behavioural challenges. Clients spend most of their time in the courtyard participating in various activities. The daily ward routine starts at 06h00 when bathing takes place. Resting time starts after lunch at 13h00 till 15h00. Visiting takes place from 15h00 till 16h00 in the visiting area. Handover from day to night shift takes place at 19h00. Resting time for clients at night is at 21h00.
Ward 5	Male Acute Admissions	Ward 5 is male admission ward with very ill patients. Unit has a closed side and open side. Closed side has new patients who are mostly disruptive, disorganized, and restless. Some require seclusion and when they are secluded tend to be very loud and would bang the doors. From 6:30 day staff begin their day by washing clients from the closed side. Around 8:30 weather permitting all our patients are in the courtyard until 12:00 where they

		are free to express themselves. After lunch they go inside their dormitories to rest until 15:00. Sleeping time is at 21:00 at night until 5:30 the next morning. Thus, quiet times is during rest time 12:30 to 15:00 and night time from 21:00 to 5:30. Admissions: we get admission at any time day and night. Visiting times: From Monday – Friday we only get visitors at 19:00-20:00. Weekends we have visiting at 15:00-16:00. Weekends visiting is the busiest time in the unit as most families can only come on weekends. Lights: when there is no loadshedding we have enough lighting, when there is loadshedding we have challenges as the power tends to fade by the second hour.
Ward 6	**Acute Female admission**	These patients are sometimes severely ill and not in contact with reality. They then tend to make a lot of noise. Some of them are then put in seclusion and tend to bang on the seclusion doors which is cladded in metal and makes a lot of noise. Admissions come anytime during day or night. The ward routine starts in the mornings at 06:00 when they start showering. There is a resting time is the afternoon after lunch till visiting time at 15:00. Bedtime at night starts at 21:00. Patients need to rest at night to help with the recovery process. It is therefore imperative that lighting is low. At the back of the ward is a recreational space where the patients spend most of their time during the summer. The area is enclosed with vibacrete, but can become noisy at times when there are sports activities going on. It also happens that patients are throwing their shoes over the wall. There are several visitors coming on a weekend and in the afternoon.
Ward 7	**Female Acute**	These patients come from ward 6 and are sometimes not really stabilized and still very psychotic and noisy. They need to be transferred back to ward 6 with help. There is no enclosed tunnel between the two wards, and this then happens for everybody to see. They then tend to make a lot of noise. The ward routine starts in the mornings at 06:00 when they start showering. There is a resting time is the afternoon after lunch till visiting time at 15:00 Bedtime at night starts at 21:00. Patients need to rest at night to help with the recovery process. It is therefore imperative that lighting is low. At the back of the ward is a recreational space where the patients spend most of their time during the summer. The area is enclosed with wire, and you can see patients moving and playing in the courtyard. This can become very loud. There are several visitors coming in the afternoons to visiting loved ones. There is also some of the patients who attend the day center to help them on the recovery road. These patients sometimes walk to the day center with the OT and back if not taken with GG vehicle. Patients also walk on the grounds as part of their recovery process and as part of the ward program and over weekends for their own leisure.

		The environment of Stikland hospital is contributing to the recovery process of patients. Patients sit in the backyard and watch the birdlife and animals running around. It feels like a farm for patients. It is peaceful what is good for mental health. Family members also sit with patients outside during visiting times and staff also make use of grounds for planning activities like Spring Day functions
Ward 8	**Male acute – pre discharge**	Patients transferred from ward 5 and are sometimes not really stabilized and still very psychotic are noisy. Sometimes if their behaviour is unpredictable and require seclusion and when they are secluded tend to be very loud and would bang the doors and scream. Difficult to manage, aggressive patients need to be transferred back to ward 5 with help. Wards 5 and 8 are not next to each other and need to pass between wards 6+7(female wards) to get to ward 5. A fence secures Ward 7's courtyard if females is outside, they will witness the transfer. The ward routine starts in the mornings at 05:30 when night staff start showering the west side (small dormitory). Day staff will shower the rest of patients when their shift starts at 07:00. There is quiet time in the afternoon after lunch till visiting time at 15:00 At the back of the ward is a recreational space where the patients spend most of their time. The area is enclosed with vibacrete, there is artificial grass and shade with enough benches for their comfort. They like to play dominoes. OT, Psychology, Nursing and Doctor group activities in mornings and afternoon with smaller groups of patients. Visiting time is daily between 15:00 and 16:00. There is also some of the patients who attend the day center to help them on the recovery road. These patients walk to the day center with the security officer allocated to the day center and back. If it's raining the GG vehicle will take them to the day center. The environment of Stikland hospital is contributing to the recovery process of patients. Patients sits in the backyard and watch the birdlife and animals running around. It feels like a farm for patients. It is peaceful what is good for mental health. Bedtime at night starts at 21:00. Patients need to rest at night to help with the recovery process. It is therefore imperative that lighting is low. During loadshedding lighting is a big concern, especially in the dormitories.
Ward 9	**Male medium-long term patients**	Ward 9 receives transfers from ward 4 and ward 8-it does happen that some of the transfers are still very psychotic, and they are noisy. It is disturbing for the long-term patients, and they get unsettled when patients are aggressive and noisy. We will put an aggressive patient in seclusion if needed or transfer them back to ward 4 or 8. Ward routine-starts at 05:30 in the morning with showering of the patients on the gent's side. Resting time-after lunch at 12:00 till 14:30

		Lights out at 21:00 at night-patients are always tired and after good night's sleep they feel refreshed-need low lighting in the dormitories at night to improve the sleep process. Recreation Area in the morning and afternoon-back stoop and back yard-we do groups at these areas, and they play dominoes a lot. OTT-do daily groups with the patients in her group room and on the back stoop. 8 patients attend SATS daily during the week and 1 patient attends Sofunda daily during the week. Patients benefit from this, and they learn new skills that helps them with the recovery process. They also earn a very little amount of money for their work. Patients need to walk to SATS from ward 9-it's very far to need walk-also to walk back in the afternoon. Visiting time in the afternoon between 15:00 and 16:00 and evening between 19:00 and 20:00. Families prefer to visit over weekends or in the afternoon. Patients will often sit in the flower garden with their families during visiting hour. Patients find the environment contributing to their recovery -the acute patients-they enjoy walking on the grounds-always under supervision.
Ward 10		Ward 10 is an acute admission and closed ward for male and female elderly patients. Admission criteria is 60 Yrs and above. It is 20 bedded unit and has 3 isolation rooms, and no seclusion room. The patients who require seclusion would be transferred to ward 11 for further management and containment. The ward admits patients with dual diagnosis (Psychiatric & medical conditions), but priority would be given to those patients presenting with mental illness. Some of patients on admission presents with aggressive behaviour, suicidal ideation which requires sedation, seclusion and 1:1 nursing care. Due to aging and deterioration of physical status, they are prone to develop secondary medical conditions and are vulnerable to slip and falls. The ward programme is diverse and includes all multidisciplinary team members to cater for the patients' needs. Those who are high functioning takes part in OT activities for stimulation of cognitive function. Ward routine-starts at 05:30 in the morning with showering of the patients on the gent's side. Resting time-after lunch at 12:00 till 14:30 Lights out at 21:00 at night-patients. Visiting time is daily between 15:00 and 16:00. The elderly population are disturbed by loud noises and hearing people speaking but they cannot see who is talking, therefore the area around the ward should be quiet. The elderly sometimes mixed the day and night times and therefore lighting should be adapted according to these times.
Ward 11		Ward 11 is an acute admission ward for male and female elderly patients from the age of 60 yrs. and is regarded as a closed ward. It is 24 bedded unit and has 2 seclusion rooms and 3 isolation rooms. The ward admits patients with dual diagnosis (Psychiatric & medical conditions), but priority is given to those patients presenting with mental illness. Some of patients on admission presents with aggressive behaviour, suicidal ideation which requires sedation, seclusion and 1:1 nursing care. Due to aging and deterioration of physical status, they are prone to develop secondary medical condition and are vulnerable to slips and falls. The ward programme is diverse and includes all multidisciplinary team members to cater for the patients'

		needs. Those who are high functioning take part in OT activities for stimulation of cognitive function. Ward routine-starts at 05:30 in the morning with showering of the patients on the gent's side. Resting time-after lunch at 12:00 till 14:30 Lights out at 21:00 at night-patients. Visiting time is daily between 15:00 and 16:00. The elderly population are disturbed by loud noises and hearing people speaking but they cannot see who is talking, therefore the area around the ward should be quiet. The elderly sometimes mixed the day and night times and therefore lighting should be adapted according to these times. Some old people can make loud noises and can scream all the time. Clients like to watch the cars driving in the road and the different birds and squirrels running around the garden.
Ward 12		Ward 12 is a Detoxification Unit, where clients (male and female) are admitted for substance abuse, Like Heroin, Codeine, morphine, and methadone. There clients come for 1 week detoxing, where they get treated for withdrawals. They are referred to our unit by external social workers and rehabilitation services. Once client has completed our one week programme, they have to follow-up at either in-patient or out-patient rehabilitations. While clients are in the unit they get treated with medication for the withdrawals. There is also a ward programme, whereby sessions ares being done by Psychology, Occupational therapy, and nursing. The NA- Narcotic Anonymous also comes in once a week to have a support group with the clients. The cliental is very vulnerable at times and we receive complex cases, with very depressed and suicidal, personality disorder, clients as well as aggressive at times. We also receive many clients who are gang affiliated. The unit is fenced with a fence as visitors are not allowed at the unit, this is due to people trying in the past to smuggle drugs into the unit. The old Paarl Road is at the back of the unit and the noise of the cars and traffic can be heard. Clients do go on walks on hospital grounds but accompanied by nursing staff and Security. they normally enjoy the environment, with the trees and birds, geese, and squirrels. There should be no interference possible with the public in making drug deals. Clients wake up at 07:30 in the morning and go to bed at 22:00 at night.
Ward 13		Ward 13 is a 4-week Alcohol Rehabilitation programme. The unit is a 26-bed unit. We have 18 males and 8 female beds. The referral procedure is as follows. The clients can call the unit directly and staff do telephonic screening and an admission date is given immediately. The admissions are being done every Monday and the discharges are done every Friday. We also have a dual diagnosis group, clients that use other substances and have mental health diagnosis, and those clients are referred to us from the acute units once a month and there should be no interference possible with the public in making drug or alcohol deals.

		Clients have a ward programme and receive groups sessions from Psychology, Occupational therapy, social work, and nursing as part of rehabilitation. The AA-Alcoholic Anonymous also comes in once a week to have a support group with the clients. The cliental is very vulnerable at times and we receive complex cases, with very depressed and suicidal, personality disorder, clients as well as aggressive at times. The area around the ward should be safe for clients if they need quiet time when depressed.
Ward 14		Ward 14 is a long-term ward for elderly patients. It is a 45 bedded unit and has 1 isolation room. The award is divided into 4 sub areas: Male & Female dormitories. Female medium-term area: (**10 patients' under age of 60 from female acute wards**). Palliative care area. The ward receive referral from ward 10 & 11, and acute female wards. Those patients referred from wards 10 & 11 are mentally stable and waiting for placement, some of their physical conditions deteriorated and need assistance with daily living activities and require palliative care. Those who are high functioning are involved in ward programmes such as OT activities like knitting, painting. Ward routine-starts at 05:30 in the morning with showering of the patients on the gent's side. Resting time-after lunch at 12:00 till 14:30 Lights out at 21:00 at night-patients. Visiting time is daily between 15:00 and 16:00. The surroundings should be quiet.
Ward 15		Ward 15 is a therapeutic admission ward, for male and female patients. Ward 15 also accepts patients from Acute Male and Female wards per referral. All our patients are referred from other hospitals, CHC'S, Private Psychiatrists and Psychologists. Diagnostic criteria are mainly Depression, Anxiety, Personality Disorders. Patients are very emotional and vulnerable due to complex traumatic life experiences. Patients might become uncontained, aggressive, and suicidal in the ward. Patients are going for walks on the hospital grounds as part of the therapeutic ward programme. The recreation area at the back for recreational purposes and group activities is fenced with a wall and secured. Patients tend to become noisy when they have a ward function-like a braai. Containment of patients when becoming uncontained can be problematic and noisy. Therapeutic ward programme is based on skills and psycho education. Ward needs to be quiet as well as area around ward. Programme starts at 07.00 and lights out is from 22.00.
Ward 16 - 21		No specific requirements

5. STIKLAND SOUTH STAKEHOLDER ENGAGEMENT

All of the below contextual information as well as the engagements with the following stakeholders contributed to the informants for Stikland South, including the meetings held with the existing users. The following is a record of Workshops and Participation. It is important to note that discussions of incorporating Stikland South, came through the initial appointment of Stikland North.

Date	Organisation	Purpose	Representative
14 July 2022	WCG	Presenting option 4 and 5 for Stikland North and South	Jacqui Gooch: DTPW Head of Department (HoD) Lindelwa Mabuntane: Special Projects Marsallene Harris- Special Projects: Project leader Nolusiso – Project administrator Bathandwa Same- Town Planning intern : Special Projects Gavin Wiseman- Director Affordable Housing Alastair Rendall – ARG Design Khiara Smith – ARG Design
The outcome of the meeting was that it would make sense to plan the future of Stikland including both North and South portions as dealing with the North in isolation would be too limiting. A recommendation was made that the HoD of Infrastructure be in contact with the HoD of Health and Wellness to propose an engagement between the departments with a view to rationalizing the use of land on Stikland North and South.			
30 May 2023	WCG	Stikland Discussion Meeting with Management (DoH & W; Stikland Hospital Management)	1. Lindelwa Mabuntane (LM) - Infrastructure – Special Programs 2. Marshallene Harris (MH) Infrastructure – Special Programs 3. Phoziswa Daniel (PD) Infrastructure – Special Programs 4. Linette vd Berg (LvB) Department of Health & Wellness (DoH&W) 5. Nico Walters (NW) Department of Health & Wellness (DoH&W) 6. Michelle Blake (MB) Department of Health & Wellness (DoH&W) 7. Zandre Filby (ZF) Department of Health & Wellness (DoH&W) 8. Milne van Leeuwen (MvL) Department of Health & Wellness (DoH&W) 10. Alastair Rendall (AR) ARG Design 11. Khiara Smith (KS) ARG Design 12. Gita Goven (GG) ARG Design
The meeting agreed that it was sensible to look at rationalizing activities and future planning by looking at Stikland North and South comprehensively. DoH&W agreed that some land in Stikland South is superfluous to current and future use and that the 3 facilities currently in Stikland North should really be located in the South. It was agreed to re-group in August to take the process further with input from all parties.			
12 May, 26 & 29 June 2023	ARG Design	Stikland Heritage Specialist Site Visit Stikland Environmental Specialists Site Visit	Cindy Postlethwayt -Heritage Rene Brett – Landscape Zandre Filby Zandre Filby (ZF) Department of Health & Wellness (DoH&W) Anathi Skweyiya Alastair Rendall – ARG Design Khiara Smith – ARG Design
Information gathered in these meetings and visits has been included in the baseline Heritage, Landscape, Planning and baseline Reports. The outcome of the environmental site visit was that a freshwater specialist be appointed to further investigate a wetland area on site.			

6. SUMMARY OF THE KEY FINDINGS INFORMED BY POLICY & STAKEHOLDER ENGAGEMENTS

All National, Provincial and City of Cape Town planning and development policies support the principle of intensifying development of publicly owned land in strategic locations such as Stikland Hospital.

The entire Stikland hospital site, which includes the Stikland South site is seen as part of the City's Inner Core, prioritised for investment and co-investment towards meeting TOD objectives.

The entire Stikland site, which includes the Stikland South, is part of the Voortrekker Road Corridor (VRC) Integration Zone, earmarked as a key employment area, well-located residential environment accommodating a range of income groups, and an area of concentration for higher order (metropolitan and sub-metropolitan) institutional uses (particularly health and tertiary education).

The larger Stikland site – including Stikland South – is seen as a strategically located catalytic area within the City and VRC Integration Zone identified for future area-based intervention opportunities. If unlocked, these sites would fundamentally impact on the development landscape of the VRC Integration Zone and contribute to the City's TOD objectives.

All key Stakeholders – WCG: Department of Infrastructure, WCG: Department of Health and Wellness, City of Cape Town Land Use Planning and Catalytic Projects - regard the Stikland South site as having development potential. The exact extent and nature of the future development is to be the subject of the work for which ARG Design is responsible over the next year or so.

7. CONTEXTUAL ANALYSIS

The following section unpacks key elements related to the site to provide an overview of the current status of the site and surrounding area while achieving a better understanding of these conditions in terms of their implications for future development proposals for the site. The information captured here builds on the contents of the Baseline Reports, which can be accessed for more detailed data and specialist study findings.

7.1 Location and Role of Site

7.1.1 Regional

The site forms the southern portion of the Stikland Hospital Estate. Located within the broader Tygerberg Area, this region includes significant concentrations of commercial and industrial areas (see Figure 8.1). These commercial nodes include the Bellville CBD, Tyger Valley, Brackenfell and Cape Gate, while the large industrial areas in close proximity include Stikland, Sacks Circle/Bellville South, Kuilsrivier and Parow Industrial. Stikland Industria boasts being one of the most centrally located industrial zones in the Northern suburban region of the City of Cape Town.

Some of the suburbs that border Bellville and Stikland include Durbanville and Kraaifontein. The Bellville CBD and Stikland Industrial Area both play significant roles in terms of the broader Cape Town economy and are well located due to the proximity of major transport routes and infrastructure. Regionally the scale and location of Stikland is also strategic as it is a large portion of government-owned land, as illustrated in Figure 7.1-1.

7.1.2 Local

In terms of the local space-economy of Bellville, Stikland is located in close proximity to the regional nodes of Bellville CBD, Tygervalley and Tygerfalls, the Parow Centre and Kuilsriver. The area is home to various tertiary institutions, such as UWC, University of Stellenbosch Business School and Tygerberg Medical campus, and also hosts a variety of medical institutions and hospitals in a concentrated manner.

The Stikland site is bordered by largely middle-income, low-density residential neighbourhoods such as Thalmen, Chrismar, Blommendal and Oakglen in Bellville to the west and north, and the higher density residential area of Heemstede to the east. These areas are largely single residential in nature, with open spaces and institutional uses interspersed with the residential uses.

The Stikland Industrial Area borders the Hospital site to the south. It is separated from the site by the Bellville-Kraaifontein railway line, with Stikland Station located adjacent to the site to the south-west.

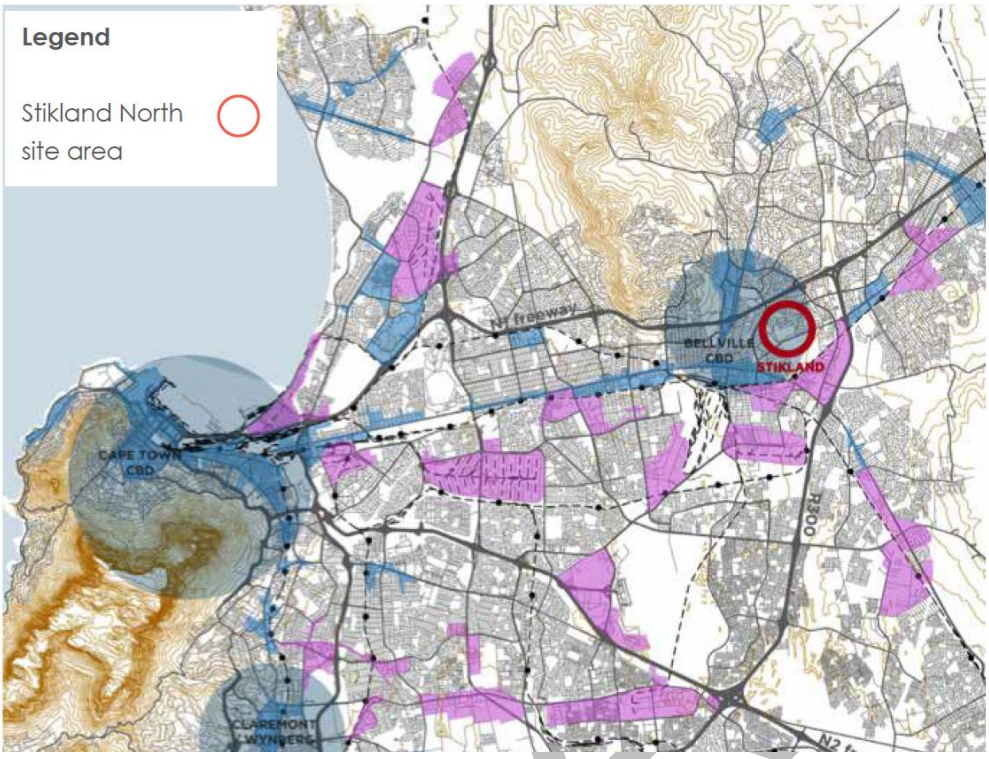


Figure 7.1-1 Regional location of the study area

Figure 7.1-2 Significant portions of state owned land

7.2 Transport and Movement

Stikland (mainly Erf 6300 plus subdivided portions) is owned by the Western Cape Government, under the auspices of the Department of Infrastructure. It is located in the north-eastern sub-metropolitan area (Refer to Figure 7.2-1). Stikland South bounded on its north side by Old Paarl Road (Provincial Main Road R101) linking Bellville (west) to Brackenfell and Kraaifontein (east). To the west, the site is flanked by De La Hay Avenue, to its south by the Kraaifontein rail line, and to its east the residential suburbs of Heemstede and Groenvallei, separated from the site by Midmar Road. (Please note that this section is supported by appendix 2.a and 2.b)

7.2.1 Transport Context

This Contextual report provides an overview of the road and public transport related proposals in the wider study area, which may impact on the site from a transport operations perspective.

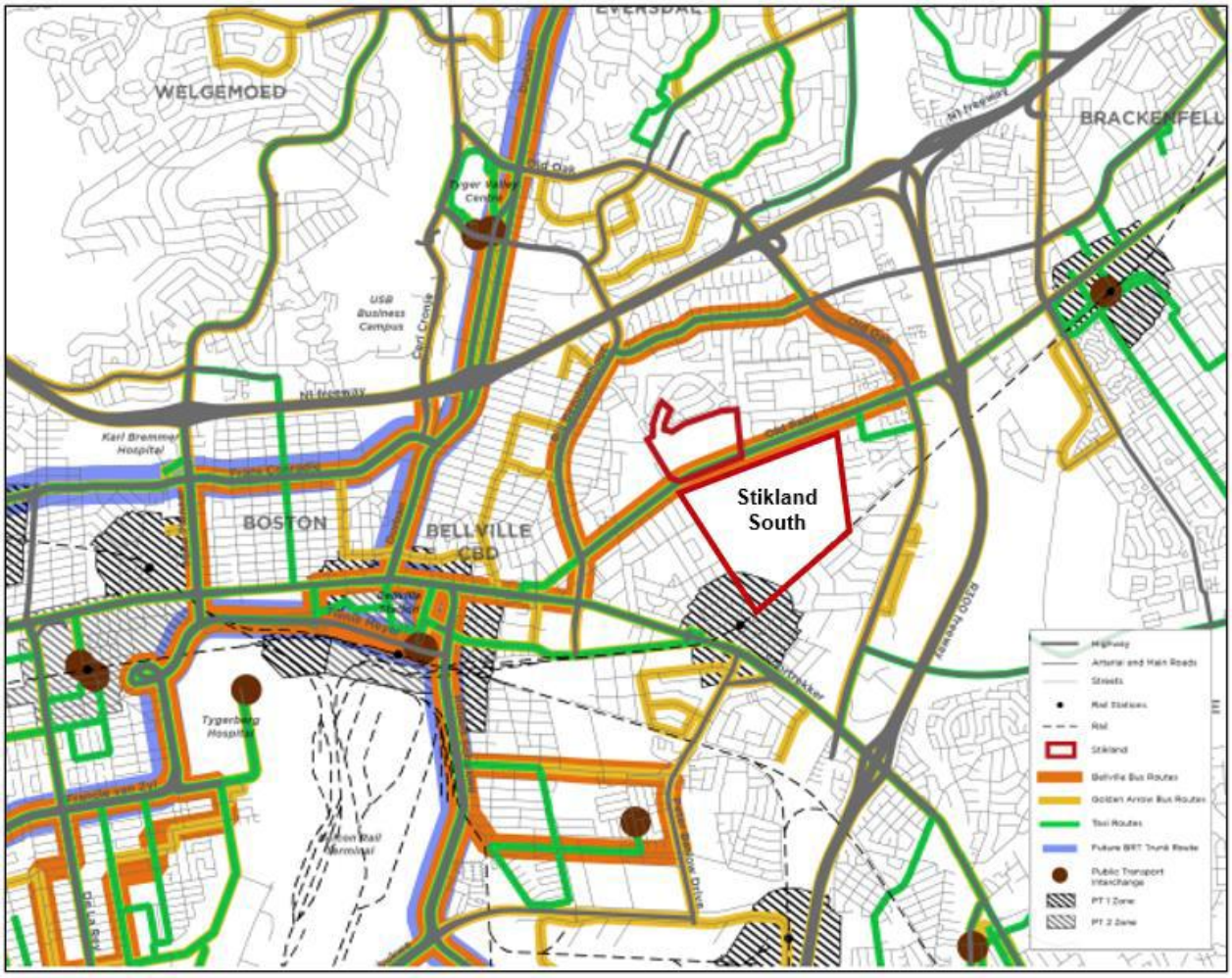


Figure 7.2-1 Exisiting & future transport network in vicinity of Stikland South

7.2.2 Existing Transport Network

The salient aspects related to the transport network in the vicinity of the Stikland as a whole, and the southern portion in particular, are highlighted below:

- The site is in close proximity to major arterial and movement routes in Cape Town, such as the N1 Freeway, R300 Kuils River Freeway, and the Voortrekker Road Corridor. Old Paarl Road (R101) which dissects the site and Old Oak Roads provide convenient access to these major roads;
- The R101 is classified as a Provincial Main Road, and in the City of Cape Town's hierarchy, as a Class 3 road. The road has reasonably limited access allowance and a primary focus on vehicular mobility, however it has more frequently spaced signalised intersections to the east. It serves as a public transport route for bus and minibus-taxi services;

- Stikland Station is located adjacent to the entrance to the hospital, and provides a significant potential benefit for public transport access; and
- No MyCiti bus services are currently operational within either the core or the secondary study area. The IPTN implementation plan has been divided into three phases each containing a number of trunk routes. Phase 2, intended for completion by 2032, includes Trunk Route 13 (T3) linking the Metro South East, Delft, and Belhar to Stikland, Bellville, Tygervalley and Durbanville.

Figure 7.2-1 is sourced from a contextual framework report completed for Stikland North, but the transport network and services are also relevant to Stikland South. Although it is clear that the network is well developed, in a long established part of the city, there are a number of new road proposals planned in the area.

