



agriculture, land reform
& rural development

Department:
Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA



KAI !GARIB
MUNICIPALITY



Review and Development of the **Municipal** **Spatial Development Framework** for

KAI !GARIB LOCAL MUNICIPALITY

February 2023

Phase 1: Project Inception

Phase 2: Status Quo Analysis, Policy Context and Spatial Vision

Phase 3: Spatial & Sectoral Analysis and Stakeholder Consultation

Phase 4: Spatial Proposals

Phase 5: Implementation Framework and CEF

Phase 6: Final Comprehensive SDF, Close-Out Report & Retention

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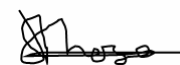
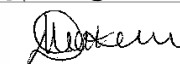
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SECTION A: INTRODUCTION

A1. INTRODUCTION

The Department of Agriculture, Land Reform and Rural Development (DALRRD) has appointed Tshani Consulting CC to review the Spatial Development Framework for the Kai !Garib Local Municipality

This document serves as the **Phase 4: Spatial Proposals**; Report prepared by **TSHANI CONSULTING CC**.

B2. BACKGROUND AND OBJECTIVES

The specific intention is to review and prepare a Spatial Development Frameworks for the Kai Garib Local Municipality, in terms of Section 12 (1) of the Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013) (SPLUMA).

The SDF is intended to guide the orderly and desirable spatial development of the district municipality by inter alia developing development strategies/guidelines. The SDF should provide direction to guide decision-making on an ongoing basis, aiming at the creation of integrated, sustainable, and habitable regions, cities and towns.

A3. PROJECT PHASING

The following table highlights the project phases.

Table 1: Project Phasing

PHASE 1:	Project Inception
PHASE 2:	Status Quo Analysis, Policy Context and Spatial Vision
PHASE 3:	Spatial and Sectoral Analysis and Stakeholder Consultation
PHASE 4:	Spatial Proposals
PHASE 5:	Implementation Framework and CEF
PHASE 6:	Final Comprehensive Draft SDF, Close-Out and Retention

SECTION B: SPATIAL DEVELOPMENT FRAMEWORK

The Spatial Development Framework of a town/city should direct and arrange the development activities and the built form in such a way that it can accommodate ideas and desires of people without compromising the natural environment and the way services are rendered. Therefore, the Spatial Development Framework should provide general direction to guide decision-making and action over a multi-year period aiming at the creation of integrated and habitable cities, towns, and rural areas.

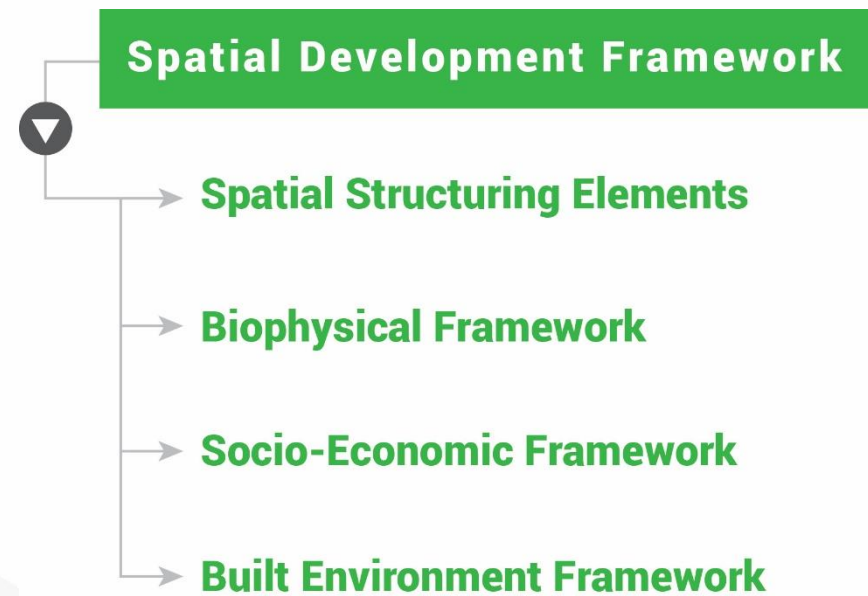
This phase stems from the Strategic Framework and Concept Plan and it aims to build on the concept plan and to identify Spatial proposals to facilitate growth. The proposals align to NSDF, PSDF, KRSDF, RDSP and ZFM SDF etc.

To enhance the objectives of efficiency, sustainability, accessibility, integration, equality and good governance, the following strategies must be used in developing policies and processes:

- Adopting a growth management approach
- Understanding the city's development context
- Utilising a city-wide approach to development
- Implement area-based development initiatives and interventions.

- Identify marketable opportunities.
- Providing development guidelines

The structure of the Spatial Development Framework will include the Spatial Structuring Elements and they will be aligned to the 3 SPLUMA Pillars and the Spatial Planning Categories.



The NC PSDF 2020 recognises that the SPCs are not a blueprint for land-use classification, or a zoning scheme. The SPCs provide a framework to guide decision-making regarding land-use at all levels of planning, and they have been articulated in a spirit of creating and fostering an organised process that enables people to work together to achieve sustainable development in a coherent manner. The designation of SPCs does not change existing zoning or land-use regulations or legislation. SPCs merely help to clarify and

facilitate coherent decision-making that can lead to better zoning, laws and regulations. The SPCs, furthermore, provide a framework in terms of which land-use decisions can be standardised throughout the province. It is advisable that all zoning scheme regulations be aligned with the SPCs.

The diagram below depicts the alignment of the SPLUMA Pillars to the Spatial Planning Categories.

