MAMRE

LOCAL SPATIAL DEVELOPMENT FRAMEWORK

URBAN PLANNING AND DESIGN

Volume 1: **Approved by Council on 26 April 2023**

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Glossary of terms and definitions

TERM	DEFINITION
Active interface	Refers to street frontages where there is an active visual engagement between those in the street and those on the ground floors of buildings. This quality is assisted where the front facade of buildings, including the main entrance, faces and opens towards the street, and also where ground floor uses accommodate activities that provide a level of interaction between pedestrians and the building uses including cafes/restaurants, shops, offices etc.
Aquifer	Area identified as reflecting the physical extent of a water-bearing layer of soil, sand, gravel or rock that will yield significant usable quantities of water.
Aquifer Protection Zone (Or Groundwater Protection Zone	An aquifer protection zone for drinking water supply can be defined as 'the surface and subsurface area surrounding a borehole or wellfield, supplying a public water system, through which contaminants are reasonably likely to move forward and reach such a water or wellfield' (Harter, 2002). Protection zones are put in place to ensure the integrity of the groundwater quality within the aquifer. Furthermore, additional measures need to be considered, such as controlling the activities.
Biodiversity	Biological wealth of a specified geographic region including the different marine, aquatic and terrestrial ecosystems, communities of organisms within these, and their component species, number and genetic variation.
Biodiversity network	The map of protected and critical biodiversity areas (including natural vegetation remnants and wetlands) for the city, based on the fine-scale systematic conservation plan, in accordance with the legal requirements.
Bioregion	A geographic region or area containing whole or nested ecosystems and that is characterised by its landforms, vegetation cover, human culture and history and declared by the Minister in terms of the National Environmental Management: Biodiversity Act, Act 10 of 2004 (NEMBA).
Bioregional plan	A legislated biodiversity plan, aimed at assisting with the management and conservation of South Africa's biological diversity, declared in terms of Chapter 3 of NEMBA. The aim of

	the plan is to provide a map of biodiversity priorities with accompanying land use decision making guidelines.
Cemetery	A place for the burial of human remains, and may include ancillary buildings such as an office and chapel, but does not include a crematorium.
Character (of a place)	Collection of qualities and features that are distinctive to a place or area and in this case is used to distinguish period of establishment or pattern of settlement
Civic clusters	Concentration of public facilities (e.g. schools, clinics, libraries) located in close proximity to one another. Various scales depending on the role and function within the locational context.
Climate change	Climate change refers to any change in climate over time, whether due to natural variability or as a result of human activity (IPCC 4th Assessment).
Climate change adaptation	The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects (IPCC Glossary, 5th Report).
Connector route	These connect different areas of the city and have a greater mobility function than development corridor main roads. They are typically characterised by comparatively high volumes of faster-moving traffic, although this may vary considerably across a variety of different road types in different areas. These may accommodate a mixed activity/ mobility function, but their role in accommodating activity is generally confined only to nodal areas (or in more outlying areas 'villages'). In some instances, direct access to abutting land uses and residential properties is provided along connector routes.
Context	The broader environment within which a development or site is located. Context is a broad term and can refer to natural systems, topography, the social and economic environment, the built environment, access, public institutions, public space, and public utility services.
Critical Biodiversity Area	Critical Biodiversity Areas are terrestrial and aquatic features in the landscape that are critical for conserving biodiversity and maintaining ecosystem functioning, and that are required to meet biodiversity targets (for biodiversity patterns and ecological process features).
Critical Ecological Support Area	Natural and rural areas with biodiversity importance which are essential for management consolidation, connectivity and viability of biodiversity in CBAs and protected areas. These are not essential for meeting biodiversity targets but play an important role in supporting the ecological functioning of CBAs and/or in delivering ecosystem services.
Cultural landscape	Sites, areas, places, settlements and urban and rural landscapes of historical significance, vistas and scenic beauty and places of spiritual, cultural and historic significance.
Densification	Increased use of space, both horizontally and vertically, within existing residential areas/properties and new developments, accompanied by an increased number of units and/or population threshold.
Destination place	A place that forms a significant landmark or area of attraction and is part of the unique identity of Cape Town. Due to these qualities, these places hold potential for exploiting economic opportunities particularly in relation to their role as destinations for locals and tourists.
Development edge	A demarcated edge line defining the outer limits of urban development for a determined period of time; there are two types of edge lines, namely urban edge lines and coastal edge lines, - the former being a medium- to long-term edge line, where the line has been demarcated in a position to phase urban growth appropriately, or to protect natural resources.
Development Management Scheme	A scheme consisting of scheme regulations and a register with (or without) a zoning map.
District spatial development framework	As contemplated in Chapter 3, Part 3 of the City of Cape Town Municipal Planning By- Law, 2015, as amended. Document which includes integrated District Spatial Development Framework (DSDF) and Environmental Management Framework (EMF)
Ecological buffer	Strip of land adjacent to a watercourse, wetland or vlei, required for the protection and enhancement of aquatic and riparian ecosystem integrity and functioning.
Ecological services	Services that indirectly accrue from the natural environment, and do not have direct market values, such as flood

	attenuation, natural drainage and erosion prevention, wastewater management through biological treatment, air quality management and filtration, carbon sequestration, and biodegradable waste disposal.
Economic agglomeration	A concentration of businesses and people increases productivity both by putting upward pressure on the price of land, thus driving businesses to become more productive and people to become more skilled, and also through the agglomeration benefits to which close proximity of firms gives rise. Valuable agglomeration economies, which help to sustain Cape Town's prominent regional position, are crucially dependent on effective infrastructure.
Economic potential areas	Areas anchored by 'opportunity' or 'growth' business nodes which exhibit an above-average location potential, and typically characterised by economic agglomeration.
Employed	Persons who work for pay; profit or family gain in the reference period.
Fire Risk Lines	Two sources were combined to delineate Fire Risk Lines: the 'Wildland-Urban Interface' (WUI) - as per the GEF Fynbos Fire Project and defined as the risk level to communities where urban development areas intermingle with flammable wildlands. It represents itself in different risk levels to residents and their assets in terms of exposure to death or injury and damage from wildland fires. The line represents the life risk to residents and was methodologically delineated in a similar fashion from Gordon's Bay to Melkbosstrand on the outer edges of the built-up area. The line should be considered as indicative of locations where field fires are difficult and operationally complex and expensive to fight considering the locational context of the natural environment and operational constraints of practical firefighting. The WUI was supplemented on the Peninsula by the fire breaks of the Table Mountain National Park whilst no line exists for the Cape Flats coastal area.
Floodline	A line on a map depicting water levels likely to be reached by a flood having a specified recurrence interval.
Food security	A situation that exists when people have secure access to sufficient amounts of safe and nutritious food for normal growth, development and an active and healthy life. Food insecurity may be caused by the unavailability of food, insufficient purchasing power, inappropriate distribution, or inadequate use of food at the household level (IPCC 4th assessment).
Form	The layout (structure and urban grain), density, scale (height and massing), appearance (materials and details) and landscape of development.
Gap housing	Housing for households with a monthly income of between R3 500 and R10 000, who fall outside the government housing subsidy income limit of R3 500 per month, and find it difficult to access housing in the private market.
Green Infrastructure	A strategically planned, designed and managed network of natural open spaces and 'engineered' ecological systems, with other environmental features, that provide ecological, community and infrastructure services with an emphasis connectivity and the involvement of nature to solve problems in the built environment of urban areas.
Gross base density	The average number of dwelling units per hectare across large city district areas or the city as a whole, excluding land-extensive uses such as agricultural and rural land and large natural areas/nature reserves/parks.
Heritage Area	An area identified in terms of S31 of the NHRA as being worthy of protection on the basis of its environmental or cultural interest
Heritage inventory	Compiled by the local authority (in this case The City) and contains all heritage resources within its area of jurisdiction.
Heritage Register	A register maintained by the provincial heritage resources authority (in this case HWC) that lists all heritage resources considered to be conservation worthy
Heritage resource	Any place or object of cultural significance, according to the NHRA, unique, non-renewable and precious locations includes sites and landscapes of historical significance, areas of scenic beauty, and places of spiritual and/or cultural importance.
Historic urban landscape	An urban landscape that has been formed over time and that is characterized by historical layering of architectural features and cultural values
Incremental densification	Small-scale densification that has a minimal impact on the urban fabric, e.g. subdivision or secondary dwelling units, but translates into higher densities over time.
Inward growth	Urban development that occurs within the existing urban footprint and infill development of developable land within the current urban periphery.
IRT Feeder Route	A secondary and usually smaller carrying route of an Integrated Rapid Transit system which feeds the main trunk route.

Land redistribution	Land redistribution to the landless poor, labour tenants, farm workers, and emerging farmers for residential and productive uses to increase livelihoods and improve quality of life.
Land reform	Encompasses three interrelated components, namely land restitution, land tenure and land redistribution.
Land unit	The hierarchy of plans specified in terms of the provisions in item 136 of the Development Management Scheme, and applies to areas generally referred to as special planning areas.
Land use intensification	Refers to achieving a greater spectrum of mixed uses (commercial, industrial and residential) through the increased use of space, both horizontally and vertically, within existing areas or properties and new developments, accompanied by an increased number of units and/or population thresholds, in accessible, high opportunity locations.
Location potential	Composite metric generated annually by the City's ECAMP Diagnostic Model to gauge the level of alignment between a business node's locational assets and constraints, and the generic requirements of the main non-residential property classes -- industrial, office and retail. It consists of agglomeration (scale, intensity and complexity of economic activity), room for growth, proximity to suppliers, markets and gateways, level of infrastructure constraint and congestion, incidence of business burglaries and robberies and access to workers and disposable income.
Mixed land use	Area of existing or proposed horizontal and/or vertical integration of suitable and compatible residential and non-residential land uses within the same area or on the same parcel of land; implies contextually appropriate intensity of land uses that should facilitate efficient public transport and a vibrant local urban environment. Also referred to as land use diversity.
Mixed market residential	
Mobility	The ease with which people can travel with minimal delay on a route.
Multifunctional	The combination of different yet compatible functions within one physical framework to serve a variety of social and community groups; allow for a wider range of facilities that reinforce one another in close proximity, offering greater access to potential users. Differentiation in activity may be physical (different activities on different floors or premises of the same building) or in time (using the same facility for different activities, but at different times).

New development area	An area earmarked for future development.
Nodal development	Significant and concentrated development in terms of scale, location, impact, diversity and agglomeration of functions (facilities, services and economic activities).
Non-motorised transport	Transport modes that are not motorised, e.g. walking and cycling.
Not economically active	Persons who were neither employed or unemployed (e.g. full-time students; retired persons; and homemakers who did not want to work).
Opportunity area	An area with specific character which shows potential for future development and/or conservation and is guided by development guidelines to support the implementation of the vision.
Other ecological support area	Transformed (e.g. extensive agriculture) sites with conservation importance.
Other structuring open space	Open space which is not part of the biodiversity network or significant agricultural areas, but has been identified to promote access to open space for active and passive recreation and promote the notion of a linked open space system.
Overlay zone	A category of zoning applicable to a particular area or land unit which: (i) stipulates development rules in addition to the underlying zone or base zone requirements, which may be more or less restrictive; (ii) may include provisions and development rules relating to primary -, additional -or consent uses, limitations in addition to the underlying base zone, subdivision and sub divisional areas, special planning areas, development incentives, urban form, urban renewal, heritage and environmental protection, etc.
Period	Refers to a period of time (date) when a place or area was established or developed
Population density	The number of people per given area, e.g. square kilometre.
Population growth	This is a change in the size of the population (increase or decrease) of a particular place at defined time as a function of births, deaths and net migration.
Potable water	Water intended to be used for drinking or domestic purposes, such as preparing food, and washing.
Public open space	Land which is designated as public open space, under the ownership of the City or other organ of state, with or without access control, and which is set aside for the public as an open

	space for recreation or outdoor sport, including a park, playground, public or urban square, picnic area, public garden, nature area including ancillary buildings, infrastructure and uses.
Public transport interchange	Supports the transfer of public transport users between modes (rail/bus/taxi) but also functions to support economic activity.
Resilience	The capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganising in ways that maintain their essential function, identity and structure while also maintaining the capacity for adaptation, learning and transformation.
Resource efficiency	The rate at which finite and scarce resources are consumed relative to economic and population growth.
Risk activity	An undertaking where the material handled or the process carried out is liable to cause combustion with extreme rapidity, give rise to poisonous fumes, or cause explosions, and includes major hazardous installations and activities involving dangerous and hazardous substances that are controlled in terms of national legislation.
Roofscape	The distinguishing character of a particular street or area as viewed along the skyline or horizon and is formed by roof shape and repetitive patterning.
Scenic Drive	A public road designated as a scenic drive; characterized by high quality scenic qualities including background vistas of mountain, open country, coastline or city;
Spatial concept	A concept used to describe a particular set of spatial features (e.g. urban node, civic precinct).
Spatial efficiency	The private and public benefit of urban development and attendant infrastructure, relative to its lifecycle cost.
Streetscape	The distinguishing character of a particular street as created by the elements at ground floor, including building frontages, setbacks, materials, form, road space, landscaping, street furniture, etc.
Strip development	Mixed-use development usually located along activity routes and activity streets and some developmental routes.
Structuring element	Spatial aspect that provides structure or form to urban development (e.g. a main road provides structure to which land uses respond).
Sub place	Second (lowest) level of the place name category, determined by Statistics South Africa, namely a suburb, section or zone of an (apartheid) township, smallholdings, village, ward or informal settlement.
Subsidised housing	Housing supplied in terms of the national Department of Housing's housing subsidy scheme.
Transit-oriented development	Transit-oriented development (TOD) is a multifaceted and targeted strategic land development approach to improved urban efficiencies and sustainability by integrating and aligning land development and public transport services provision. It promotes inward growth and compact city form with an emphasis on building optimum relationships between urban form, development type, development intensity, development mix and public transport services to create a virtuous cycle of benefits over the long term as described in the City of Cape Town TOD Strategic Framework. Different TOD objectives, tools and outcomes are applicable at metropolitan, corridor, nodal, precinct and project scales.
Unemployed	Persons who did not work, but who looked for work and were available to work in the reference period.
Unemployment rate	Unemployed persons as a percentage of the labour force.
Urban development	Buildings and infrastructure with a residential purpose as well as offices, shops, community facilities and other associated buildings, infrastructure and public open space necessary to provide for the proper functioning of urban areas and amenity and recreation. The term 'urban development' includes golf estates, vineyard estates with a residential component, equestrian estates with a residential component, rural living estates, eco-estates, gated communities and regional shopping centres. Urban development excludes noxious industry and generally excludes land for industrial purposes. However, service trades that are compatible with mixed-use development and that generate a low impact on surrounding urban uses may be permissible if the nature and type of industry is deemed to form an integral part of an area demarcated for urban development purposes.
Urban Development Zone	The Urban Development Zone is an area demarcated in accordance with the Income Tax Act, Act 58 of 1962 as amended by the Revenues Laws Amendment Act, Act 45 of 2003. In terms of this incentive, taxpayers who construct, improve or purchase a building or part of a building from a developer within this area will be allowed to claim a reduction in taxable income.
Urban footprint	The total spatial extent of existing urban development.
Urban management	Urban management involves the area-based involvement of and coordination with end users in the implementation, operation and maintenance of public facilities and services. In the local context, this may include the establishment of City Improvement Districts, Area Coordination Teams or Mayoral Urban Regeneration Programmes. In the long term successful

	urban management fosters a culture of joint accountability between the City and local stakeholders, reducing the potential of tension usually associated with top-down service delivery.
Urban node	Area characterised by the intensity, mix and clustering of activities/land uses (including commercial/business development and associated employment opportunities, higher-order services and higher residential densities).
Vulnerability	The degree to which a system or population is susceptible to, or unable to cope with, adverse events.
Water Sensitive City	A Water Sensitive City is a settlement that serves as a potential water supply catchment, providing a range of different water sources at a range of different scales, and for a range of different uses; provides ecosystem services and a healthy natural environment, thereby offering a range of social, ecological, and economic benefits; and consist of water sensitive communities where citizens have the knowledge and desire to make wise choices about water, are actively engaged in decision-making, and demonstrate positive behaviours such as conserving water at home and not tipping chemicals down the drain.
Water-sensitive urban design	Minimises disruption of the natural water cycle by reducing runoff, attenuating flooding, and treating runoff before discharge into the receiving waters, whilst at the same time increasing the amenity value of water systems, and reducing the cost of water infrastructure.
Working age population	Persons aged 15-64 years.
Zoning	A category of directions setting out the purpose for which land may be used and the land use restrictions (e.g. height limits, building lines, bulk, and coverage) applicable in respect of the said category of directions by the scheme regulations.