7.2.3 Bellville Transportation Master Plan Framework

There are a number of transport proposals in the vicinity of the Stikland site, which have been investigated, the most recent and comprehensive of which is the Bellville Transportation Master Plan Framework. Not many of the proposals in this report were incorporated into the City's Public Right of Way Plan for Cape Town.

A study was undertaken by Aurecon under the auspices of the City of Cape Town to review all transportation planning initiatives associated with the Bellville CBD precinct. The outcome of the review is a synthesis of all planning proposals that have been considered to date and the formulation of a Bellville Transportation Master Plan Framework (October 2019). The scope of the investigation was broad ranging, taking into account future transport proposals away from the CBD, but would ultimately impact on the functioning of the road network in the CBD. The Stikland South site was included in the modelling as a new development node, and projected to accommodate 4 593 residential units, and 60 000m^2 GLA non-residential use. It was not considered developed by 2040, but as part of the so-called end state scenario:

The road planning proposals in the vicinity of Stikland are described below:

- The extension of Peter Barlow Drive northward, across the Northern railway line, to link with De La Hay Avenue.
- The northern alignment option for the extension of the Tienie Meyer Bypass along the Northern railway line, crossing Strand Street and into the Stikland site, continuing along the railway line (Stikland Extension), then veering northward along the eastern boundary of Stikland South, to link with Old Paarl Road opposite Meerlust Street. This will form the fourth leg to an existing signalised intersection.
- The extension of Cilmore Street across the Northern railway line, to link with the eastward

extension of Tienie Meyer Bypass at the point of its northward alignment. This would require the latter to be elevated at its junction with Cilmore Street extension (Refer to Figure 7.2-2).

- The northern extension of De la Hay Avenue from the point where it currently terminates at Douglas Carr Drive, a residential access street serving Blommendal, to link with Bill Bezuidenhout Avenue.

An image of the proposals is depicted in Figure 7.2-2.

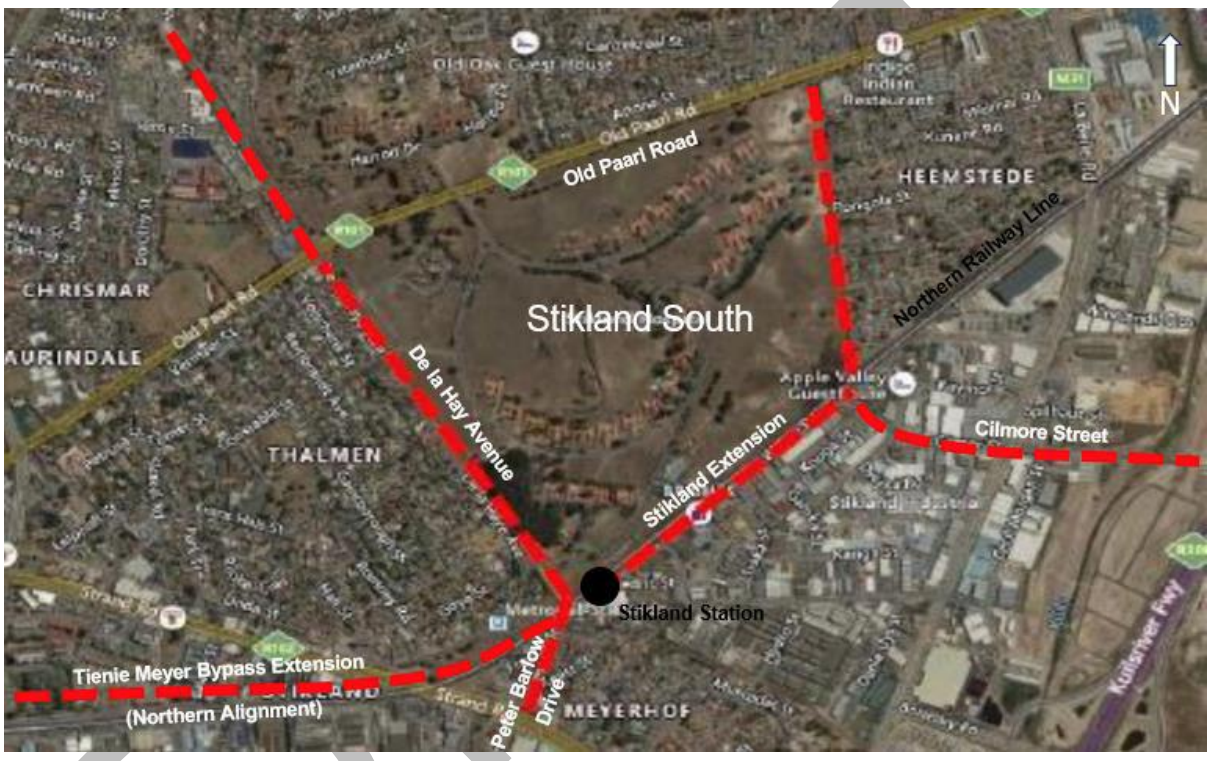


Figure 7.2-2 Stikland Hospital site supporting road proposals (source: Bellville Transport Masterplan Framework)

The extension of Cilmore Road westward across the railway line, to tie in with the north-south link on the Stikland south site, is depicted in more detail in the Bellville Future City report, which was completed after the Bellville transport study (Refer to Figure 7.2-3 below).

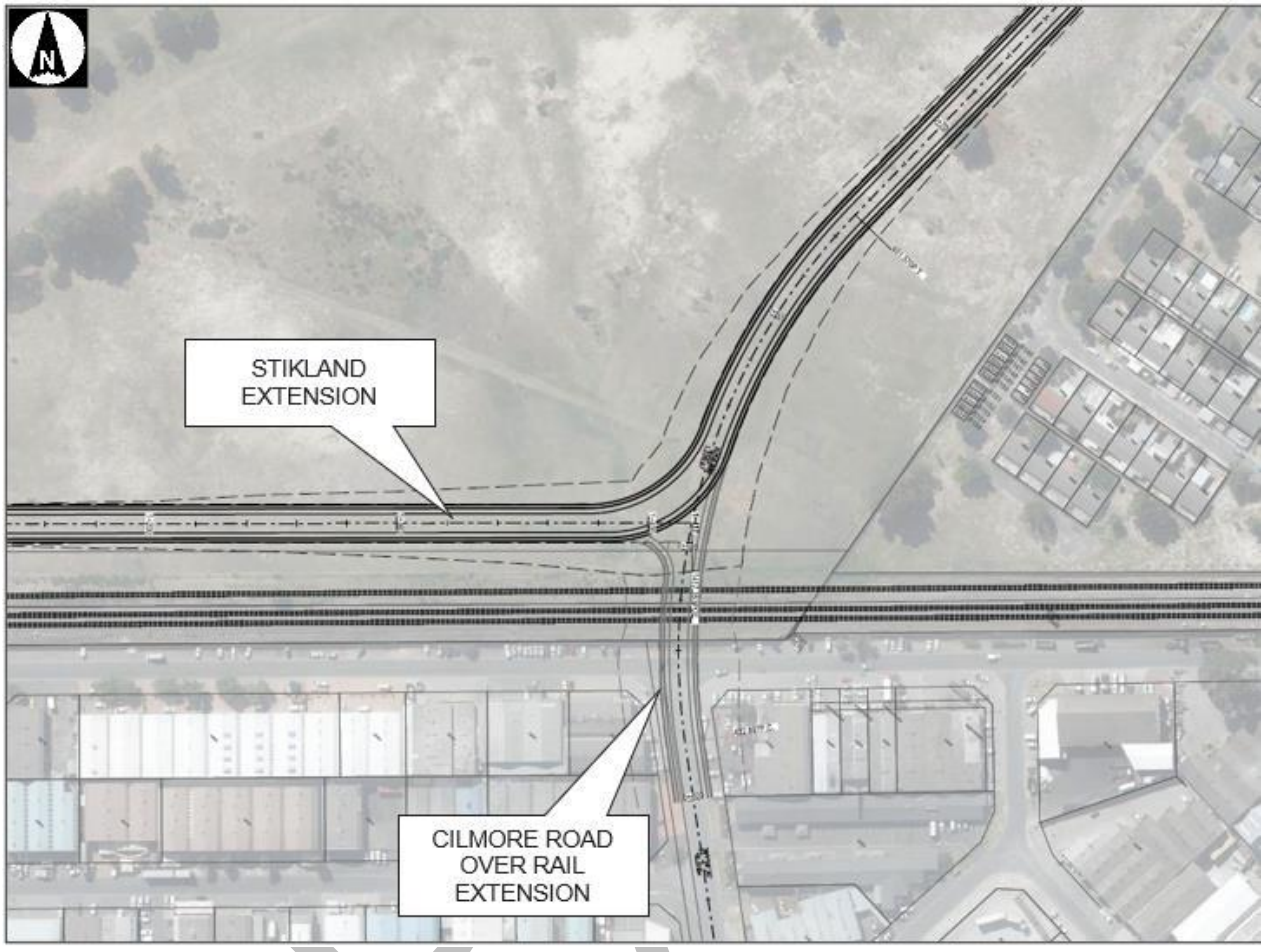


Figure 7.2-3 Concept layout of Stikland extenstion and Climore Street Road over rail crossing (Source Bellville Future City Report)

Public Right of Way (2022) Road Network (Cape Town Transport Network)

The City of Cape Town has a city-wide transport plan that shows the ultimate road and rail network for the city. All identified long-term road and rail proposals are depicted on the plan, which is periodically updated as new proposals are formulated or some schemes become obsolete. As part of the Bellville CBD transport study, extensive modelling was done of all the concept proposals for new road infrastructure in the vicinity of the area. It is significant that none of the proposals listed in Section 7.2.3 are included in the City's updated right of way plan for new or upgraded roads. There could be a number of reasons for this, including (i) the selection of the southern alignment of the Tienie Meyer Bypass extension, which does away with the northern alignment; (ii) the technical feasibility of some of the proposals could be questionable, however this needs to be established; (iii) the projected traffic demand is too low along some of the road links to warrant their implementation; or (iv) some proposals could have mistakenly been omitted.

The transport network in the vicinity of the Stikland site is illustrated in the Figure 7.2-2 above. Further away, it is proposed for Tienie Meyer Bypass to be extended eastward to link with Voortrekker Road, and Robert Sobukwe Drive is planned to be extended northward to link with Durban Road.

It is not clear from the report that despite the inclusion of the Stikland site as a new development node in the model, the proposals listed above were not included in the future road network. The transport impact assessment will shed light on the requirements for new road infrastructure, and could result in reviewing some of the decisions made. In discussion with an official from the City's Transport Department, it was agreed that previously planned proposals would need to be reconsidered to accommodate new developments on the Stikland South site.

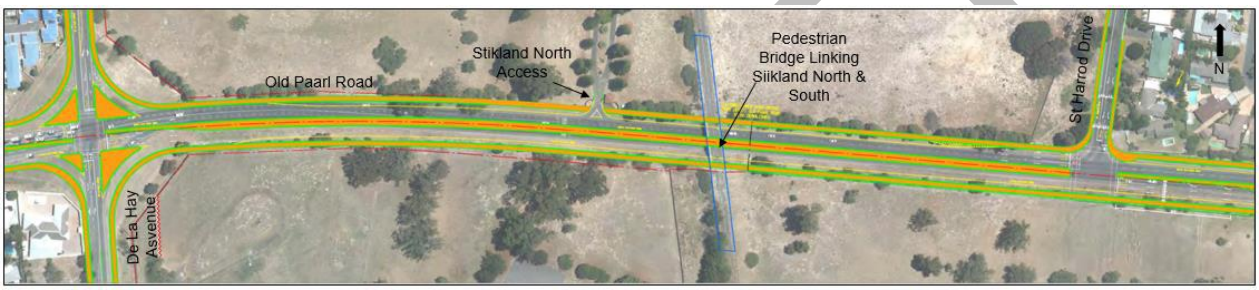


Figure 7.2-4 Section of proposed upgrade of R101 in vicinity of Stikland

7.2.4 Upgrading of Old Paarl Road

The eastern section of Old Paarl Road (up to Old Oak Road) has been upgraded to a dual carriageway with exclusive turn lanes at major intersections (Ref 5). To the west of Old Oak Road, it still functions as a four lane undivided road, without right turn lanes at signalised intersections. The upgrading is due to proceed westward, but depends on funds being made available. The design of the road has been completed, and in the vicinity of Stikland North, the proposed layout does not make provision for a full access to Stikland North, nor provides a point of access to Stikland South. Provision has only been made for a marginal intersection (left in; left out), as illustrated in Figure 7.2-4.

It is likely that the type of intersection at the Stikland North access was decided on without taking into account the full development potential of the site. Any development of meaningful magnitude on the Stikland North site is likely to require a full, signalised intersection. Furthermore, if the Stikland South site were to be developed, a rational point of access into the site from the R101 would be via a fourth leg at this intersection.

7.2.5 Initiatives to Restore Rail Services

The Northern Railway line, running along the southern boundary of Stikland South, with Stikland Station located close to the south-western corner of the site, has the potential to provide for a significant transport modal share of the demand for transport resulting from development on the site.

Following a period during the Covid-19 pandemic when all rail services were suspended, a limited service has been introduced between Kraaifontein and Cape Town. There are currently 12 trains per day on this route, and run at between ½ hr and 1 hour intervals during commuter peak hours. Historically, 8 trains per hour were operated during the commuter peak hours, i.e. 7.5 minute headways. Should this quality of service be realised, rail can play a meaningful role in the modal share of trips generated by future development of the site. This is dependent on PRASA's ability to continue to improve service levels on the network.

The Modernisation Study of the Northern Corridor, undertaken under the auspices of the City of Town, is a comprehensive status quo assessment of the Cape Town rail network. Issues affecting its operations are wide-ranging in scale and function, and deal with aspects related to restoring basic functionality following the spate of vandalism the past few years, normal maintenance and repairs, modernising the signalling system, acquiring and deploying new rolling stock.

The effective resolution of these issues has political, operational, administrative, financial and security dimensions, which evidently makes for a very complex set of problems to address. Unless there is real progress in addressing these issues, it would not be realistic to expect for rail to have a significant modal share of transport services serving the site.

7.2.6 Transport : Conclusion and Way Forward

There are a number of studies undertaken and plans formulated in the north-east metropolitan area within which Stikland South is situated, which have implications for the functioning of the transport system. These need to be taken into account when considering the more detailed assessments of proposals formulated for the site.

Based on the considerations in this Contextual Report, the way forward is proposed as follows:

- Confirm land use scenarios considered for the Stikland South site in the modelling of the Bellville Transportation Master Plan Framework;
- Undertake Transport Impact Assessment of new development scenarios formulated for the Stikland South site. This will include collecting new traffic data to inform assessing the existing capacity of the road network;
- Review previously considered proposals and consider new possible proposals for new road linkages and intersections with existing road network to accommodate development on the

Stikland South site, in consultation with the relevant officials from the City and Provincial authorities;

- Confirm progress made towards stabalising the rail operations along the Northern railway line.

From the contextual assessment presented in this report, the potential development of the Stikland South site is likely to require the reconsideration of previously formulated road links, which do not currently form part of the City's Public Right of Way Plan.

7.3 Traffic

This section provides an overview of the transport related considerations relevant to the development of Stikland South. It reviews the transport related infrastructure and services, current and planned, that would need to be taken into account when undertaking the detailed assessment of its likely impact on traffic and transport operations.

Figure 7.3-1Stikland South Locality Plan

7.3.1 Traffic Data

No updated traffic data has been sourced to date. When the study commenced in 2020, the impact of the Covid-19 pandemic on travel patterns was still considered too pronounced to reflect "normal" conditions. Updated traffic data will be collected during the next phase of the project once it is clear where potential access points are proposed. Historic (2010 & 2014) counts are available at the intersections of Old Paarl Road with St Harrod Drive and De La Hay Avenue, and at the intersection of De La Hay Avenue and Paratus Avenue.

7.3.2 Public Transport Data

Current road-based public transport data will be obtained from the traffic counts to be undertaken in the next phase of the project. Rail related data is considered unreliable in view of the decline in rail services during the past decade.

7.3.3 Transport Planning Data

Transport planning data relevant to the site has been obtained from the following sources:

- Public Right of Way: Road Network Metropolitan Area, City of Cape Town, July 2017;
- Integrated Public Transport Network (IPTN) Plan, City of Cape Town, July 2016;
- Bellville Transportation Masterplan Framework, City of Cape Town, October 2019;
- Bellville Future City, City of Cape Town, May 2020; and
- Upgrade of Old Paarl Road (SMEC Consulting Engineers, 2015).

7.3.4 Existing Transport Situation

The existing transport network is indicated in Figure 7.3-2, which also indicates future proposals in vicinity of the site. The existing road network, public transport routes and services are discussed in the next two sections.

7.3.5 Existing Road Network

The site is located along Old Paarl Road (R101), classified as a Class 3 Minor Arterial in the metropolitan road hierarchy. The road is historic, linking Cape Town with its hinterland to the north-east. It runs parallel to the N1 Freeway (Class 1) and the Kraaifontein railway line, together forming a high order corridor at a sub-metropolitan level. To the east of the site, the northern extent of the R300 is aligned prior to its interchange with the N1. The site is therefore well located with respect to its regional accessibility.

The other boundaries of the site are De La Hay Avenue to its west, the Northern Railway Line to it south, Midmar Road to its east.

Figure 7.3-2 Existing & future transport network in vicinity of Stikland South

7.3.5.1 Existing Traffic Operations

As noted in Section 7.3.1, recent traffic data has not been collected due to the impact of Covid-19 on travel patterns. Traffic data from historic counts (February 2014) at the Old Paarl Road/ De la Hay Avenue intersection are indicated in Figure 7.3-3 below.

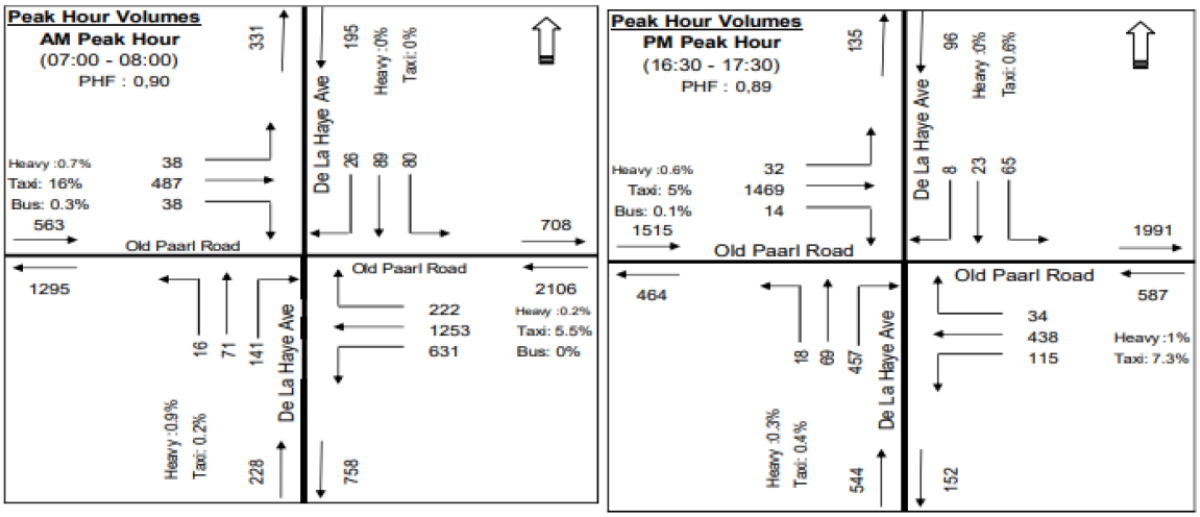


Figure 7.3-3 Historic traffic flows at Old Paarl Road/De La Hay Avenue intersection

The traffic flows are high, especially westbound along the R101 in the AM peak hour (2 106 veh/hr), approaching De la Hay Avenue. The average capacity of an major arterial road is 1 200 veh/hr/lane, which means that at the time (2014), the R101 was operating at close to capacity conditions, and functioning as a Class 2 facility rather than a Class 3 one. Also of interest is the significant left turn movement from the R101 into De la Hay Avenue in the AM peak hour (631 veh/hr), as is the reverse movement in the PM peak hour, albeit somewhat lower (457 veh/hr). This may be due to a high movement demand between the R101 and Bill Bezuidenhout Road via De la Hay Avenue, rather than the Stikland Hospital itself being a strong attraction. This will be confirmed following additional data collection, which will also reveal traffic growth trends along these routes.

7.3.5.2 Existing Public Transport Routes & Services

Although the site is well located with respect to public transport routes in close vicinity of the site, with minibus-taxi and Golden Arrow bus routes running along Old Paarl Road, there is no direct pedestrian access to Stikland South. There are no public transport services (taxis or buses) currently along De la Hay Avenue.

Rail services are available in close vicinity of the site, to its south, in the form of the Northern railway line. Stikland station is within comfortable walking distance from the site, 300m from the site entrance to the station.

7.3.5.3 Existing NMT Facilities

Non-motorised transport facilities exist in the form of a two-way cycle facility (Class 3) on the east side of De la Hay Avenue. There is however no sidewalk on De la Hay Avenue, hence pedestrians use the cycle facility.

A pedestrian bridge used to link the northern and southern portions of Stikland, but is no longer in use due to structural defects on the bridge. The repair and re-opening of the bridge would depend on redevelopment of both sites being realized and depending on the development proposals for each side of Old Paarl Road it may be best demolish the bridge as it is an impediment to the use of the site and the rational planning of future access intersections.

7.3.6 Future Transport Proposals

The Contextual Report produced as part of this study (Ref 1) outlines the future road proposals in the vicinity of the site that would impact on traffic operations on the road links adjoining the site, and is not repeated in this here. It is worth noting that as part of the recently completed Bellville Transportation Masterplan Framework report, a traffic modelling exercise was undertaken that projects future traffic demand on the road network.

It is noted that the road reserve of De la Hay Avenue is 25m wide, and currently accommodates a single two-way carriageway on the western side of the reserve. Provision would have been made for the eventual dualling of the road. It is not clear if the recent modelling as part of the Bellville Transport Masterplan produced results that reflect the likelihood and timing of an eventual upgrade. A Transport Impact Assessment of development options on the Stikland South site will also inform its likely future capacity.

7.3.7 Access Arrangements

7.3.7.1 Existing Situation

Although Stikland South is bounded by the R101 on its north side, it has no access onto the road. Access to the principal facility on site, the Stikland Hospital, is gained exclusively via a link on the southern section of De la Hay Avenue. A small separate portion accommodating the Western Cape Nurses College also gains access from De la Hay Avenue, at an access point closer to the R101.

7.3.7.2 Future Access Considerations

The site currently has limited points of access to its surrounding road links, which are sufficient for its current requirements, but would not be adequate to serve any new development of a reasonable magnitude. The establishment of direct access onto the R101 would be a priority, but more significant access opportunities would become possible if the extension of road links from the surrounding road network into the site were to be realised. A few conceptual alignments of such links had been proposed, but do not form part of the updated right-of-way plan for the city. The reconsideration of these road links would need to be done during the impact assessment phase for new development proposals on site.

Figure 7.3-4 Existing access arrangements for Stikland South

7.3.7.3 *Conclusion*

This baseline report sets out the traffic and transport related local informants to potential development opportunities on the Stikland South site. The site is situated in a key location in the eastern metropolitan area, with well development road linkages to the surrounding major road network, and is potentially a highly accessible site. A number of previously planned road linkages would however need to be revisited to provide connectivity to the surrounding network.

During the next phase of the project, with the formulation of a Development Framework, a Transport Impact Assessment (TIA) will be undertaken. It will be based on an arrangement of points of access onto the site together with upgraded and new road links, as required and agreed with the relevant City officials.

7.4 Civil Services

A desktop investigation was conducted into the services in the existing area as well as the current impact of these services on the developability of the study area. Water, sewerage and electrical bulk and reticulation systems for the area is at or over capacity and several key upgrades will be required. (Please note that this section is supported by appendix 3.a)

The extent of the upgrades will be determined by the development blocks proposed. Upon finalisation of the development yields and densities to be pursued, further investigations will need to be conducted to verify bulk services implications.

Notwithstanding the above, the status of some civil infrastructure in the precinct has been determined through engagement with city officials.

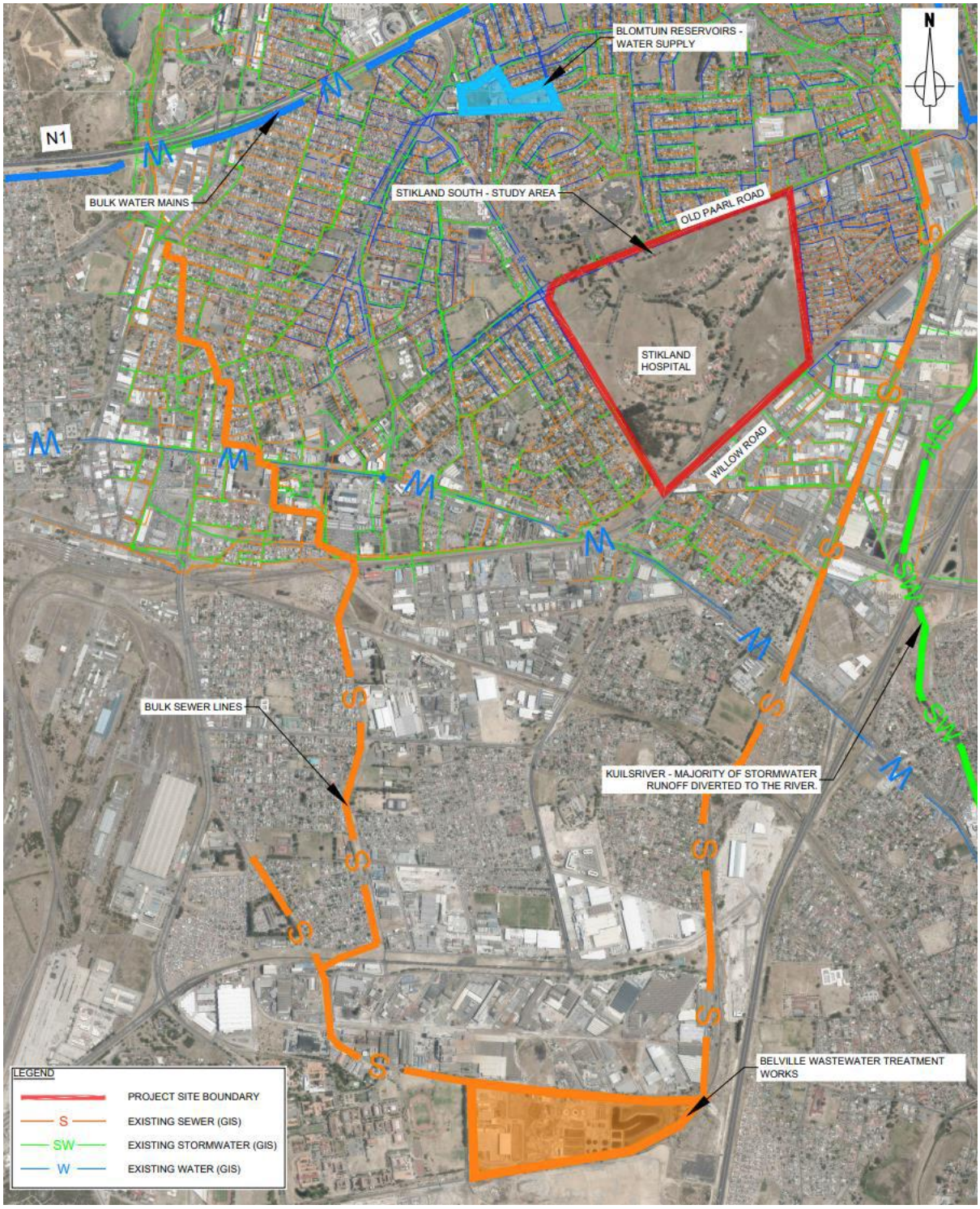


Figure 7.4-1 Locality plan - Stikland South

7.5 Civil Services Status Quo Assessment

This section considers the existing municipal infrastructure within the study area, and the performance of the existing services. This is, therefore, a status quo assessment. The proposed demands of the future development will be considered in a follow up report, following the finalization of the development framework. (Please note that this section is supported by appendix 3.b)

The following municipal services were investigated:

- Potable Water
- Foul Sewer
- Stormwater

7.5.1 Foul Sewer

The Stikland South study area is well serviced by existing foul sewer infrastructure in the immediate vicinity.