	 BIOPHYSICAL	 SOCIO ECONOMIC	 BUILT ENVIRONMENT
SPLUMA Pillars	Agriculture Land Transformation Climate Change Geology & Topography Biodiversity & Ecosystems Landscapes And Sense Of Place	Regional Space Economy Demographics & Social Conditions Cultural Heritage & Tourism EmploymentLocal Economy & Business Key Economic Sectors Rural Development	Settlement Patterns Settlement Role, Hierarchy & Function Spatial Structure & Form Built Heritage Land Use & Activity Patterns Infrastructure Transport & Movement Networks Housing
Spatial Planning Categories	A Core B Buffer C Agricultural Areas A.a Statutory Protected Areas B.a Non-Statutory Conservation Areas B.b Ecological Corridors B.c Urban Green Areas C.a Extensive Agricultural Areas C.b Intensive Agricultural Areas	D Urban Related D.f Institutional Areas D.g Authority Areas D.i Business Areas D.j Service Related Business D.k Special Business D.l SMME Incubation D.m Mixed Use Development Areas D.q Resorts & Tourism Related Areas	D Urban Related D.a Main Towns D.b Local Towns D.c Rural Settlements D.d Tribal Authority Settlements D.e Communal Settlements D.h Residential Areas D.n Cemeteries D.o Sports Fields & Infrastructure D.p Airport & Infrastructure D.r Farmsteads & Outbuildings E INDUSTRIAL AREAS E.a Agricultural Industry E.b Industrial Development Zone E.c Light Industry E.d Heavy Industry E.e Extractive Industry F SURFACE INDUSTRIAL BUILDINGS F.a National Roads F.b Main Roads F.c Minor Roads F.d Public Streets F.e Heavy Vehicle Overnight Facilities F.f Railway Lines F.g Power Lines F.h Telecommunication Infrastructure F.i Renewable Energy Structures F.j Dams & Reservoirs F.k Canals F.l Sewerage Plants & Refuse Areas F.m Mixed Use Development Areas

B1. SPATIAL STRUCTURING ELEMENTS

To plan efficiently, there needs to be a focus on investing resources in areas of opportunity to create maximum impact. There needs to be certain structuring elements to give guidance to develop and spatial planning. For the Kai !Garib Local Municipal Spatial Development Framework, there are Spatial Structuring Elements that can guide spatial development and decision-making in the municipality. These are broken down in the section below.

The spatial framework is developed through an interconnected set of nodes, networks, and surfaces. The crux of development in this system is the movement of people, goods and services that produces the basic impetus for developing functional relationships between otherwise independent and unrelated elements. The movement of people, goods, and services are channelled along specific routes that describe a network of interaction. Where networks intersect the opportunity for people, goods and services develop to interact and this gives rise to activity nodes. The intensity of interaction gives rise to the development of a hierarchy of nodes of different sizes depending on the level of interaction taking place in a node. This one-dimensional system of networks and nodes are tied together through surfaces that fill the areas between the nodes and networks.

B1.1 Nodes

Nodes' is term usually ascribed to cities, towns, and villages. This tends to work against the need to achieve rural development through integration of urban and rural areas. It is accordingly proposed the term node is to be less prominent and less significant in future SDFs with the emphasis rather being placed on identifying "human settlement" where integrated programmes can be shared. Such settlement/s can be both rural and urban in nature and could serve to bridge diversity between these communities.

Nodes are generally described as areas of mixed-use development, usually having a higher intensity of activities involving retail, transportation, office, industry, and residential land uses. These are the places where most interaction takes place between people and organisations, enabling most efficient transactions and exchange of goods and services. Nodes are usually located at interchanges to provide maximum access and usually act as catalysts for new growth and development.

From an efficiency and functionality perspective, the clustering of community, social and business facilities in nodes around points of highest accessibility is of vital importance, i.e. -

By clustering facilities, a high-quality node can be created that can serve as the heart of communities and promote social interaction.

- Multiple neighbourhoods can be served by social services in central points.

- The sharing of facilities between various services (e.g., buildings, logistics, parking etc.) can take place.
- Central clusters ensure enhanced accessibility and convenience for residents.
- It is proposed that the following general principles apply to the development and management of nodes:
- To support the effective development of the node in the municipality, the development of urban non-residential land uses, such as business, retail, community facilities, and social services should be restricted to nodal areas.
 - Nodes should typically be located at the main access points in urban areas, typically at the intersection of a major mobility route and the major collector route.
 - These nodes should show a large degree of public investment in infrastructure, public domain, and social services.
 - Nodes must be characterised by mixed-use, high intensity activity and higher density residential development (maximum FAR's, coverage and height should not be restricted).
 - The way parking in the nodal areas is treated is of importance. Large parking lots adjacent to streets should not be promoted. Buildings should be placed as close to street boundaries as possible to facilitate pedestrian movement and to define and shape the public space.

- Extroverted as opposed to introverted development patterns and typologies must be promoted.
- Site layouts and building designs of individual developments must take cognisance of and support public transport and pedestrian movement.

The Kai !Garib SDF has taken guidance from the National Spatial Development Framework, 2022 and the Northern Cape Provincial Spatial Development Framework 2020 to define and categorise the nodal areas for the municipality.

The following Settlement Classification has been defined by the NSDF to nodes in the country. The same distinction has been used for the Kai !Garib LM SDF to ensure alignment from the National, and Provincial plan through to the district plan.

National Network of Rural Service Centres

- Rural development must be supported through a network of prioritised service centres where people in rural areas and settlements can be optimally provided with municipal and social services, and where rural logistics and support can be provided to support rural development.
- Specific support must be provided to (1) towns that act as border towns and trade posts, and (2) growing towns in border regions.

- In arid areas and areas experiencing a decline in population, settlements must be consolidated, and maintenance prioritised in such core towns.
- In dense rural settlement regions, consolidation within nodal centres and rural design is required.