List of acronyms

BIONET	Biodiversity network
BNG	Breaking New Ground (housing developed in terms of the Integrated Residential Development Programme)
BRT	Bus Rapid Transit
CBA	Critical biodiversity area
CBD	Central Business District
CDC	Community Day Centre
CESA	Critical Ecological Support Area
CMA	Cape Metropolitan Area
CNA	Critical Natural Areas
CCT	City of Cape Town
CTOD	Comprehensive Transport Orientated Development
CT MSDF	Cape Town Metropolitan Spatial Development Framework
DALRRD	Department of Agriculture, Land Reform and Rural Development
DCCP	Dassenberg Coastal Catchment Partnership
DE&ADP	Department of Environmental Affairs and Development Planning
DFA	Development Facilitation Act (No 67 of 1995)
DMS	Development Management Scheme
DSDF	District Spatial Development Framework
du/ha	dwelling units per hectare (density measure)
EGS	Economic Growth Strategy
EIA	Environmental Impact Assessment
EMF	Environmental Management Framework
FLISP	Finance Linked Individual Subsidy Programme
GAP	Housing for households earning between R3501- R22 000 per month, and qualifying for a mortgage bond (FLISP subsidy applies)
GIN	Green Infrastructure Network
GLA	Gross Leasable Area
HIA	Heritage Impact Assessment
HPOZ	Heritage Protection Overlay Zone
ICT	
IDP	Integrated Development Plan (in terms of the MSA)
IDZ	Industrial Development Zone
IEM	Integrated Environmental Management

IGA/ IGGCA	Incremental Growth and Consolidation Areas as per the MSDF
IPTN	Integrated Public Transport Network
IRDP	Integrated Residential Development Programme
IRT	Integrated Rapid Transit
IUDP	Integrated Urban Development Framework
LSDF	Local Spatial Development Framework
LUM(2020)	Land Use Model (draft 2020)
LUMS	Land Use Management System
LUPA	Western Cape Land Use Planning Act (No 3 of 2014)
LUPO	Land Use Planning Ordinance No 15 of 1985)
MDG	Millennium Development Goals
MCPA	Mamre Communal Property Association
MPBL	Municipal Planning Bylaw, 2015
MSDF	Municipal Spatial Development Framework, 2018
MRA	Mamre Resident's Association
NDP	National Development Plan
NEM:AQA	National Environmental Management Air Quality Act(No 39 of 2004)
NEMA	National Environmental Management Act (No 107 of 1998)
NEM:BA	National Environmental Management Biodiversity Act(No 10 of 2004)
NEM:PAA	National Environmental Management Protected Areas Act (No 57 of 2003)
NEM:WA	National Environmental Management Waste Act (No 59 of 2008)
NHRA	National Heritage Resources Act (No 25 of 1999)
NMT	Non-Motorised Transport
OESA	Other Ecological Support Area
PGDS	Provincial Growth and Development Strategy
PGWC	Provincial Government Western Cape
POS	Public Open Space
PSDF	Provincial Spatial Development Framework
PT	Public Transport
SAHRA	South African Heritage Resources Agency
SDF	Spatial Development Framework
SDG	Sustainable Development Goals
SDS	Social Development Strategy
SEMA	Specific Environmental Management Acts

SMME	Small, Medium and Micro Enterprises
SPC	Spatial Planning Category
SPLUMA	Spatial Planning and Land Use management Act (No 16 of 2013)
TRANCRAA	Transformation of Certain Rural Areas Act (No 94 of 1998)
TOD	Transit Oriented Development
TODSF	Transit Oriented Development Strategic Framework
UDZ	Urban Development Zone
WANR	Witzands Aquifer Nature Reserve
WCBCI	West Coast Biodiversity Corridor Initiative
WSUD	Water-Sensitive Urban Design
WWTW	Waste Water Treatment Works

VOLUME 1: BASELINE AND ANALYSIS REPORT

1 INTRODUCTION

1.1 INTRODUCTION

Mamre is a small rural settlement of immense heritage significance that developed around the Moravian Mission Station and is located close to the northern boundary of the City of Cape Town within the Blaauwberg District. The majority of the northern part of this district is undeveloped.

The Mamre community has over the last 5 years identified housing as one of the highest priorities within the town. Initial research has shown that there are various other aspects within Mamre and the immediate surrounding area that required attention. These included amongst others land matters related to housing, land reform and ownership, sustainable environmental and heritage projects as well as administrative and governance related matters. In light of the before mentioned it became evident that there was a need for a holistic approach in order to guide development and decision making in the larger landscape of Mamre.

1.2 BACKGROUND

The significance of Mamre exceeds the authenticity of its built environment and its significance predates the Moravian mission settlement as it is strongly associated with the First Nations. The history of the First Nations in Mamre is an underrepresented history which must be further explored with the representatives of this people group. Two historical figures from the First Nations group stands out and has been celebrated by the Mamre community. These are Hans Klapmuts and his sister Rosetta Klapmuts. More research and understanding of these figures and their importance in the history of Mamre and their contribution to the area before and after the mission station establishment is needed. It is believed that Hans Klapmuts resisted converting to Christianity and that part of the settlement is built on his kraal whilst his sister embraced Christianity and has been referred to the mother of the community of Mamre.

In 1700, a farmer called Henning Hüsing received permission to use the "Groenekloof" as a cattle-post. Hüsing became the sole provider on a four-year contract of meat to the visiting ships and to the Dutch east India Company garrison and hospital. He held sole rights to grazing in the Groenekloof area. In 1701 the governor at the time, W.A. van der Stel, established a military post called "De Kleine Post" close to the Groenekloof to curb confrontations between the local Khoi-Khoi and the farmers and to reduce cattle raids. This military post existed until 1791. During 1807 the Earl of Caledon approached the Moravian Missionary Association to establish a missionary station at the Groenekloof. The farms De Kleine Post, Louwskloof and Cruijwagenskraal were made available for this purpose, Louwskloof farm being the residence of the Khoekhoe captain Hans Klapmuts. The Moravian mission station established at Groenekloof is the second oldest mission station in South Africa, Genadendal being the oldest. The first church service in Louwskloof was held in March 1808, under a poplar tree.

A small village consisting of whitewashed thatched roofs, gable end walls and common human scale cottages started to take shape at the mission station in the Groenekloof, which was renamed "Mamre" in 1854 after the Biblical town of Mamre. The Moravian missionaries tried

to instil a self-sufficient lifestyle and taught the community a number of trades, of which horticulture was one of the most important. In 1808 the first 18 plots were cut off to become the first residences in Mamre. The most fertile land adjoining the river was preserved for the allotment gardens and the houses were located on the less fertile slopes. Gardens were therefore established along the banks of the Modder and Mooimaak Rivers, inside Mamre and on the outskirts of the town. Resulting in a unique settlement pattern and significant contribution to Mamre's morphology.

Some of the old cottages still used for residential purposes, as well as the historical "Langhuis" behind the "Pastorie" (Parsonage), the Moravian church, shop, "Loben" Hall, school and the water mill used by the first residents still exist and today make up the historical centre of the town. The old buildings as well as the layout of Mamre contribute to the valued qualities of Mamre and the spatial cultural landscape of historic Mamre needs to be maintained. As such, the unique spatial layout of the town, development of the built form flanking the allotment gardens on the Mooimaak river banks is considered the historic core of Mamre.

Figure 1: Historical images of Landmark Buildings in Mamre

1.3 PROJECT OBJECTIVE

The main purpose of this document is to provide a contextual overview of the existing trends in the local area. The aim is to collate existing information on the local area. The document will form an input to the Mamre Neighbourhood co-creation process that is currently underway.

This document presents a "work-in-progress", as compiled using secondary research material. It is submitted to help form a background of available information that has been accessed to understand the local area. Further inputs to the baseline and analysis report will be included after external consultations.

1.4 STUDY AREA AND LOCALITY

The Mamre Study area is situated towards the most northern region of the City of Cape Town Metropolitan border and falls part of the Blaauwberg District. The study area also includes the Malmesbury Farms. The full extent of the area is shown in Figure 2 below.

All references to the 'Mamre Area', the 'Study Area' and 'Mamre' in this document refer to the full extent described above.

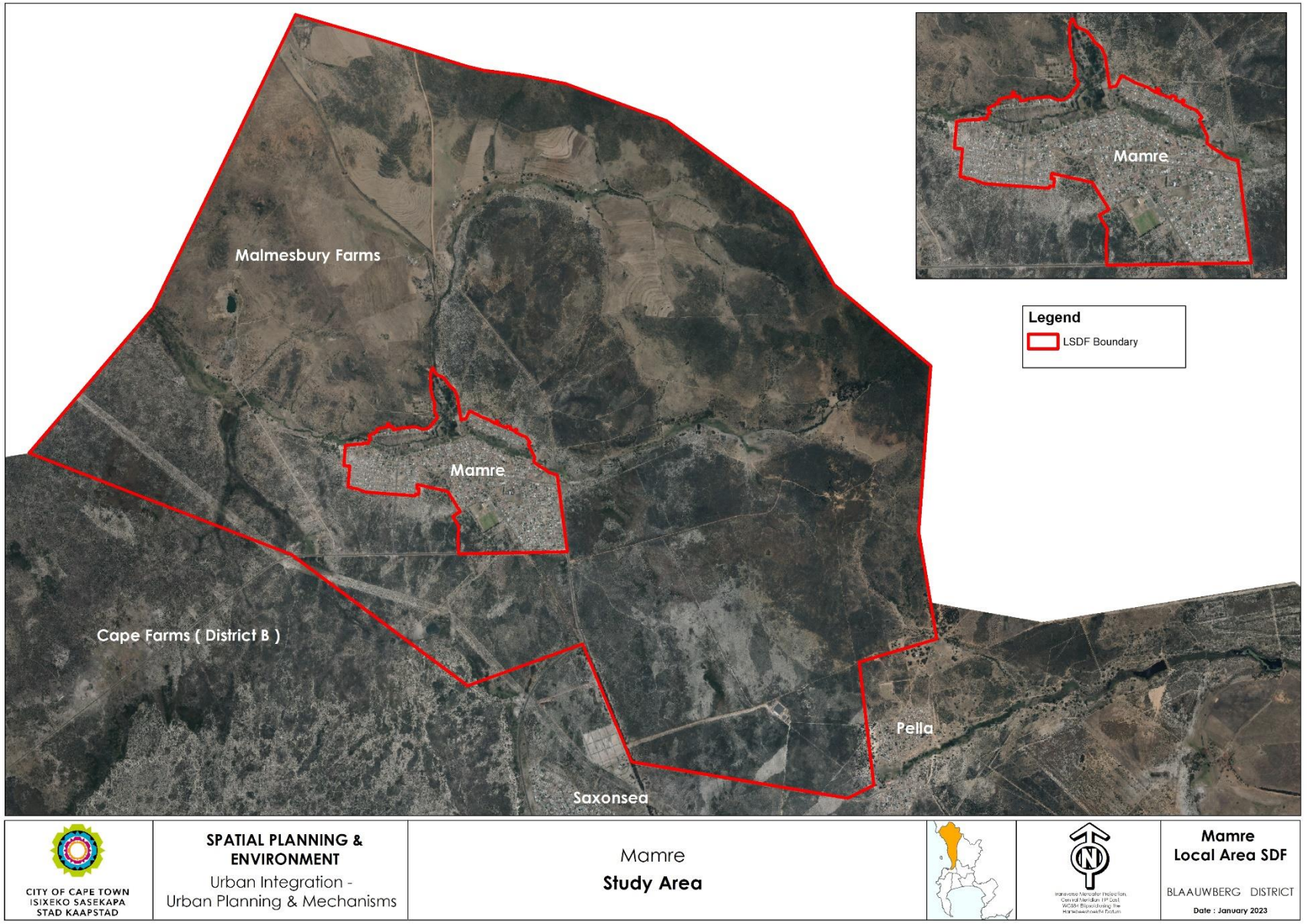

Figure 2: Study Area

2 POLICY CONTEXT

2.1 POLICY CONTEXT

The legislative context applicable to the SDFs has changed considerably since 2012. Under the previous planning regime, the Western Cape Government determined a number of municipal planning matters in terms of the Development Facilitation Act, Act 67 of 1995 and the Land Use Planning Ordinance, 15 of 1985 (LUPO). These have subsequently been repealed and replaced by the Spatial Planning and Land Use Management Act, Act 16 of 2013(SPLUMA) in 2013, the Western Cape Land Use Planning Act, Act 3 of 2014 (LUPA) and the City's Municipal Planning By-Law, 2015 (MPB-L). In addition to these a range of legal informants influence spatial planning in the heritage, environmental, transport and agricultural sectors.

2.1.1 Planning Legislation

Section 21 (I) (i) of the SPLUMA states that a municipal spatial development framework(SDF) must identify the designation of areas in which more detailed local plans must be developed. This is further emphasized in Chapter III (Part 3) of the LUPA that provides details relating to the content and process to be followed for the adoption/amendment of municipal SDFs. Neither the national or provincial acts makes reference to local spatial development frameworks but this is dealt with in detail in the city's by-law.

To this effect sections 11 & 12 of the MPBL mandates the preparation of Local SDFs to align and give further effect to the municipal SDF and any relevant District SDF by providing more detailed, local area planning. The objective of the Mamre LSDF is to contextualize existing policies for the area and provide land use and urban form guidelines for future development. Furthermore, the LSDF may include an implementation plan which must among other things inform and guide actions aimed at realizing proposals of the local spatial development framework. Chapter 20 of the Development Management Scheme as stipulated in Schedule 3 of the MPBL further provides mechanisms for designating localized development management rules through overlay zones that deals with specific concerns. In the case of Mamre the proposed heritage protection overlay is applicable and further elaborated on in section 2.2 below.

2.2 NATIONAL POLICIES AND STRATEGIES

2.2.1 Sustainable Development Goals

The declaration "Transforming Our World – the 2030 Agenda of Sustainable Development" was adopted during a special summit post the 2015 development agenda. The 2030 Agenda included a set of 17 universal integrated objectives for sustainable development that would be a catalyst for co-operative transformative action at an international scale. These objectives build upon the expiring Millennium Development Goals(MDGs) which included eight (8) goals for eradicating extreme poverty between 2000 – 2015. In contrast with the MDGs the SDGs are uniformly applicable to all countries of the world and have significantly expanded on the scale and content of the MDGs.

The seventeen (17) Sustainable Development Goals are summarized below:

1. End poverty in all its forms everywhere
2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
3. Ensure healthy lives and promote wellbeing for all at all ages
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

5. Achieve gender equality and empower all women and girls
6. Ensure availability and sustainable management of water and sanitation for all
7. Ensure access to affordable, reliable, sustainable and modern energy for all
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all
9. Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation
10. Reduce inequality within and among countries
11. Make cities and human settlements inclusive, safe, resilient and sustainable
12. Ensure sustainable consumption and production patterns
13. Take urgent action to combat climate change and its impacts (noting agreements made by the UNFCCC forum)
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation, and halt biodiversity loss
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.

2.2.2 National Development Plan (2030)

Planning in South Africa is guided by principles that promote the creation of spaces that are liveable, equitable, sustainable, resilient and efficient and support economic opportunities and social cohesion. The principles are regulated in terms of section 7 (a – e) of the SPLUMA. Spatial plans and frameworks need to entrench these principles through the spatial patterns proposed for development in order the unlock development potential and inform infrastructure investment and prioritisation through co-ordinated efforts of the public and private sector.

The NDP defines these development principles as follows:

Spatial justice

The historic policy of confining particular groups to limited space, as in ghettoization and segregation, and the unfair allocation of public resources between areas, must be reversed to ensure that the needs of the poor are addressed first rather than last.

Spatial sustainability

Sustainable patterns of consumption and production should be supported, and ways of living promoted that do not damage the natural environment.

Spatial resilience

Vulnerability to environmental degradation, resource scarcity and climatic shocks must be reduced. Ecological systems should be protected and replenished.

Spatial quality

The aesthetic and functional features of housing and the built environment need to be improved to create liveable, vibrant and valued places that allow for access and inclusion of people with disabilities.

Spatial efficiency

Productive activity and jobs should be supported, and burdens on business minimised. Efficient commuting patterns and circulation of

goods and services should be encouraged, with regulatory procedures that do not impose unnecessary costs on development."

The SPLUMA includes a 6th principle namely:

Good Administration

Cooperation amongst state institutions combined with an integrated and ethical approach to land use management and development that pro-actively uses state assets and resources to advance service delivery, address poverty and progressively realise the constitutional rights of citizens and the above principles: spatial sustainability, spatial resilience, spatial quality, and spatial efficiency.