The area is bordered by the following existing underground foul sewer pipelines:

- A DN150 along the northern edge of the site along Old Paarl Road(R101);
- An DN200 sewer crossing from Stikland North to Stikland South in the vicinity of the Western Cape College of Nursing;
- A DN225 sewer line exiting the south western edge of the site; and

The foul sewer system ultimately discharges into the Belville WWTW.

The following high-level comments regarding the existing sewer network were received from the respective services departments:

- Belville WWTW has a maximum capacity of 75Ml, of which 15Ml is available for additional treatment; and
- No upgrades to the WWTW are planned in the near future.

The existing external municipal sewer network can be seen in Drawing No. HHO-7515-702-1401 & 1402 (Figure 7.5-1 & 7.5-2)

Figure 7.5-1 Existing external municipal sewer network 1

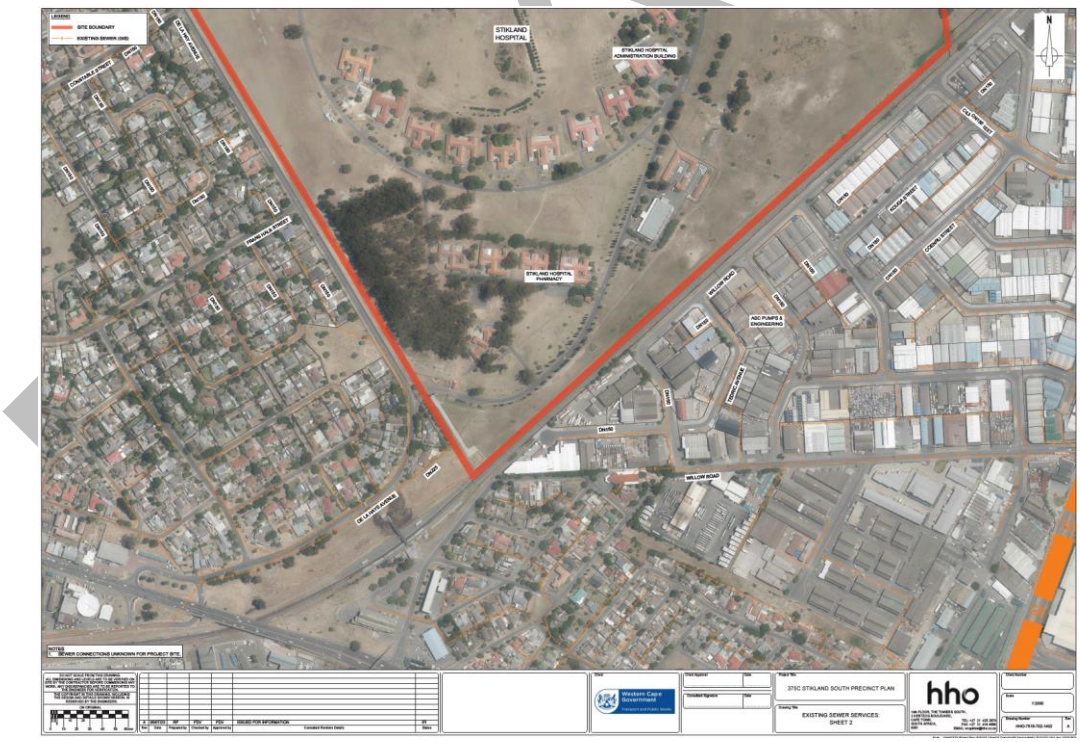


Figure 7.5-2 Existing external municipal sewer network 2

7.5.2 Stormwater

The Stikland South study area is serviced with stormwater infrastructure, and given the large portions of undeveloped land, stormwater is not considered a significant issue for the current state of development.

The following existing stormwater pipes traverse and border the site:

- A DN300 on the northern edge of the site;
- Two DN300 stormwater pipes on the northern edge of the site, conveying the stormwater from Stikland North into Stikland South and discharging into the open fields;
- A DN600 on the Northern edge of the site conveying the stormwater from Stikland North into Stikland South and discharging into the open fields;
- A Bulk DN1800 stormwater main in the south eastern corner of the site; and
- A DN375 Stormwater pipe along De La Haye Avenue bordering the western edge of the site.

The existing stormwater network can be seen in Drawing No. HHO-7515-702-1421 & 1422 (Figure 7.5-3 & 7.5-4)

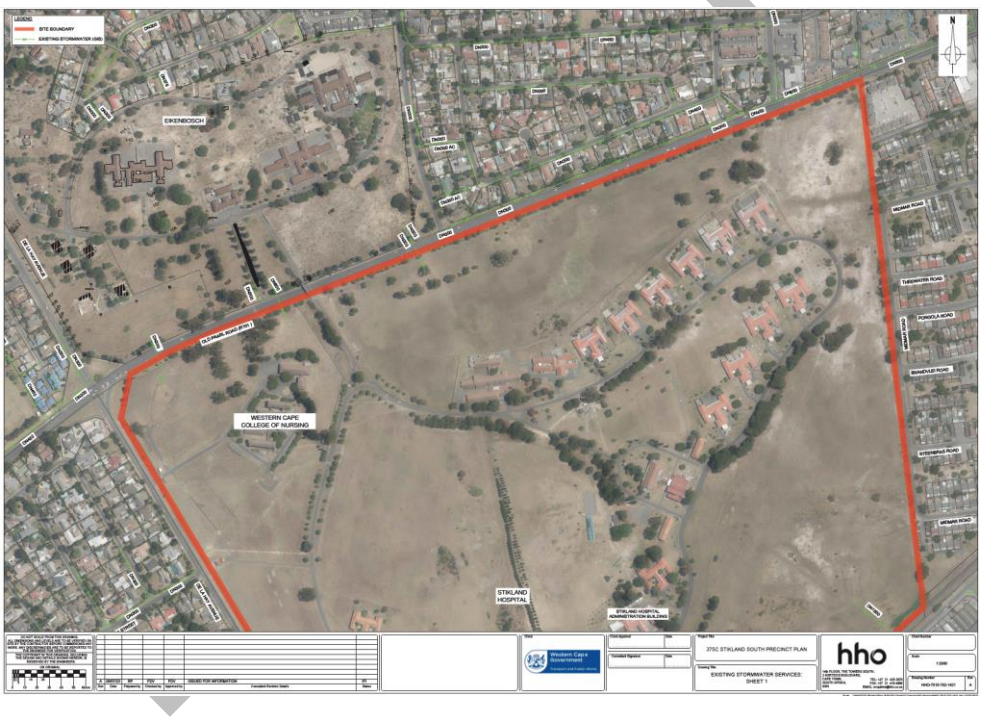


Figure 7.5-3 Existing stormwater network 1

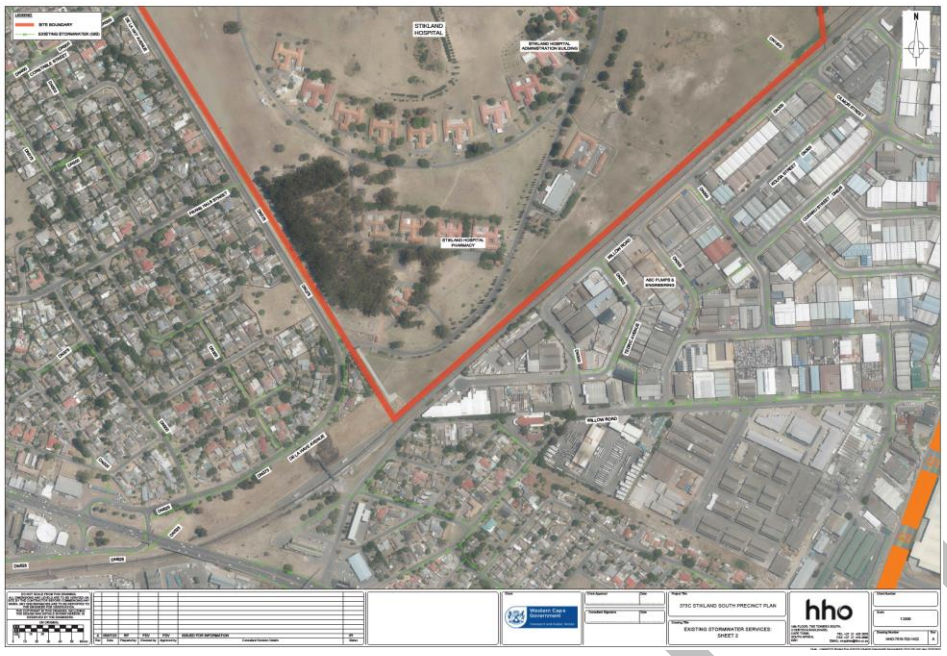


Figure 7.5-4 Existing stormwater network 2

7.5.3 Potable Water

The Stikland South study area is well serviced with water infrastructure.

The area is bordered by the following existing underground water mains:

- A DN375 water pipe along De La Haye Avenue and possible connection to the site in the North western corner of the site;
- A DN300 water pipe along Old Paarl Road (R101) boredring the northern edge of the site;
- A DN225 water pipe on the western edge of the site, along De La Haye Avenue; and
- A Bulk DN750 Water main south of the site along Strand Road.

The existing water network can be seen in Drawing No. HHO-7515-701-1461 & 1462 (Figure 7.5-5 & 7.5-6)

Figure 7.5-5 Existing water network 1

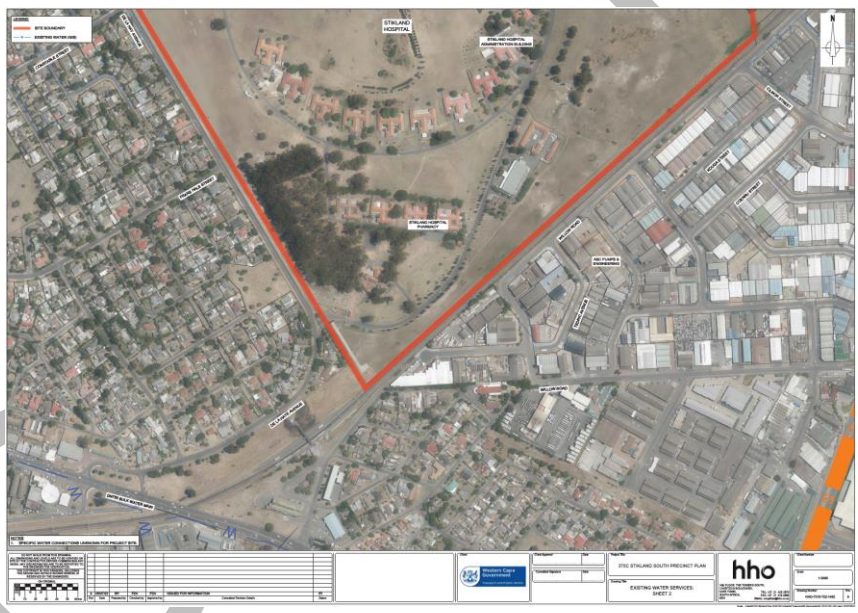


Figure 7.5-6 Exisiting water networks 2

7.5.4 Constraints, Opportunities & Fixes

A baseline assessment of the existing stormwater, potable water, and foul sewer infrastructure was undertaken. The existing daily demand for foul sewer and potable water is not known for the area but will be taken into account in the next phase once the gross leasable area (GLA) is finalized and an application can be made for a demand assessment.

Water and foul sewer reticulation systems for the area are at- or over-capacity and several key upgrades will be required. The extent of the upgrades will be determined by the development basket proposed.

Following the finalization of site development plans, proposed demands on potable water and foul sewer as well as future site stormwater runoff will be calculated. Confirmation will then be obtained from the local authority regarding the capacity of the existing bulk services to accommodate the future demands. Any future site connections or connection size upgrades will be for the account of the applicant.
The following is required if the site is developed further:

- On site management of stormwater via stormwater attenuation ponds;
- Once the proposed development is confirmed, the future demands for stormwater, potable water; and foul sewer should be determined. Spare capacity in the surrounding network must be confirmed with the local municipality; and
- Water and Sanitation municipal service plans must be designed according to Departmental Service Standards and be approved prior to construction.

7.5.5 Civil Services Conclusions

A baseline assessment of the existing stormwater, potable water and foul sewer infrastructure was undertaken. The existing site is adequately serviced by stormwater, potable water and foul sewer infrastructure.

The existing daily demand for foul sewer and potable water is not known for the area but will be taken into account in the next phase once the gross leasable area (GLA) is finalized and an application can be made for a demand assessment. The existing municipal infrastructure has no existing capacity constraints and should be able to support reasonable future development on the site pending a demand assessment.

Following the finalization of the site development plans, the proposed demands, and future site stormwater runoff will be calculated. Confirmation will then be obtained from the local authority regarding the capacity.

7.5.6 Civil Services Recommendations

Once the proposed development (GLA) is confirmed, a bulk services assessment should be conducted.

This assessment will assess the impact of the future development of the site on the bulk services and the potential constraints or opportunities within the bulk services network.

7.6 Electrical Infrastructure

This section indicates the existing electrical infrastructure for the proposed Stikland South Development. (Please note that this section is supported by appendix 4.a)

7.6.1 Existing Bulk Electrical Infrastructure

In our previous study for Stikland North Development, the City of Cape Town, who is the Electricity Supply Authority for this area, confirmed in a capacity letter that the existing 11kV network of the City in this area has limited capacity. The proposed development of 54.3 Ha will require substantial upgrade to the City's network.

Once we receive the proposed development framework for the Stikland South Development, we can compile a load estimate for the development and then engage the City with regard to the proposed upgrade required to their network.

7.6.2 Existing Electrical Servitude

The City of Cape Town confirmed that there is an existing 22m servitude on the site, as shown on the photograph below. The servitude contains a 66kV overhead line. However, the City plans to upgrade this overhead line to a 132kV line in the near future.

7.6.2.1 Existing Servitude

The minimum clearances from an overhead line are contained in the Occupational Health and Safety Act & Regulations. Attached a copy of this table in appendix B. In this case the 72kV line measurements will be applicable and 145kV line measurements once the lines gets upgraded.

Figure 7.6-1 Existing servitude

7.6.2.2 *Existing Servitude*

The minimum clearances from an overhead line are contained in the Occupational Health and Safety Act & Regulations. Below, Figure 8.20 is a copy of this table. In this case the 72kV line measurements will be applicable and 145kV line measurements once the lines are upgraded. The horizontal clearances will still need to be confirmed with the City Electrical Department.

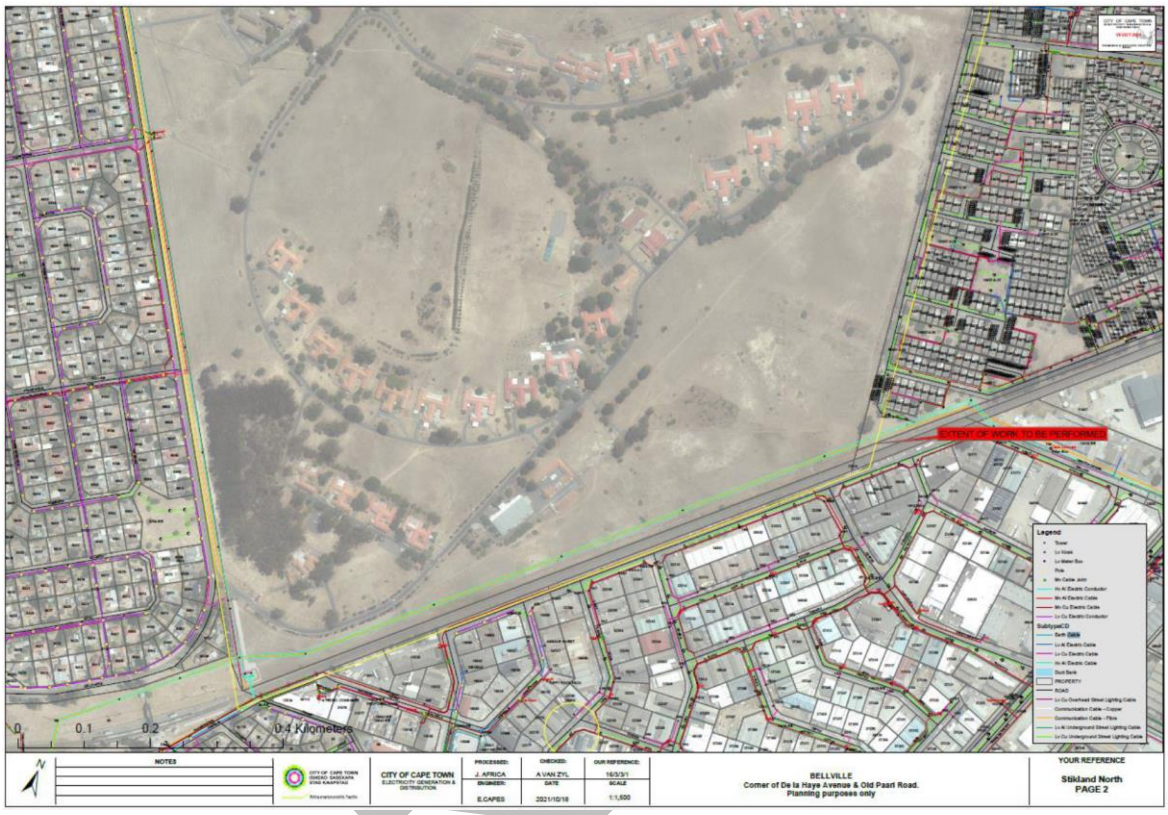


Figure 7.6-2 Exisiting electrical network layout drawing

Electrical Machinery Regulations, 1988 (reg 15) 265

15 Clearance of power lines

(1) The supplier or user shall cause—

(a) the minimum clearances of electric conductors and other wires of power lines, excluding overhead service connections and line conductors having a voltage not exceeding 1,1 kV r.m.s. consisting of insulated wire of a type which complies with a safety standard incorporated for this purpose in these regulations under section 36 of the Act, to be not less than the clearances indicated in the following table:

Maximum voltage for which insulation is designed, kV r.m.s. phase-to-phase	Minimum safety clearance	Maximum clearance in metres				
		Above ground outside townships	Above ground in townships	Above roads in townships, proclaimed roads outside townships, railways and tramways	To communication lines, other power lines or between power lines and cradles	To buildings, poles and structures not forming part of power lines
1,1 or less	—	4,9	5,5	6,1	0,6	3,0
7,2	0,15	5,0	5,5	6,2	0,7	3,0
12	0,20	5,1	5,5	6,3	0,8	3,0
24	0,32	5,2	5,5	6,4	0,9	3,0
36	0,43	5,3	5,5	6,5	1,0	3,0
48	0,54	5,4	5,5	6,6	1,1	3,0
72	0,77	5,7	5,7	6,9	1,4	3,2
100	1,00	5,9	5,9	7,1	1,6	3,4
145	1,45	6,3	6,3	7,5	2,0	3,8
245	1,85	6,7	6,7	7,9	2,4	4,2
300	2,35	6,3	7,2	8,4	2,9	4,7
362	2,90	7,8	7,8	9,0	3,5	5,3
420	3,20	8,1	8,1	9,3	3,8	5,6
800	5,50	10,4	10,4	11,5	6,1	8,6
533 kV d.c.*	3,76	8,6	8,6	9,8	4,3	6,1

Provided that these figures are based on the assumption that clearances shall be determined for a minimum conductor temperature of 50°C and a swing angle corresponding to a wind pressure of 500 Pa: Provided

Figure 7.6-3 Electrical machinery regulations

7.7 Heritage

Stikland South is the southern section of the larger original Stikland Hospital site. The hospital is surrounded by established, primarily freehold-title, low-density residential suburbs with the exception of Stikland Industria to the south. Stikland South now constitutes the remaining core of the Stikland Psychiatric Hospital operation, although vast areas of the site are vacant and not utilised nor required in the future. This vacant land lends itself to a regeneration opportunity. (Please note that this section is supported by appendix 5.a)

7.7.1 Scope of Work & Methodology

The following heritage section is designed to establish the heritage related opportunities and constraints of the site to feed into broader contextual and baseline investigations for Stikland South in the event that it be established that development proposals could be prepared for this site in due course. It can also be utilised as a basis for any further requirements in terms of the National Heritage Resources Act should any work proceed to Development Framework stage.

Information was gathered during site inspections and documentary research of literary and official sources on the site and surrounding area.

Documentary research was undertaken of records of the Surveyor General and the Department of Rural Development and Land Reform's CDNGI Geospatial Portal and Chief Directorate: Surveys and Mapping. Two interviews have been held with the Stikland Hospital staff to ascertain the functional operations and requirements of the hospital in so far as they may of relevance to heritage matters and re-development opportunities.

7.7.2 Site Description

The site slopes evenly and over approximately 20m from north-west to south-east.

The site landscape presents as open and well-tended, with hospital buildings spread across the site in a low density sprawling ellipse from the south-western to north-eastern corners.

A number of the tree lines and what were likely eucalyptus woodlots when the land was originally farmed remain and are older than 60 years. These and the tree planting along the perimeter drive are important, and the only, form-giving landscape elements in an otherwise relatively featureless suburban/institutional landscape.

Figure 7.7-1 5m Site Contour (CFM)

Figure 7.7-2 1938 aerial, Stikland was farmed with tree lines along the Old Paarl Road and a number of woodlots and clumps of trees (CCT)

Construction on Stikland Hospital began in 1960, transforming the farmland. Almost all the vegetation on Stikland North was removed for development. However, due to the central layout of the main facility on Stikland South, most of the perimeter trees were retained.

Between 1968 and 1980, the eucalyptus woodlot in the south-western corner has expanded; the tree line along Old Paarl Road has been significantly lost, vegetation in the south-eastern section, speculated to be alien invasive, had expanded considerably.

The latter is however cleared by 1996 and a new line of trees planted along parts of the perimeter drive.

This pattern remains essentially unchanged today; with the low density hospital grounds surrounded by vast areas of regularly tended grass in all the open areas.

Figure 7.7-3 1968 aerial (CCT)

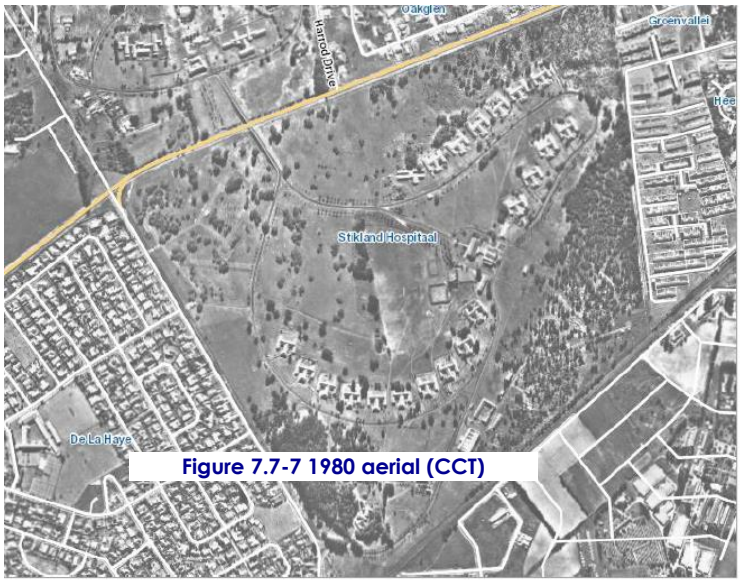


Figure 7.7-7 1980 aerial (CCT)

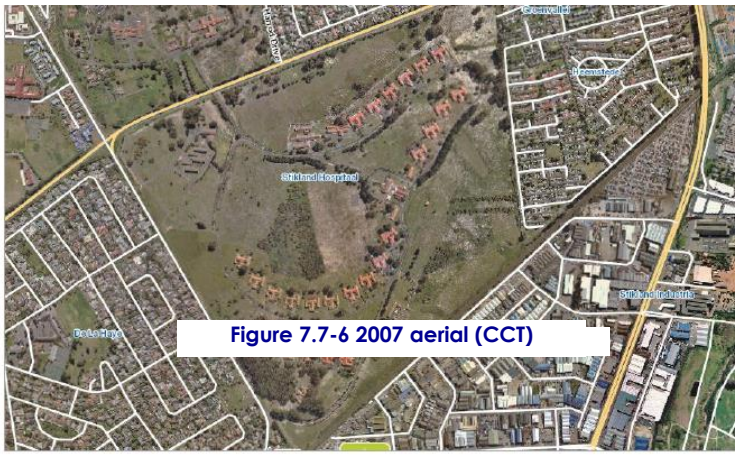


Figure 7.7-6 2007 aerial (CCT)

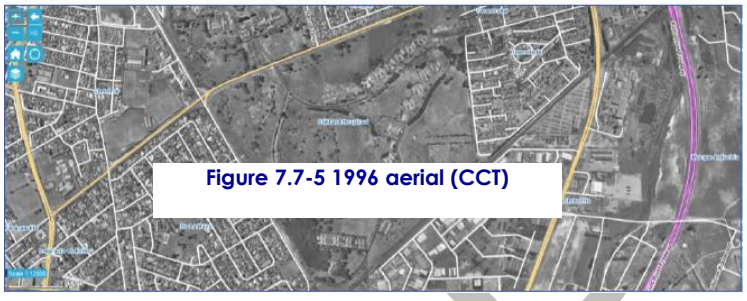


Figure 7.7-5 1996 aerial (CCT)

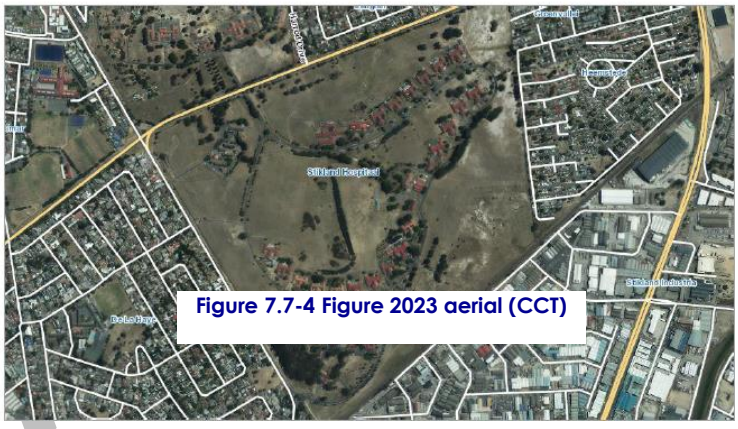


Figure 7.7-4 Figure 2023 aerial (CCT)

Figure 7.7-8 Tree line along Old Paarl Road in proximity to the intersection with De La Haye Avenue, Stikland north left, behind the vibracrete wall and Stikland South right

Figure 7.7-9 Tree line along Old Paarl Road east of the overhead pass Stikland north left, behind the vibacrete wall, the mature tree line retained. Stikland South right, the tree line insubstantial and relatively immature.