Other Smaller Towns and Settlements in South Africa

- Consolidate and provide basic services to the local population in a network of small towns and settlements.
- Urban consolidation and basic service delivery in growing regions must keep pace with population growth and economic development.
- In densely populated and growing rural regions, (1) settlement must be consolidated in nodes, and (2) spatial planning and rural design done to ensure managed and quality future settlement development.

- In areas that are ecologically sensitive and that experience harsh climatic conditions, and are set to experience even harsher such conditions, existing settlement expansion and new settlement formation/ development must be discouraged.
- In arid areas and areas experiencing a decline in population, settlements must be consolidated, and maintenance prioritised in core towns.
- Mining development must be decoupled from settlement development, and existing settlement expansion or formation/development of new settlements in the case of new mining developments be carefully considered and decisions based on a full life-cycle analysis of the mining activities and the life of the settlement/s after mine-closure.

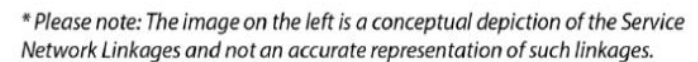
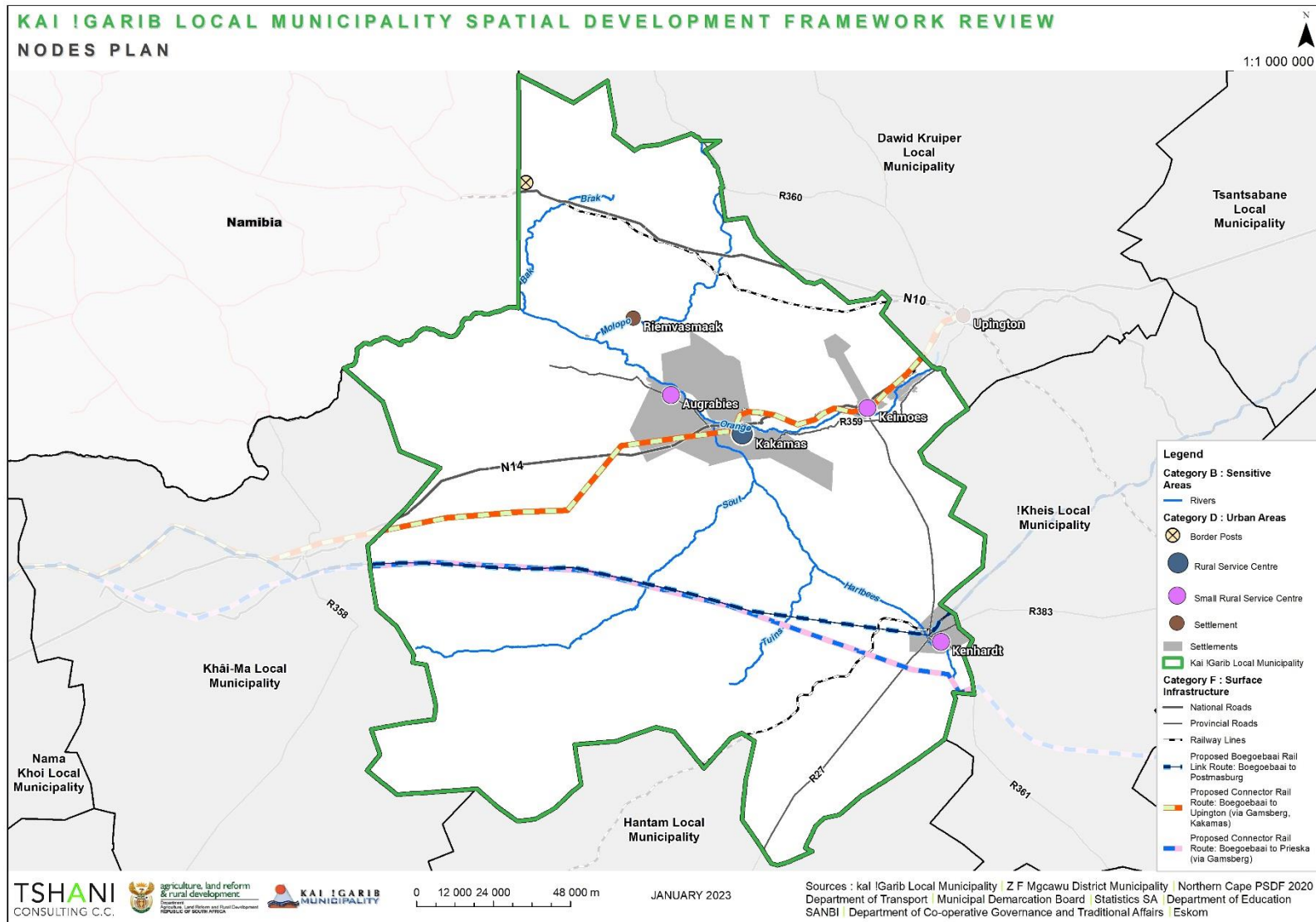