2.2.3 Integrated Urban Development Framework (2015)

The development principles highlighted in the SPLUMA and the thematic intervention related thereto are also emphasised in the Integrated Urban Development Framework (IUDF) where the focus is on spatial integration, inclusion and access, growth and governance. These inform the objectives namely:

"(1) integrated urban planning forms the basis for achieving integrated urban development, which follows a specific sequence of urban policy actions: (2) integrated transport that informs (3) targeted investments into integrated human settlements, underpinned by (4) integrated infrastructure network systems and (5) efficient land governance, which all together can trigger (6) economic diversification and inclusion, and (7) empowered communities; all of the above will demand effective (8) governance and (9) financial reform to enable and sustain these policy actions."

2.2.4 Land Transformation Process

Land in Rural communities were proclaimed in terms of the Rural Areas Act (Act 9 of 1987) where trust land vested in the relevant Minister (Land Affairs, then Rural Development and Land Reform and subsequently Agriculture, Land Reform and Rural Development). The Rural Areas Act was repealed by the Transformation of Certain Areas Act (Act 94 of 1998 – TRANCRAA. The purpose of TRANCRAA was to transfer land to its rightful beneficiaries through a prescribed process for the creation of entities e.g. to hold the land in the commonages in trust for the inhabitants of the rural areas. Mamre is subject to the provision of the Transformation of Certain Rural Areas Act, No. 94 of 1998 whereby the commonage land has been transferred to the Mamre Communal Property Association (MCPA).

The Department of Land Affairs (now Department of Agriculture, Land Reform and Rural Development) in co-operation with the City of Cape Town (Blaauwberg Administration) and the Mamre Local Development Forum appointed consultants in 2001 to assist with the land transformation process in Mamre. MCA Planners was tasked to do an assessment of existing land uses, opportunities and constraints and develop proposals regarding suitable land uses/activities for the Mamre Commonage. A report dated 2003 contains the findings of this task.

The transfer of the commonage land to the MCPA was concluded in July 2013 and is now owned by the local community. These properties include Remainder of Farm 971 and Portion 1 of Farm No. 6.m

2.2.5 National Heritage Resources Act 25 of 1999 (NHRA)

The National Heritage Resources Act envisions an integrated system for heritage management at all levels of government:

- Introduction of an integrated and interactive system for the management of national heritage resources;
- Promotes good governance at all levels;

- Empowers civil society to nurture and conserve their heritage resources so that they may be bequeathed to future generations; and
- Provides for the protection and management of conservation-worthy places and areas by local authorities.

The NHRA instructs local authorities (s30(5) and s31(1) to compile an inventory of the heritage resources within its area of jurisdiction as well as identity for protection areas of environmental or cultural interest for protection.

Mechanism for exemption

The NHRA makes provision for the exemption of the requirement of the general protection for buildings older than 60 years, S34(3), and/or the requirements for a heritage resources management in terms of s38(9).

The provincial heritage resources authority (in this case HWC) may at its discretion make an exemption from the requirements of S34 provided that HWC is satisfied that heritage resources (that are conservation worthy) have been adequately provided for in terms of the formal protections of the NHRA i.e. the heritage register (Grade III) or heritage areas.

DMS Item 162: General Provisions:

Heritage Protection Overlay Zoning – Summary

The Heritage Protection Overlay Zoning is the mechanism or tool in the MPBL for managing heritage. The HPOZ includes the various urban conservation areas which were amalgamated into one heritage protection overlay zoning when the Cape Town Zoning Scheme regulations (2013) were replaced by the Development Management Scheme of the MPBL (2015).

Table 1 summarises the proposed approval exemptions for sites protection by the HPOZ. Currently Exemption 3 is applied to all places protected by the HPOZ and it is consistent with the provisions of S107 of the previous zoning scheme, which aimed at managing the exterior of buildings and the streetscape of historic neighbourhoods.

Table 1: Proposed approval exemptions for sites protected through the General Provisions of the HPOZ

Exemptions				Activities exempted from having to obtain Council's approval
Exemption 4	Exemption 3	Exemption 2	Exemption 1	The following **Landscaping** activities are exempt: Day to day gardening and garden maintenance that *does not involve* the removal of mature trees or hedges, or change in the topography of the landscape, or the erection, demolition or removal of walls, fences, structures or features. Continuance of planting and farming activities which does not change the character or topography of a place. This *does not include* the erection of permanent or temporary structures.
				The following **Minor Maintenance** activities are exempt: Re-painting or re-decorating (including changes in paint color but not including painting of natural stone, unpainted metal, face-brick, ceramic, or unpainted wood, or similar such unpainted surface); Replacement of roof covering using identical material, treatment and form; Minor maintenance that does not involve: changes in material, form, or type of finish, removal of original joinery, features or fittings,

			or such which have been part of the structure for over 60 years.
			The following **Internal Alterations** activities are exempt: Internal construction, removal, alteration or demolition that is not visible from outside a structure. (This exemption does not include internal construction across window, door or other openings which may be seen from outside the structure, or alterations that compromise the structural integrity of a structure).
			The following activities are exempt: All activities authorised for a place, site or area in terms of and in accordance with a **Heritage Management Plan** approved by the City.

Notes:

1. Exemption 3 includes exemption 1 and 2, and Exemption 2 includes Exemption 1.
2. The above exemptions do not apply to any other requirements under Planning law, the National Building Regulations or any other legislation.

DMS Item 163: Specific Provisions: Heritage Protection Overlay Zoning

Where applicable and appropriate, the DMS makes provision for specific provisions to be applied to a heritage place or area protected by the HPOZ. These specific provisions may be in addition or alternative to the general provisions and are customised to the specific characteristics of the area. Before adopting the specific provisions for an area protected by the HPOZ, the City must consult with the property owners of the area.

2.2.6 National Environmental Management Act

The overarching legislative framework that governs all environmental activities is the National Environmental Management Act (No 107 of 1998). NEMA aims to provide for co-operative environmental governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of state; to provide for certain aspects of the administration and enforcement of other environmental management laws; and to provide for matters connected therewith.

NEMA requires that its principles be applied by municipalities and used to guide Environmental Impact Assessments (EIAs) and prepare Environmental Management Frameworks (EMFs). The key principles require environmentally, socially and economically sustainable development, the protection of natural resources and the maintenance of natural systems, equitable access to resources and environmental management that puts people and their needs first.

NEMA requires that the City supports international agreements. This is of particular importance as Cape Town has two World Heritage Sites, an extensive coastline and is situated within the Cape Floral Kingdom.

Accompanying NEMA is a set of Specific Environmental Management Acts (SEMA's). Known by the abbreviation of SEMA's, Specific Environmental Management Acts all fall under the auspices of the overarching National Environmental Management Act (NEMA). To date five SEMA's have been promulgated, with the most recent one being Waste Act in 2008. The full list of SEMA's is:

1. National Environmental Management: Protected Areas Act (57 of 2003), known as the NEM: PAA

2. National Environmental Management: Biodiversity Act (10 of 2004), known as the NEM: BA
3. National Environmental Management: Air Quality Act (39 of 2004), known as the NEM: AQA
4. National Environmental Management: Integrated Coastal Management Act (24 of 2008), known as the NEM: ICM
5. National Environmental Management: Waste Act (59 of 2008), known as the NEM: WA

2.3 Provincial Policies and Strategies

2.3.1 Provincial Spatial Development Framework (2014)

Cape Town is an important asset in terms of its location and impact on the economy within the broader provincial context. This is acknowledged by the PSDF and has led to a number of policy directives listed below:

- Reinforce the Cape metro region as the province's economic engine;
- Build 'land assembly' capacity in the urban space-economies and apply new land policy instruments (land banking, land value capture, etc.);
- Incentivise mixed land use and economic diversification in urban and rural land markets;
- Regenerate and revitalise existing economic nodes in the urban space-economy (CBDs, township business centres, modal interchanges, fishing harbours, etc.);
- Prioritise public transport investment and higher order facilities in district centres; and
- Stabilise small towns, invest in off-grid infrastructure technologies, and use the roll-out of ICT infrastructure to connect and economically empower across space.

2.3.2 A Toolkit for Integrating Land Reform and Rural Development into Spatial and Land Use Planning

The Western Cape Land Use Planning Guideline: Rural Areas of 2019 (Rural Areas Guideline) serves as a basis for spatial planning and development management to improve the planning and management of rural areas in support of the Provincial Spatial Development Framework and its policy to diversify and strengthen the rural economy.

The purpose of this toolkit for Integrating Land Reform and Rural Development into Land Use Planning is twofold.

Firstly, it is intended to give a comprehensive snapshot of all relevant information that might have an impact on development planning in rural areas. It gives guidance in terms of different land use options that would support land reform projects and should be considered by planners and built environment practitioners.

Secondly, it provides a handy tool to assist officials in front line services in addressing the needs of the community by giving an insight into the type of assistance that is currently available in the land reform sector. The Toolkit consists of four parts, namely:

1) Legislative and Policy Context;
2) Instruments to Facilitate Land Reform and Rural Development;
3) Rural Land Use Options to Implement Land Reform Projects; and
4) Transformation of Certain Rural Areas.

2.4 METROPOLITAN (LOCAL) POLICIES AND STRATEGIES

2.4.1 Integrated Development Plan (IDP)

Cape Town's Integrated Development Plan contains three spatial strategies:

Spatial strategy 1: Plan for economic growth and improve access to economic opportunities.

Spatial strategy 2: Manage urban growth, and create a balance between urban development, food security and environmental protection.

Spatial strategy 3: Building an inclusive, integrated, vibrant and healthy city.

These provide the spatial direction that establishes a corporate spatial perspective which informs the review of sector and lower-order spatial plans. The spatial strategies also inform submissions and motivations for development proposals and applications from the public and private sector and directly impact the assessment of development applications.

2.4.2 Municipal Spatial Development Framework (MSDF)

The MSDF approved on 26 January 2023 provides high level policy direction for the investment rationale. The following policy statements are applicable in the case of Mamre:

***Policy 3**: Introduce land use policy reform and mechanisms that will support the development and growth of small businesses and township economies (both formal and less formal).*

P3.6 Plan for improved and quality public realm that accommodates informal economic activities through innovation, creativity and uniqueness of the local areas and maximisation of commuter mobility.

***Policy 11**: Identify, conserve and manage heritage resources and cultural landscapes*

P11.2 Maintain and update the City's heritage inventory

P11.3 Provide information on types, quality and value of heritage resources to promote evidence-based decision-making.

P11.4 Identify areas where Heritage Exemptions could be considered (using the Parow Heritage exemption as a basis for replication).

P11.5 Optimise heritage resources as an asset to support economic and social development and a tool to integrate communities.

P11.6 Encourage sustainable use of heritage sites to promote urban regeneration so they contribute further to the economy and enrich the quality of urban life.

P11.7 Promote access to heritage resources, and enable and promote local heritage tourism initiatives through the protection and conservation of destination places and special cultural and heritage areas.

***Policy 12**: Provide for cultural and social practices and events to promote spatial justice and spatial integration.*

P12.1 Support land development proposals and decision-making that incorporates the conservation and management heritage resources including cultural landscapes and agriculture / rural landscapes.

***Policy 13**: Protect and enhance scenic routes and places of scenic value, including destination places, cultural landscapes and agriculture- rural landscapes celebrating all of Cape Town's diverse cultural.*

P13.1 The assessment and decision-making pertaining to land development proposals and decision-making within scenic routes should consider the existing cultural – natural landscape and informed by Scenic Drive Network Management Policy, Urban

Design Policy, Outdoor Advertising Bylaw (2013) and relevant considerations within applicable District SDF Development Guidelines.

Policy 14: *Provide efficient access to destination places where potential exists, especially in or near areas of high social need in support of economic inclusivity and spatial integration.*

P14.1 The assessment of land development proposals should consider the protection and enhancement of existing and potential destination places and prioritise public access as relevant considerations within decision-making.

P14.2 Ensure destination places are effectively managed to conserve their special qualities by:

- planning for unused or under-utilised areas of social and cultural significance in an appropriate manner, that will contribute positively towards creating and strengthening an integrated sense of place; and,
- ensuring contextually appropriate land use and urban management is in place, that will guide and enhance the urban character and tourist economy of an area.

P14.3 Prioritise the value creation and improvement of multifunctional public spaces, especially in previously disadvantaged and underserved areas, and urban support areas identified in the District SDFs.

P14.4 Maintain the City's heritage graded areas and proactive identification of heritage exemption areas.

2.4.3 District Spatial Development Framework (DSDF)

The 2022 Blaauwberg District Plan, approved on 26 January 2023, has identified Mamre as a destination place as it is a landmark of historical significance with a rich settlement and vernacular architectural heritage. There are 3 areas that has been earmarked for urban development in the form of infill sites and the proposed land uses include medium density residential and small scale business opportunities. The R304 Mamre Road has been identified as a SR2 scenic route which are defined as routes that traverse scenic areas but are frequently accessed. The historic Eucalyptus (Blue gum) tree lane along the R304 is an important heritage resource which is also significant in the larger cultural landscape and must be retained and protected at all cost.

2.4.4 Environmental Strategy (2017)

The Environmental Strategy is a sectoral framework which fits within the larger framework for sustainability and good governance.

The City's Cultural Heritage Strategy, embedded in the Environmental Strategy 2017, provides a policy and framework for the management and protection of the cultural heritage resources of the City. The key cultural heritage objective of this strategy is the identification, assessment, conservation, management and enhancement of the heritage resources, structures and landscapes of all the people of Cape Town and to ensure that the memories and values associated with such resources are appropriately represented.

A further objective is to ensure that spatial, developmental and environmental planning accommodates and responds to the unique history, scenic and environmental qualities of Cape Town.

2.4.5 Climate Change Strategy (2021)

The strategy is aligned with the SDG 13 and aims to ensure that the co-benefits of climate change adaptation and mitigation are maximised in the implementation of the strategy. These benefits could include but are not limited to *job creation, improved health, reduced risk, improved energy and water security, Further to this the* purpose is to provide high level guidance for decision making, planning and implementation in respect of climate change.

To this effect the City is a member of C40 which is a global climate change leadership grouped focused on promoting climate change response action at a local government level. The Climate Change Hazard, Vulnerability and Risk Assessment that was conducted during 2018/19 identified the potential climate risks and their impacts that could be applicable as follows:

1. Drought and associated water shortages
2. Flooding and associated impact on people and infrastructure
3. Heat stress and associated health impacts on vulnerable people
4. Damage to infrastructure and property due to severe storms and strong winds
5. Increased risk of fire, affecting both the natural environment and urban areas.

2.4.6 Social Development Strategy (SDS)

The policy aims to improve and enhance the quality of life of all people, especially the poor and marginalized communities by focussing on addressing poverty inequality and social ills, while enabling people to participate in their own development. The strategy speaks to all objectives of the IDP, practically those in strategic focus areas of the opportunity and inclusive city and the building integrated community's priority.

The strategy views the organisation as an integrated whole where each directorate has a role in facilitating social development. Hence, the way that the departments provide services, plan, regulate, employ people or directly intervene in communities shall be done in a manner that promotes the social development of communities. The SDS is structured around five high-level objectives. These are:

1. Maximise income generating opportunities for people who are excluded or at risk of exclusion
2. Build and promote safe households and communities
3. Support the most vulnerable through enhancing access to infrastructure and services
4. Promote and foster social integration
5. Mobilise resources for social development

2.4.7 Economic Growth Strategy (EGS)

The purpose of the EGS is to develop and grow the local economy. The strategy focuses on responding to the current challenges that faces the City of Cape Town, most notably the high unemployment rate, inequality, poverty and the city's lacklustre current and projected growth rates means that this situation in unlikely to change if the organization follows a 'business as usual' approach.

The EGS is an important lever in attaining the opportunity city and inclusive city strategic focus areas. It focuses on positioning Cape Town as a forward looking, globally competitive city implementation of programmes. It also covers economic inclusion by focusing on skills development and building integrated communities.

The EGS is structured in five strategic areas:

1. Building a globally competitive city through institutional and regulatory changes
2. Providing the right basic service, transport and ICT infrastructure
3. Utilising work and skills programmes to promote growth that is inclusive
4. Leveraging trade and sector development functions to maximum advantage
5. Ensuring that growth is environmentally sustainable in the long term

2.4.8 Transit-Oriented Development Strategic Framework (TODSF)

Transit Orientated Development (TOD) represents the intricate relationship between "Transit" (the operational/access imperative of an urban environment) and "Development" (the spatial manifestation of those that are within the urban economy). TOD is about changing, developing and stimulating the built form of the city in such a way that the movement patterns of people and goods are optimised to create urban efficiencies and enable social equinity and economic development. It is considered to be Cape Town's best long term development strategy to address spatial inequality, improve public transport affordability and arrest sprawl. TOD is driven by the integration of sustainable public transport and strategic land use intervention and built on the principles of affordability, accessibility, efficiency, intensification and densification.