Figure 7.7-10 Stikland South photographic drive through location points, counter-close wise, concentrated on large parcels of vacant land within and surrounding the hospital complex at centre




7.7.3 General Historical Overview

The earliest property information pertaining to the site is of the Cape Farm 341, Stikland, a very early Cape grant of 1797, extended with later grants in 1814. It was subdivided over a period of time (from 1860 to 1914) into 18 portions, the remaining portion becoming Farm 362 Stikland, later erf 6300. Much of this remaining portion was sold to the national government in 1951 for the purpose of building what became the original extent of Stikland Hospital.

A homestead is recorded in the earliest diagrams at what is now the south-westernmost corner of Stikland North, subsequently demolished and a new homestead is reflected in the 1914 diagram to the east, which homestead (now also demolished) is present in the 1938 aerial, around which is an identifiable windrow, a portion of which is still present on Stikland North. In 1935, the farm was incorporated into the expanding Bellville Municipality.

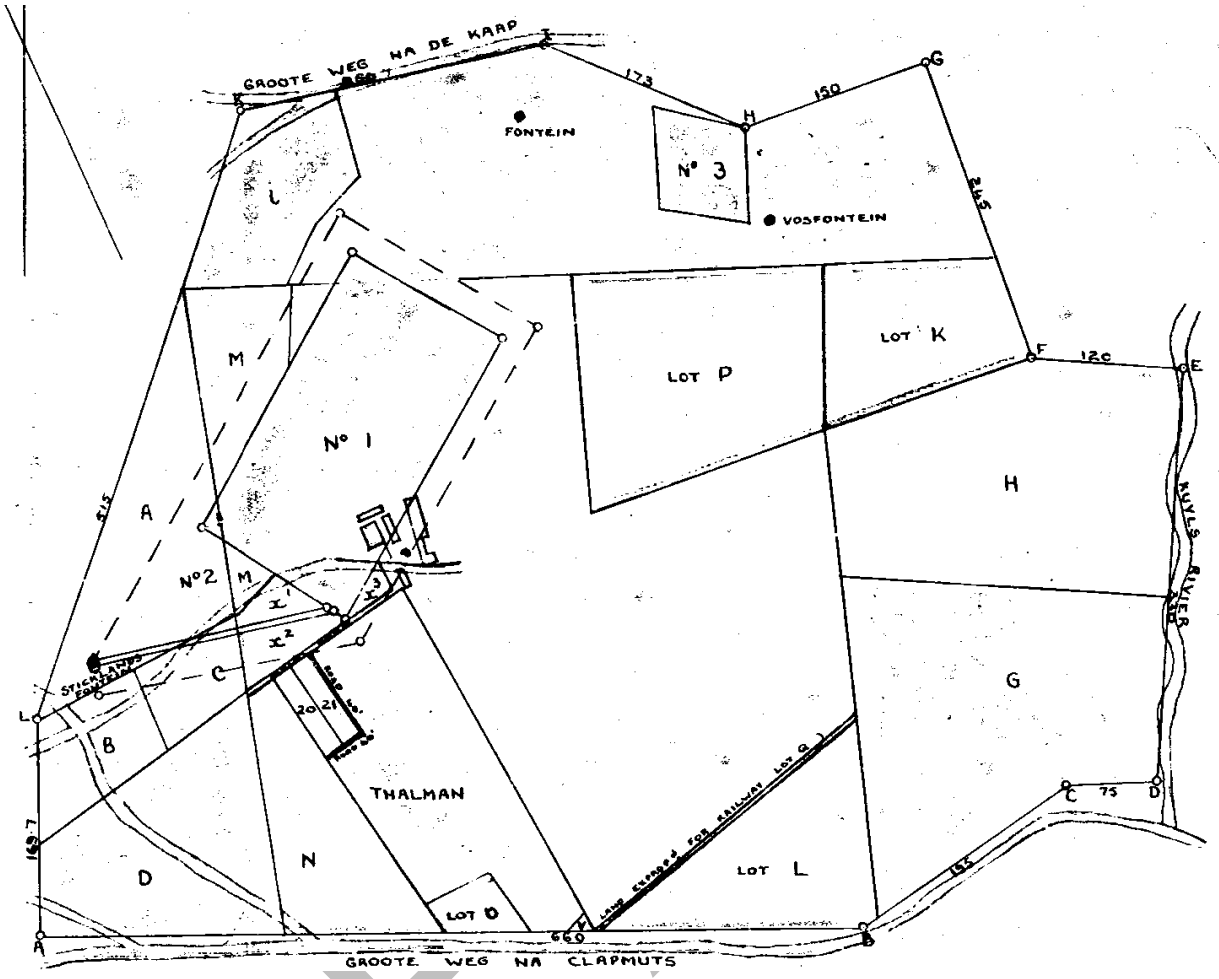
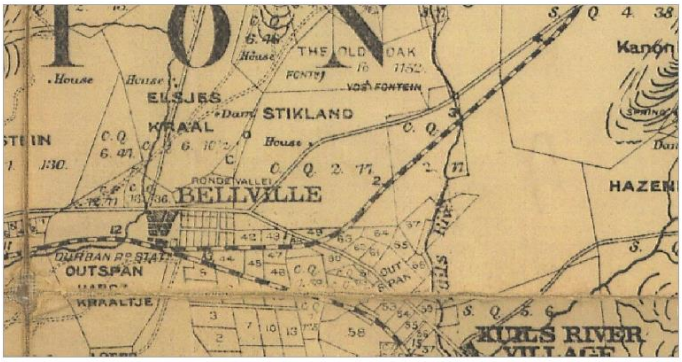
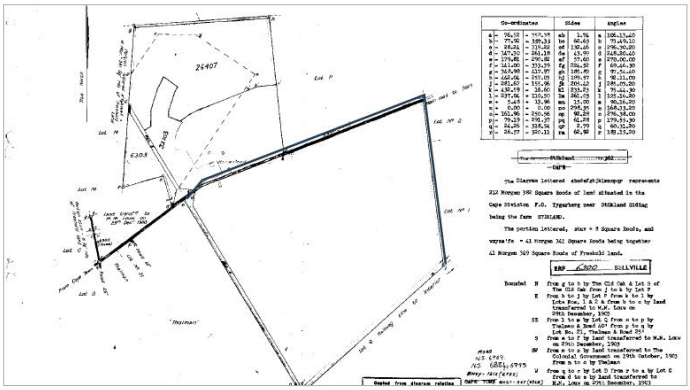


Figure 7.7-11 Original extent of farm Stikland (SG244/1844)





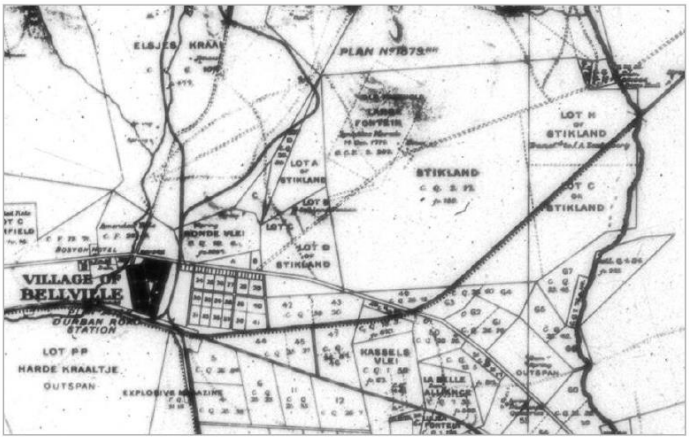


Figure 7.7-12 Cape Division 1901

Figure 7.7-14 1953 Encroaching suburbia at the time of the sale of Stikland farm to the state, much of the property still under cultivation

Figure 7.7-13 Remaining extent of farm Stikland early 20thC (SG207/1914) sold in 1951 for the purpose of erecting Stikland Hospital. Erf 32103 was subdivided from Erf 6300 in 1991 and forms part of Stikland North

Figure 7.7-15 Map South Malmesbury Southern Districts 1880 - 1900, Stikland farm already bisected by the original wagon route to Paarl

7.7.4 Social History Overview: Stikland Hospital

The modern history of the property lies in its development as Stikland Psychiatric Hospital. The section that follows contextualises this development. It is to be noted that the use of terminology relating to mental health coincides with that used in its historical context or the secondary sources and its use here will reflect that.

Although the development parcel includes only Stikland South, the social history of the site is intricately tied to Stikland North as well, both being components of the overall Stikland Psychiatric Hospital.

7.7.4.1 Early provision of Mental Health Services in the Cape

Gillis (2012) describes how the VOC had to make early accommodation for the behaviourally disturbed at the Cape, initially in a primitive structure adjacent to the first Van Riebeek fort; enlarged in 1674 but when a new hospital was built in 1699 adjacent to the Company Gardens, mentally ill patients were moved 'into a small, enclosed apartment for locking up the mad'. A third hospital was built in 1772 near the Company Gardens, again with some space for mental patients, and when this too became overcrowded, patients were transferred to the nearby Slave Lodge. With the opening of Somerset Hospital in 1818 some beds were set aside for 'lunatics' who were cared for among the physically ill. This was the only such facility in the Cape Colony at the time.

"Psychiatric diagnosis as we know it did not exist, and the mentally ill, lacking an obvious physical cause, were simply called 'insane', 'mad' or 'lunatic', the latter because of the supposed effects of the moon. They were largely thought to be possessed by demons – which could be dispersed by 'alienists', an appellation which endured well into the late 19th century. It is interesting to note that the concept of mental illness as a disease only came about towards the end of the 18th century, and the term 'psychiatry' was coined by a French physician in 1808. Causes were not known but, apart from the functional psychoses of mania and schizophrenia, malnutrition, malaria, epilepsy, alcoholism and syphilis must have been causal. Treatment did not exist as such; it was purely a matter of ensuring the safety of the person and controlling violent or disruptive behaviour."

Overcrowding at Somerset Hospital, however led to the transfer in 1836 of 'lepers, lunatics and the chronically sick' to Robben Island where living conditions were exceptionally poor and treatment, for many years, inhumane. The island, as previously in the hospitals, was a dumping ground for the socially unacceptable. This remained the case until the building of Valkenberg Hospital in 1892, although black patients remained at Robben Island until the 1920s. Treatment at the time was entirely symptomatic, consisting mostly of sedatives and hypnotics.

7.7.4.2 Early Psychiatric Hospital Phase

Towards the end of the 19th C, international views (particularly in Europe and America) on management of the mentally ill began to reject temporary lock-up and restraint arrangements. New ideas led to the building of purpose-designed institutions for the 'insane', based on British and American models; these had extended wings for the wards and closed courtyards where necessary. It was considered that mental hospitals, then called asylums, should be placed in some sort of a garden or park setting as fresh air, pleasant surroundings and useful occupation would aid recovery. Treatment, though remained limited.

Simultaneously, in South Africa the state was under increasing pressure to provide a measure of control and order on its public institutions. Such order included separate housing and treatment for the 'insane' and separation of race and gender. In this context Valkenberg was built on the banks of the Liesbeek River, as one of the earliest purpose-built SA asylums, in 1891.

"The architecture at Valkenburg was characterised by excellence of design. Scottish architect Sydney Mitchell of Sydney Mitchell and Wilson undertook the first commission, with project management being undertaken by the Department of Public Works under the supervision of DPW architect H S Greaves who also contributed to design project. At the time Sydney Mitchell prepared the designs for Valkenburg he had established himself as a successful and well-respected specialist in asylum design. The Valkenburg design shows some resemblances to the Scottish asylum designs and hospitals for which he is best known."

A prototypical late 19th C purpose-built asylum, Valkenberg was extended in the early 20th C by other notable architects, maintaining a tradition of architectural excellence. It was based on international asylum design precedent and changing representing attitudes to medical care from that period. In 1891 at the same time of the designing of Valkenburg Englishman Sir Henry Burdett produced a book containing a series of principles and requirements with plans, for the for the design of hospitals and asylums.

Figure 7.7-16 Central approach leading to the Valkenberg administarion block and projecting wings C 1899 (J9600 Cape archives in Attwell 2012)

The location of the institution, and its extensive grounds were a key part of the asylum design. In line with new international norms, access to open space was part of the therapy. Patients were encouraged to work although black patients were required to – mostly in manual labour.

Segregation by gender and race remained at its core: in 1915 negotiations were underway regarding a land transfer for the area east of the Black River (Oude Molen) for a separate asylum for the black 'insane'. The buildings were completed between 1917 and 1918 and remained a racially segregated institution until it was de-racialised in the 1990's.

Figure 7.7-17 Valkenburg in 1935, a well ordered arrangement of spaces around the site with paths and routes defined by the tree planting. It shows the extension of the male and female wards to the south and north of the main complex and the beginning of a dispersal of the building footprint (Attwell in Baumann et al 2012).

The heritage significance ascribed to Valkenberg is summarised below for the purposes of providing the required comparative assessment with Stikland Psychiatric Hospital (from Attwell in Baumann et al 2012 p69 – 70).

Historical significance: Valkenburg Hospital.1891- 1955

Medical (Scientific) significance: Valkenburg is highly significant in terms of the medical and architectural history of psychiatric institutions in South Africa, being the first purpose-built asylum/psychiatric hospital in the country; the first too to be designed by an architectural firm with knowledge and experience in the design of sanatoria and asylums.

Scientific significance: Design was based on international models of asylum design - notably the pavilion model which provided better hospital conditions, better sanitation and better care for the mentally ill. The design of Valkenburg incorporated the available technology for patient comfort with an emphasis on relative freedom of movement, light, ventilation and good sanitation. Valkenburg was one of the first institutions to introduce electricity. Valkenburg was the first asylum in South Africa based on scientific design principles. From this perspective it can be considered of national significance in the history of psychiatric medicine.

Architectural/historical significance: Valkenburg was designed by Scottish firm Sydney Mitchell and Wilson who were experts in the design and asylums and sanatoria. The institution was designed around the concept of pavilion architecture which combined oversight, surveillance and freedom of movement. The institution designed by them was built by the Colonial Governments Department of Public Works under the guidance of notable architects such as HS Greaves and later GS Cleland. Both local architects were exponents of a South African style intended to use the finest of materials and elegance of design. The early designs remained true to the original architectural intentions but gradually changed to meet new governmental design requirements and responses to the changes in treatment of the medically insane. The building complex is significant in that in was built in a relatively short period of time between 1892 and 1896, and the historic core remains substantially intact.

Medical social architectural significance: Valkenburg: The building as a medical treatment facility As professional and social attitudes to mentally ill persons had undergone a change in the late nineteenth century, so had attitudes to their care. This was evident not only in medical treatment but the spaces and conditions under which they lived or were confined. By the nineteenth century there was increased emphasis on healthy living conditions and differentiated treatment. These principles were expressed spatially in the design of the building itself. Design therefore was a key medical response (Louw and Swartz 2001(4).

Social order - a key ingredient in the racial and class differentiations of nineteenth and twentieth century South Africa was also expressed spatially at Valkenburg which because it was purpose designed became an expression of social and racial control.

The following may be illustrated in a spatial analysis of the Valkenburg buildings:

- The centre of control represented by the visually dominant administration block;
- The concept as design and living conditions as part of the medical care of patient;
- Spatial and social hierarchy: The differentiation of accommodation and care based on social class. Paying guests received special treatment and there were suits available for their stay if required. The architecture with reflected the social hierarchy;
- Spatial expression of changed attitudes to health care including the placement of the campus in park-like grounds;
- Racial segregation: differentiation of accommodation based on race.

Figure 7.7-18 The revitalised historic core of Valkenberg completed 2012 (www.citizen.co.za)

7.7.4.3 MODERN PSYCHIATRY & STIKLAND HOSPITAL ERF 6300

The 1930s saw major therapeutic developments including electro-convulsive therapy. New medications and ideas emerging from the World War 2 experience led to the rapid evolution of psychiatry. Lithium was discovered in 1949 as an effective treatment for some forms of bipolar illness. Medications such as Chlorpromazine introduced in 1955 enabled the management of violent and disruptive behaviour, and imipramine was introduced in 1957 to manage depression and anxiety. The introduction of psychotropic drugs made it possible to look beyond mere custodianship to active therapeutic measures, notably

psychological treatments, group and outpatient therapy, therapeutic communities, etc (Gillis: 2012). This process in the second half of the 20th C is generally referred to de-institutionalisation.

"Old-style custodial mental hospitals were closed with the move of psychiatry to general hospitals and the community. The term 'psychiatric' rather than 'mental' was preferred, and a variety of ancillary therapies and treatment venues were set up, including day hospitals, outpatient clinics, therapeutic communities, multidisciplinary teams, social clubs and rehabilitation centres. Special units for particular conditions were created, e.g. eating disorders, personality disorders, child and adolescent psychiatry and geriatric psychiatry. This move into mainstream medicine had major results in South Africa, the most notable being the establishment of academic departments of psychiatry in general hospitals, notably in the Johannesburg, Groote Schuur, Pretoria, Tygerberg and other general hospitals. Active collaborative relationships developed with other branches of medicine, and psychiatry came to be increasingly accepted as a major medical discipline. The understanding of psychiatric illness as a treatable medical condition reduced its stigma and brought a greater willingness of patients to be treated."

"Although beset with the residual problem of large chronic populations, psychiatric hospitals offered the components of modern psychiatry including outpatient clinics, a therapeutic team approach, social and community services, occupational therapy, rehabilitation, etc. The transfer of responsibility for psychiatric services to provincial health authorities in 1987 gave a major impetus because of the emphasis on curative services and more diverse venues and forms of therapy. In the process, psychiatry came closer to general medicine and lost some of the stigma that had bedevilled it.

Under the apartheid regime, strict legislation concerning separate facilities and accommodation for black patients was enforced but, beginning in 1991, transformation and consolidation began in some hospitals and lead to the total abolishment of racial distinctions when a new government came to power in 1994.

It did not, however, prove possible to phase out psychiatric hospitals because of the special situation in South Africa with its large peri-urban and rural populations, poor transport, overcrowding in informal settlements, and poor community and social support services. But, as indicated, psychiatric hospitals have moved with the times: they began to offer a variety of purpose-orientated treatments and therapeutic facilities, e.g. a psychogeriatric unit at Stikland Hospital Outpatient clinics were established at most hospitals, and legislation in 1976 made provision for a community service in country areas associated with particular psychiatric hospitals. Peripheral outpatient clinics were established in many parts of the country which catered mostly for patients who had been discharged from hospital, but also for newly referred patients".

However, the provision of community-based care for those with mental health problems has not remotely been able to meet the demand precipitated by the process of de-institutionalisation. This is the case internationally as much as it is locally. As a result, in this period and context, the role of non-governmental and other voluntary organisations has become increasingly important and has included financial and other support from the Departments of Health and Social Welfare in effective public-private partnerships. Many of these organisations deal with the support and rehabilitation of mentally ill people and tend to work closely with public and private psychiatric hospitals.

This was the context within which Stikland Mental Hospital was conceived, precipitated also by the chronic and persistent overcrowding in mental health institutions at the Cape and elsewhere. Prior to the 1960s, Valkenberg Asylum was the last custom-built mental hospital in South Africa (Louw), and indeed the building of a new psychiatric hospital that eventually became Stikland was initially specifically intended to replace the outdated and overcrowded Valkenberg. It is also the context, which has led ultimately to the underutilisation of large portions of the original Stikland hospital grounds.

Debated for many years, and interrupted by World War II, "the owner of the farm "Stikland," situated in the suburb of Bellville, some 20 km from Valkenberg Hospital, offered the farm for sale when the national government started to look for suitable sites." 6 Objections were raised against the proposal on a number of occasions by the then Belville Municipality, although these were eventually overcome, particularly when the proposed name changed from "Belville Mental Hospital" to "Stikland Hospital." In 1951, it was announced that the government had purchased Stikland farm for the construction of a new mental hospital for mainly white patients – with fewer places for 'coloured' patients, and none at all for black patients (although by the time construction on Stikland Mental Hospital started in 1960, overcrowding in the white sections of mental hospitals was ironically no longer a problem).

Although supplemented with relevant interviews, the analysis that follows is heavily dependent on a definitive article by Johann Louw, 2019.

Construction began in 1960 on the 180ha site, already divided by Old Paarl Road, and linked by a bridge built at the time for this purpose. The site plan for the new hospital is included in Figure 30 below and it is notable that the general layout is still easily recognised in the present-day Stikland North and South, with almost no changes to its design.

On Stikland North (viewing from left to right) are what were the houses for medical staff, including a house for the medical superintendent, an admissions building, the administration building (see also Figure 28), a hospital for chronic cases, and an infirmary, which included a section for tuberculosis (TB) patients.

South of Old Paarl Road, "arranged roughly in a kidney shape, are 20 villas, or cottages, often called wards in the documentation. These were designated for 'European' patients, who were separated according to sex. A recreation hall (with a capacity of 1,000 seats) and a kitchen were placed between the rows of villas (see the right-hand side of Figure 30). To the left of the kitchen was a building for female occupational therapy, and to the right, one for male occupational therapy. Also near the kitchen were a boiler house, workshops, and a storeroom. Below the 20 villas, in the bottom right-hand corner, lie four villas for Coloured (marked as "non-European" on the architectural plans) patients, together with accommodation for Coloured staff. Above and to the left of the kidney shaped ward arrangements, just below Old Paarl Road, lie a nurses' home and a students' training centre, completed later, in 1983.

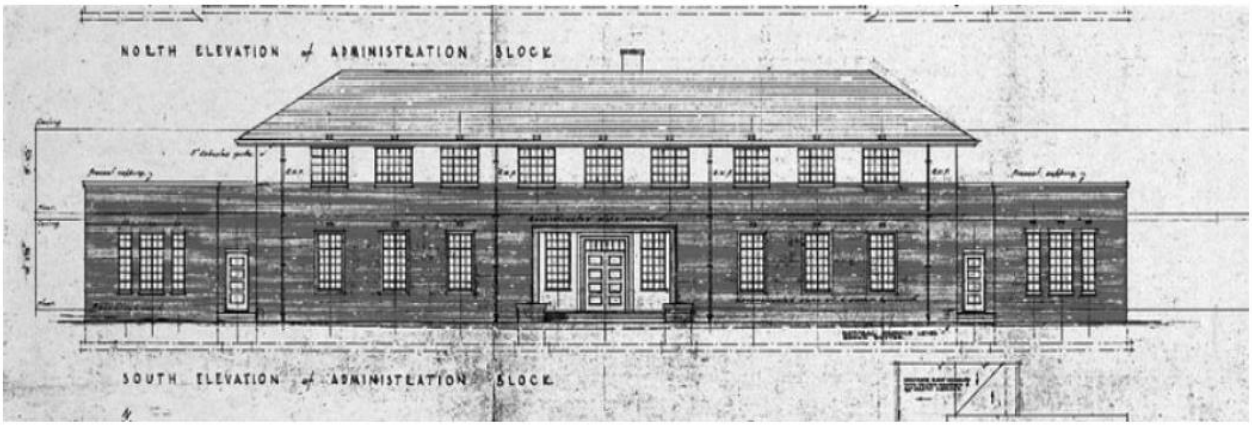


Figure 7.7-19 The original building plan (south evaluation for the administration building on Stikland North (Louw 2019)

The design was done by the National Public Works Department, under the signature of William MacDonald, Chief Government Architect. He was born in Scotland, attended the Glasgow School of Architecture (Artefacts, n.d.), and arrived in South Africa in 1927. In 1947, he was appointed as Assistant Chief Government Architect of the Public Works Department in Pretoria.

The first medical superintendent of Stikland, Ben Wolpowitz, specifically identified the design as "the Villa system."

German in origin, the villa system was designed for patients who could live outside the hospital system and allowed for an open-door treatment, with less security and more community facilities such as church, entertainment and common service buildings. The villa design received support from two reports by the World Health Organization (WHO) in 1953 and 1959. The WHO reports also provided guidelines on the architectural aspects of mental hospitals, including maximum size (no more than 1,000 beds), and free-standing buildings, arranged to resemble a village rather than a single monolithic building. Location in a natural area of woods, gardens, and farmland was promoted.

"It was not possible to determine to what extent the architects of Stikland Hospital were familiar with these reports, but the hospital's design showed much correspondence with the WHO's recommendations. The number of beds in the hospital, which was more or less consistent with the recommendations, the way chronic cases were separated from patients requiring shorter periods of stay, the emphasis on community care, and the villa design, with its garden areas, all could have been informed by the WHO reports. It would be fair to say that the design of Stikland was in step with contemporary ideas about asylum design.

The 20 villas for White patients and the four villas for Coloured patients were designed to house 50 patients each, bringing the total number of patients in Stikland close to the overall number of beds preferred by the WHO. Men and women were housed in different villas, and the villa arrangement also made it possible to have some separation according to psychiatric classification. Each villa was divided into two 14-bed wards, two eight-bed wards, and six single rooms for the most difficult patients

Each villa had eight toilets, four bathrooms, and two showers, with a shared dining room and sitting room in each building. The four villas for Coloured patients were almost exact replicas of those for White patients, except that they contained no single rooms, only another ward with six beds (Figure 29 shows the inside of a villa for Coloured patients). The individual buildings in Stikland were not fenced, although the entire site was surrounded by a fence. The WHO regarded the open-door prescription as a sign to the patients that they were trustworthy in the eyes of the hospital administration.