Table 2: Nodal Classification

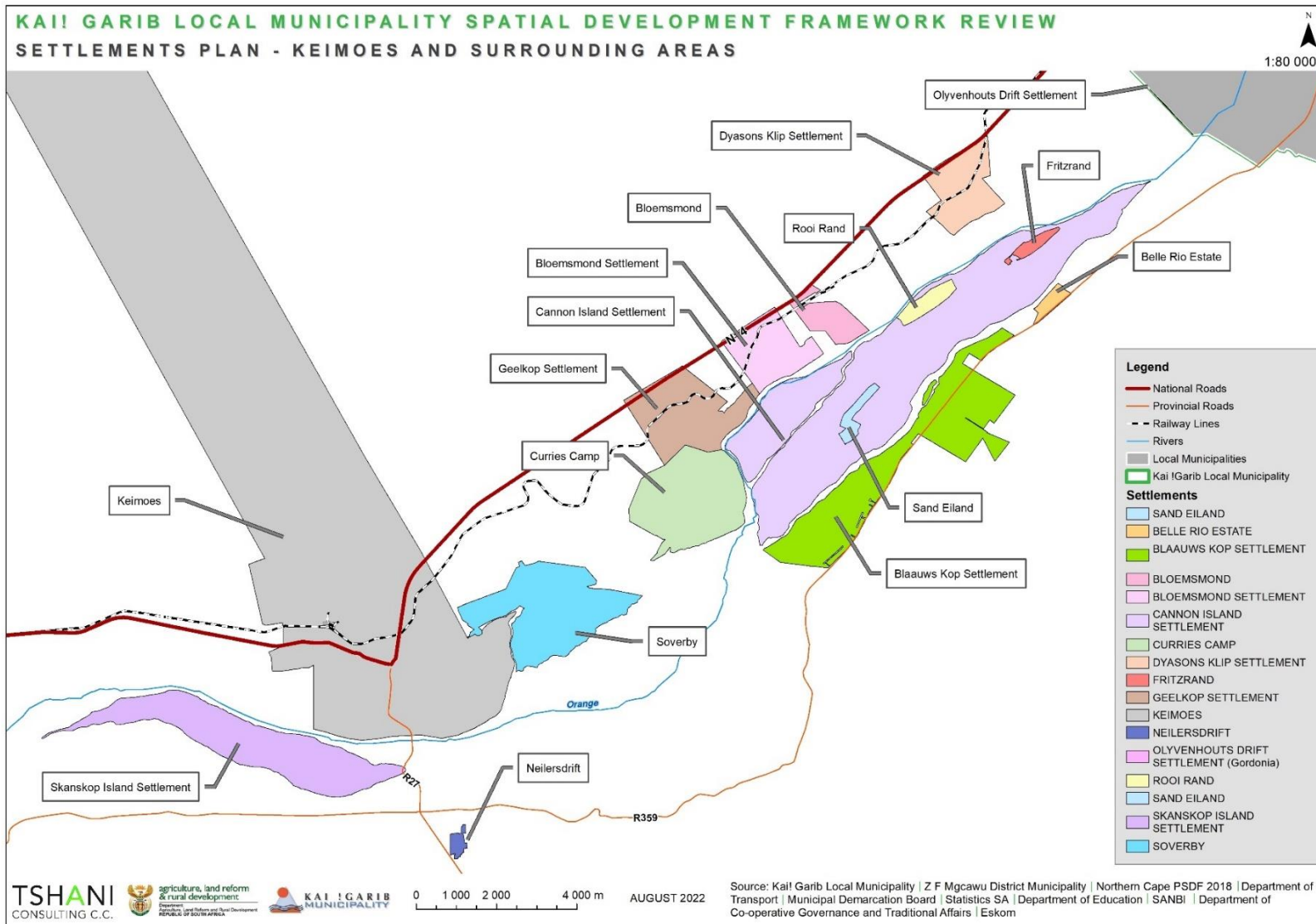
Nodal Classification							
Town Name	Population	NSDF(2022)	PSDF(2020)	DSDF(2012)	SDF(2012)	SPC Categories	SDF 2023/28
Alheit	638			Settlement Areas	Secondary Town	Agriculture	Settlement
Augrabies	3627		Rural settlement	Settlement Areas	Primary Town	Agriculture	Small Rural Service Centre
Bloemsmond	315			Settlement Areas	Secondary Town	Agriculture	Settlement
Cillie	1969		Rural settlement	Settlement Areas	Secondary Towns	Agriculture	Settlement
Kakamas	9539	Rural Service Centre	Small Rural Service Centre	Settlement Areas	Primary Town	Local Towns	Rural Service Centre
Kanoneiland	2251		Rural settlement	Settlement Areas	Secondary Town	Agriculture	Settlement
Keimoes	9501	Rural Service Centre	Small Rural Service Centre	Settlement Areas	Primary Town	Local Towns	Small Rural Service Centre
Kenhardt	4842		Rural settlement	Settlement Areas	Primary Town	Rural Settlement	Small Rural Service Centre
Lannetsville	1499			Settlement Areas	Secondary Town	Agriculture	Settlement

Louisvale	1088		Rural settlement	Settlement Areas		Agriculture	Settlement
Riemvesmaak-Vredesvallei	624		Rural settlement	Settlement Areas	Settlement	Agriculture	Settlement
Lutzburg	1302				Secondary Town	Agriculture	Settlement
Marchand	3223		Rural settlement	Settlement Areas	Secondary Town	Rural Settlement	Settlement
Riemvesmaak-Sending	694		Rural settlement	Settlement Areas	Secondary Town	Agriculture	Settlement
Soverby	1292			Settlement Areas	Secondary Town	Agriculture	Settlement