Cape Town's urban form and structure is characterised by dispersed development patterns and inequitable access for many of its users. In part, this can be attributed to segregated apartheid planning, but more recently has become a trend exacerbated by socio-economic reality. Population and residential densities in many of the formally developed areas of the city remain extremely low by international standards and access is further constrained by mountain and sea. This has led to the development of poorer residential communities in locations far away from employment and opportunities, making the cost of providing and using a high quality public transport unsustainable.

3 DEMOGRAPHICS

3.1 Demographic Analysis with Growth Projections

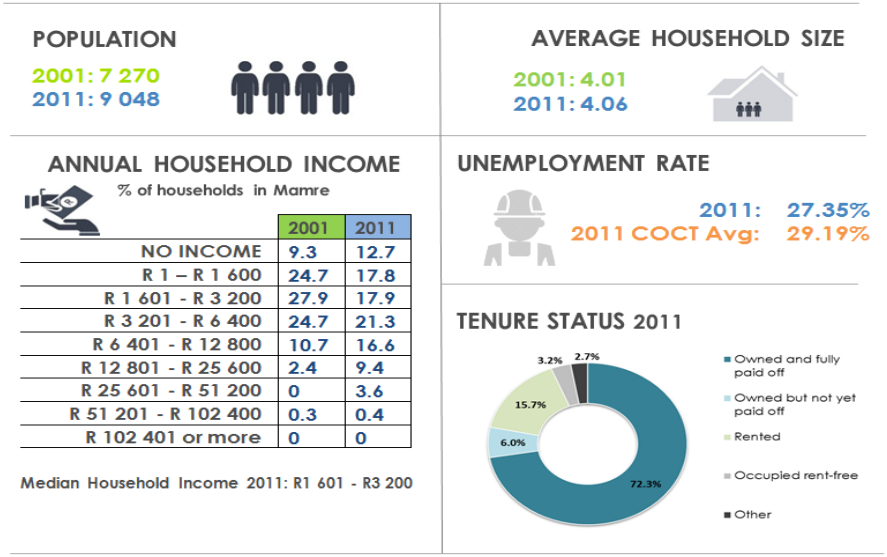

Figure 3: Socio-economic analysis of Mamre sub-place

3.1.1 Population

The current population according to the estimated figures from the solid waste count as at Jan 2018 is 9137. This showed a mere increase of 89 people since the Stats SA 2011 census data when the population was 9048. This increase is much less than the preceding 10 years from 2001 – 2011 census where the population increase was at 1778. There is no detailed information on the age distribution in the Mamre settlement however in the larger Blaauwberg district the age categories between 20 – 35 years has had the highest numbers. Similarly, there is also a high

percentage of the district's population between the 0 – 4 year age bracket. Taking the above into consideration it can be assumed that Mamre's population will not be growing exponentially but the focus should rather be on sustaining the town for the natural growth of the current residents and their families.

3.1.2 Employment and Income

According to the 2011 census data Mamre as indicated in Figure 3 had an unemployment rate of approximately 27%. Furthermore, 17,8% of the households in Mamre earned between R0 - R1 600 per annum, whereas 17,9% earned between R1 601 – R3 200; 21,3% earned between R3 201 – R6 400; 16,6% earned between R6 401 – R12 800. This equates to a total of 73% of households earning below R1 070 per month in 2011and in addition 12% had no income. It should also be noted that the "no income" bracket has increased from 9.3% in 2001 to 12.7% in 2011 which indicates that there are more households with no income and can be assumed that this has a direct link with the unemployment levels in the town. Furthermore, the income brackets between R1 – R6400 had an overall decline of 18% between 2001 and 2011 but on the flip-side there has been an increase of 16.6% of the households that earn R6 401 and above. This could be an indication that people's lifestyles might be improving slightly. It is noteworthy that there are no households that had an income above R102 401 throughout this period which shows that the community as a whole fall in the lower income groups.

3.1.3 Education

Table 2 below for Mamre indicates the education statistics according to the Stats SA 2011 census data. There are about 74 % of the population where there is no information on the level of schooling. It is clear that about 23 % attend both primary and high school whereas there are almost 2% that attend either a college or other form of tertiary education institution. Adults also make up 1% of the population that attend basic education and training programmes.

There is no high school in Mamre and they have to travel to Atlantis or Cape Town for higher education. Scholar transport is provided to the students that attend high school in Atlantis.

The community have alluded to the need for a high school. The overall education provision perspective of the Western Cape Department of Education is through implementation that is spatially targeted in order to ensure that the demand/need is met at a provincial level.

Table 2: Stats SA 2011 census Education data for Mamre

Mamre Education levels	Figures	%
Pre-school	24	0.3
Primary & Secondary	1878	22.9
Special school	15	0.1
ABET	66	0.9
FET & Other colleges	105	1.3
Tertiary	42	0.5
Not Available	6051	74.0
Total	8181	100

4 NATURAL ENVIRONMENT

4.1 GEOLOGY, SOILS AND TYPOGRAPHY

The southern, coastal and northern regions of the Blaauwberg district have undifferentiated coastal and inland rock deposits. The north-west aligned Mamre fault in the northern part of the district is the only evident major fault in the Blaauwberg district. The Mamre area is characterized by three lithological units (Report of a 1:10 000 scale study on the climate, topography, soils and water of the Mamre commonage, 2003:36). There are granite intrusions associated with the Cape Granite Suite exposed in the northern part of area. These intrusions occur over shale bedrock of Malmesbury Group origin towards the eastern part of Mamre and in some places overlain by unconsolidated sands of the Bredasdorp formation.

According to the Agri-Informatics report, (2003:19) a large portion of the Mamre commonage is on the coastal plain, and is covered by deep white quaternary Aeolian sands (deposited by wind). Greywacke of the Moorreesburg Formation, Malmesbury Group, which had been weathered down to slowly permeable swelling clays, underlies a portion of the sands towards the east. A series of hills north-east of Atlantis and Mamre is rising to an elevation of up to 300 m above sea level. These hills, formed by granite intrusions, are the only area where noteworthy steep slopes are found within the district. However, they are largely undeveloped except for limited agriculture.

In the mid-slope there is a more weathered granite whilst the foot of the slope is comprised of the fertile and looser sandy loam colluvial soils. In the southern part these soils are arable, hence there are communal gardens along Modder River, which transverse across the community from east to the west. The north western part is good for grazing and when drifting towards North-East the land can accommodate wildlife. From the soil assessment it is clear that some high potential soils are capable to retain sufficient moisture for summer crops with a medium to low water requirements, are present at Mamre. Wine grapes are considered to be the crop with the best potential to fully make use of the set of natural resources found at Mamre[1].

Most of the non-sandy areas has a moderate to high potential for wheat production. Small grain production is however, directly linked to an expensive upgrade of the runoff control infrastructure. This implies that a breakeven point will only be reached after several years of production.