Wolpowitz explained that the villas were far apart so as to create the impression of spaciousness (Byvoegsel tot Die Burger, 1962). Indeed, a reporter of a local newspaper wrote that he associated the large tracts of land between the buildings with the peacefulness and tranquility of a farm ("Hospitaal waarop," 1961). Nevertheless, it was difficult to achieve the surroundings of "woods and gardens" in Bellville, as Stikland Hospital was situated in a suburban (even semi-industrial) context …, and the soil was sandy and poor (Figure 8.40 provides a glimpse of the conditions prior to the gardens being established).

Figure 7.7-20 Page from Byvoegsel tot Die Burger, January 27, 1962, showing the interior of a ward for Coloured patients. The door on the right leads to bathroom facilities and wardrobes. There are no bars in front of the windows on the left, although the windows cannot be opened completely. Reprinted with permission, Die Burger/Media24.

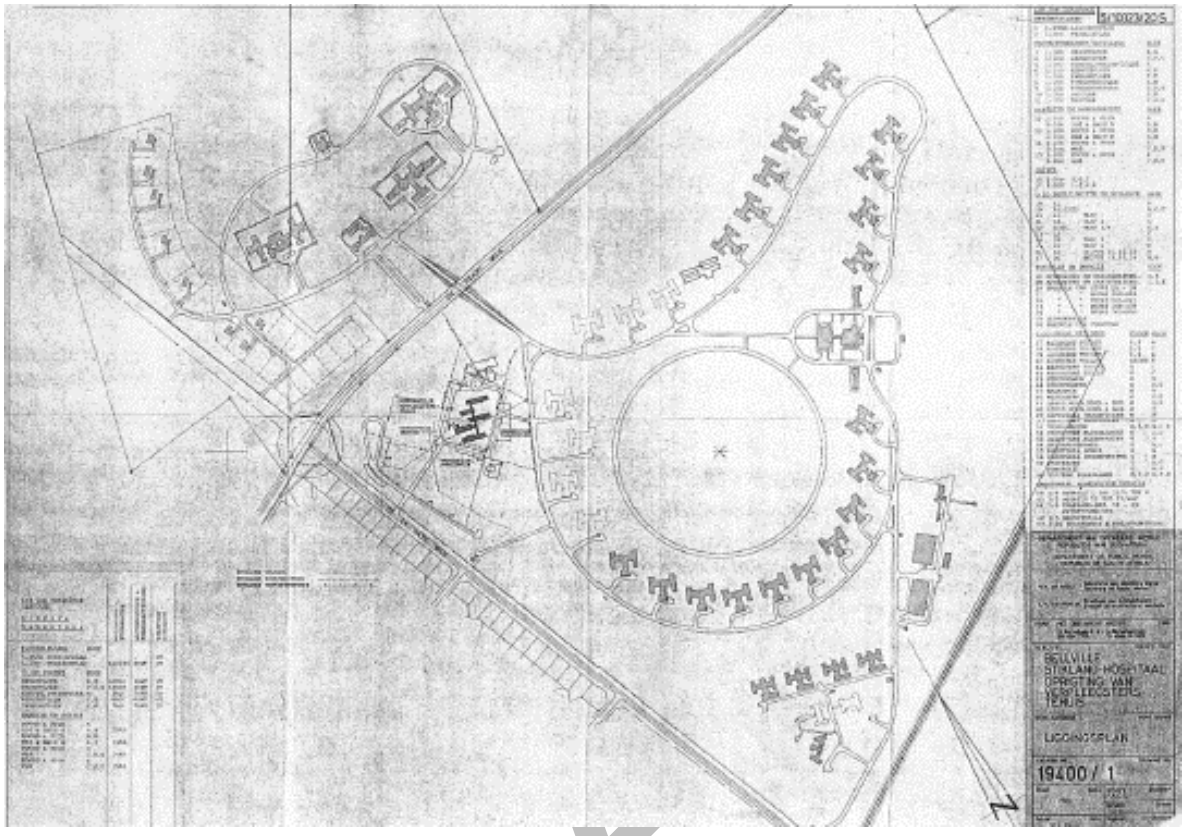


Figure 7.7-21 Original Stikland Mental Hospital site plan (In Louw 2019)

Figure 7.7-22 1966 aerial, the Stikland hospital appears fully constructed (620 007 0124), construction having started in 1960

Figure 7.7-23 Stikland Pychiatric Hospital site (Google image 2021), virtually unchanged since it was constructed

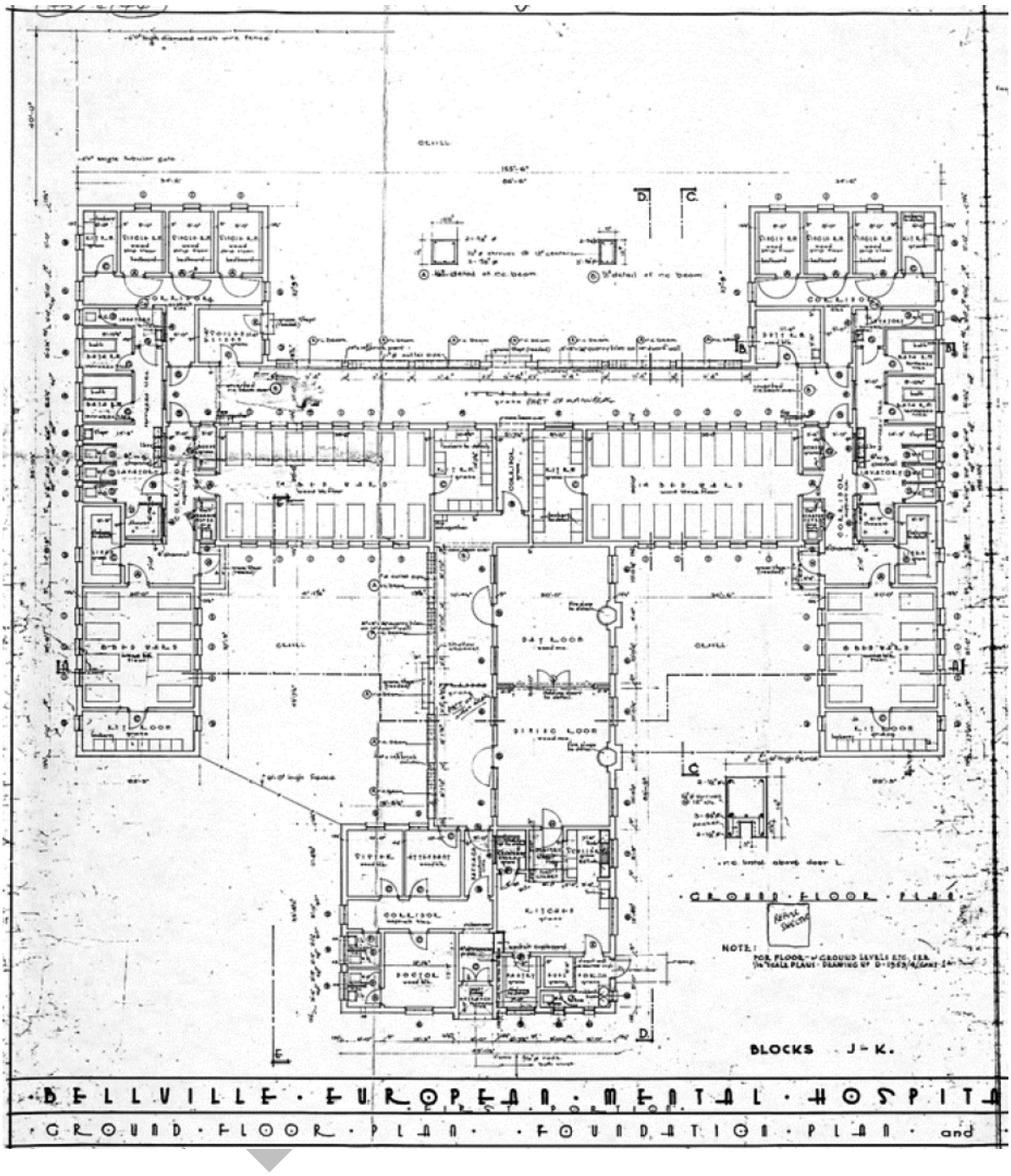


Figure 7.7-24 Villa floor plan (Louw 2019)

Although the Stikland documents rarely refer specifically to race, the new treatment practices had very different effects for African, Coloured, and White patients. The Commissioner for Mental Health remarked that in the early 1950s, schizophrenic and manic-depressive cases formed the bulk of White admissions, but as a result of the response to chemotherapy, they could remain in the community rather than take up space in the mental hospitals (Republic of South Africa, 1963). Laurenson and Swartz (2011) also

commented on this—that the annual reports of the Commissioner for Mental Health by 1961 reflected the impact of the new antipsychotic drugs, such as an increase in the number of discharges and a decrease in the length of stay of especially psychotic patients. As a result, temporary patients were mainly Whites, and long-term patients were mainly African or Coloured (Jones, 2012, p. 39).


DIE BURGER, DONDERDAG, 23 NOVEMBER 1961

Vlieërs Sterf

SÓ LYK die nuwe hospitaal vir sielsiekes in Stikland. Op 1 Januarie word die eerste pasiënte toegelaat. Die hospitaal word op 1 April amptelik geopen.

STAATSPRESIDENT

Figure 7.7-25 Page from Die Burger, Nov 23, 1961, showing the single-story villas. Reprinted with permission, Die Burger/Media (Louw 2019)

The buildings themselves did not show particular architectural pretensions, and function rather than form dominated the features of the buildings. The administration building and the buildings on Bellville's main business artery were typical of the postwar buildings constructed in Cape Town's northern suburbs, in that they were functional and rather featureless. The villas were single-story buildings, and they resembled the family units that were typical of White South Africa in the 1950s and 1960s (Myburgh, 1998, p. 76). McLaughlan (2014) has identified a tendency for the early villa hospitals to borrow the aesthetic of neighbouring dwellings. The architectural modesty of Stikland Hospital contrasts sharply with the ambition of the late 19th-century Valkenberg Hospital, which was built as a "colonial showpiece" (Louw & Swartz, 2001, p. 19). Other than references to its modern appearance, no references could be found to architectural aspects of the numerous buildings that made up the large complex of the hospital."

Whilst not definitively proven, it is a reasonable assumption that almost every building on Stikland is now or will soon be older than 60 years. The original building plans include all the institutional buildings as they

currently stand; and almost all of the residential buildings. Construction on the hospital started in 1960, by 1961 many of the buildings were complete, and the hospital opened in 1962. The 1966 aerial shows that all the buildings on the original building plan had been constructed. The photographs that follow are representative of the buildings and layout in the park-like setting of the grounds within the hospital, although they are not specifically identified since this area is unaffected by any identification of development opportunities.

With the development of the psychiatric profession, Stikland developed a close relationship with the University of Stellenbosch, training their medical students. It also provided training for psychiatric nurses. Stikland Hospital thus played an important role in improving the training of clinical psychologists and, ultimately, in statutory recognition being granted to psychology as a profession, in 1974. Valkenberg Mental Hospital had a similar affiliation at the time with the Medical Faculty of the University of Cape Town (Louw, 2019).

7.7.4.4 Current Practice

Although originally the structures on Stikland North (houses for medical staff, an admission building, the administration building, a hospital for chronic cases, an infirmary and archives) were directly related to the primary hospital operations, this has changed over time as the de-institutionalisation imperative has continued. Nonetheless, the primary focus of uses on Stikland North remains on mental health and special needs service provision, albeit one supplied largely by the private or NGO sector. There are some remaining links with Stikland operations, specifically for the Community Mental Health and Psychiatric

Foundation Clinic (CMHP) and the step-down facility, New Beginnings. The separation from the primary operations ON Stikland Sout, particularly since the bring linking the two over the R101 has been closed.

Stikland South operations are virtually identical to those established when the hospital was first constructed and buildings and building uses remain unchanged. It is a 423-bed Acute facility with 450 patients on site i.e. it is more than 100% full and this is always the case. The availability of mental health facilities remains severely constrained in Cape Town, as has been the case historically. There remains a challenge with returning patients to their families (as has historically been the case). The hospital services the Karl Bremmer and Eerste Rivier catchment area and also admits walk-ins direct from the public (or police) as well as an influx of foreign nationals. It remains a teaching hospital linked to the Stellenbosch University.

Facilities include:

- 146 acute beds facility (for psychologically ill patients who stay 3-6 months at a time);
- Approximately 160 short term patients who come in and leave (the hospital is currently assisting the Metro and rural patients;
- The Acute services have a long-stay population occupying 70 beds (patients under 60 years of age);
- Acute services for older persons (Psycho-Geriatric) include 45 acute beds and 45 chronic beds (these are long-stay patients);
- A step-down facility, with population inheritance from the New Beginnings site(40-bed step-down facility) and 135 long-stay patients due to social ills and the community's lack of acceptance.

With 23 Wards, all purpose-built and separated by gender and status of treatment, the patients move between Wards as their stage of treatment changes, but few have free reign on the grounds. Most activity, including group and outdoor activity, is contained with each Ward perimeter boundary, and some have perimeter containment. Patients are Hensie Vroom and the DSD Wards 16 and 17 do use the large outdoor spaces within the perimeter fence (i.e. outside the possible development areas under consideration) for walking, exercise, and there is a clubhouse with soccer and netball facilities used by patients and staff.

Figure 7.7-26 Ward structures

7.7.5 Context

The site is not situated in or considered part of a landscape of historical or cultural significance. It is surrounded by suburban residential development of no heritage significance.

In respect of visual considerations:

- The site is not on an identified scenic route;

- The site is visible from the surrounding road and rail network, largely due to the open boundary fences and large areas of vacant land;
- The existing trees and tree lines form important visual components of the site and form the most important environmental feature of the site. The site in its context stands out as it has more and larger trees and open space than much of the surrounding suburbs. It is surrounded by dense urban development with small trees. The trees provide important character to an otherwise featureless site.

Figure 7.7-27 Corner of Old Paarl Main Road (R301) and De La Haye, looking onto the north-western corner of the property

Figure 7.7-28 Western edge of Stikland from Del La Haye Road and surrounding suburbs. Stikland North to immediate left; Stikland South mid and background left

Figure 7.7-29 Western edge of Stikland from Del La Haye Road

Figure 7.7-30 De La Haye suburb right, Stikland South left (Google earth)

Figure 7.7-31 The R301 as it passes through Stikland Hospital, Stikland South to the left; Stikland North to the right, the disused bridge connecting the two

7.7.6 Statement of Significance

The grading of heritage significance is based on the three-tier grading system used in the NHRA and HWC's guidelines "Grading: Purpose and Management Implications" (16 March 2016).

Analysis reveals that the primary significance of Stikland Hospital lies in its social significance as an institution serving a particularly marginalised sector of society, the failures of which can impact society as a whole. However, it is suggested that whilst important, this does not fit the definition of intangible cultural heritage and should not be a matter for the heritage sector to regulate. For this reason, the institution and site are considered Not Conservation Worthy (NCW) in the absence of other attributes of heritage significance, including architectural or aesthetic. The institutional operations and layout historically does reflect apartheid-era racial categorisations and unequal treatment, but this is no longer the case and not sufficiently unique to grade the site in heritage terms.

Nonetheless, HWC has required an HIA for the proposed re-development of Stikland North (although the NID recommended no further requirements in terms of the NHRA) and the Scope of Work issued by HWC ("including a social study focusing on the historical analysis with assessment of impact to the built environment and surrounding context") has necessitated the further articulation of this assessment.

To expand briefly, the NHRA provides some legal definitions of social significance:
Section 2 (xxi) "living heritage" means the intangible aspects of inherited culture and may include-

- Cultural tradition
- Oral history
- Performance
- Ritual
- Popular memory
- Skills and techniques
- Indigenous knowledge systems
- The holistic approach to nature, society and social relationships

Section 3(2) The national estate includes, inter alia

- Places to which oral traditions are attached or which are associated with living heritage

Section 3(3) Criteria for assessing the significance of a place or objects.
A place has heritage significance, inter alia, because of:
a) Historical value

- Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

d) Social value

- It is associated with economic, social or religious activity; and

- It is associated with living heritage (cultural traditions, public culture, oral history, performance or ritual)

Policy guidance is provided by: UNESCO's 2003 Convention for the Safeguarding of the Intangible Cultural Heritage (which SA has ratified) proposes five broad 'domains' in which intangible cultural heritage is manifested. This includes

- Oral traditions and expressions, including language as a vehicle of the intangible cultural heritage;
- Performing arts;
- Social practices, rituals and festive events;
- Knowledge and practices concerning nature and the universe;
- Traditional craftsmanship.

None of these can be said to have been met in any significant way, and perhaps, in the absence of any other legislative framework to give guidance to development of the site, other than the policy and regulations pertaining to planning and building, these issues can be given due consideration incidentally.

The SAHRA palaeontological sensitivity map records the sensitivity as being low.

Given the history of agricultural activity, and, in the 1960s, much clearing for earthworks and redevelopment of the site, the likelihood of significant archaeological finds are considered to be low and the standard protocols should be sufficient.

RED	VERY HIGH	field assessment and protocol for finds is required
ORANGE/YELLOW	HIGH	desktop study is required and based on the outcome of the desktop study, a field assessment is likely
GREEN	MODERATE	desktop study is required
BLUE	LOW	no palaeontological studies are required however a protocol for finds is required
GREY	INSIGNIFICANT/ZERO	no palaeontological studies are required
WHITE/CLEAR	UNKNOWN	these areas will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map.

Figure 7.7-32 SAHRIS paleo-sensitivity map

7.7.7 Stikland Psychiatric Hospital

Historical significance: low

Medical (Scientific) significance: Stikland is significant in terms of the medical and architectural history of psychiatric institutions in South Africa, being the first purpose-built psychiatric hospital built during the period known as de-institutionalisation. It contributed significantly to research and training for the newly emerging mental health professions along with other institutions such as Groote Schuur and Valkenberg.

Architectural/historical significance: The design of Stikland was a key medical response to the prevailing attitudes of the time based on international models of design - notably the villa model. "It exemplified many of the global ideas about treatment and management of the mentally ill and the buildings constructed to accommodate them. In addition, the separation of patients by sex and psychiatric condition, and the design of the interior space—to accommodate disruptive patients, for example—were standard features of practices of care. What would have been less recognizable to the foreign visitor was the strict segregation that was applied according to the race of the patient (and the race of the staff member). Thus, although the building type was largely a global one, it contained elements that reflected local practices." Like all other institutions of the time, racial differentiations were built into the design and management of the institution. These have however been integrated since the 1990s.

The historic buildings and layout remain substantially intact. There is little however that is notable in the architecture itself, which is unpretentious, utilitarian and functional design, featureless, and borrows it's the aesthetic from the mid-century development in the area.
Aesthetic: No aesthetic or visual significance.

Social: People with mental health problems are arguably amongst the most marginalised in all societies and South Africa is no exception. The more so amongst those without financial resources. The provision by the State of humane and appropriate care for people with such disabilities is never adequate and critical for those affected either directly or by association (families in particular). "The construction of this large, 1 000-patient facility in South Africa in the 1960s reflects the argument that mental hospitals in this country retained their critical significance in improving mental health care. In fact, in the mid-1980s, another large psychiatric hospital, Lentegeur Hospital, was built in the larger Cape Town area. One may therefore question whether South Africa was in fact a case of "deinstitutionalization," other than the efforts made to introduce changing practices in mental health care and the hopes for new forms of treatment."

Proposed grading: **NCW**

Stikland South Context

As the core component of it, the site is linked to all the significances of Stikland Psychiatric Hospital as a whole. It reduced function and need for space is also a clear outcome of the further process of deinstitutionalisation in South Africa from the early 1990s where in-house mental health care treatment was progressively reduced but were not accompanied by the expected concomitant development of community-based multidisciplinary mental healthcare.

Proposed grading: **NCW**

Figure 7.7-33 CCT Heritage Audit amended with proposed grading of Stikland South (NCW), bordered red, overall landholdings bordered (NCW), and context (NCW)

7.7.8 Heritage Indicators

In principle, given the lack of identified heritage resources of significance, this assessor is of the opinion that, with the possible exception of some of the trees (which significance is to be established in a separate study by Viridian) there are no heritage constraints to development of the site.

Heritage Design Indicators are intended to guide future development in order to prevent or mitigate potentially high negative impacts on the identified heritage resources and form the basis upon which the proposed development is assessed. In this context, no heritage related informants have been provided.

Only the retention of the mature trees where appropriate, as established by Viridian, is recommended, to be considered more as place-making opportunities.

7.7.9 Legal Requirements

Any proposed development of the Stikland South site would trigger the requirement for the submission of A Notification of Intent to Develop (NID) to Heritage Western Cape (HWC) in terms of the National Heritage Resources Act No. 25 of 1999 (NHRA).

In view of the assessment within this report, it is reasonable for any such NID to recommend that no further studies should be required in terms of the NHRA i.e. no Heritage Impact Assessment is warranted.

However, HWC is the final arbiter of these decisions, as well as the grading of heritage resources (other than those deemed to be of national significance).

Bearing this in mind, it should be noted that on 9 September 2020, HWC issued a response to a NID for Stikland North (which NID recommended that no HIA be required) requiring a Heritage Impact Assessment (HIA) that satisfies the provisions of section 38(3) of the NHRA. This HIA is to have specific reference to the following:

- A comparative study of other institutional buildings including related built environment; and
- A social study focusing on the historical analysis 12 with assessment of impact to the built environment and surrounding context.

It is therefore recommended that should a development framework for this site (Stikland South) be prepared, a NID should be submitted as soon as possible to establish HWC's requirements in this regard. Should HWC require an HIA despite a recommendation to the contrary, it is recommended that a Phased approach to the HIA be requested in order to submit the identification of heritage resources and heritage indicators for support or otherwise, as their support for a grading of Not Conservation Worthy may limit the requirement for an impact assessment.

Alternatively:

- If the Phase 1 HIA for Stikland North is submitted to HWC for interim comment (with their prior agreement), this should establish the precedent for Stikland South, which may then obviate the need for an HIA; or
- HWC could be informed that the site boundaries for the Stikland North HIA have been expanded to include Stikland South, and the impact assessment be conducted simultaneously, avoiding unnecessary duplicate work.

7.8 Tree Survey

7.8.1 Introduction

Viridian Consulting Landscape Architects were appointed on the consultant team for the Stikland North precinct plan. The appointment was extended to include conducting a baseline study for Stikland South Precinct. (Please note that this section is supported by appendix 6.a)

This section focuses on a high-level tree survey of the existing trees found currently growing in the precinct. The landscape analysis is a desktop analysis that builds on the previous planning work completed and shared by the client. It was identified that the major site informants that are significant to the landscape planning and design were:

- The exposed, relatively level topography of the site in relation to its surroundings; and
- The extensive existing mature trees and open meadows that form a distinctive cultural landscape that stands out from its local surroundings.
- This report documents the high-level tree survey and the tree management recommendations that derived from this study to become site-planning informants.

7.8.2 Approach & Methodology

The site is located in an area with a vegetation type, which would not naturally support trees due to the following factors:

- Fire prone natural vegetation
- Lack of year round water availability
- Strong, drying summer winds

The trees that are found on site are the result of a consciously created cultural landscape with trees planted to define routes and avenues, delineate boundaries, and protect outdoor spaces from prevailing winds. They have been established with irrigation and the species present are a combination of indigenous (not locally indigenous) and exotic species.

The tree survey was based on the available aerial photography prepared by the planners/ urban designers.

Due to the size of the site and large number of trees present on the site, the site was divided into five different areas (A-E), which can be viewed within each of the five layouts as well as the overall tree survey reference plan.

The tree survey consists of the drawings that indicate the position and plan reference tree number of each tree group or in some cases individual trees, as well as a tree management table, which provides the following information:

- Tree / tree group reference number
- Species name
- Comment on the condition of the trees
- Comment on the desirability of the tree in relation to alien and invasive plant species lists (refer legislation listed below)
- Recommendation as to how the planning process should respond to the individual or group of trees.

Legislation governing the management of alien and invasive species are as follows:

- National Environmental Management Act (Act 107 of 1988) or NEMA
- National Environmental Management: Biodiversity Act (Act 10 of 2004) or NEMBA Act
- NEMBA Alien and Invasive Species (AIS) Regulations were passed into law in 2014 and updated in 2020 and commenced in 2021.
- Conservation of Agricultural Resources Act (ACT No. 43 OF 1983) or CARA

Four categories of action/response have been identified, and are colour coded upon the plans provided.
These are:

- **Green**: Strongly recommended to be retained and protected during the development process. These trees are particularly healthy or significant specimens, they may indigenous or exotic but are considered very special and every effort must be made to retain these trees in the proposed layout and future development process. The development footprint must take into account the setback from individual trees in order to retain them successfully.

- **Blue:** These are trees that are strongly recommended to be retained. The tree is desirable and plays a significant role in the cultural landscape and the place making that it provides. These are trees that should inform the spatial layout.

- **Orange:** The trees are not necessarily considered to be significant individual specimens, but they are existing, and their significance is recognised in that they are an important resource in an urbanized landscape with limited large trees. They would require significant resources to replace.

  These trees are recommended to be retained if they are not in conflict with the proposed development footprint. The development footprint must take into account the setback from individual trees in order to retain them successfully.

- **Red:** Recommend tree to be removed (either due to the condition of the tree, listed as an alien or invasive species within a category that requires removal in terms of current legislation, and/or its inappropriateness to retain in terms of health and safety.

The criteria for trees to be retained and/or considered for inclusion in the spatial layouts need to take the following into account:

- The particular species and the expected canopy height and width at maturity. Some species respond well to regular pruning and shaping and their size can be limited. Other species have a natural shape and size that does not lend itself well to significant pruning or shaping to contain their size. All trees require maintenance pruning to protect against damage from falling limbs or to extend their lifespan and protect the tree health;
- Different species have different types of root systems. Some are known to be quite aggressive and are not compatible with proximity to roads, foundations, underground services and other infrastructure;
- The existing level around a tree considered for retention cannot be significantly adjusted. The majority of the trees roots are located within the top 150- 200mm layer. Filling over the tree's root zone has a detrimental effect on the tree's ability to continue exchanging oxygen. Cutting into the root zone inflicts significant damage to the tree. Even partial construction and excavation within the root zone needs to be considered carefully in order to assess the potential success of retaining the tree;
- Each tree that is to be retained in the development must have a Root Protection Area (RPA) identified. The RPA determines the extent of the area to be fenced off/ protected from levels changes, and the setback for development and construction.