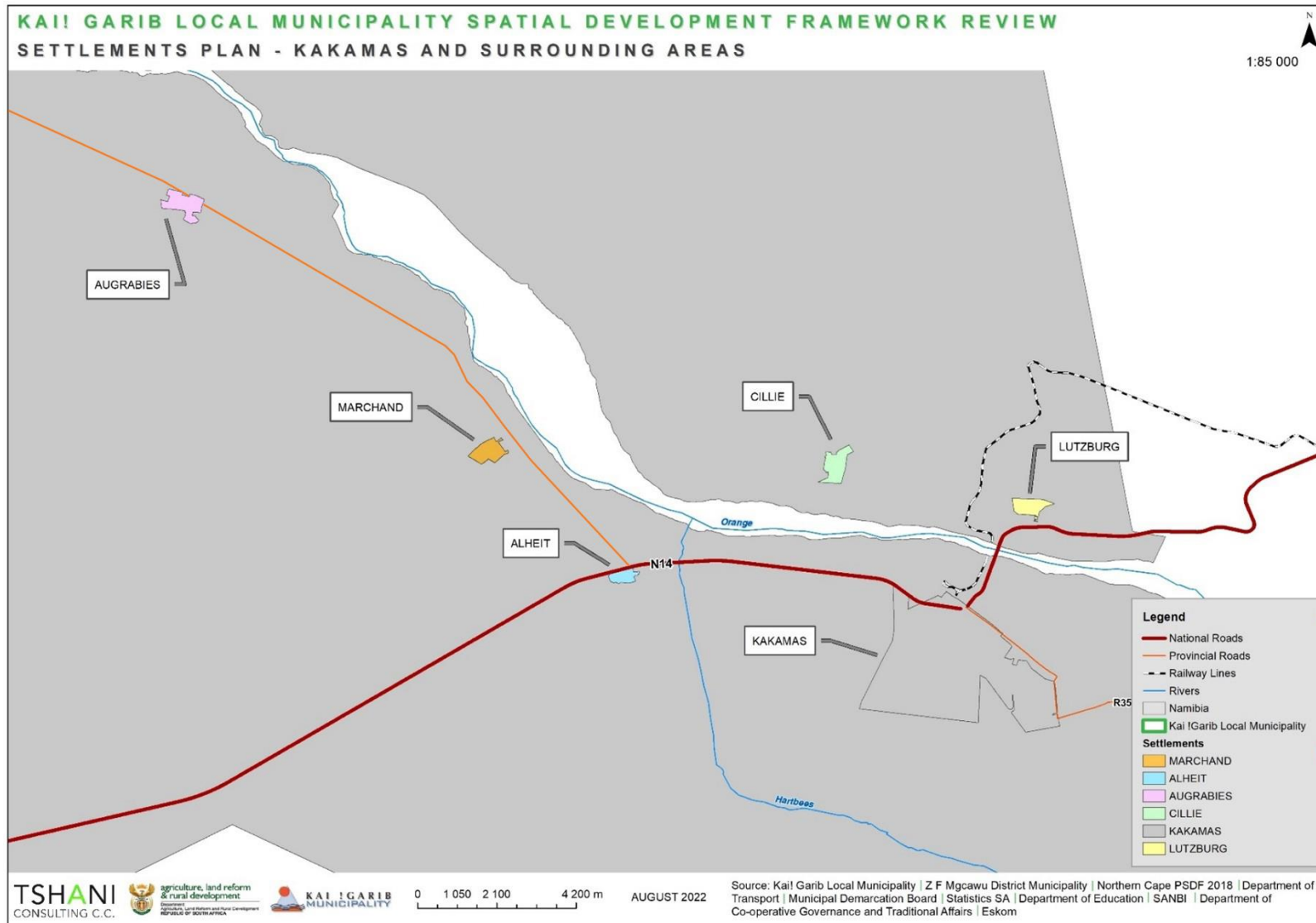
The nodes shown on the following plans are as stipulated on the table alongside. It is to be noted that the overall nodes plan has points for all settlements but due to the close proximity of these settlements, they cannot be seen at a municipal level. These are highlighted in Plan 2 and 3 which are zoom ins to the area.



PLAN 1: Nodes



PLAN 2: Keimoes and Surrounding Areas



PLAN 3: Kakamas and Surrounding Areas

B1.2 Corridors

A “Development Corridor” is normally used to symbolise the area where important economic activities are to be encouraged along a particular route. There is often difficulty in stakeholder perceptions regarding the term ‘corridor’ and the purpose of such planning tool. It is proposed that the use of the term ‘transport route’ be adopted in future because it places emphasis on the transportation activity, which is critical for economic clusters to grow in both urban and rural environments;

Development Corridors are identified for spatial and economic planning purposes, as roads and/or railway routes associated with the movement of goods and people. The high transportation function creates the opportunity for economic activity to take place along these movement corridors, particularly at junctions. These occur at various levels, from local development corridors along the main streets of the towns or even along rivers, to Regional and Provincial Corridors. Different types of corridors can be distinguished, such as development corridors, movement corridors and cavity corridors.

What is important to understand, is that the corridor may not take the form of a continuous integrated band of activity. At points of highest access along the central spine, development will be more intense and of a higher order while at locations of lower access, lower intensity development or even part of a natural open space network may be found.

Corridors are aimed at improving:

- Efficiency in terms of mobility;
- Spatial transformation through connectivity;
- Economic, social, and environmental sustainability.

Corridors differ in their functions based on activity, traffic, and adjacent land uses. The following section highlights different types of corridors identified within the various government spheres.

Development corridors are described in planning terms as **roads or railway routes that are usually associated with the movement of people between places**. This function of facilitating movement of people along a route also means that these “movement corridors” have the potential to accommodate development of different levels of intensity and a mix of land uses at certain points along the route.