[1] MCA report, November 2003

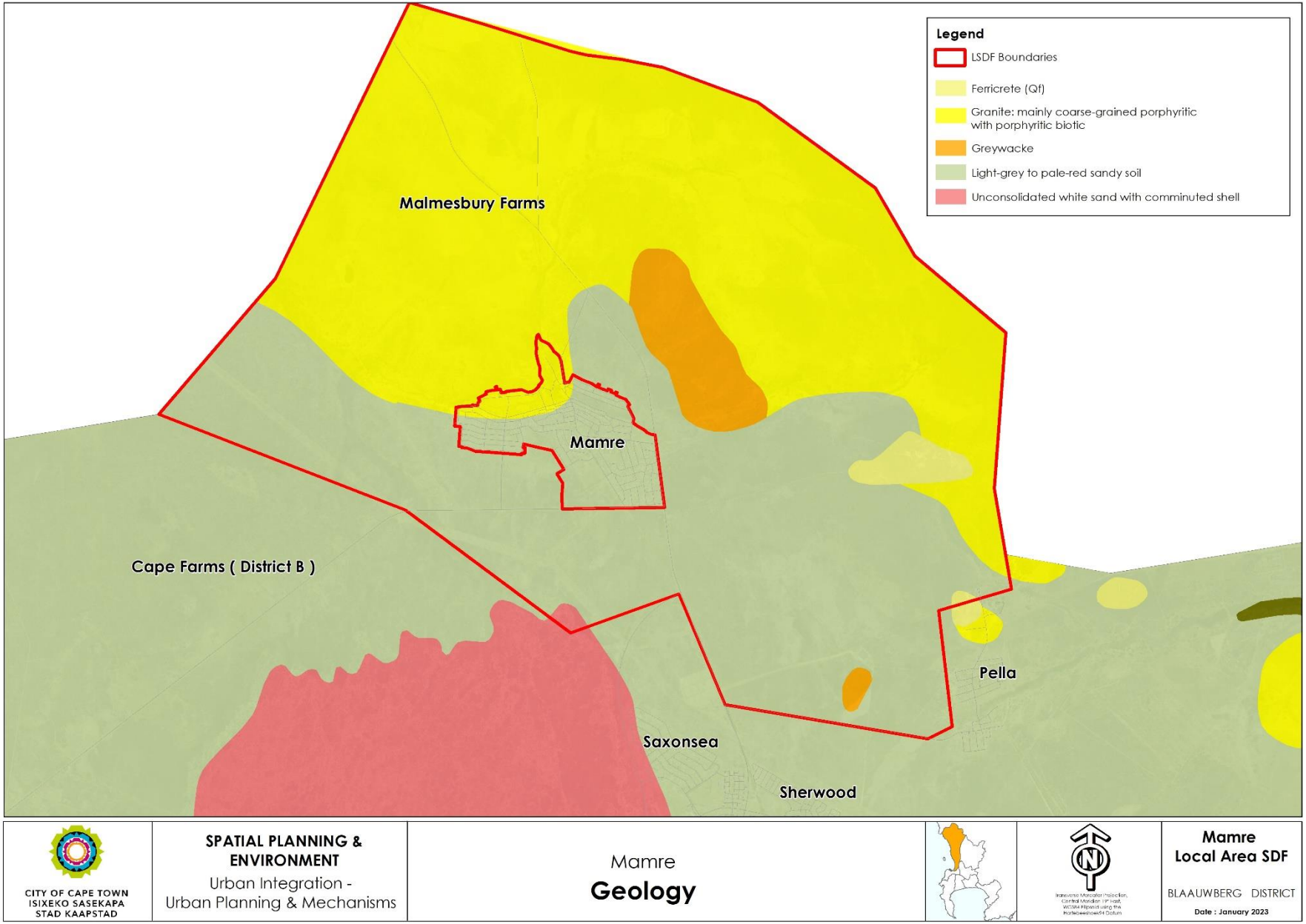

Figure 4: Geology of Mamre study area and surrounds

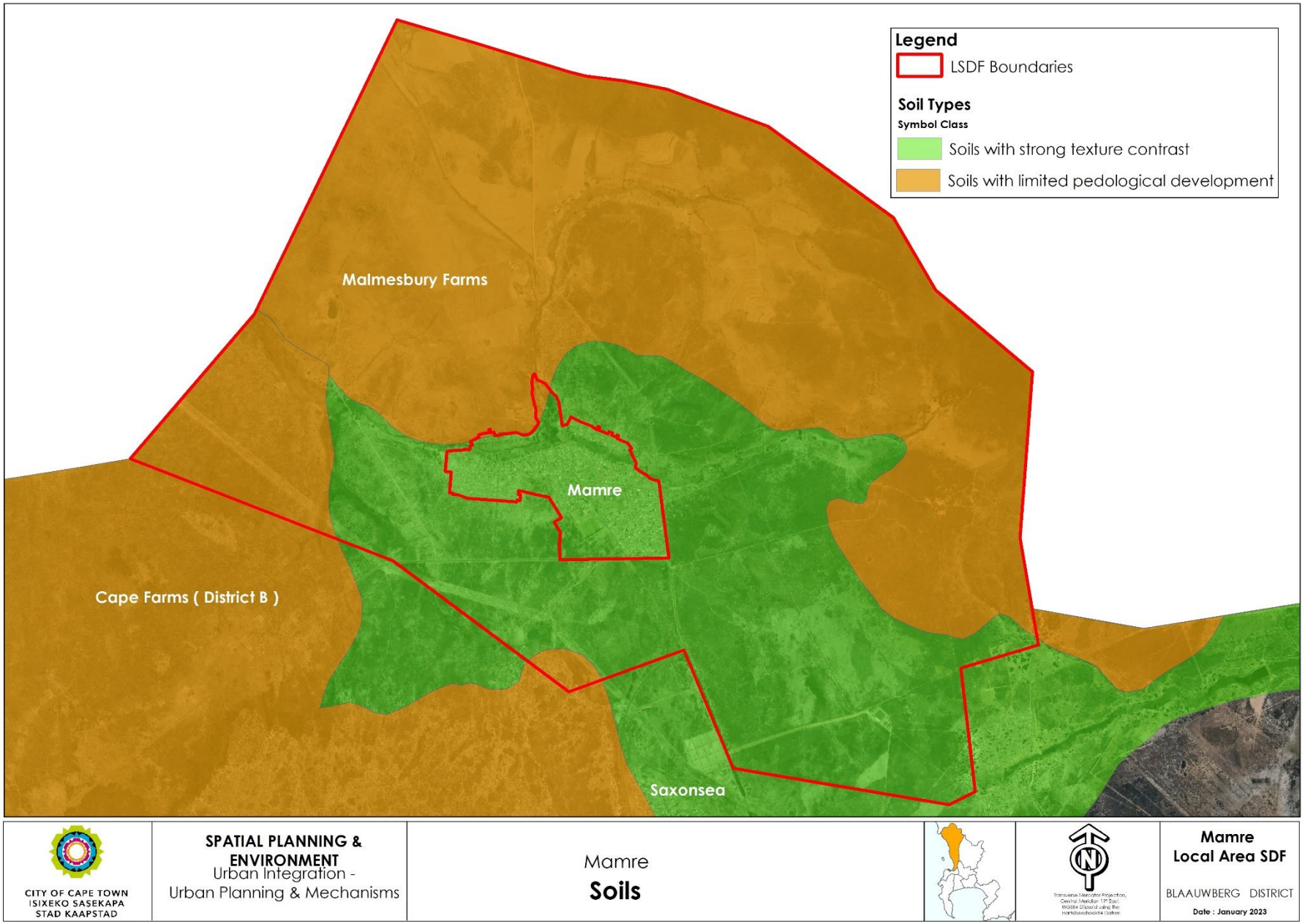

Figure 5: Soils in the Mamre study area and surrounds

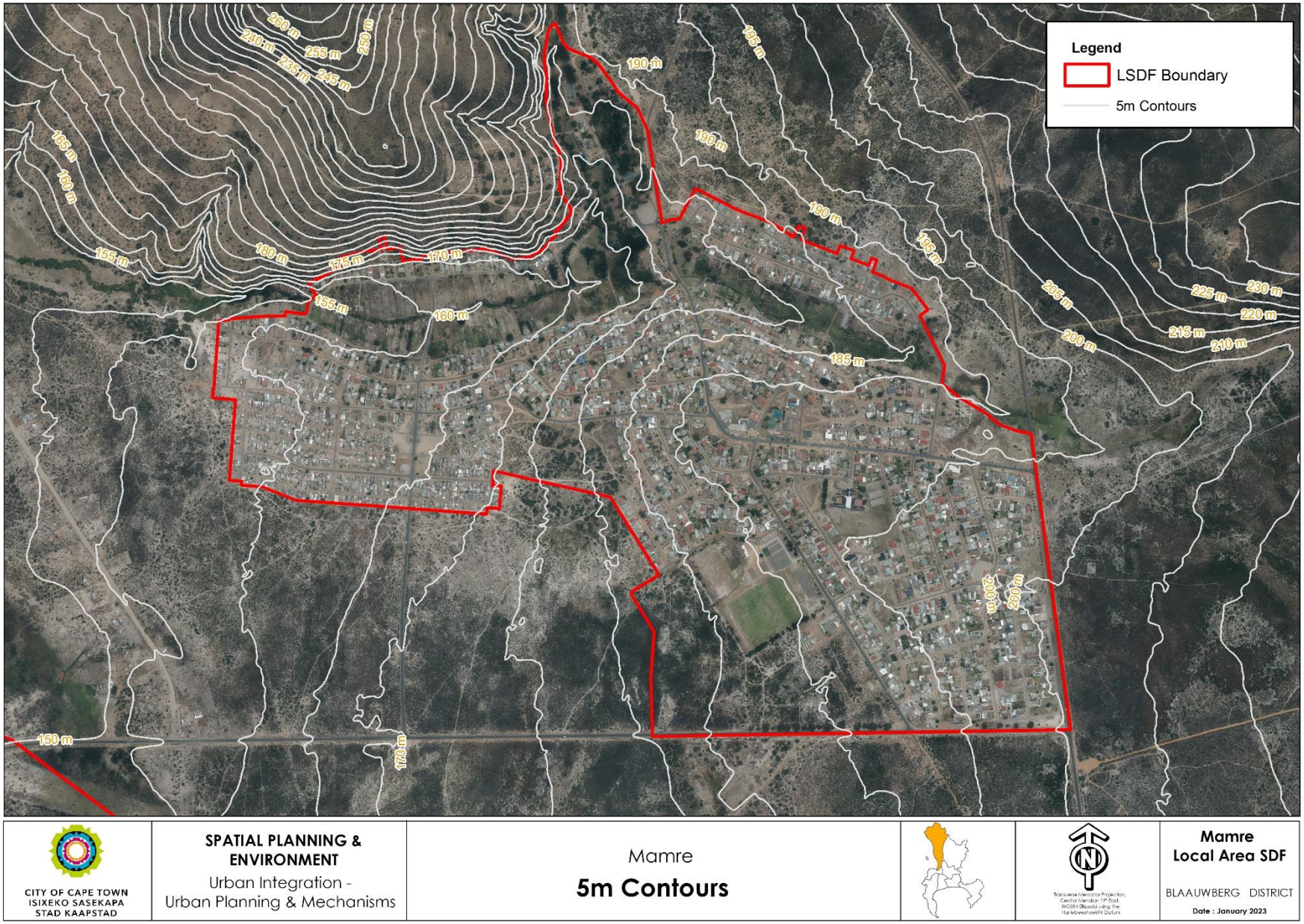

Figure 6: Topography in Mamre and surrounds

4.2 FLORA

The West Coast region includes some of the most important unpreserved lowland habitat within the Cape Floristic Region, which has been identified as a conservation priority and area of enormous international significance. The Blaauwberg district contains some of the last remaining tracts of two of South Africa's rarest vegetation types, namely Sand Fynbos (two sub-types; both 'Critically Endangered') and Renosterveld (three sub-types; all 'Critically Endangered'). The biodiversity in this district is undergoing continual decline with the most significant threats being presented by sand-mining, agricultural activities, overly frequent veld fires, rapid and insensitive development; infestation by invasive alien species, and overexploitation of water and marine resources. Similarly, insensitive developments must be avoided in future.

Furthermore, as veldfires and invasive alien vegetation are already outlined as threats consideration should be given to the impacts of climate change on the occurrence of veldfires (intensity and frequency) in terms of wind strength and temperature increase and the associated impacts on biodiversity and the potential to damage property, infrastructure and cause the death of grazing animals.

A brief description of the vegetation types that occur in the Mamre area is provided below:

Atlantis Sand Fynbos occurs in the southern part of the study area on the eastern side of the Dassenberg-Darling Hills through Riverlands to the area between Atlantis and Kalbaskraal. It is moderately undulating to flat sand plains with a dense, moderately tall ericoid shrubland dotted with emergent tall sclerophyllous shrubs and open short restioid stratum. This vegetation is considered critically endangered as it consists 100 Red Data species, with almost 47% having already been transformed.

Swartland Granite Renosterveld occurs in a small area in the north of the district near Dassenberg and Mamre. Swartland Granite Renosterveld supports a mosaic of grassland/herblands rich in bulbs and medium dense, microphyllous shrublands dominated by renosterbos. Groups of small trees and tall shrubs are associated with the heuweltjies and rock outcrops found in this vegetation. This vegetation is considered critically endangered, with almost 74.3% having already been transformed.

Swartland Silcrete Renosterveld, the largest remaining fragment of this vegetation is found between Moorreesburg and Mamre on moderately undulating lowlands (often elevated). This vegetation is an open, low, small-leaved shrubland dominated by renosterbos with many succulents. This vegetation is classified as Critically Endangered and 86.4% has already been transformed, making conservation targets unattainable.

Swartland Shale Renosterveld contains the highest concentration of threatened plant species (214 in total; of which 25 are endemic to the vegetation type). It is moderately undulating plains and valleys supporting low to moderately tall leptophyllous shrubland of varying canopy cover as well as low, open shrubland dominated by renosterbos. This vegetation is considered critically endangered and 90% has already been transformed, making conservation targets unattainable.

General: There are 21 national vegetation types that naturally occur in the city. These vegetation types may be broadly grouped into mountain fynbos, lowland fynbos, renosterveld and strandveld. Of the 21 vegetation types, one is locally extinct, 10 are listed as Critically Endangered, and six are listed as Endangered. Seven of these 21 vegetation types are endemic to (only occur in) Cape Town. The

historic extent of natural vegetation in Cape Town was 2 425 km^2, and as of July 2018 the extent of natural vegetation was 914 km^2. At least 32 km^2 of the city's natural vegetation has been lost in ten years (2008-2018) – this is cumulatively bigger than Table Mountain National Park.

Table 3 below lists the percentage of each vegetation type remaining in Cape Town and compares the extent remaining of each vegetation type and the proportion of historical extent.

Table 3: Percentage of historical vegetation remaining

No.	National Vegetation Type	Historic extent in SA (km^2)*	2018 remaining in CCT %	National Threat Status*	National Conservation Target*	CCT protection level^
1	Atlantis Sand Fynbos	689	58.6	EN	30	Poorly protected
2	Boland Granite Fynbos	524	61.5	EN	30	Moderately protected
3	**Cape Flats Dune Strandveld**	**399**	**46.4**	**EN**	**24**	**Moderately protected**
4	**Cape Flats Sand Fynbos**	**577**	**10.9**	**CR**	**30**	**Poorly protected**
5	Cape Seashore Vegetation[$]	220		VU	20	
6	Cape Winelands Shale Fynbos	84	54.7	VU	30	Well protected
7	Elgin Shale Fynbos	279	37.5	CR	30	Well protected
8	Hangklip Sand Fynbos	89	54.5	CR	30	Well protected
9	Kogelberg Sandstone Fynbos	914	96.8	CR	30	Well protected
10	**Lourensford Alluvium Fynbos**	**36**	**7.7**	**CR**	**30**	**Hardly protected**
11	**Peninsula Granite Fynbos**	**92**	**43.5**	**CR**	**30**	**Well protected**
12	**Peninsula Sandstone Fynbos**	**219**	**95.9**	**CR**	**30**	**Well protected**
13	**Peninsula Shale Fynbos**	**13**	**46.2**	**VU**	**30**	**Well protected**
14	**Peninsula Shale Renosterveld**	**25**	**12.5**	**CR**	**26**	**Poorly protected**
15	Southern Afrotemperate Forest	775	99.4	LC	22	Well protected
16	Swartland Alluvium Fynbos	477	12.5	EN	30	Not protected
17	Swartland Granite Renosterveld	951	25.7	EN	26	Poorly protected
18	Swartland Shale Renosterveld	4964	7.4	CR	26	Poorly protected
19	Swartland Silcrete Renosterveld	101	9.1	CR	26	Hardly protected
20	Western Coastal Shale Band Vegetation	134	99.7	LC	30	Well protected

** NBA 2018 Terrestrial Threat Status data (SANBI, 2018a). Other data from Cape Town Biodiversity Report 2018.*
CR = Critically Endangered, EN = Endangered, VU = Vulnerable, LC = Least Concern
^ According to SANBI criteria, but for areas within the city only.
[$] Previously combined with Cape Flats Dune Strandveld.
***7 vegetation types endemic to CCT** are in **bold.** Excludes 4 azonal vegetation types: Cape Estuarine Salt Marshes, Cape Inland Salt Pans, Cape Lowland Freshwater Wetlands & Freshwater Lakes*

The Dassenberg Coastal Catchment Partnership (DCCP) initiative was originally identified as one of the two most important Climate Change adaptation corridors for the Fynbos Biome. The initiative has been managed as a collaboration between the City of Cape Town, Cape Nature, WWF, Table Mountain Fund, Wilderness Foundation, Cape West Coast Biosphere Reserve, SANParks and SANBI.

Since 2013, the CCT has been proactively acquiring, managing and retaining important biodiversity land outside the urban edge and in the DCCP as a mechanism to facilitate development in Atlantis through a land banking mechanism as a form of biodiversity offsetting. This proactive method of mitigating for the future loss of terrestrial biodiversity has been supported by the competent authorities: DEA&DP and Cape Nature. It is important to note that the loss of the remnant biodiversity in Atlantis can be mitigated at this stage as sufficient high quality vegetation remains outside the urban edge to meet National Conservation targets for the vegetation types in question. This pragmatic and innovative approach has much potential to facilitate development while ensuring priority land is added to the conservation estate, thereby securing biodiversity resources and the vital ecosystem services they deliver. To date the City has purchased 19 properties (of which 17 are for the Atlantis Conservation Land Bank) totalling 1 095 ha mostly along the Klein Dassenberg Hills. So far this has been used to facilitate 15 developments totalling 153ha. The acquisition of a number of additional properties are included in the land acquisition capital pipeline.

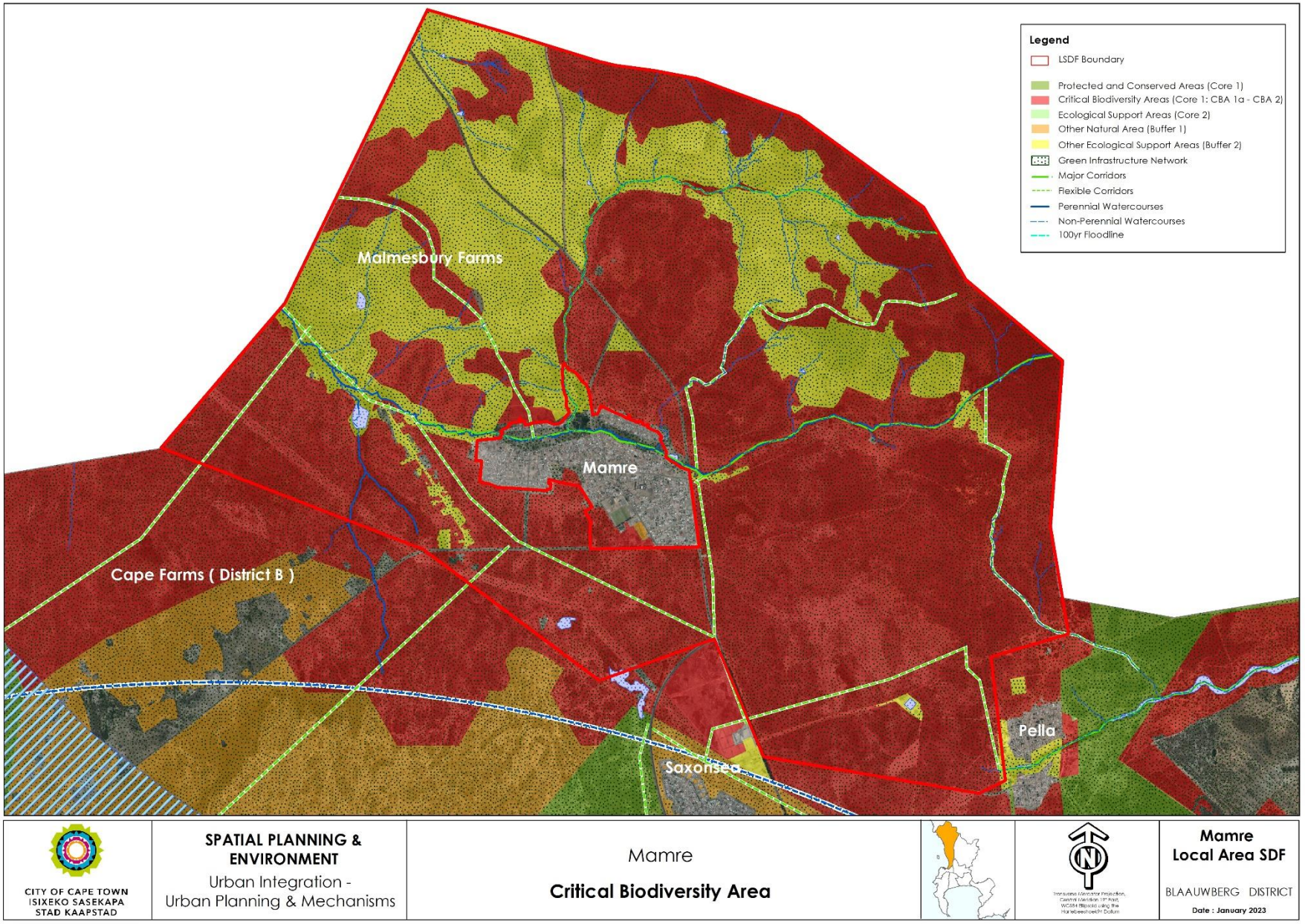

Figure 7: Biodiversity Network of Mamre and Surrounds

4.3 FAUNA

4.3.1 Mammalian Fauna

The ecological corridors linking important natural areas are essential for the continued survival of many mammal species. One of the important ecological corridors within this area is the corridor linking the Mamre Commonage to the coast. The agricultural areas to the north of the Blaauwberg Nature Reserve(BNR) are critical for fauna. The agricultural areas to the north of the BNR are critical in ensuring that the BNR still remains viable for species with extensive home ranges or low densities within the CCT. These include the Aardvark *(Orycteropus afer)*, Black-backed Jackal *(Canis mesomelas)* and Bat-eared Fox *(Otocyon megalotis)*.

4.3.2 Invertebrate Fauna

Wallengren's Silver-spotted Copper (Trimenia wallengrenii wallengrenii) is a Critically Endangered butterfly which used to occur in Swartland Granite Renosterveld on the hills north of Mamre. While it may still occur within the City, no adult Wallengren's Silver-spotted Copper has been recorded near Mamre for nearly 20 years.

The Endangered Dickson's Strandveld Copper (Chrysoritis dicksoni) is known to have historically occurred in two widely separated localities, namely between Melkbosstrand and Mamre and on the south coast near Witsand. However, Chrysoritis dicksoni appears to have become extinct in all known localities between Melkbosstrand and Mamre.

4.4 PROTECTED AND CONSERVATION AREAS

The rich biodiversity of Mamre and surrounds contribute to the natural history of the area which forms an integral part of the cultural heritage.

Dassenberg Coastal Catchment Partnership (DCCP) comprises 34 500 hectares of land of which 45% is public land, 37% private and 18% Mamre community land. The partnership consists of the DCCP West (Witzands Aquifer Nature Reserve [WANR] which is a proclaimed nature reserve); four additional erven to the north of the Dune field and the Brakkefontein Section) and the DCCP East (Klein Dassenberg, the Kanonkop, Fraaiuitsig, Dankbaar, Sonop, Dassenberg Sections and Stewardship sites).

The main objectives of the DCCP is:

- Water security
- Climate change resilience and adaptation
- Socio-economic opportunities, and
- Conserving natural and cultural heritage of the area

The management of the DCCP further includes building and maintaining relations with various stakeholder groups, communities, private landowners, City Departments and other agencies. The DCCP is also responsible for the operational management of three official residential properties and the Mamre Visitors Information Centre (MVIC).

- **Nirvana Conservation Area (Ptn 20 of Cape Farm 20)** is a privately managed conservation area within the DCCP biodiversity cluster near Atlantis that conserves 15.5 ha of Critically Endangered Atlantis Sand Fynbos. The conservation area contains nearly 30 threatened plant species including three Critically Endangered species *Diastella proteoides*;

Aspalathus retroflexa subsp. *bicolor* and *Amphithalea ericifolia* subps. *erecta*. The conservation area is a seamless extension of the Dankbaar Section of the Witzands Aquifer Nature Reserve and is completely clear of invasive alien species and in maintenance phase.

- **San Michell Conservation Area (Ptn 19 of Cape Farm 29)** is a privately managed conservation area within the DCCP biodiversity cluster near Atlantis that conserves 10 ha of Critically Endangered Atlantis Sand Fynbos. The conservation area is an extension of the Nirvana Conservation Area and the Dankbaar Section of the Witzands Aquifer Nature Reserve containing one Critically Endangered species *Aspalathus retroflexa* subsp. *bicolor*. The conservation area has been cleared of all invasive alien species, but requires several more follow-up treatments.