Figure 7.8-1 Tree survey plan: Area A

Figure 7.8-2 Tree survey plan: Area B

Figure 7.8-3 Tree survey plan: Area C

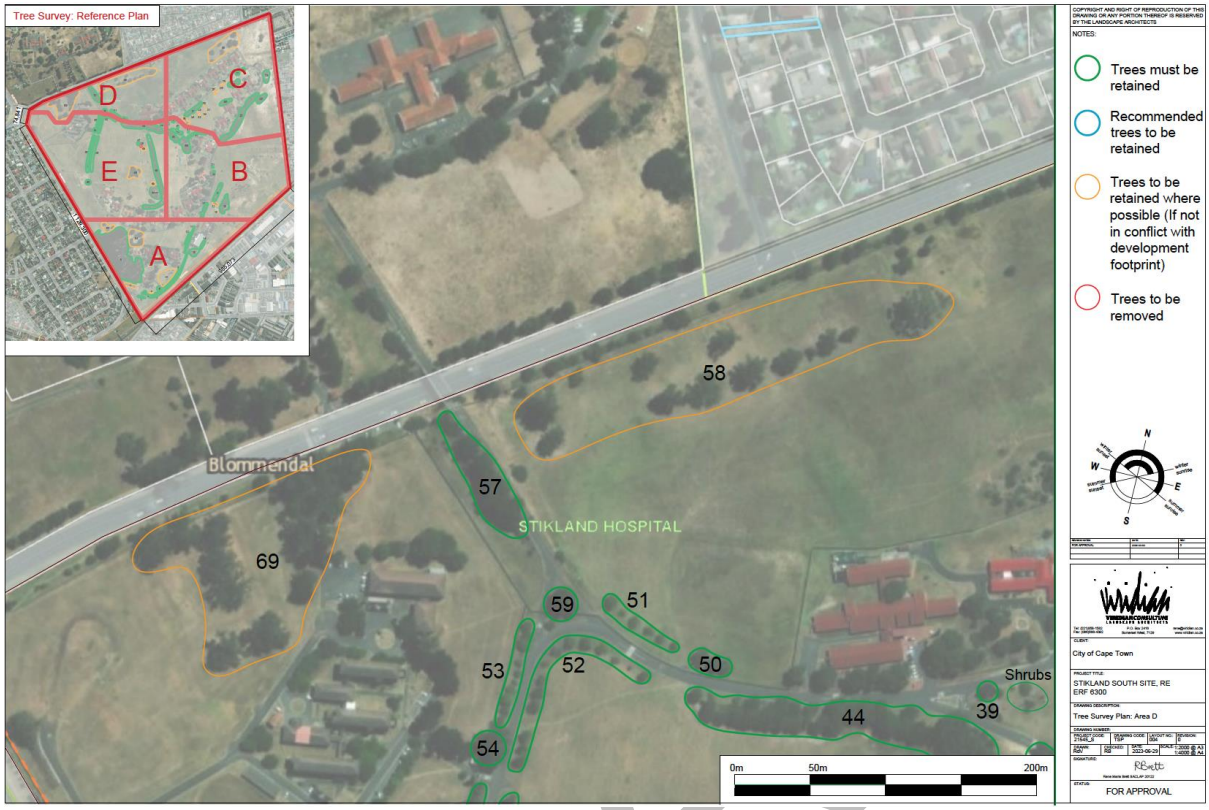


Figure 7.8-4 Tree survey plan: Area D

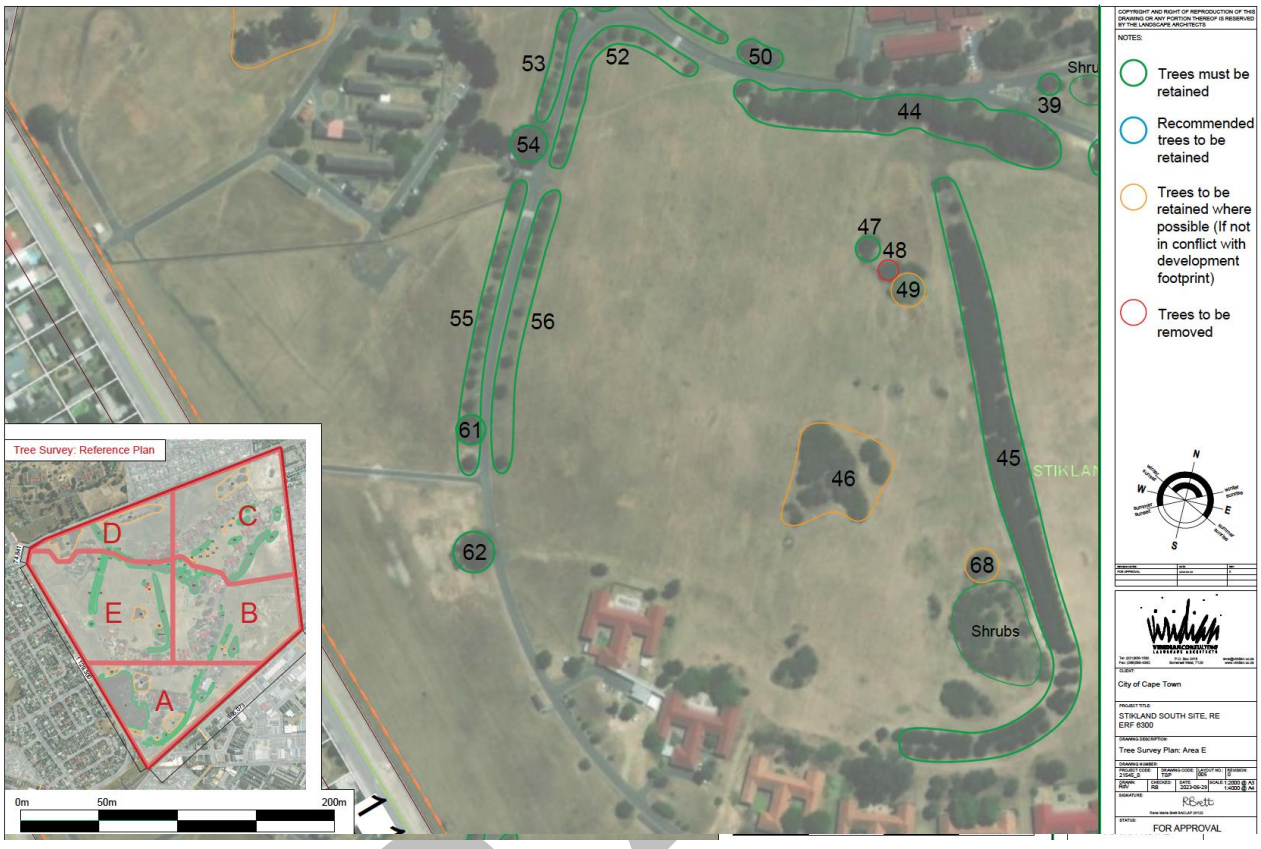


Figure 7.8-5 Tree survey plan: Area E

7.8.3 Conclusion and Way Forward

The Tree Management Table included in Annexure A contains all the survey information and must be read with the drawings in Annexure B. A recommended action or response has been provided for each tree based on the criteria as set out in section 2.

The drawings included in Annexure B are listed as follows:

Tree Survey: Reference Plan

Tree Survey Plan: Area A (Drawing number 21545_S_TSP_001_Rev0)

Tree Survey Plan: Area B (Drawing number 21545_S_TSP_002_Rev0)

Tree Survey Plan: Area C (Drawing number 21545_S_TSP_003_Rev0)

Tree Survey Plan: Area D (Drawing number 21545_S_TSP_004_Rev0)

Tree Survey Plan: Area E (Drawing number 21545_S_TSP_005_Rev0)

7.9 Aquatic Biodiversity Screening Report

The Western Cape Department of Human Settlements proposes to develop housing opportunities on vacant portions Erf 6300 (Stikland Hospital), Stikland, City of Cape Town (see Figure 7.9-1). EnviroSwift Western Cape (EnviroSwift) conduct an aquatic biodiversity screening study of the proposed site to determine if there are any aquatic biodiversity constraints on or near the site, which need to be taken into consideration in planning the development. Additionally, any authorisation requirements in terms of the NEMA EIA Regulations (2014, as amended) and the National Water Act, Act 36 of 1998 (NWA) relating to the presence of aquatic habitat, need to be identified. In order to provide this input EnviroSwift conducted site visits in September 2023 and also undertook a desktop review of available information including the National Geospatial Information (NGI) Rivers database (available on Cape Farm Mapper), the National Wetlands Map (CSIR, 2018), City of Cape Town wetlands layer (BioNet, updated 2018) and the Western Cape Biodiversity Spatial Plan, 2017). (Please note that this section is supported by appendix 7.a)

Figure 7.9-1 Portions (A-E) of the proposed site (Stikland Hospital) under consideration for future development

7.9.1 Assumptions, Limitations and Methodology

The following limitations apply to this screening-level study:

- Two site visits were conducted on 18 and 22 September 2023, respectively (i.e. late in the wet season) which allowed for a conclusive determination of hydrology and seasonality;
- During the site assessments the proposed site and its immediate surrounds were searched for signs of natural drainage, elevated levels of soil saturation and aquatic habitat (hydrophytic vegetation). Aquatic habitat in the greater area was identified based on the available online databases, *viz-a-viz* the National Wetlands Map Version 5 (CSIR, 2018) and the City of Cape Town Wetlands Layer (BioNet, updated 2018);
- In determining the presence of any wetlands on-site, the methods used were limited to the upper 50cm of soil in accordance with the Updated Manual for Identification and Delineation of Wetland and Riparian Areas (Department of Water Affairs and Forestry - DWAF, 2008) and the Application of the DWAF (2008) Method to Wetland Soils of Western Cape (Job *et. al.* 2009);
- The project footprint is located within an area characterised by Aeolian derived, sandy soils associated with the Cape Flats Aquifer. These soils often have grey profile colours, which are not necessarily associated with hydromorphic soil forming processes and are thus not indicative of riparian or wetland habitats. According to Day et al. (2010), a number of wetland types and conditions have been identified for which soil morphological indicators do not readily apply. These include seasonally saturated to inundated wetlands in sandy coastal aquifers dominated by wind-blown sands. Such wetlands are called "cryptic", and cannot reliably be identified as wetlands during the dry season on the basis of standard wetland identification and delineation tools. Soils within cryptic wetlands often lack redoximorphic features and surface water is only present during specific periods of the year after sufficient rainfall. It is the opinion of the freshwater specialist that the project footprint area may contain such cryptic wetlands which will only display wetland characteristics during the winter months;
- The study area is considered a difficult case for wetland delineation due to the history of disturbance, having being cultivated since the mid-1900s, and due to ongoing, regular mowing of the vacant areas. As a result reliance on vegetation to determine wetland habitat is limited and other methods including the use of historical aerial imagery available on Google Earth Pro were used as soil characteristics could not be relied upon as discussed in the previous bullet.

7.9.2 Regional Freshwater Ecological Context

The proposed site is situated within the Southern Western Coastal Belt Ecoregion, within the Berg Water Management Area (WMA), the Greater Cape Town sub-Water Management Area (sub-WMA) and the G22C and G22E quaternary catchments (NFEPA, 2011 and Kleynhans et al, 2005).

According to the NGI Rivers database (Cape Farm Mapper, 2023) and the National Wetlands Map Version 5 (CSIR, 2018) there are no rivers, drainage lines or wetlands within the site (see Figure 7.9-2). The proposed site does however fall within the regulated zone (500m) of a hillslope seep, which is located approximately 20m north of the north-western boundary of the site. The City of Cape Town Wetlands Layer (BioNet, updated 2018) however indicates that the proposed site lies within the regulated zone of a second wetland, an endorheic depression, located approximately 420m north of the north-western property boundary (see Figure 7.9-3). Both wetlands occur upslope of the proposed site and on the far side of Old Paarl Road and as such are not at any risk of being impacted by the future development on the site. A groundtruthing exercise conducted by Dr Toni Belcher (Blue Science, 2020) for the site known as Stikland North (Erf 32103) confirmed that the mapped hillslope seep approximately 20m north of the northern site boundary is artificial and associated with a leaking water pipe or possibly the sewer pipe on the property.

The BioNet (updated 2018) was also consulted to determine whether the site or any nearby land is identified as having any biodiversity conservation significance (i.e. presence of Protected Areas, Critical Biodiversity Areas and Ecological Support Areas). According to the BioNet, neither the proposed site nor the surrounding areas are identified as having any conservation importance.

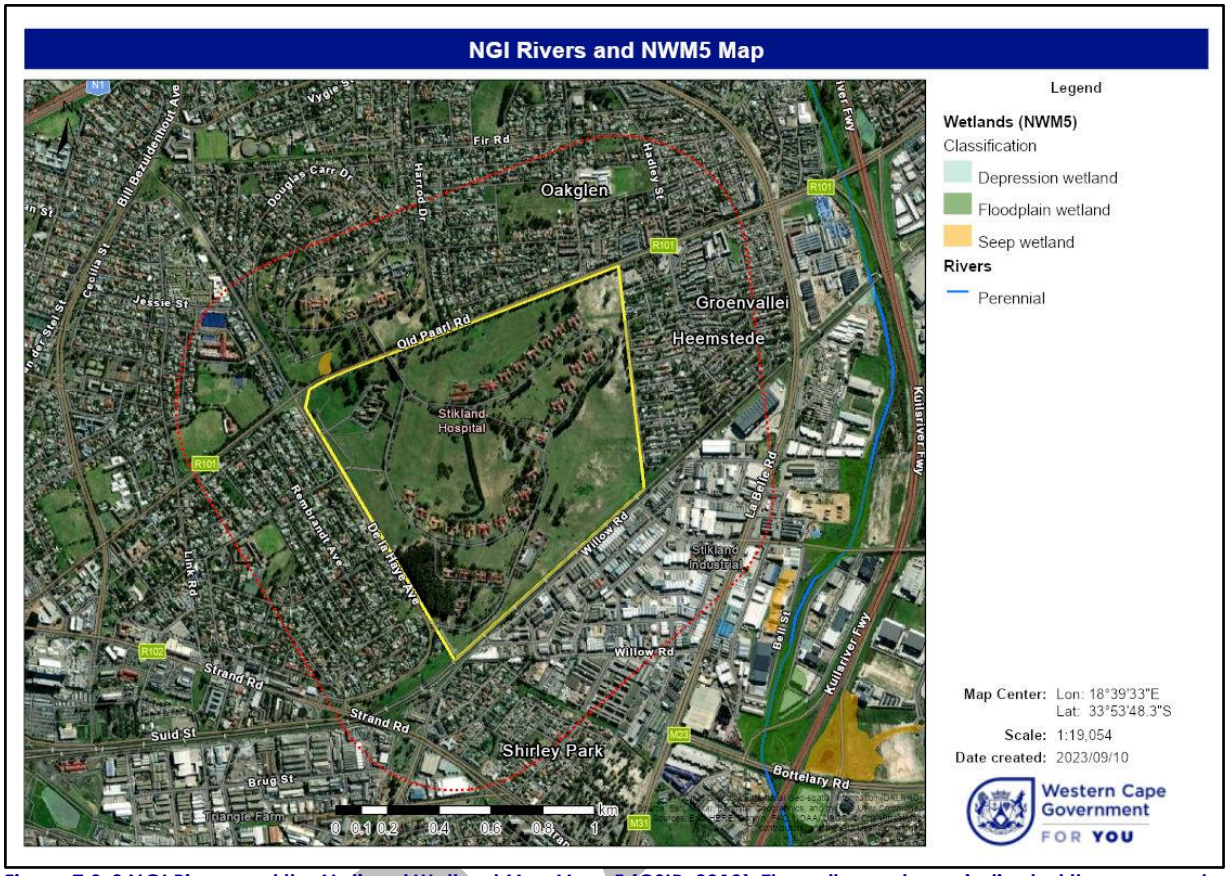


Figure 7.9-2 NGI Rivers and the National Wetland Map Vers. 5 (CSIR, 2018). The yellow polygon indicated the proposed site and the red strippled line the NWA regulated area for wetlands (i.e 500m from the site boundary)

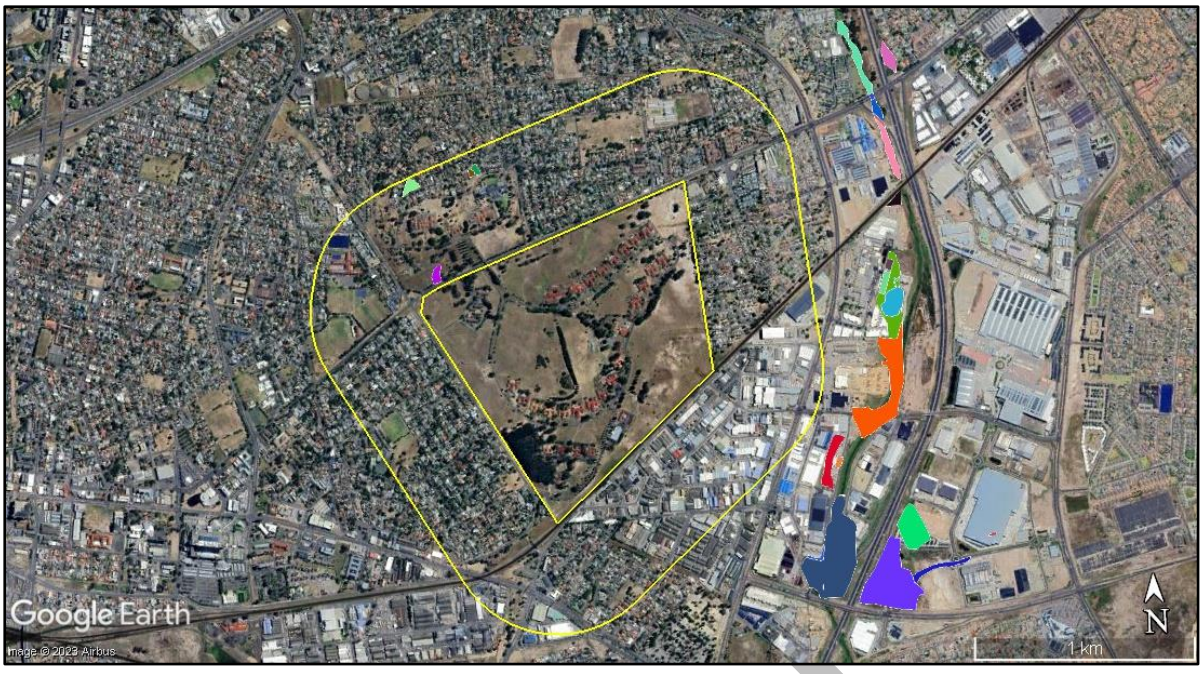


Figure 7.9-3 City of Cape Town Wetlands Layer (BioNet, updated 2018). The wetland features identified to the north west of the site and within the regulated zone are upslope of the site (i.e. the proposed development poses no risk to these feature). The remaining features are beyond the regulated zone.

7.9.3 Site visit and groundtruthing

EnviroSwift visited the site on 18 and 22 September 2023 in order to confirm whether any watercourses, as defined in terms of the NWA, are present within or immediately adjacent to the site, The site visit focussed on the vacant areas where future development opportunities are being considered viz-a-viz portions A – E as indicated in Figure 1 and in particular an area in portion C identified by the appointed Environmental Assessment Practitioners (EAPs), Infinity Environmental, as containing Typha capensis, a known indicator of wetland permanent zones (Infinity, 2023). The findings of the site investigations are presented below according to the portion of site.

7.9.3.1 Portion A:

At the time of both site visits standing water was evident in a band running through the central part of Portion A with surface and sub-surface flow direction determined to be in a south westerly direction towards De la Haye Avenue (see Figures 7.9-4). The presence of Juncus kraussii, a wetland obligate, in the larger wetland feature confirms the presence of a wetland in this area. This wetland is also visible on historical aerial imagery during the wet season but disappears during the dry season confirming the non-perennial nature of the wetland.

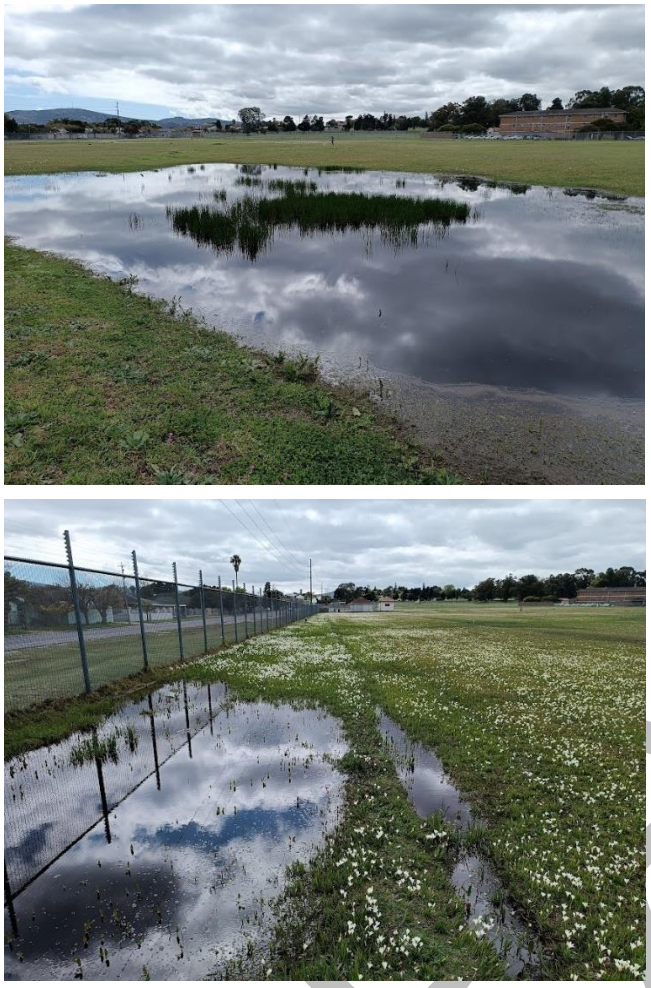


Figure 7.9-4 Photos of standing water in the central part of Portion A. The photo on the left shows the most prominent feature with a stand of Juncus kraussii in the centre and the photo on the right is taken at the western boundary of the site with drainage from the site reaching De la Haye Road.

7.9.3.2 Portion B:

There were no indicators of wetland habitat in Portion B.

7.9.3.3 Portion C:

The area of interest identified by Infinity Environmental as containing Typha capensis was located and the presence of T. capensis as well as ponding water was confirmed (see Figure 7.9-5). The feature is located in a deep depression of unknown origins but assumed to be artificial as the surrounding areas are flat and there are no natural forces that could result in a depression of this form. Infinity (2023) presumed the feature to be artificial insofar as its hydrology appears, at least in part, to be driven by run-off from Old Paarl Road which lies immediately adjacent tom the north of the feature. The fact that the feature contains T. capensis would suggest more natural source of flow as T. capensis typically indicates

permanent levels of soil saturation and road-run-off would only sustain wet season flow. The lack of any road-side culverts discharging directly into the feature also suggests that flow is part sustained by run-off and part by groundwater ingress and on the evidence available would suggest that the feature comprises a depression wetland.

Figure 7.9-5 Photo of the Typha capensis dominated pond adjacent to the northern boundary of the site and Old Paarl Road immediately beyond the fence.

Another to the east of the Typha-dominated depression was observed as comprising ponding water (see Figure 7.9-6). An auger sample taken within the area of ponding water (see Figure 7) revealed wetland soil characteristics typical of the wetland permanent zone (dark, sludgy soil rich in organic material). While vegetation was evident within and surrounding the pond, the species were not possible to identify due to the plants not being in flower with the exception of the numerous white flowering plants which were widespread across much of the Portion C as well as other portions of Erf 6300. The species was identified as Sparaxis bulbifera which, while not being regarded as a wetland obligate, is known to be associated with sandy, seasonally waterlogged lower slopes and flats and occasionally wet clay soils (http://redlist.sanbi.org/species.php?species=1536-1).

Based on the soils and a review of historical aerial imagery (Google Earth Pro) the ponding area is most likely a depression wetland. Another band of soils occurring between the Typha-dominated depression and the depression further to the east in Portion C was identified on Google Earth Pro has indications of above-normal green colouration during parts of the dry season suggesting the presence of a temporary / seasonal wetland.

Figure 7.9-6 Photo of an area of ponding water to the east of the Typha-dominated depression.

Figure 7.9-7 Photo showing the auger sample taken within the area of ponding water shown in Figure 6. Note the dark colour and rich organic content characteristic of the wetland permanently saturated zone.

7.9.3.1 *Portion D:*

There were no indicators of wetland habitat in Portion D.

7.9.3.2 *Portion E:*

At the eastern-most part of the site in Portion E an area of dense kikuyu grass (Pennisetum clandestinum) was observed that was also evident in historical aerial imagery during the dry season which suggests elevated levels of soil saturation (see Figure 8). Augering in this area revealed wetland soil conditions (see Figure 7.9-8), albeit more so of wetland temporary / seasonal conditions. Other mention-worthy features, albeit not natural, observed in this area was a concrete-lined stormwater canal which ran along the eastern boundary of the site and discharged into a culvert immediately downslope and east of the kikuyu-dominated wetland seep.

Figure 7.9-8 Area of sense kikuyu grass in Portion D indicative of elevated levels of soil saturation.

Figure 7.9-9 Soil auger sample taken within the area of dense kikuyu grass indicative of wetland conditions. Note the dark, organically rich surface component overlaying lighter reddish soils indicative of elevated levels of clay.

At the south-western end of Portion E two additional areas of ponding water were evident during the two September 2023 site visits. The feature at the extreme south-western end was deemed to comprise an endoreheic depression wetland on the basis of the presence of obligate wetland vegetation including Arum lily (Zantedeschia aethiopica) and a white flowering aquatic plant, possibly Spiloxene aquatica (see Figure 7.9-10). The other feature to the north east of the depression (see Figure 7.9-11) was deemed to be entirely artificial as strong flow was evident from a manhole which showed signs of pollution in the form of odour and grey colouration on vegetation (see Figure 7.9-12). According to the estate manager of some 20 years the manhole is for a stormwater pipeline so the source of contamination is unknown.

Figure 7.9-10 Zantedeschia aethiopica (left) and a white flowering aquatic plant, possibly Spiloxene aquatica (right) present in the endorheic seep in the extreme south western part of Portion E.

Figure 7.9-11 Ponding visible in the area near the overflowing stormwater manhole.

Figure 7.9-12 Grey slimy deposit on vegetation near the overflowing stormwater manhole indicative of pollution, possibly ingress of effluent into the stormwater system.

7.9.4 Key Findings and Way Forward

Available desktop resources do not map any watercourses on the site and one, possibly two wetlands upslope of the site to the north which are not hydrologically coupled to the site and are therefore of no

concern. When groundtruthed by the specialist on 18 and 22 September 2023 the vacant areas at the outer perimeter of the site which are under consideration for future development were found to contain wetlands on the basis of soil characteristics, hydrology (ponding and soil wetness) and wetland vegetation (see Figure 7.9-13). Of the 6 areas determined to comprise wetlands one area in Portion C (indicated as an orange polygon in Figure 7.9-13 was identified primarily on the basis of vegetation colouring on historic aerial imagery and therefore is not confirmed to comprise a wetland.