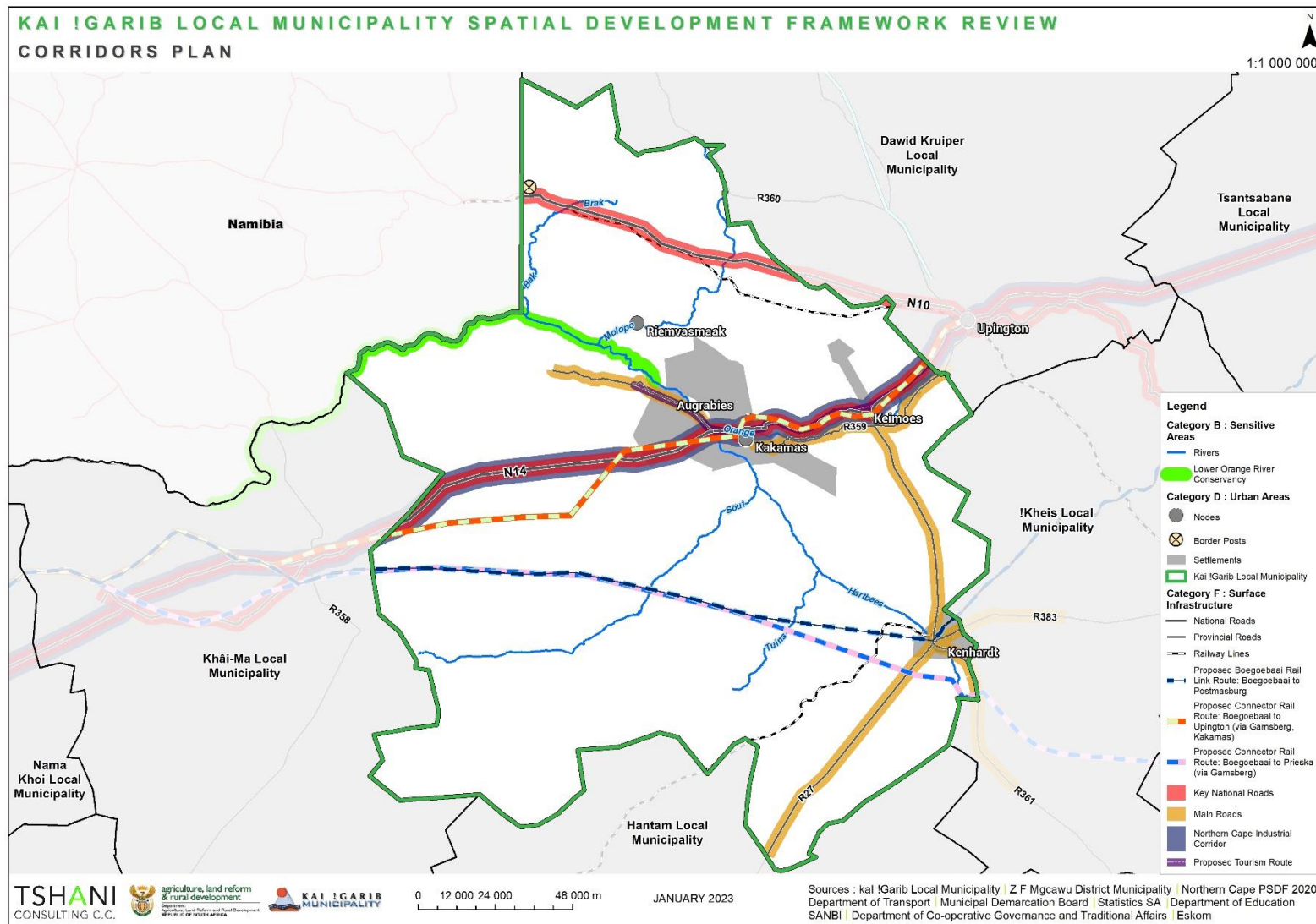
Activity corridor means a major public street that incorporates an existing or planned public transport route, and adjacent land up to one block wide on both sides, used or intended for mixed use development and a **high intensity of a range of economic and social activities**.

The N14 and N10 are termed as key national roads due to the distance they cover, the number of cities, towns and provinces they transverse. The routes transverse through the municipality from Johannesburg to Springbok. The R27, R359 and R383 are main roads in the municipality. they are the secondary major movement routes in the municipality. the R27 connects Keimoes and Kenhardt and goes all the way to Calvinia. The R359 is an alternative route to the N14 running parallel between Keimoes and Kakamas.

And forming part of the portion to Augrabies to complete the Tourism Route proposed in the SDF.

Table 3: Corridor Classification

Corridor Classification					
Corridor	NSDF(2022)	PSDF(2020)	DSDF (2012)	SDF(2012)	SDF 2023/28
N14	Key National Road	Provincial Route	National Road	National Road	Key National Road
N10	Key Regional Road	National Connectivity Route	National Road	National Road	Key National Road
R27		Main Road	Arterial Route	Main Road	Main Road
R359		Main Road	Arterial Route	Main Road	Main Road
R383		Main Road			Main Road
Tourism Route					Tourism Route
Northern Cape Industrial Development Corridor					Northern Cape Industrial Development Corridor
Sishen-Saldanha Rail					Railway Line
Rail Route 1					Boegoebaai-Upington Route
Rail Route 2					Boegoebaai-Prieska
Rail Route 3					Boegoebaai-Kuruman



PLAN 4: Corridors

B1.3 Settlement Edges

A 'settlement edge' is the dividing line or boundary between areas of urban development (a settlement) and non-urban or rural development.

The Guideline set by Department of Agriculture, Land Reform and Rural Development for the development of Municipal Spatial Development Frameworks specifies that an SDF should define urban edges around settlements. The delineation of an Urban Edge is vital for the achievement of Spatial Transformation, that is, the containment of urban sprawl, the intensification of development at designated localities, and the improved integration of urban areas. Beyond the Urban Services Edge, rural land uses and densities are intended to be less intense. As a result, the Urban Edge focusses more on managing densities.

The DALRRD Guidelines for the development of Municipal Spatial Development Frameworks notes that peri-urban sprawl is a challenge because the increasing housing densities, often on communally owned land, are creating conditions which are too dense for successful rural livelihoods but not dense enough to sustain efficient convenient urban settlements. Peri-urban sprawl is thus considered unsustainable for both residents of peri-urban settlements and for the city. This also highlights the need for sufficient serviced land within urban areas.

An '*Settlement edge*' is the dividing line or boundary between areas of urban development (a settlement) and non-urban or rural development. It also defines the logical boundary between areas with different features and

purposes, such as the boundary between areas considered environmentally sensitive and those suitable for development.