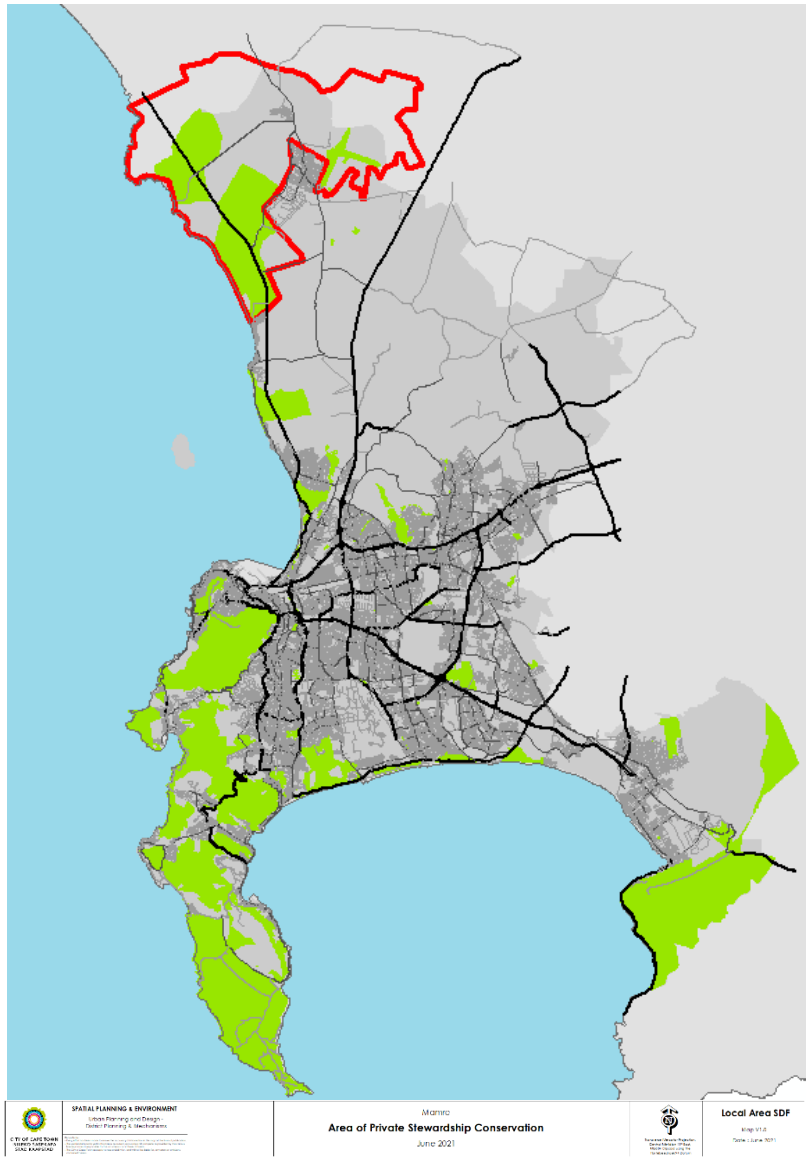

Figure 8: Protected and Conservation Areas in relation to DCCP

4.5 HYDROLOGY

4.5.1 Rivers

The non- perennial Modder River is the main surface water source passing through the town of Mamre and forms part of the Atlantis river catchment. During rainy season the river is used to irrigate the adjacent subsistence crops grown by locals along its banks. The state of the Modder river according to the Department of Water Affairs, 2005 report is indicated in Table 4 below.

Table 4: Health status of rivers as per DWAF 2005

River	River health*	Most notable problems
Modder River	Fair	• Infestation with alien vegetation • Infestation with alien fish in lower reach • Some water abstraction

***Note: The order of rankings is Natural, Good, Fair, Poor, Unacceptable (DWAF, 2005)

4.5.2 Groundwater

The aquifer located between Mamre and Atlantis and stretching to the West Coast, is highly productive with a median yield of 0.5 to more than 5 ℓ/s (DWAF, 2000). The Atlantis Water Scheme comprises two wellfields, one at Witzand and one at Silwerstroom. The Witzand aquifer is artificially recharged with treated wastewater from the Wesfleur WWTW at Atlantis, while water from the Silwerstroom is blended with aquifer water, treated and distributed to Atlantis and Mamre (DWAF, 2005). This area is protected under Witzands Aquifer protection zone. However, the quality of the water in Atlantis sole-source aquifer could be compromised by development pressures adjacent to the Witzands dunes and at Silverstroom (the aquifer's recharge areas) as well as pressure on the Wesfleur WWTW. Treated effluent from this facility is currently used to recharge the aquifer, so water quality monitoring and maintenance of the Wesfleur facility is critical.

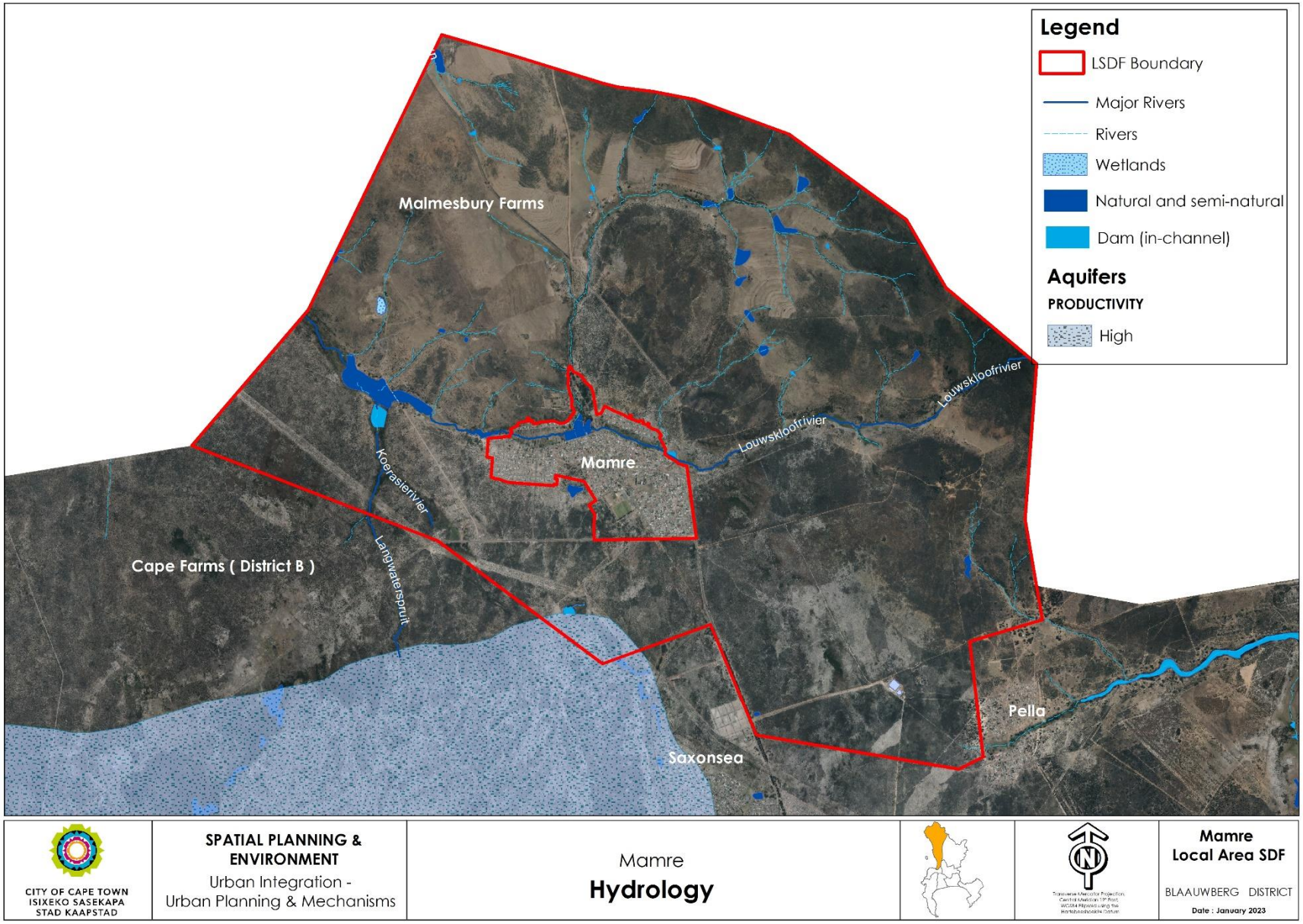

Figure 9: Hydrology of Mamre and Surrounds

4.6 AGRICULTURE AND GREEN INFRASTRUCTURE RESOURCES

4.6.1 Agriculture

There are no soils of high agricultural potential in the area. A study completed by MCA Planners in 2003 regarding the agricultural potential of the commonage area has indicated that the main type of agricultural activities that was happening at that stage was subsistence farming in the forms of vegetables and pigs. This was mainly occurring along the banks of the Modder River and the garden plots in the town. The MCA report further noted that wine grapes would be the most economically viable type of agricultural activity due to the 'dryland' conditions of the area. It has however not been verified that this is still the case today.

4.6.2 Green infrastructure – Wind Energy

The Mamre Communal Property Association(MCPA) has signed a 20-year lease agreement with the company Western Wind Energy. This would give the company the right to bid on behalf of the community when the Department of Energy re-opens bids in terms of the Independent Power Producer (IPP) Procurement Programme. The agreement paves the way for the development of a wind farm on communally-owned land which is expected to provide a much needed economic injection for the town. The proposal is for the MCPA and Western Wind Energy to form a consortium with other stakeholders to fund and drive the project. It is expected that 100megawatts of energy, with wind speeds of 8.2m per second would be generated. The wind energy could be sold directly to ESKOM or alternatively be fed into the grid of the City.

4.7 HERITAGE AND CULTURAL RESOURCES

The oldest urban node in the Blaauwberg District is Mamre. The historical village dates back to 1808 when the Groenkloof outpost was made available to the Moravian Church for the establishment of a mission station. Mamre was established on the VOC outpost of Groenekloof (also known as *de Kleine post*). At the time of the establishment of the mission station, the land incorporated two additional farms: *Louwskloof* (which was referred to as a Khoekhoe 'reserve'[1]) and *Cruywagenskraal*. After the emancipation of slavery in 1830, the Moravian mission station became a refuge for newly freed slaves. The name Mamre dates to 1854[2]. Pella-Katzenberg is an offshoot from the Mamre mission station

Mamre together with Pella-Katzenberg, forms a cultural landscape within the Blaauwberg District with unique characteristics. Originally eighteen plots were laid out along the Mooimaak River and the fertile land adjacent to the river was used for farming purposes. The original cottages were laid out in a row along the less fertile slopes. The cottages were constructed using locally available materials (thatch, clay brick and lime) and conform to the Cape vernacular, albeit on a more modest scale. It was only in 1858 that the land was transferred to the Moravian Church. Based on the Moravian village model of a generous commonage bisected by the Louws River (Mamre) and Swart River (Pella-Katzenberg), with abutting garden plots, these villages provide a model for sustainability that have withstood the test of time and technology.

[2] Kruger, B. 1966. The pear tree blossoms: a history of the Moravian mission stations in SA 1737-1869.

With the exception of the historic church werf, the individual buildings have been much altered and original early 19th century cottages are rare. The town retains the character and sense of place that is unique in its own right as it is the 2nd oldest Moravian mission station in South Africa and forms part of a network of Moravian mission stations including Genadendal, Elim and Pella-Katzenberg.

There are currently no existing Heritage Protection Overlay Zone (HPOZ) in the Blaauwberg District. Mamre's historical core and associated cultural landscape has been identified as an area for investigation for protection as a place of high cultural interest. However, the table below provides the details of 2 sites that enjoys formal protection as provincial heritage sites under the national heritage legislation.

Table 5: Provincial Heritage Sites in and around Mamre

Provincial Heritage site	Address	Description
Mamre Historical werf and graveyard	Off Frans Street, Mamre	Originated as an 18th century VOC outpost known as Groenkloof. Was transferred to the Moravian Missionary society in 1808. It is the oldest Moravian Mission in the Cape Town Metro and the second oldest Moravian Mission station in in the Western Cape/South African. The historical farm dwellings were converted by the missionaries to accommodate homes for the missionaries themselves as well as school buildings and a church.
Mamre Watermill	Off Frans Street, Mamre	The watermill dates from c1840