As indicated in Section 2 the site is considered a difficult case for wetland delineation due to the history of disturbance with agriculture being evident as far back as 1938 and then with construction of the hospital in 1968 and then in recent years with frequent mowing of the vacant areas and open spaces within the hospital grounds by maintenance staff which has resulted in the dominance of alien grasses such as kikuyu (Pennisetum clandestinum) and exotic annuals and shrubs as larger indigenous shrubs and semi-aquatic vegetation being either outcompeted or stunted and therefore difficult to identify. An additional factor is that the soils are unlikely to mottle readily making the delineation of the outer wetland seasonal / temporary zone difficult. Nonetheless there was sufficient evidence to confirm the presence of at least 5 wetlands on the site and the possibility of a 6th wetland in Portion C. It is also possible that a larger part of Portion C comprises wetland habitat as the delineations focussed on first identifying wetland permanent zones and then with using historical aerial photography the wider extent of the wetland areas were confirmed.

A Geotechnical Survey of the vacant portions would allow for more conclusive wetland delineation as the subsoil conditions across the site at depths greater than the upper 500 mm would be determined. There is a strong possibility that the Geotechnical Survey would identify the presence of an impermeable clay layer in the deeper subsoil that could be the driver of what appears to the perched wetland conditions, at least insofar as the wetlands in Portion A and Portion C are concerned.

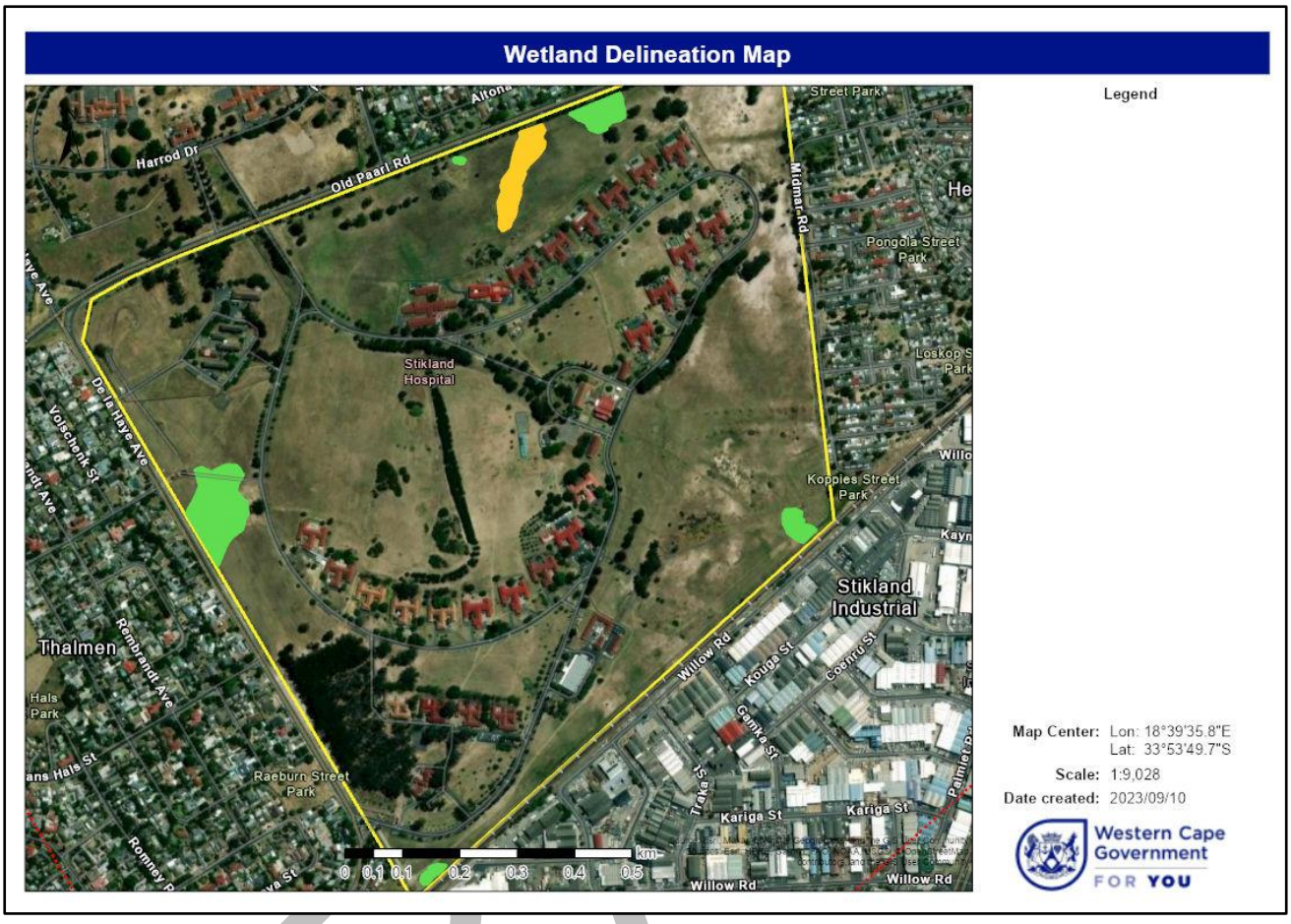


Figure 7.9-13 Wetland Delineation Map. The 5 green polygons indicate confirmed wetlands while the orange polygon indicates unconfirmed yet likely wetland.

Given that wetlands are confirmed within Portions A, B, C and E any development in these areas would require a Water Use Authorisation in terms of the NWA as the development would be within the 500m regulated zone of these wetlands. Additionally, any development in Portions B and D would also be within the 500m regulated zone of the delineated wetlands and given that these areas are upslope of the delineated wetlands it is likely that they would be at risk and therefore also require a Water Use Authorisation.

In order to determine the level of risk and hence the level of Water Use Authorisation (either a General Authorisation or a WULA) a SANASP accredited scientist with expertise in freshwater ecology would have to undertake a detailed ecological assessment of the wetlands to determine the Present Ecological State (PES) and their Ecological Importance and Sensitivity (EIS). On the basis of these indices the risk to the individual wetlands can be determined using the DWS Risk Assessment Matrix (RAM). If found to all be LOW Risk then a GA would apply and if any activity is found to generate a risk greater than LOW then a WULA would be required.

In terms of the NEMA EIA Regulations (2014, as amended), the site should be determined to be urban in which case the future development of the site would only require environmental authorisation if any wetlands on the site were being encroached into by the development. If this was the case then it is also likely that wetland loss would occur in which case the loss in wetland habitat and function would need to be offset, either via an on-site offset or an off-site offset, before the Wate Use Authorisation would be approved. To this end the National Wetland Offset Guidelines and the associated Wetland Offset Calculator (Macfarlane et al. 2014).

In conclusion there are at least 5 wetlands within the site and future development plans would need to take consideration of their presence from an ecological impacts perspective and from a founding perspective. A Geotechnical Survey should be commissioned and the wetland delineation revisited. If the outcome is that the wetlands as identified in this study do occur on the site then a freshwater ecologist should be appointed to undertake a detailed freshwater ecological assessment including a Risk Assessment using the RAM to determine the precise authorisation requirements. The application of the RAM is only possible when a Site Development Plan indicating the spatial extent of the proposed development is available. The site therefore has been determined to have high aquatic biodiversity sensitivity.

7.10 Environmental Screening Report

Western Cape Government: Department of Infrastructure currently investigating on vacant portions of Erf 6300-RE (Stikland Hospital), Stikland, City of Cape Town. The appointed consultants ARG Design, on behalf of the Department of Infrastructure, have requested that Infinity Environmental provide an environmental screening of the precinct to determine environmental sensitivities and legislative requirements associated with the re-development of the identified vacant portions. (Please note that this section is supported by appendix 7.b)

7.10.1 Receiving Environment

7.10.1.1 Terrestrial biodiversity

Historically, the entire site would have supported Cape Flats Sand Fynbos vegetation, now Critically Endangered. However, the site has been significantly degraded by past agricultural activities and institutional use. There is therefore none of this vegetation apparent on the site, and much of the site is vegetated by mown lawns which consist of common indigenous and exotic grass species and weedy annuals. In addition, the site is not selected in any of the applicable conservational spatial plans for the region.

7.10.1.2 *Aquatic Sensitivities*

The site is situated within the Southern Western Coastal Belt Ecoregion, within the Berg Water Management Area, the Greater Cape Town sub-Water Management Area, and the G22C and G22E quaternary catchments. According to desktop mapping, there are no rivers, drainage lines, or wetlands within the site. However, the site does fall within the regulated zone (500m) of a hilltop seep, which is located approximately 20m north of the north-western boundary of the site. In addition, The City of Cape Town Wetland Layer (BioNet, updated 2018) indicates that the proposed site lies within the regulated zone of a second wetland (an endorheic depression) which is located approximately 420m north of the north-western property boundary. Both wetlands occur upslope of the site and on the far side of Old Paarl Road and, therefore, are not at any risk of being impacted by future development on the site.

The 26 June 2023 visit took place in the heavy rain and much of the site was saturated or inundated. This reduced the value of the presence of water near the surface as an indicator of seasonal to temporary wetland conditions. Therefore, the primary indicator of wetland extent used was the presence of obligate wetland plans versus obligate dryland species (which is challenging because of the frequent mowing of the site).

This site visit identified one area on the site which supports obligate wetland vegetation (bulrush, Typha capensis). This is shown in Figure 7.10-2 on the following page. Other areas on the southern boundary have some indicators of seasonal saturation. These may be associated with stormwater outfalls, of which at least three are mapped as discharging onto the site along Old Paarl Road (see Figure 7.10-1).

The delineation and characterisation of possible wetlands were undertaken by aquatic specialist (Nick Steytler of EnviroSwift) duly registered with the Council for Natural Scientific Professions. The specialist mapped six wetland areas, as seen in Figure 7.10-3. The information and images provided below have been extracted and incorporated into the sections below.

Figure 7.10-1 Typha capensis depression on the western boundary

Figure 7.10-2 Stormwater infrastructure surrounding the site (green) and discharging onto it (yellow)

Figure 7.10-3 Wetland characteristics (green)

The site visits undertaken by aquatic specialist on 18 and 22 September 2023 focused on the vacant areas where future development would take place. The report by EnviroSwift divided the site in portions A-E, as discussed below and seen in Figure 7.9-1 on the following page.

7.10.2 Environmental Portion Evaluation

7.10.2.1 Portion A

There is a band of water flowing through the central part of Portion A, with surface and sub-surface flow in a south-westerly direction towards De La Haye Avenue. There is also Juncus Kraussii present, which is a wetland obligate. In addition, this wetland is visible in historical imagery during the wet season, but disappears during the dry season, confirming that this wetland is non-perennial.

Figure 7.10-4 Standing water on Portion A

7.10.2.2 Portion B

There are no wetland indicators of wetland habitat in Portion B.

7.10.2.3 Portion C

Portion C was identified in the 26 June 2023 site visit as containing Typha capensis, a wetland species, as well as ponding water. The water feature is located in a deep depression of unknown origins, but is assumed to be artificial as the surrounding areas are flat and there are no natural forces that could result in a depression of this form. The presence of T. capensis suggests that the water is from a natural source, as it indicates permanent levels of soil saturation.

nding water was also observed to the east of the Typha dominated area and soil samples revealed wetland soil characteristics. Based on this soil sample, and a review of historical imagery, this area is most likely a depression wetland. In addition, another band of soil occurring between this ponding area and the Typha dominated area (further to the east of Portion C) indicates above normal-green colouration during parts of the dry season, which suggests the presence of a temporary / seasonal wetland. This was established using Google Earth Pro).

Figure 7.10-5 Typha capensis dominated pond on Portion C

7.10.2.4 Portion D

There were no indicators of wetland habitat in Portion D.

7.10.2.5 Portion E

Elevated levels of soil saturation can be assumed during the dry season due to the areas of dense kikuyu grass (Pennisetum clandestinum) present in Portion E, according to historical imagery. Sampling in this area revealed temporary wetland conditions. It is also important to note there there is a concrete-lined stormwater canal along the eastern boundary of this portion of the site, which discharges into a culvert immediately downslope and east of the kikuyu-dominated wetland seep.

Two additional areas of ponding water were present at the south-western end of Portion E. The southern most depression contained obligate wetland species (Zantedeschia aethiopica and Spiloxene

aquatica). The northern feature was deemed to be entirely artificial because strong flow was evident from a manhole.

Figure 7.10-6 Area of dense kikuyu grass on Portion E

Figure 7.10-7 Zantedeschia aethiopica (left) and Spiloxene aquatica (right) on Portion E

7.10.3 Conclusion and Way Forward

Given that wetlands have been confirmed in Portions A, B, C, and E of the site, any development in these areas would require either a General Authorisation or a Water Use Licence, depending on the nature of the development. Portion B and D do not contain wetlands but are located within the 500m regulated area and are upslope of the wetlands delineated by the Aquatic Biodiversity Screening Report. Consequently, development within Portion B and D is likely to pose risk to the wetlands and will require water use authorisation. The wetlands identified upslope by City's BioNet will not pose any risk to the future development of the site.

To determine the level of risk of the water use authorisation (and therefore whether it would require a General Authorisation or a Water Use licence), a SANASP accredited scientist with expertise in freshwater ecology would have to undertake a detailed ecological assessment of the wetlands to determine the Present Ecological State and their Ecological Importance and Sensitivity. In addition, a Geotechnical Survey of the vacant portions would allow for a more conclusive wetland delineation.

In terms of the NEMA EIA Regulations (2014, as amended), the site should be determined to be in an urban area, in which case the future development of the site would only require environmental authorisation if any wetlands on the site were being encroached into by the development. If this occurs, the loss of wetland habitat and function would need to be offset, either via an onsite offset or an offsite offset, before the water use authorisation would be approved.

The environmental baseline findings, together with the draft conceptual designs / plans, once formulated, will be further reviewed by the Environmental Assessment Practitioner, to consolidate and document the findings in an Applicability Checklist for submission to the environmental authorities.

7.11 Property Markets and Development Potential

The City of Cape Town's Densification Policy proactively encourages development of public sector land within the urban fabric in a way that facilitates spatial integration and the intensification of land uses. The WCG DoI therefore seeks to develop the Stikland land parcels, within the proposed vision of a mixed-use node that includes office space, residential, retail and health care. The following section unpacks key information relating to the current property market and development trends in Cape Town relevant to the implementation of a mixed-use node. (Please note that this section is supported by appendix 8.a)

7.11.1 Property Market Overview: General Threats

The most significant threat in 2022 for this development and beyond is the possibility of an on-going interest rate hiking cycle. Given three consecutive interest rate hikes to date (November 2021 through March 2022), the outlook ahead is that further interest rate hikes are inevitable with a forecasted peak to 6.50% in 2023. Albeit a counter measure to stem inflation and retain inflation within the set band, the consequential effect to the property sector at large could realise the slowing in growth to new development opportunities. The effect of rising interest rates can be interlinked to either end of the development spectrum [(i.e., developer/ end user (purchaser)], where the influence of the cost of capital is felt by both the developer and the end consumer to any given product. The inevitable outcome is such that the end cost of a developed product will yield a higher entry point to the consumer.

Another threat to the property market is the overall state of the economy. Inflationary pressures has reflected upward movements throughout 2021 with consumer price inflation accelerating from a low of 2.9% in February 2021 to a 5.9% in December 2021 (ref: SARB Quarterly Bulletin No. 303 – March 2022), the impact of which places fair pressure on households.

The housing market is closely linked to economic performance and is sensitive to pricing pressures at producer level. GDP growth (albeit off a low base and integrated with the effects of the COVID 19 pandemic) is forecasted at 2.1% for 2022 and expected growth of 1,9% over the next three years.

The rental market will likely struggle unless the economy recovers in 2022/3 as low affordability levels continue to put downward pressure on rentals.

Consumers face high financial pressure, making housing affordability challenging in 2022/3. House prices also tend to increase with rising fuel prices, which is set to increase given the current Ukraine/Russian conflict.

7.11.2 Offices

The Rode's Property Report for the fourth quarter of 2021 showed that the office market continues to be oversupplied, resulting in a vacancy rate of 16.7% for Cape Town.

The work-from-home trend has been negative for this sector, and its impact will persist for years to come. The current oversupply of space affords prospective tenants fair choice and equally highly negotiable rental structures. The sector is however expected to stabilise into the near future where a gradual return to "the work from office versus work from home" may cause demand for office space to increase.

Rode's latest office market survey showed that national gross rentals for A-grade space dropped by another 4.2% in the fourth quarter. It's the sixth consecutive quarter in which office rentals decreased.

Grade A nominal rentals in Cape Town decreased by 12.6% compared to the same period in 2020, the worst decline of all the major cities in South Africa. This is a dynamic market, which is changing all the time and will have to be reviewed periodically. Some offices should be included as the development should encourage work from home. However, it will be of a lower order than would have been proposed before Covid-19.

7.11.3 Housing

According to Rode's residential survey data flat vacancy rates at a national level have averaged 9.9% (Q1-2022) down from an average 10,2% in the fourth quarter of 2021. This is unchanged from the previous quarter.

At a micro level, the trend to increased vacancy rates (Cape Town, 4th quarter - 2021 – 8.7% to 11.7% - Rode's Report 2022:1) in the residential market has come into effect. Notable as such is that the Western Cape has yielded a far greater supply of completions since 2020. In 2021, there remains an oversupply (Cape Town) of developed and completed rental units. The effect to which fair pressure to rental yields remains in place over the short term.

Vacancies generally improved in 2021 after hitting a peak of 13,1% in the fourth quarter of 2020 but remain at double pre-pandemic levels. There are no significant signs yet that the improvement has resulted in increased rental growth.

According to FNB, data nominal house prices rose by 3% year on year in October 2021, gradually slowing from the pre-pandemic peak of 5,1% in April 2021.

The trend for 2021 showed that prices increased by 4,2% year on year over the first ten months, boosted by record-low interest rates. This was roughly on par with consumer inflation which was 4,3% over the same period.

House prices ended 2021 in negative territory in real terms given the increased inflation rate to 5,9% in December. In nominal terms, the growth rate has consistently been decelerating since May 2021.

The slower house price growth is to be expected, given the fading impact of lower interest rates amid record-high unemployment figures and an economy struggling to get back to pre-pandemic levels, which has been exacerbated by the war in Ukraine and subsequent oil price increases.

7.11.4 Retail

The retail property market recovered somewhat during 2021, with its capitalisation rate weakening slower as lockdown restrictions were less severe than in 2020. However, the severe July 2021 unrest and associated looting were a giant setback for this sector.

The retail market is expected to continue its recovery in 2022/3. However, it will be hampered by the impact of higher inflation and interest rate hikes on consumer spending.

7.11.5 Residential Trends in General

There has been a strong demand for residential space in recent years due to population growth and the influx into metropolitan regions in Cape Town. These have led to a significant increase in demand for residential property, which has seen an increase in property prices. New construction of residential supply was unable to continue due to the recent lockdown. However, given the temporary halt of construction, the demand for residential space will not decrease in the face of the CoVid-19 pandemic but may find itself leveling off in context to current (over) supply and rising interest rates. There remains the correlated position of de-escalating house prices versus the cost of building, particularly where the latter escalates at a greater rate to the former. The competing interest of new residential product versus existing residential product, plausibly implies that the cost of purchase to an existing housing unit is less than that of the cost to build new. To the point where supply and demand in the market realises a balance and/ or where macro- economic factors leans more in favour of new build, the entry price point to new housing developments will experience pressure across all LSM sectors.

Cape Town has a housing problem, not just an affordable housing problem. With an estimated 1,2 million households, of these it is estimated that about 320 000 households are either living in over-crowded or informal conditions (Urban Real Estate Research Unit, 2018). While housing is an issue, there is a lack in provision of sustainable neighbourhood developments. After centuries of social divisions, Cape Town's

jobs, schools and sources of economic opportunity are still concentrated in the inner city and in affluent suburbs. Most residents can't afford to live in those areas and endure long commutes from townships and poor communities. Many of these townships and poor communities lack parks, hospitals and basic infrastructure for water and sanitation.

There will always be a need for people to have a roof over their heads. Residential property does not lose its attractiveness, as a home is a stable investment. However, the provision of housing supply to the market, require integrated planning with surrounding amenities and economic opportunities.

Given the changes in the work environment the office property market is changing. Prior to the CoVid-19 pandemic, there had been a shift in office space, as people seek to work close to home. In light of the CoVid-19, this shift has been favoured. With more companies working from home, current demand for new office space has declined. The office market reacts to macroeconomic changes with a time lag. Therefore, in the short term there will be fewer new lease agreements, with long-term rental agreements - to

Changes in the office space, have resulted in a move towards more dynamic office spaces. These trends have been due to technological advances, which have allowed employees to work from remote locations. This results in less need for office spaces, and less space needed to seat all the employees who are employed at a set company. Demand in the office space has been shaped by e-commerce, mixed-use node gentrification and worker mobility trends, which has resulted in property investors exploring new property models.

There is an international trend towards co-working, which has been defined as shared office space / collaborative office space (more shared equipment and services) these are set to change the office space in South Africa, as it is currently doing in Europe (D'adorante, 2019). However, given the Covid-19 pandemic regulations and management of these spaces will change. These changes in demand for certain types of office space (open- plan, studio spaces and spaces that allow for more or less social interaction) have placed strain on the office market as companies are starting to require less space per employee. However, this could also mean that companies might require more space in the future, and therefore decrease employee- seating density within office spaces. The opportunities for open plan / hot desk office space therefore remains feasible, however a larger emphasis should be placed on residential development on the site.

The retail market sales growth has been weighed down by weak consumer confidence, muted demand, high rates of unemployment and load shedding. The overall trading density for December 2019 had increased by 6.1% compared to December 2018, which translates to a 2% growth when adjustment is made for inflation. This growth has been mainly seen in smaller retail formats, as shoppers favour

convenience centers for an increasing proportion of their spending's. As per the SAPOA report (2020) the largest categories within retail growth can be seen in electronics, secondly department stores and thirdly food stores.

In the midst of the Covid-19 pandemic, grocery stores and supermarkets are benefiting from people staying in rather than dining out. Brands have accelerated their adoption to integrated online and offline sales as consumers prefer to avoid crowded shopping areas (JLL Research,2020). Retailers have shifted focus to assessing options to offset the loss of revenue from their physical store portfolios. These include; gyms providing online workout sessions and restaurants providing meals for delivery. As structural change in the retail market accelerates, greater emphasis will be placed on the shift towards a flexible omni-channel retail model and sustainable fulfillment (JLL Research, 2020). These models will require a strengthening of partnerships between landlords and retailers to emerge to achieve this.

Health Care property falls within the commercial property market, while government health care facilities fall within the public/state owned property market. The latter derives little to no profit within the property market. Private health care property markets generate relatively stable profits. Commercial property that are designed and directed for exclusive healthcare assets, occupy licensed operators of hospitals, clinics, pharmacies and laboratories. The leasing of commercial property for use on the health care sector is expected to increase, with expected changes to health care business models. South Africa's National Departments target for 2030 is for everyone to have access to an equal standard of care regardless of their income bracket. These changes will influence shifts in the way these health care properties are managed and leased out.

According to the National Development Plan 2030, public-private partnerships within the health sector should be encouraged. "The principles to manage these partnerships should guide best practice purchasing, provisioning, procuring and sound financial management of health services to create incentives from improving access, greater equity, higher quality, more innovation and serving the poor with efficiency" (National Development Plan 2030). The future of leased health care properties will surely change given the government's 2030 strategies.

Public health care system tends to be fragmented with numerous small- scale health providers attempting to solve specific needs in the health care system. It is rare for a health care centre to provide for a variety of needs. An example hereof is Groote Schuur Hospital, which does not provide dental services, however, those services are provided at Tygerberg Hospital. Stikland Mental Health Hospital is equipped with Occupational and Physical theory facilities. However, these services are only made available for Stikland Hospital patients. Therefore, patients who are in close proximity to the hospital will have to travel to a different public health facility that offers these services to the public, of which there are very few, and far apart, in Cape Town.

Figure 7.11-1 The Bellville residential property market

Bellville Property Market

Residential

Showed an increase in 2021 from the slowdown in 2020 due to COVID-19. Average House prices were just under R2million. The average house buyer's age is 36-49. This node does reflect a varying degree of pricing structures to residential units with location being a predominant factor on price (See Figure 7.11-1 - Figure 7.11-3).

The location in the broader context is a mix of single dwelling through to multi- storey residential units and is interspersed by varying LSM's. Purchase price points per m2, by and large reflect a relatively low base whence compared to that of alternate suburban areas and equally display rates that, all things equal yield new development opportunities as marginal opportunities. The price point is low and the developer will need to understand the housing market relevant to this area.

Commercial

Bellville is dominated by street-front retail. Prices have levelled off in 2021 and 2022.

Larger industrial spaces appeared to be in higher demand than lighter and smaller rental units, reflective of the trend in increased warehousing and logistics activities (CoCT, 2012). The commercial market will be based on catering to the residents on the site and in the surrounding neighbourhood (local internal market) and by virtue of the fact that the site fronts onto Old Paarl Road with high visibility.

7.11.6 Economic Feasibility

Given the location of the land within a primary residential area, the introduction of mixed-use facilities will improve access to facilities for those who currently reside in the area. Through urban planning policy and legislation the site is identified for urban restructuring, comprising of urban infill redevelopment and incremental densification. Therefore, through the proposed future development, connections will be

made between the surrounding areas. In addition, it will improve access to employment and housing opportunities.

The land is owned by Provincial Government Western Cape, which is currently in the process of investigating a number of properties identified, in ownerships of the WCG, for possible office purposes/government precincts to accommodate staff commuting from the Northern Suburbs. Therefore, by developing this land parcel it will meet a need in the department, and (in the medium term) provide housing and employment opportunities.

7.11.7 Maximally Productive

Based on the factors affecting demand a mixed-use node comprising of office, residential, retail and health care property supply, will improve productivity of these land parcels, while providing incremental growth opportunities for surrounding land uses.

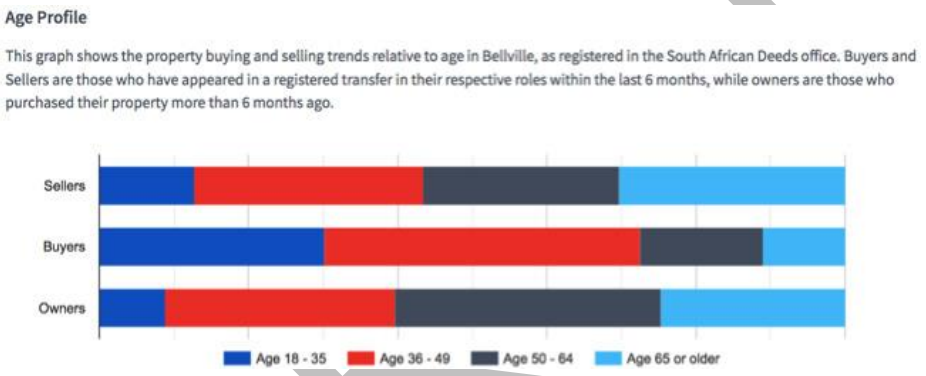


Figure 7.11-2 The Bellville age profiles of buyers

Figure 7.11-3 The Bellville buyers trends

7.11.8 Synthesis of Property Analysis

The property analysis supports the development of medium density residential development with minimal commercial development (to support local internal demand). Very minimal office development should also be considered, due to the current trends.