Settlement edges are used to *manage investment* and *characteristics of infrastructure levels* according to the needs of communities and economic activities located within settlement edges or outside settlement edges; and are used to encourage more efficient use of underutilized land existing in a settlement or town, through development of vacant land or the re-use of "brownfield" degraded land areas.

According to the Development Edges: A Settlement Typology Updated Approach and Data Report, 2015, prepared by the Department of Rural Development and Land Reform, over the last decade, throughout the world, and in South Africa, there has been a new focus on approaches to managing urban growth. The acceptance and use of several planning concepts has received widespread support. Many of these concepts and practices are not necessarily new, but they have become part of an integrated toolbox of concepts addressing common approaches.

These approaches are responses to several concerns and the need to address a growing awareness of the interrelatedness of issues. The undesirable features that were identified were:

- Urban sprawl, which has several dimensions, unlimited outward and "leapfrog" expansion, as well as being extremely low density.
- Large scale conversion of open space and environmentally sensitive land to urban uses

- Worsening traffic congestion
- Costly requirements to expand roads and other infrastructure
- Conversion of valuable agricultural land to urban uses.

The following goals will be achieved through the identification of development/ settlement edges: -

- Achieving Balance (There are two dimensions to this concept of balance.)
- Achieving a Dynamic Balance between the Landscapes of Society
- Achieving Greater Urban Efficiencies
- Protecting Important Elements within Urban Settlements
- Promoting Small-Scale Agriculture
- Managing Urban Wastes
- Issues of Sustainability and Recycling
- Co-ordination of Line and Point Bulk Services to Achieve Efficiencies
- Avoiding Hazards
- Limiting the outward extension of new developments
- Raising densities in both new and existing areas
- Emphasizing public transport
- Creating what is called "sustainable" development (development that limits consumption of resources and is maintainable into the future)

The approaches to achieve these directives included concepts such as: -

- The need to create compact cities that facilitate the provision of efficient infrastructure and transportation;
- The need to be ecologically sensitive;
- The need to manage, direct, or limit urban growth, and the tool used to do this is to create an "Urban Edge", which is also called an Urban Growth Boundary.

Factors in Sizing Growth Boundaries: - Growth Pressures: -

- This is the most important factor in sizing the Urban Growth Boundary.
- Anticipated growth must have sufficient capacity within an urban growth boundary – if growth is high, then the urban growth boundary must be "roomy"; otherwise, there is a need to change it quite soon. If growth is low, then urban growth boundary can be tight.
- The Urban Growth Boundary must be related to anticipate growth pressures in terms of both amount and direction.

Potential for Growth Deflection: -

- Constrained Urban Edges will tend to push growth elsewhere.
- This could be planned to direct growth towards a particular area, and if it is possible to where an adjacent authority will respond to the opportunities, otherwise development could be scattered and /or leapfrogged.
- If an adjacent area is planned then this will not occur, but this depends on the potential for "deflection".

- A planning decision to densify existing residential development, usually to achieve thresholds for public transportation, will require constraints on the direction for growth and on limiting the aerial extent of the built-up area and will be matched with changes of zoning within a fixed area.

Protection of Agricultural Land: -

- High quality agricultural land will determine a tight and firm edge.
- Low quality agricultural land will permit inclusion within urban growth boundary.

Infrastructure Capacity: -

- Limits to the provision of infrastructure will constrain an urban edge and is often a key factor,
- Infrastructure provision is large scale and done over a long period and urban edges need a long-term horizon.
- An urban edge will remain in place for lengthy periods and then large areas are included as capacity is extended or alternatives are available.
- Urban Growth Boundaries can be flexible or be adjusted at regular periods.

Fiscal Capacities and Fiscal Strength: -

- Strong income base will support expansion.

In terms of the transformation of human settlements, key objectives are to ensure that people live closer to their places of work and have access to better quality transport. Proposed actions in this regard include:

- Develop a strategy for densification of cities and resource allocation to promote better-located housing and settlements.

- Substantial investment to ensure safe, reliable, and affordable public transport.
- Introduce spatial development framework and norms, including improving the balance between location of jobs and people.

B1.4 Urban Edges

An urban edge is a demarcated edge line defining the outer limits of urban development. This refers to areas where full municipal services are provided to land uses other agriculture and the rural, predominantly agricultural, conservation and nature areas. Urban edges are intended to include an adequate supply of land can be efficiently provided with urban services (roads, sewers, water and storm water systems and streetlight) to accommodate the expected growth of the urban areas for a defined period. By providing land for urban uses within the urban edge the rural landscape can be protected from urban sprawl.

One of the major issues that affects the future development and spatial structure of the municipality is urban growth management. It is not possible to achieve the objectives of sustainable access to opportunities and resources if growth implies settling people further from the core area in the urban nodes. Urban growth management is recognised as the domain of the local municipalities, but it is appropriate for the District Municipality to highlight a strategy and approach that will ensure a consistency in approach between the local municipalities. Utilizing the concept of an urban edge is a tool for managing urban growth.

An **urban edge** can be defined as a planned boundary within the municipality with the sole purpose of containing physical development and sprawl and re-directing growth towards a more integrated, compact, and efficient urban form. Peripheral locations are faced with continuous outward development pressures and are typically seen as the perpetrators of sprawl. The delineation of urban edges for the identified nodes by the local municipalities is vital for achieving an efficient and sustainable municipality.

Urban edges are primarily set to:

- Manage urban sprawl;
- Encourage balanced growth;
- Identify areas of land intensification and densification;
- Rationalise areas of investment;
- Protect significant environments and resources;
- Promote efficient land use management systems.