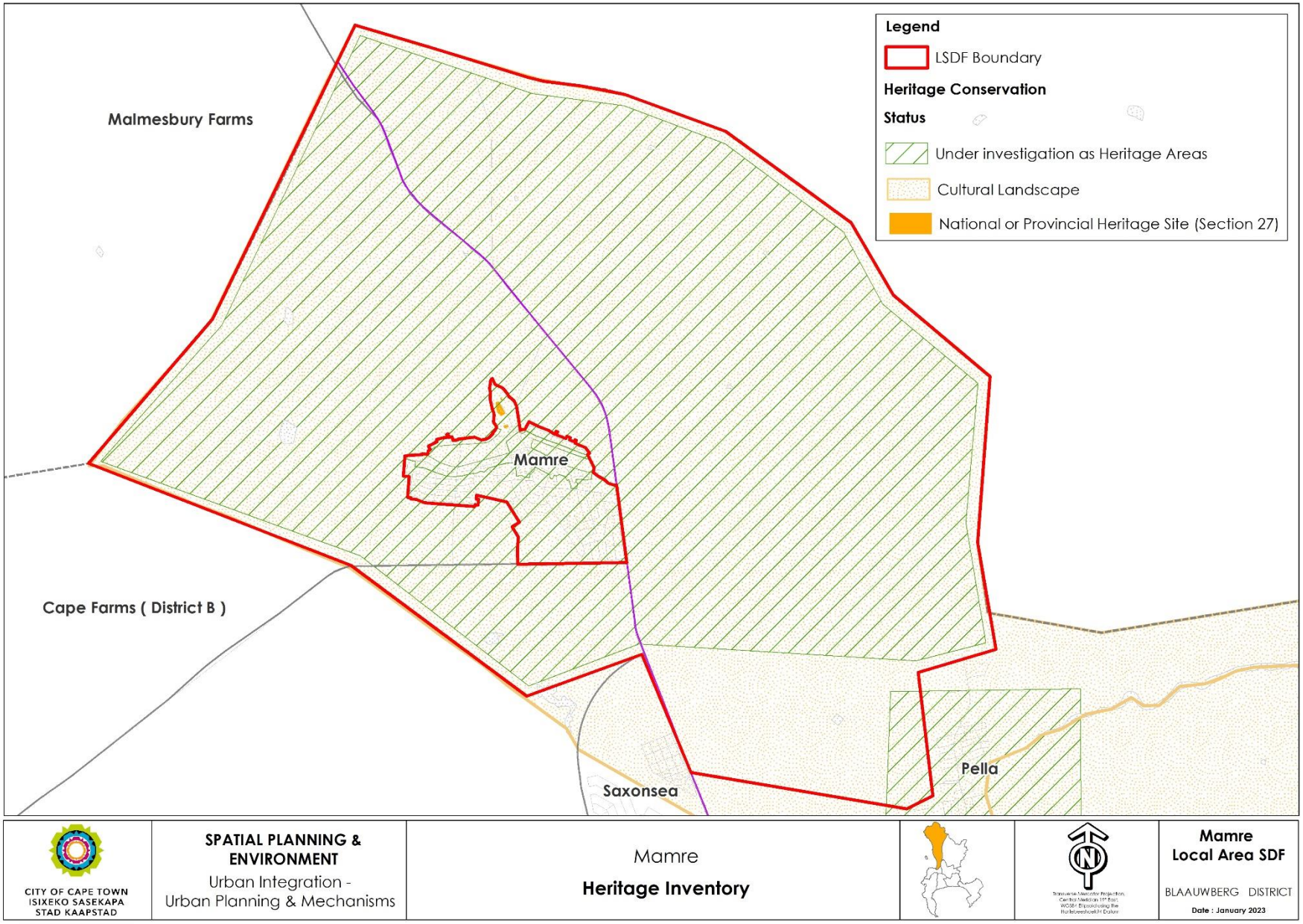

Figure 10: Heritage Inventory of Mamre and Surrounds

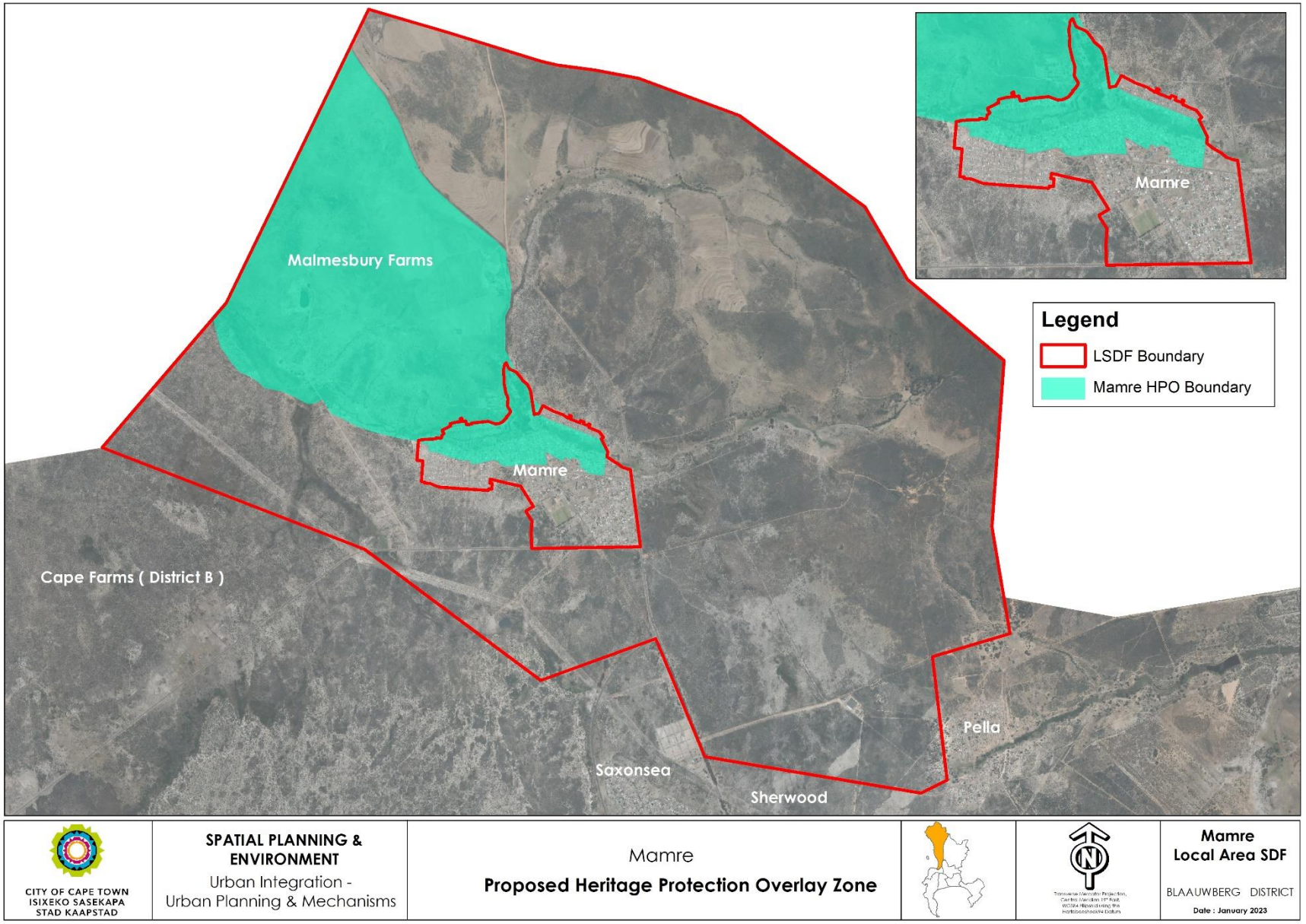

Figure 11: Proposed HPOZ for Mamre

4.8 TOURISM POTENTIAL

Both Mamre and Pella are historic Moravian mission stations. Mamre is one of the oldest missionary towns in the Cape Town region and boasts of a well preserved historic precinct. Mamre falls within the Atlantis-Mamre-Pella natural and heritage landscapes.

Tourism Plans

- Responsible Tourism Policy and Action Plan (2009)
- Guest Accommodation Policy (2010)
- Mamre Tourism Development Strategy (2012)
- Cultural Heritage Tourism Strategy and Action Plan for Cape Town (2013)
- Tourism Development Framework for Cape Town, 2004 and 2014 – identified the Mamre as a historic/cultural tourism destination.
- Blaauwberg District Projects Prioritisation Plan – Atlantis/Mamre and Pella, 2014, by the City of Cape Town
- Mamre Moravian Church Business Plan, 2015
- Draft Local area tourism development plans North (2018)
- Tourism Development Framework for Cape Town (TDF) (2019).

Tourism Statistics

Mamre is marketed as part of the West Coast Way route (culture/heritage route) which cross the Cape Town boundaries and the West Coast District boundary to include Mamre and Pella. Tourism know no boundaries and it makes sense to be marketed as part of a number of routes. Therefore, Mamre potentially has strong links to the West Coast due to the cultural landscape and also to Blaauwberg/City due to proximity to iconic attractions (e.g. BCA, Atlantis Dunes, etc.).

Mamre mostly receives day visitors as there are no overnight accommodation.

Although there are no statistics gathered in Mamre there is evidence of fast growth within the Cape West Coast tourism sector. The graph below illustrates visitor numbers into the region from 1 July 2009 to 30th June 2013 showing a substantial increase in visits to Cape West Coast icons and attractions and accommodation establishments in the past two years. About 80% of tourists are domestic. The main source countries of international tourists are: Germany, the United Kingdom and the Netherlands. The Cape West Coast has been identified as a provincial tourism expansion area.

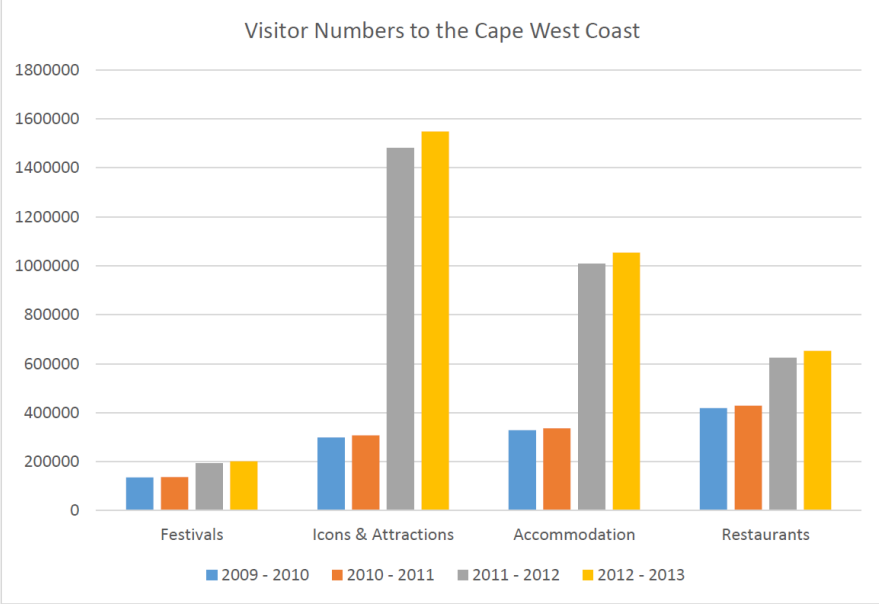

Figure 12: Visitor Numbers for the Cape West Coast area

Attractions

- Mamre Donkey trail
- The Great tree of Mamre

- The Moravian Mission Station (Fifth oldest church building in South Africa. The building was completed in 1818).
- The Water Mill
- Mamre Nature Garden
- Mamre Tourist information Centre
- Hartbeeshuisies (reed houses)
- Flower Festival
- Tori Oso Geselshuis Coffee shop

Needs and issues

- Explore the possibility of developing a West Coast Khoi Museum to narrate the rich culture and heritage of the Khoi. – link to Information centre
- Local experiences e.g. local food/produce, tractor rides, horse drawn carriages and hiking trails, e-bikes, cycling routes between the towns, etc.
- Eco-villages, arts and crafts centres to become the hot house and showcase the area's rich culture with an amphitheatre, musical events, concerts, festivals, arts and crafts exhibition and sales, coffee shop
- Zoning/land use: Support for the establishment of Bed & Breakfast (B&B's) and Backpackers facilities to counter the tendency of visitors to only visit and leave afterwards.
- Land identified for new small-scale farming activity is the Mamre commonage land and some portions of Laaste Stuiwer. Opportunities for tourism.

The Mamre Werf development has been identified as a project that is consistent with the aims of the WCBCI (West Coast Biodiversity Corridor Initiative) and one that would position the Mamre community to directly benefit from the planned growth in the tourism industry within the region. West Coast Way in conjunction with the Moravian Church has launched a walking tour through the village called the Heritage Walk. The places of note along this tour can be seen in the figure below.

- It is important that the development be supported by the correct zoning and land use - to make provision for the various activities: restaurant, accommodation, shops and so forth.
- Cemetery Hill – footpath and picnic area to be allowed in put in place.
- Link the Werf with Mamre and Mamre Garden.

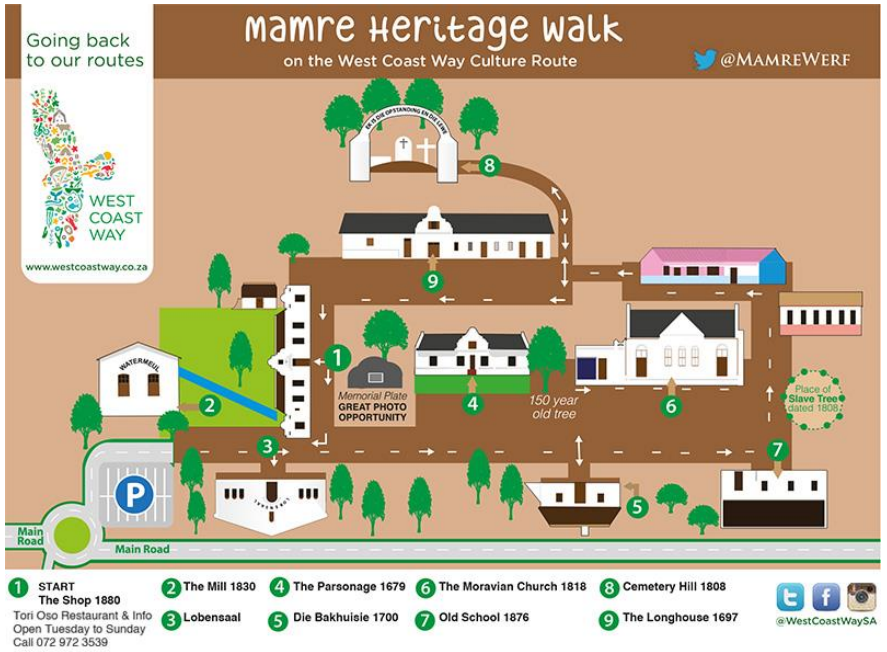

Figure 13: Heritage walk route

Pella

It is important to note that Pella is not part of the study area, but the tourism attractions in and around Pella could influence the tourism of Mamre due to its close proximity in terms of location. However, not much work has been done on Pella from a tourism point of view but there are potential to grow niche tourism. More work is needed to identify how to develop a tourism precinct around the missionary and link it to the other activities.

Attractions are:

- Pella Moravian Mission Station
- The mission station at Pella is situated on land that was known as Kop van Groenrivier in the 19th century. In the 1840's, the farm was bought by the Moravian Church and this settlement was established as a satellite to the Mamre mission station.
- The postal agency at Pella is called Katzenberg. The first reference in official records to a postal agency at Katzenberg is in 1876. The current postal agency opened in 1903 and is housed in an interesting little building close to the Moravian pastor's house.
- Manresa (Pella)
- Pella horseback trails

Atlantis

Melkpost, Hartebees Kraal and Witzand in Atlantis

Again, it is important to note that Atlantis is not part of the study area, but the tourism attractions in and around Atlantis could influence the tourism of Mamre due to its close proximity in terms of location.

The present-day industrial area of Atlantis was developed on the farm Melkpost and the township on the farms Hartebeest Kraal and Witzand. Both were Gouvernments Plaatsen in 1819.

Signal canon, Kanonkop

In the 18th century, a system of signal cannons was used by the Dutch East India Company to communicate with people on farms and outposts beyond easy reach of the Castle. The six pounder canon is still in its original position near the peak of the hill on Klein Paardeberg, 5km east of Atlantis.

Attractions are:

- Signal canon, Kanonkop;
- Atlantis dunes;
- Atlantis Township and industrial area; and
- Atlantis Adventure Tourism

5 BUILT ENVIRONMENT

5.1 ZONING AND LAND USE

5.1.1 Zoning

The majority of erven is zoned Single Residential 1 (SR1) (see figure 14 below). Other prominent zonings found in Mamre include Agriculture (AG); Community Zone 1: Local (CO1) which includes the sports fields and primary school; General Business 1 (GB1) which are mostly clustered along Main Road; Local Business 2 (LB2); Open Space 2 (OS2); and Utility Zone (UT).

The following section provides a brief overview of the land uses found within the area.

5.1.2 Land Use

5.1.2.1 Residential

The dominant residential type in the Mamre area comprise of single dwelling units. The housing stock is generally formal in nature with sizes varying. The residential character of the area is very differentiated as there are still vernacular architectural style buildings, characterized with old white lime washed walls and thatched roofs which are most likely of heritage value. The south-western portion of the town has been developed with RDP (now referred to as BNG) houses which was constructed during 2001 – 2002.

The 2022 Blaauwberg District Plan have identified three areas for urban infill which could have a potential yield of 1500 dwelling units based on a medium density development. It should be noted that these sites have been identified for infill even in the 2012 DSP but have to date not been developed. . However, given the need for residential development highlighted by the community, these sites have been retained for residential growth in the current District Plan.

5.1.2.2 Business

There are mainly small retail land uses within the area of Mamre. The majority of business premises which include land uses such as retail shops, ATM's, butchery, food outlets, etc. are located in the town centre. A few individual properties located along Main Road also has a business zoning. There are 2 business properties located within the BNG housing section but these are still vacant. Except for the rezoning of 1 property for a service station and a building plan submission for alterations to the night club, there has been no submissions for new business premises between 2016 - 2020.

5.1.2.3 Industrial

An area on the southern boundary of Mamre has been earmarked for industrial use. However, there has been almost no take up of these properties with the exception of the municipal depot and the small scale tunnel farming projects which was initiated through the Comprehensive Rural Development Programme (CRDP) on three of these properties adjacent to the sport field. There is also a small scale brickwork in the area.

5.1.2.4 Health

There is a day clinic in Mamre which caters for the community's health related needs during the day. The statistics from the Department of Health indicated that approximately 52 000 patients visit the CDC annually. The size of this facility is not sufficient for the capacity requirements and the Department of Health has identified the need to do further investigation on the site next to the clinic as an option for a

replacement facility in the long term. A land parcel with estimated size of 5000m^2 is required.

5.1.2.5 Education

There is currently a crèche with a playground and a jungle gym which is fully functional and in good condition. There is one primary school in Mamre which serves the broader needs of the community.

5.1.2.6 Public Facilities

A recent study commissioned by the Community and Health services department included a modelling exercise that identified civic clusters/nodes indicating both areas of need in order of priority(ranking) at district level and at metro wide scale. This included the type of facilities required in order to meet the needs of the population in 2020 and 2040 taking into account sector specific assumptions, guidelines and standards for facility provision.

Based on the data Mamre was ranked as a Level 5 civic node and indicated to be well served in terms of types of public facilities in relation to the catchment area and services available in the broader context. The ranking in term of need was 100/135.

The study area has the following community facilities available: a library, sport facilities, municipal office, youth centre and a cemetery. The city has identified the need for the upgrade/expansion of the library in the long term.

Cemetery:
The existing cemetery has reached its capacity and is reserved for the members of Moravian Church. The need for the new cemetery in Mamre was identified by the community some years ago.

Sport Facilities / Recreational Facilities:
There is one sports facility available for the whole community. The facility includes a rugby field; a netball court; a cricket practice pitch and changing rooms. The sports facilities are generally poorly maintained and degraded, and underutilised. The city has identified the need for upgrade of the sport complex in the short term. There are also recreational facilities such as playgrounds and parks.

Places of worship:
There are more than four churches within the area of Mamre and the major one is the Moravian church which has a hall; chapels; residential dwellings; a pre-primary school and a cemetery. The Moravian church is the fifth oldest church in South Africa. This one was built in 1818 and was declared a national monument in 1963. The main group of the buildings are still owned, administered and used by the Moravian church.

5.1.2.7 Agriculture

There is a large tract of land around the township namely the commonage. This is agricultural land that has been transferred to the community through the land reform process. The following agricultural activities are found in Mamre area:

Allotment Gardens:
This occurs along the banks of the Modder River in the middle of Mamre Town and takes the form of mainly subsistence farming for food production. These plots were subdivided from the Commonage when the town was established and allocated to individual houses situated along the river.