The most significant threat in 2022 for this development and beyond is the possibility of an on-going interest rate hiking cycle. The inevitable outcome is such that the end cost of a developed product will be more expensive for buyers.

Another threat to the property market is the overall state of the economy and rising fuel prices. Consumers face high financial pressure, making housing affordability challenging in 2022.

Offices are oversupplied and recovering slowly after Covid-19.

There remains an oversupply of in Cape Town of newly developed and completed rental units. The retail market is expected to continue its recovery in 2022. However, it will be hampered by the impact of higher inflation and interest rate hikes on consumer spending.

Cape Town has a housing problem, not just an affordable housing problem. It is estimated that about 320 000 households are either living in over- crowded or informal conditions. Cape Town's jobs, schools and sources of economic opportunity are still concentrated in the inner city and in affluent suburbs. Most residents can't afford to live in those areas The provision of housing supply to the market, requires integrated planning with surrounding amenities and economic opportunities.

This node does reflect a varying degree of pricing structures to residential units with location being a predominant factor on price. The price point is low and the developer will need to understand the housing market relevant to this area.

The commercial market will be based on catering to the residents on the site and in the surrounding neighbourhood (local internal market) and by virtue of the fact that the site fronts onto Old Paarl Road with high visibility.

7.11.9 Conclusions

The property analysis supports the development of medium density residential development with minimal commercial development (to support local internal demand). Very minimal office development should also be considered, due to the current trends. Overall the property analysis has indicated that there are a variety of mixed- use options to optimize the potential of the site.

8. Key Findings from the Contextual Analysis

8.1 Opportunities and Constraints

The below Table communicates the key Stikland South opportunity and constraint findings identified by the appointed specialists.

Table 8-1 Site Opportunities and constraints

Specialists	Opportunities	Constraints
Town Planning	• The Tygerberg District Plan (2023), identifies the Stikland Psychiatric Hospital precinct as a "Strategic Site". The precinct is considered to be an opportunity for mixed-use development in the form of commercial, office and residential development, especially on portions abutting Old Paarl Road. • The site is strategically located with good metropolitan transport access proximate to employment, social, educational and recreational opportunities. • Site served by regional and metropolitan roads. • The site is not encumbered by any title deed restrictions. • Due to the large extent of underuterlised land, there will be no demolishing of existing structures needed to accommodate newly proposed development of the Stikland South site. • State owned land.	• Electrical Servitude line located on the South and western boundary of the site. • Rezoning needed from CO2 to newly proposed site activity. • Existing patients on site - with high sensitivities towards to noise, light etc. – exploring buffer options such as bearms to reduce irritation to patients. • Existing structures approximately 34 structures, on Stikland South Re Erf 6300. • Informal PT stops on Old Paarl Road to be rectified and incorporated in road upgrade plans.
Transport and Movement	• The site is in close proximity to major arterial and movement routes in Cape Town, such as the N1 Freeway, R300 Kuils River Freeway, and the Voortrekker Road Corridor. Old Paarl Road which dissects the site and Old Oak Roads provide convenient access to these major roads. • Road based MBT and bus services well established on R101. • Stikland Station is located adjacent to the access to the hospital, and provides a significant potential benefit for public transport access. • The Stikland South site was included in the modelling as a new development node, and projected to accommodate 4 593 residential units,	• The R101 is classified as a Provincial Main Road, and in the City of Cape Town's hierarchy, as a Class 3 road. The road has reasonably limited access allowance and a primary focus on vehicular mobility, however it has more frequently spaced signalised intersections to the east. • No MyCiti bus services are currently operational. • There are no confirmed new road or rail proposals in the immediate vicinity of the site. • The design of the dualling of Old Paarl Road has been completed, and in the vicinity of Stikland South, the proposed layout does not make provision for a full access to Stikland

Specialists	Opportunities	Constraints
	and 60 000m2 GLA non-residential use. • The extension of Peter Barlow Drive northward, across the Northern railway line, to link with De La Hay Avenue. • The norther alignment option for the extension of the Tienie Meyer Bypass along the Northern railway line, crossing Strand Street and into the Stikland site, continuing along the railway line, then veering northward along the eastern boundary of Stikland South, to link with Old Paarl Road opposite Meerlust Street. This will form the fourth leg to an existing signalised intersection. • The extension of Cilmore Street across the Northern railway line, to link with the eastward extension of Tienie Meyer Bypass at the point of its northward alignment. This would require the latter to be elevated at its junction with Cilmore Street extension. • The northern extension of De la Hay Avenue from the point where it currently terminates at Douglas Carr Drive, a residential access street serving Blommendal, to link with Bill Bezuidenhout Avenue. • The eastern section of Old Paarl Road (up to Old Oak Road) has been upgraded to a dual carriageway with exclusive turn lanes at major intersections.	North, nor provides a point of access to Stikland South. Provision has only been made for a marginal intersection (left in; left out). • There are currently 12 trains per day on this route, and run at between 1⁄2 hour and 1 hour intervals during commuter peak hours. Historically, 8 trains per hour were operated during the commuter peak hours, i.e. 7.5 minute headways.
Traffic	• Left turn movement from the R101 into De la Hay Avenue in the AM peak hour (631 veh/hr), as is the reverse movement in the PM peak hour, albeit somewhat lower (457 veh/hr). This may be due to a high movement demand between the R101 and Bill Bezuidenhout Road via De la Hay Avenue, rather than the Stikland Hospital itself being a strong attraction.	• No updated traffic data has been sourced to date. • Traffic data from historic counts (February 2014) The traffic flows are high, especially westbound along the R101 in the AM peak hour (2 106 veh/hr), approaching De la Hay Avenue. The average capacity of an major arterial road is 1 200 veh/hr/lane, which means that at the time (2014), the R101 was

Specialists	Opportunities	Constraints
	• Site is well located with respect to public transport routes in close vicinity of the site, with minibus-taxi and Golden Arrow bus routes running along Old Paarl Road. • It is noted that the road reserve of De la Hay Avenue is 25m wide, and currently accommodates a single two-way carriageway on the western side of the reserve. Provision would have been made for the eventual dualling of the road. • Access to the principal facility on site, the Stikland Hospital, is gained exclusively via a link on the southern section of De la Hay Avenue. A small separate portion accommodating the Western Cape Nurses College also gains access from De la Hay Avenue, at an access point closer to the R101.	operating at close to capacity conditions, and functioning as a Class 2 facility rather than a Class 3 one. • Left turn movement from the R101 into De la Hay Avenue in the AM peak hour (631 veh/hr), as is the reverse movement in the PM peak hour, albeit somewhat lower (457 veh/hr). • There is no direct pedestrian access to Stikland South. • There are no public transport services (taxis or buses) currently along De la Hay Avenue. • Non-motorised transport facilities exist in the form of a two-way cycle facility (Class 3) on the east side of De la Hay Avenue. There is however no sidewalk on De la Hay Avenue, hence pedestrians use the cycle facility. • Stikland South is bounded by the R101 on its north side, it has no access onto that road.
Civil Services	• The site is supplied with potable water by DN375 and DN300 water mains on the northwestern edge of the site. • There is a DN225 foul sewer main in the southwestern edge of the site, which the existing foul sewerage system gravitates. This line ultimately discharges at the Belville WWTW. • Stikland South study area is well serviced by existing foul sewer infrastructure in the immediate vicinity. • Belville WWTW has a maximum capacity of 75Ml, of which 15Ml is available for additional treatment. • The Stikland South study area is serviced with stormwater infrastructure, but given the large	• No upgrades to the WWTW are planned in the near future. • The site would require on site management of stormwater via stormwater attenuation ponds. • Water and foul sewer reticulation systems for the area are at- or over-capacity and several key upgrades will be required. The extent of the upgrades will be determined by the development proposed. • The existing daily demand for foul sewer and potable water is not known for the area but will be taken into account in the next phase once the gross leasable area (GLA) is finalized and an application can be made for a demand assessment.

Specialists	Opportunities	Constraints
	portions of undeveloped land, storm water is not considered a significant issue for the current state of development. • Stikland South study area is well serviced with water infrastructure.	• 20m Slope from north-west to south-east opportunity for detention pond location at southern edge.
Electrical		• The proposed development of 54.3 Ha will require substantial upgrade to the City's network. • Existing 22m servitude on the site. The servitude contains a 66kV overhead line. The City plans to upgrade this overhead line to a 132kV line in the near future. • Building Setback lines for upgraded power line still to be determined from City.
Heritage and Trees	• Site landscape presents as open and well-tended. • The site is not situated in or considered part of a landscape of historical or cultural significance. It is surrounded by suburban residential development of no heritage significance. • The institution and site are considered Not Conservation Worthy (NCW) in the absence of other attributes of heritage significance, including architectural or aesthetic.	• A number of the tree lines and what were likely eucalyptus woodlots when the land was originally farmed remain and are older than 60 years. These and the tree planting along the perimeter drive are important, and the only, form-giving landscape elements in an otherwise relatively featureless suburban / institutional landscape. • Most activity, including group and outdoor activity, is contained with each Ward perimeter boundary, and some have perimeter containment. • Primary significance of Stikland Hospital lies in its social significance. • Only the retention of the mature trees where appropriate, as established by Viridian, is recommended, to be considered more as place-making opportunities. • A NID will have to be submitted for Stikland South.
Environmental	• No protected vegetation as the entire area is mowed regularly	• Discreet pockets of wetland identified by Freshwater Specialist.

Specialists	Opportunities	Constraints
	• Mostly well-drained gently sloping land • Incorporation of wetlands into proposed development concept can make them an asset to the overall development.	• Further Geotech investigation required to define exact extent of wetlands. • Extent of defined wetlands may impact on developable area and some may need to be reduced in size with commensurate off-sets.
Property Markets and Development	• There has been a strong demand for residential space in recent years due to population growth and the influx into metropolitan regions in Cape Town. • Residential property does not lose its attractiveness, as a home is a stable investment. However, the provision of housing supply to the market, require integrated planning with surrounding amenities and economic opportunities. • Given the location of the land within a primary residential area, the introduction of mixed-use facilities will improve access to facilities for those who currently reside in the area.	• The effect of rising interest rates will continue to impact the end cost of a developed product will yield a higher entry point to the consumer. • Consumer price inflation has accelerated from a low of 2.9% in February 2021 to a 5.9% in December, the impact of which places fair pressure on households. • The rental market will likely struggle unless the economy recovers in 2022 as low affordability levels continue to put downward pressure on rentals. • Offices - The Rode's Property Report for the fourth quarter of 2021 showed that the office market continues to be oversupplied,

Figures 8.2 and 8.3 below show those Opportunities and Constraints that can be graphically represented on the site diagram.

The Constraints diagram shows the extent of the existing Psychiatric Hospital in the centre of the site as well as the identified wetlands, the electrical servitude, the trees that must be retained, the bridge to Stikland North that is an obstacle, and the problematic interface with the suburb on the east side

The Opportunities diagram shows the available vacant land, the potential road through the site and the potential linkages to the surrounding road network. It also shows the need for some kind of buffer between the Psychiatric Hospital and the future development. The exact nature of this buffer is to be discussed with the Department of Health and Wellness and Stikland Hospital Management.

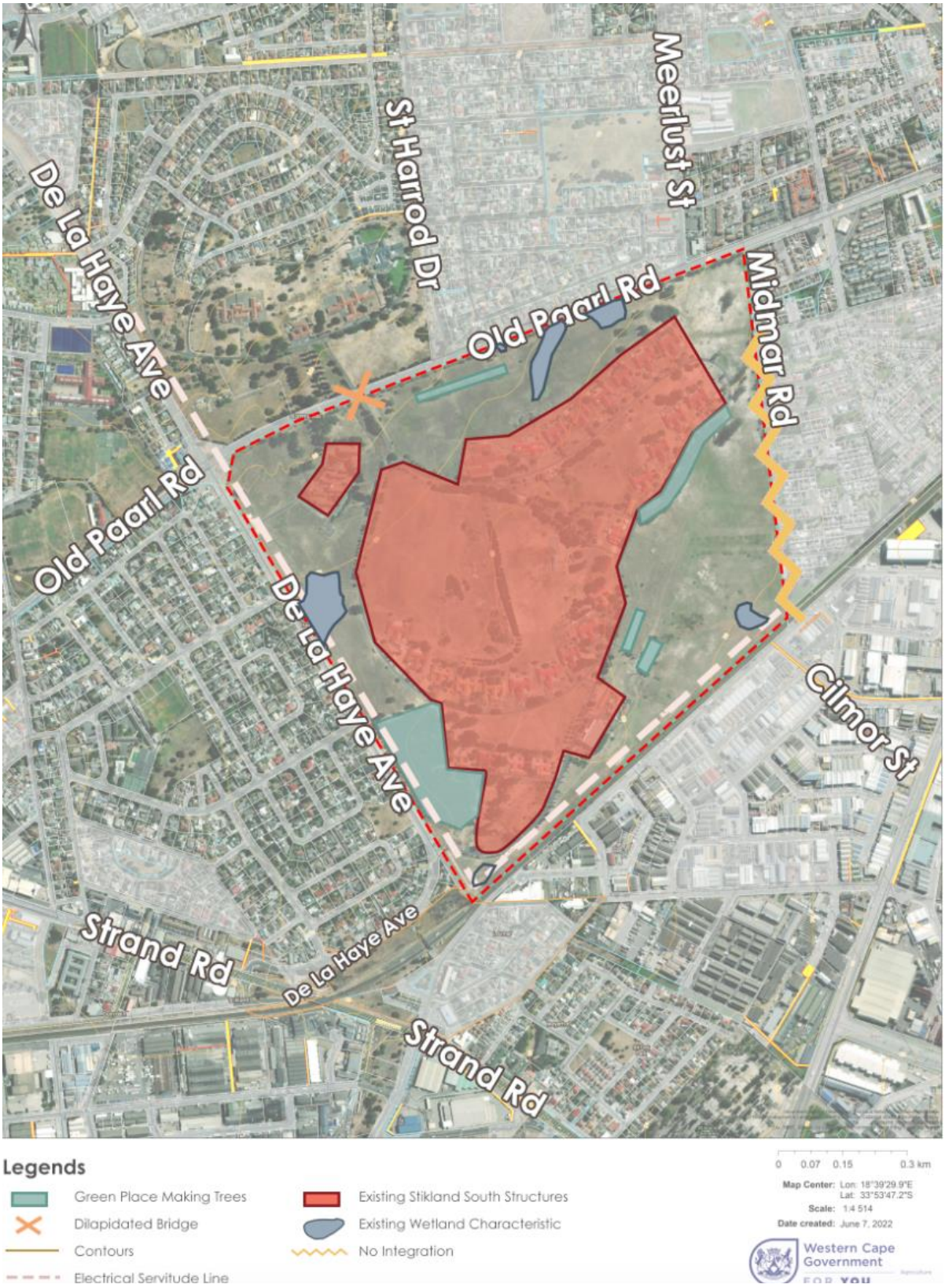


Figure 8.2 Constraints diagram

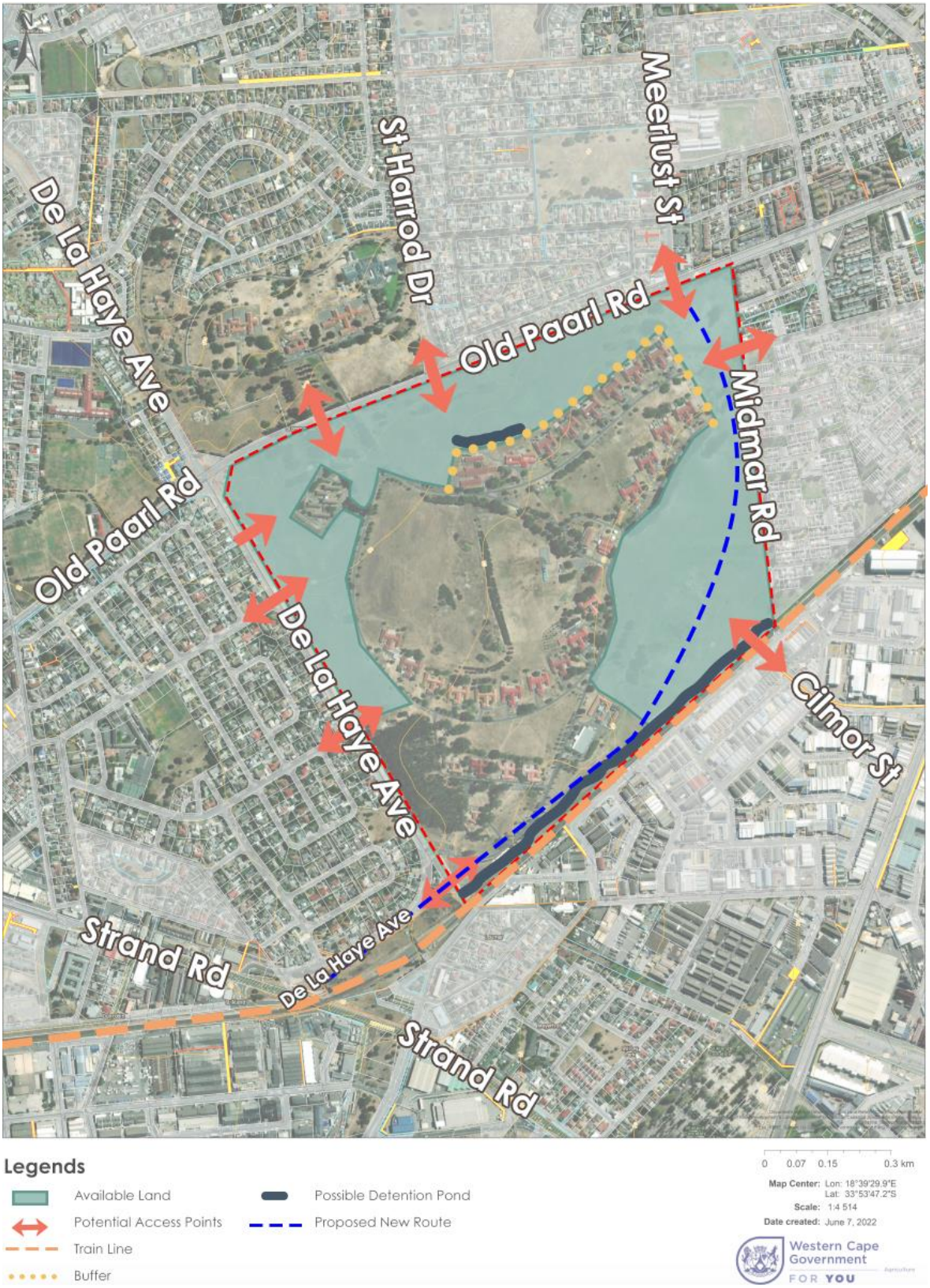


Figure 8.3 Opportunity diagram

8.2 Stikland South Vacant Land

This section discusses the proposed development potential of Stikland South, which has been informed by the appointed specialist input. Indicated in **Figure 9.1** is the identified total of 54,3 vacant hectares of Stikland South.

Based on specialist assessments undertaken it was concluded that 54.3 hectares of underused land, as shown in Figure 6.1, have the potential for development with positive social and economic effects. Table 6.1 listed the numerous traits of each section of discovered unoccupied land along with its potential for development.

These demarcated vacant areas have been guided by the principles below:

- No demolishing of any existing buildings;
- No removal of any trees in the south-western tree cluster/forest;
- Demarcating developable land on the periphery of the Stikland South site to allow for easy sectioning / subdividing off of land, with limited disruption to the existing structures and functions of the hospital; and
- Leaving adequate space for recreational activities and hospital related future extensions, which is measured at approximately 12,2 hectares.

Table 8-2 Stikland South vacant characteristics and potential development possibilities

Portion	Characteristics	Area	Potential for development
A	Elongated portion situated along De La Haye Ave in a rectangular shape. Minimal trees on site with a dense forest situated to the south and the Nursing College to the North. This portion also contains an electrical line servitude, running along its western border.	7,6 Ha including the servitude area.	Potential space for the relocation of Stikland North NGO's, as it is in close proximity to the main kitchen (which they are still heavily reliant on) and situated opposite open space and forest greenery. Large identified wetland is a significant constraint to be considered in the development proposal.
B	Situated on the corner of De La Haye Ave and Old Paarl Road. The portion is 'C' shaped, with the Nursing college located on the northeastern portion. An electrical servitude traverses this portion of the site, running along its western boundary.	4,6 Ha including the servitude area.	Potential for mixed-use and Medium density residential as it is located along Old Paarl road, in alignment with the District Plan.
C	Parallel to ward 8 -15. The portion is an elongated rectangular shape, with limited tree clusters. This portion also incorporates the abandoned, dilapidated and non-functional old Stikland bridges, which use to connect Stikland South to Stikland North, and is positioned over Old Paarl road.	13,2 Ha	Potential for mixed-use and medium residential density as it is located along Old Paarl Road, in alignment with the District Plan. It has also been discussed for this portion to incorporate an extra form of buffer between the wards and potential development. Identified Wetlands to be incorporated appropriately into development concept.
D	Portion D is a corner piece opposite Ward 6, 7 and 8. Situated along Old Paarl road, and vacant.	4,3 Ha	Potential for mixed-use and medium residential density as it is located along Old Paarl Road, in alignment with the District Plan. It has also been discussed for this portion to

Portion	Characteristics	Area	Potential for development
			incorporate an extra form of buffer between the wards and potential development.
E	Potion E is the largest vacant portion, stretching along the railway line and with scattered trees and ditches throughout the site. This portion also contains an electrical line servitude, running along its southern border.	2,4 Ha including the servitude area.	The southern boundary interfaces an Stikland Industrial and the existing railway line residential area, whilst the eastern boundary interfaces low residential density. This may be suitable for row housing on the eastern portion to mimic the low density residential pattern and medium to high density along the railway line. An electrical servitude traverses this portion of the site and there are two wetlands that largely coincide with the electrical servitude and may also form part of the future stormwater management system.
Future hospital development	Land within the boundary of the Stikland Psychiatric Hospital and its internal Service Road.	12, 2 Ha	Gently sloping land, the lower portion of which has a wetland on it that would reduce the usable area to about 7,5Ha but this is considered sufficient for District Hospital or extensions to Stikland Hospital, subject to requirements

STIKLAND SOUTH VACANT LAND AREAS

Total Vacant Land A - E Area = 54,3 Ha

Legend

- Administrative Registration
- Allotment Township
- Public Place
- Erf
- Servitude Area
- Servitude Line
- Street Parcels
- Suburb
- Unalienated State Land
- Contours 5m
- A = Area 7,6 Ha
- B = Area 4,6 Ha
- C = Area 13,2 Ha
- D = Area 4,3 Ha
- E = Area 24,6 Ha
- **Available Space for Future Hospital Development** = Area 12,2 Ha

Western Cape Government

BETTER TOGETHER.

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9. CONCLUSIONS AND RECOMMENDATIONS

To synchronize with the City of Cape Town Municipal Planning By-Law Package of Plans, the initial stage involves establishing a Contextual Framework, succeeded by the formulation of the Development Framework.

The purpose of a Contextual Framework Report, as aligned with the Spatial Planning and Land Use Management Act (SPLUMA) and Municipal Planning Bylaw (MPBL), is to provide a comprehensive understanding of the existing context and inform land use decision-making processes in accordance with the principles and objectives of SPLUMA. The Contextual Framework report serves several key purposes:

Compliance with SPLUMA: The report ensures adherence to the requirements and provisions outlined in SPLUMA. It helps to meet the legal and procedural obligations set forth by SPLUMA in relation to spatial planning and land use management.

Facilitate Spatial Planning: This report supports the process of spatial planning by providing relevant information and analysis. It helps planners and decision-makers to assess the existing conditions, identify opportunities, and consider the implications of land use decisions within the framework of SPLUMA. Inform Land Use Management: The report provides valuable insights into the context of land use management. It examines factors such as strategic land identification, vacant areas, acknowledgement of land relinquishment by stakeholders like the hospital, and development potential for medium to high-density residential projects, with a bias towards affordable housing. This information informs decisions regarding land use and development, ensuring that they align with SPLUMA's goals and objectives.

Support Sustainable Development: SPLUMA emphasizes sustainable development practices that promote social, economic, and environmental well-being. The report contributes to this objective by considering the overall pressure on land in the city and the need for affordable housing. By highlighting development potential and encouraging the use of vacant areas for medium to high-density residential projects, the report supports the creation of sustainable and inclusive communities.

Enhance Collaboration and Stakeholder Engagement: The report fosters collaboration and stakeholder engagement, which are fundamental principles of SPLUMA. By acknowledging the hospital's willingness to relinquish land and identifying opportunities for utilizing state-owned land, the report encourages cooperation between various stakeholders, including government entities, private developers, and the community.

This collaboration ensures that land use decisions are well-informed and collectively beneficial.

Ensure Effective Land Use Planning: The report contributes to effective land use planning by providing a holistic understanding of the context. It assists in identifying strategic areas, recognizing development potential, and addressing the pressing need for affordable housing. By aligning with SPLUMA, the report helps to ensure that land use planning is conducted in a comprehensive and efficient manner.

In conclusion, this Contextual Framework Report serves to comply with the legal and procedural requirements of SPLUMA, facilitate spatial planning, inform land use management decisions, support sustainable development, promote collaboration and stakeholder engagement, and ensure effective land use planning. The Contextual Framework integrates all the issues, opportunities and constraints that need to be factored into the creation of the Vision for Stikland and the Development Frameworks that will be formulated for Stikland North and South.

By fulfilling these purposes, this report guides the Stikland South development, making sure it is an inclusive management of land resources in accordance with the principles and objectives of all relevant spatial policies, plans and frameworks and through consultation with relevant Stakeholders and Interested and Affected Parties (I&APs).

It is therefore recommended that a Development Framework for Stikland South is formulated for approval by City of Cape Town, together with a "basket of rights", zoning to sub-divisional area and zoning categories and the sub-division of Stikland North and South, and the land occupied by old Paarl Road reserve, into separate erven. Stikland North and South would each have an approved Development Framework with associated land use rights and these could be used to elicit development interest and commitment either together or separately and the timing of each may be different if circumstances dictate.

The Development Framework should clearly show how the Opportunities and Constraints identified in this report have been considered and addressed to ensure sound, practical, spatially, socially, environmentally and economically appropriate and feasible proposals.

The Development Framework should be formulated in Draft for purposes of consultation with and contribution from **Stakeholders**, Western Cape Government departments of Health and Wellness and Infrastructure in particular and City of Cape Town, and registered **Interested and Affected Parties**. This will also include the statutory process associated with the Heritage Impact Assessment in which the Draft Heritage Impact Assessment Report is advertised for comment for 30 days. This is programmed for early 2024.