Vegetable and Pig Farming:
This also occurs along the banks of the Modder River and its tributaries to the northeast and east of the Town. There is a number of small scale farmers involved in subsistence vegetable gardening in these areas, while pig farming is mainly concentrated to the east of Dassenberg Road.

Grazing:
The outlying areas of the commonage are predominantly used by individuals for livestock grazing (cattle and also horses) however much of the land is fallow.

5.1.2.8 Mining

The quarry to the west of the town was previously mined for building sand and stone, but is now regarded as uneconomical and used for stockpiling only. The potential of utilising the quarry as a water reservoir or source of abstraction for ground water to support agricultural activities was investigated as part of the 2003 agricultural study. The water quality in the quarry was, however, found to be unsuitable for agricultural purposes, while the high degree of fracturing of the bedrock due to earlier blasting operations, caused doubt over its water retention and storage properties.

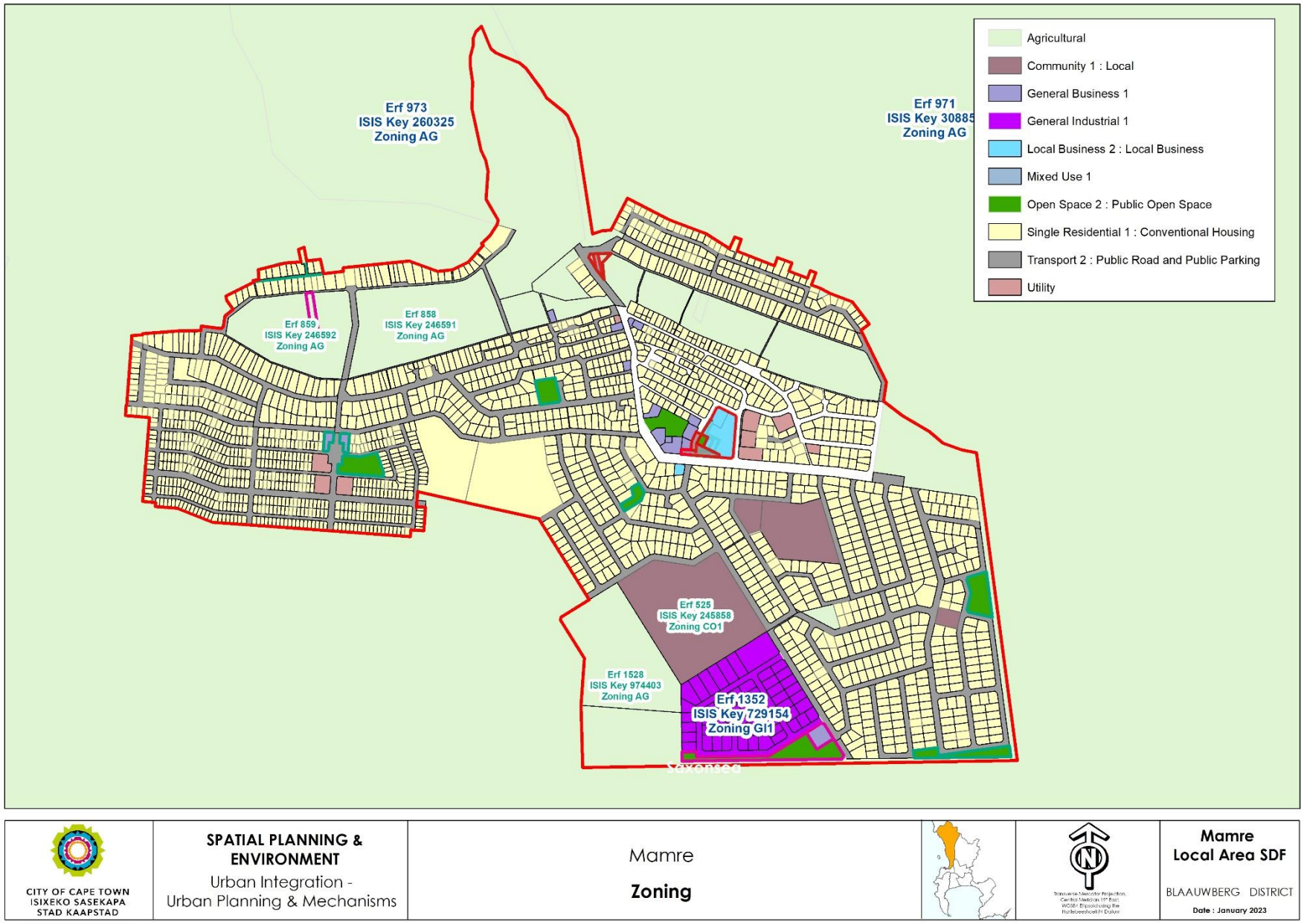

Figure 14: Zoning Map of Mamre

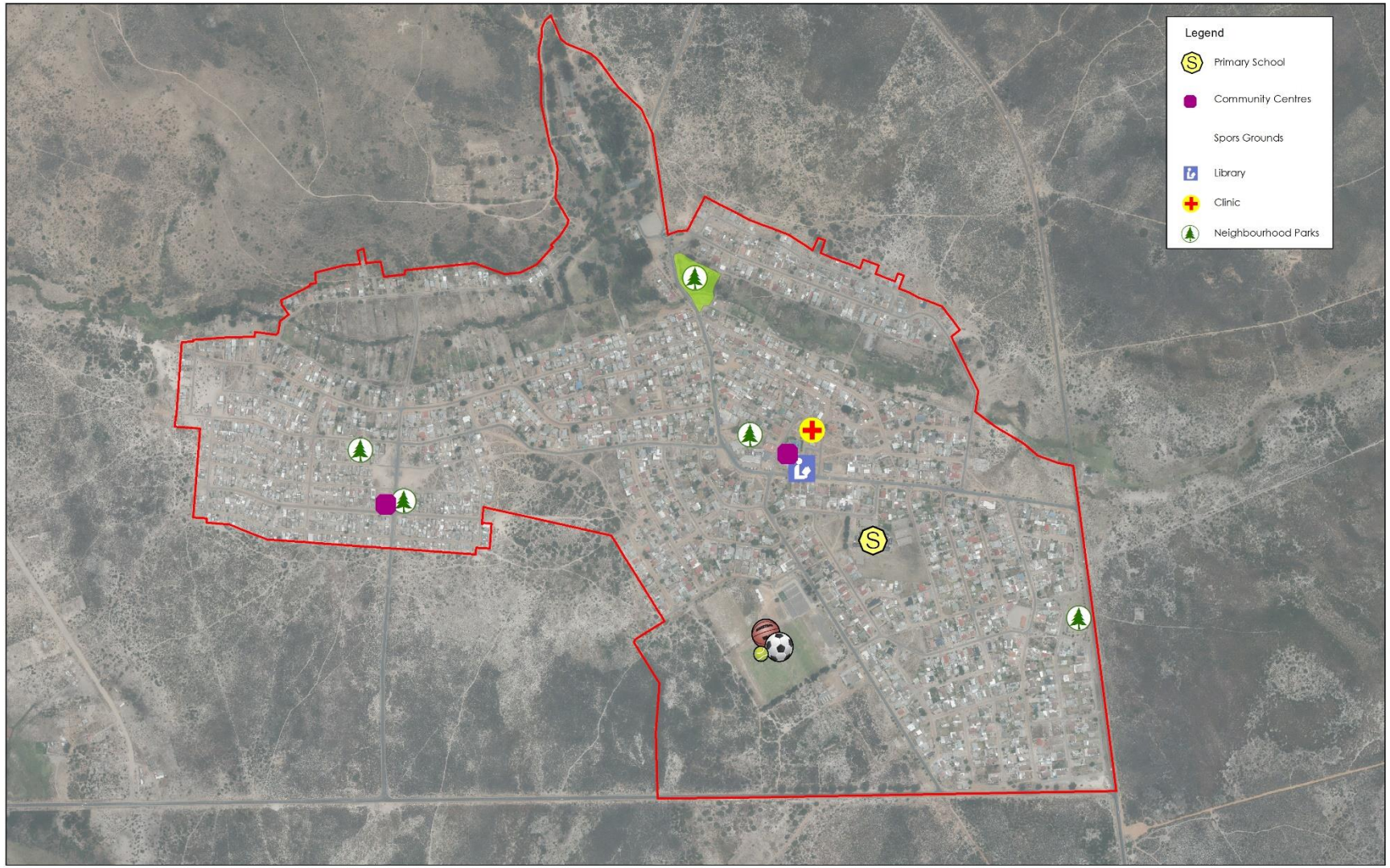

Figure 15: Public Facilities in Mamre

5.2 INFRASTRUCTURE

5.2.1 Water

The Mamre area have adequate or spare capacity in terms of water provision.

A single supply serves Mamre and there is a need to augment supply from Pella to Mamre.

During the drought there was an effort made to expand the well feels of Atlantis which made the area self-sufficient in terms of ground water- Enabling production of 15-20Ml/d. so no need to draw from the city bulk water system. There is a plan to expand the extraction capacity over the next 5 years for an additional 20ML/d that could be injected into the city system. Extraction rate testing is also ongoing. The well system also makes use of treated effluent from the Atlantis WWTW to recharge the aquifer.

The ground water extraction infrastructure is ageing so the maintenance programme is critical and expensive.

5.2.2 Sanitation and Waste Water

The Mamre area has a severe lack of capacity in terms of sanitation.

The Wesfleur domestic WwTW is at its ADWF capacity, however it is operating well below its design organic load. Flow from the Wesfleur Domestic WwTW can be diverted to the Wesfleur industrial WwTW, which currently has significant spare treatment capacity.

A project is currently underway to upgrade and replace the aeration system (blowers and diffusers) at the WwTW, which will increase its organic load capacity and ensure continued treated effluent compliance.

A capacity expansion for the domestic WwTW has been included in the medium term.

5.2.3 Electricity

In terms of electricity supply information available, it was established that the area has adequate or space capacity.

5.2.4 Transport

Mamre and the surrounds is well serviced with public transport, mainly due to the MyCiti bus service operating in both Mamre and Atlantis. The MyCiti bus service runs along Main Road, Frans Street, Goedverwacht Street, Crown Lane, Paradise Lane and Enon Road and connects to Atlantis via Dassenberg Road. There are approximately 12 bus stops spread out throughout the town.

The MyCiti bus service allows the residents of Mamre to access all other parts of the City of Cape Town at an affordable rate. Additional to the MyCiti bus service, is the GABS (Golden Arrow Bus Services) and Mini-Bus Taxi Services (see Figure 16).

GABS covers an extensive route in and Mamre and Atlantis, while also offering services further to the north of Mamre, which the MyCiti bus services does not offer. Minibus taxis also travel through Mamre, although they drive via Dassenberg Road and the Main Road only.

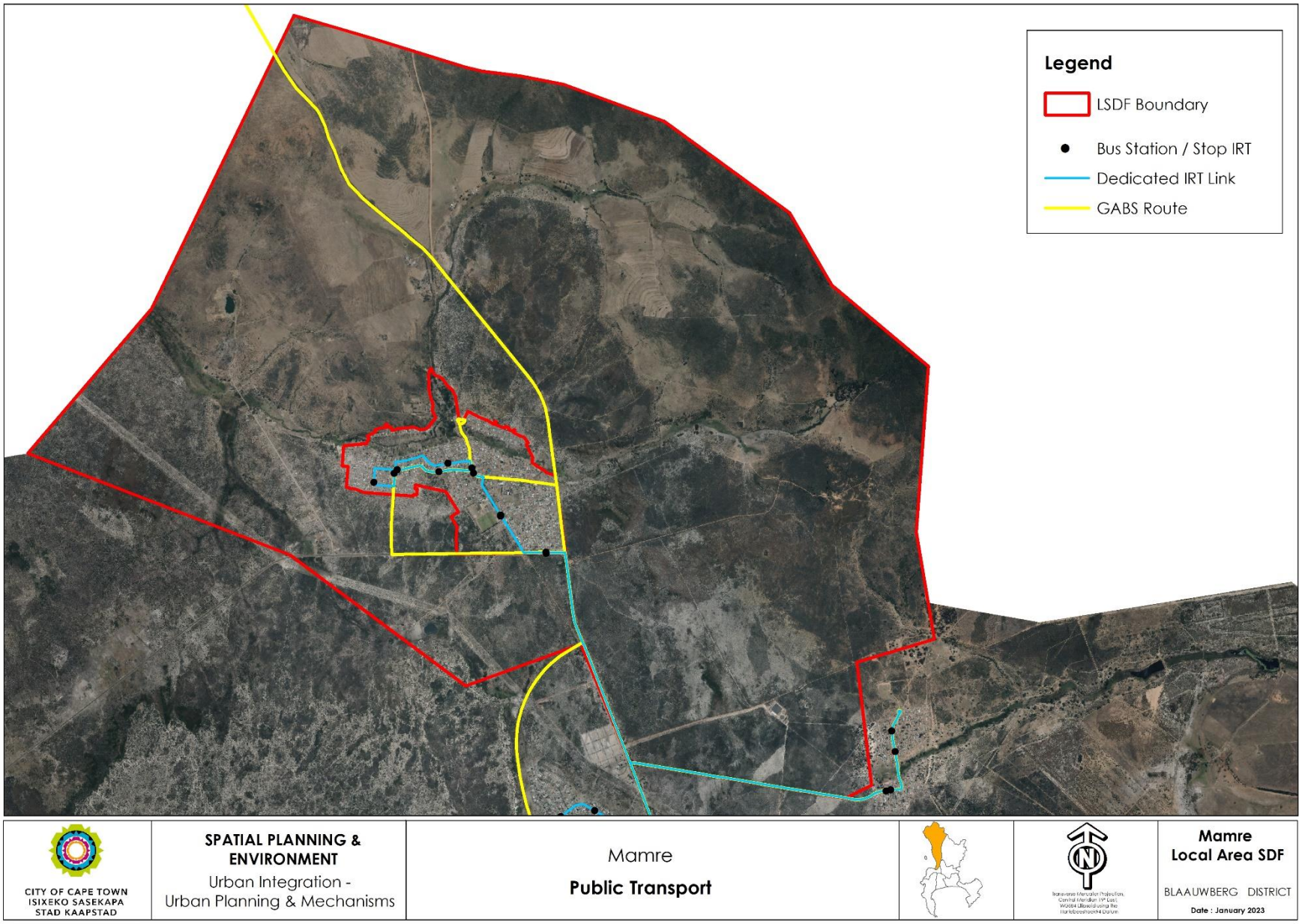

Figure 16: Public transport routes

5.3.1 Formal Economy

The formal economic activity in Mamre is primarily focused on local grocery stores, a butchery, a nightclub and farming practices in and around Mamre. These activities are located mainly along Main Road and Bishop Mark Street, but is clustered together in a node surrounded by a variety of public and municipal buildings.

5.3.2 Informal Economy

Due to the nature of the economic activities in Mamre, many of the economic opportunities are informal. Informal economic opportunities include tuck shops, car repair shops, informal trading and small scale agricultural practices for private consumption.

These informal opportunities are scattered around Mamre and are not located in a certain node or area. The success of these informal entities rely heavily on pedestrian movement and as such are located in areas where pedestrian movement is active during all times of the day. These entities are mostly operated from a single residential unit where a part of the residential unit has been converted for the purposes of trading.

6 CONCLUSION

Mamre is a small town with a stagnant population growth. The study area is filled with valuable natural, heritage and agricultural resources, which is currently sustaining this small population and holds potential to be the building blocks for future growth.

Accessibility in and around Mamre is good due to the various modes of well-functioning public transport connecting Mamre to the surrounding areas and economic opportunities. Economic opportunities within Mamre itself is limited, due to the small population of Mamre; however, there is potential to provide relevant infrastructure in the correct locations, which could provide economic opportunities to the people of Mamre.

The lack of economic opportunities in Mamre "forces" the local community to make use of agricultural practices as a way of livelihood and income. It is therefore imperative that the agricultural resources in the study area be maintained and protected, together with the other natural and heritage resources, which in turn attract tourism to the area. Tourism should be promoted in the area, with the potential for future tourism, heritage and cultural events being explored.

In terms of public facilities Mamre is well served with the type of facilities required to serve a community of this size. These include a library, a clinic and churches. However, there is no fully functioning police station or high school in Mamre. Sport facilities and well maintained open spaces fulfils in the needs of the community of good quality recreational opportunities.

In conclusion it can be said that the small town of Mamre has potential for future growth; however, public sector interventions are required in the area. The following volumes of this framework will unpack proposals for future development opportunities and guidelines towards implementation with the findings and analyses of this volume as key informants.