The delineation of the urban edge for the purpose of the SDF takes a long term, strategic approach, looking at potential future pressure areas, municipal growth directions, population projections and strategic value of certain locations. The value of having a long-term urban development boundary for the municipality is that –

- It enables long term, focused planning for infrastructure and services delivery;
- It provides certainty in the market, and
- It enables integrated, pro-active long-term spatial planning which can direct and manage growth and development.

- protects and conserves natural, agricultural, and historical resources, while managing these resources in a sustainable manner. These ecosystems provide a vital service to human settlements and their sustainability must therefore be protected;
- prevents urban sprawl, and curtails the pattern of low-density, haphazard, and discontinuous development; promotes a more efficient, safe, equitable and accessible urban structure through containing and intensifying urban development.
- provides landowners and property investors with certainty regarding where urban development is envisaged in the short term, and where it is not envisaged.

An urban edge, by virtue of its purpose should include only enough land to accommodate realistic growth expectations for the short term. An urban edge can always be expanded but once set and development is taking place, it is practically impossible to shrink the boundaries thereof.

In dealing with growth and urbanization in the urban areas the following will apply:

- The urban edges should be clearly demarcated in local SDFs based on realistic short-term growth expectations.
- The local municipalities should not entertain ad hoc, short-term proposals for the amendment of the urban edge, unless a strategic change has taken place in the municipal and provincial context that warrant such changes.

It is important to articulate the fact that urban edges if are not appropriately implemented can contribute to spatial disintegration and regional inequality. An urban edge does not mean that development cannot occur outside of the urban edge, but it does guide the level and intensity of development that should occur

B1.5 Services Edge

The Services Edge is described as the area within which the Kai !Garib Local municipality is able to provide services within.

This is the space that is promoted for densification. Development within this zone serves to manage, direct, and limit urban expansion.

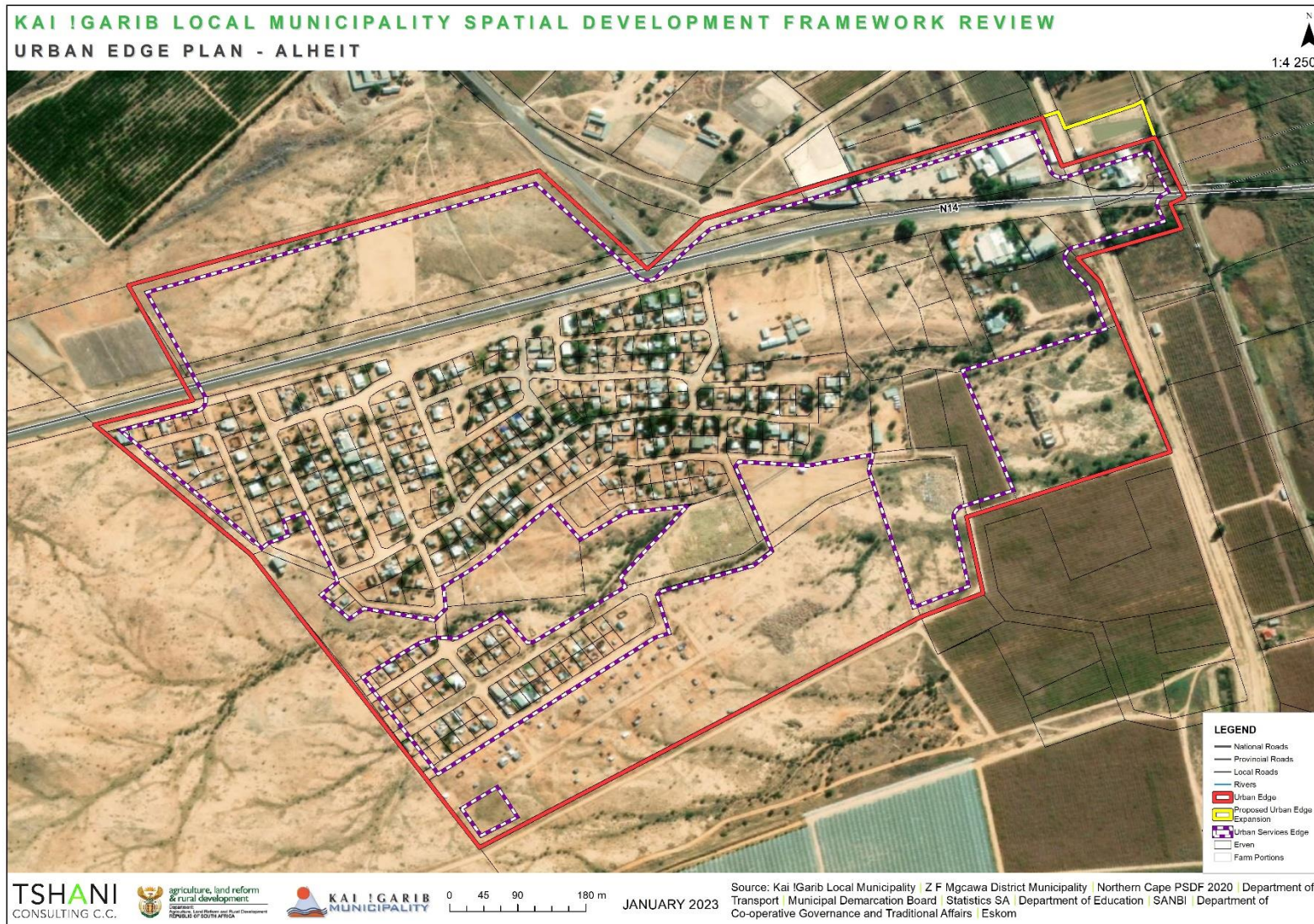
B1.6 Transition Zone

The Transition Zone is described as the area between the Urban Services Edge and the Urban Edge. The area within the Transition Zone is where future expansion can occur in the coming years. This is envisaged within the areas

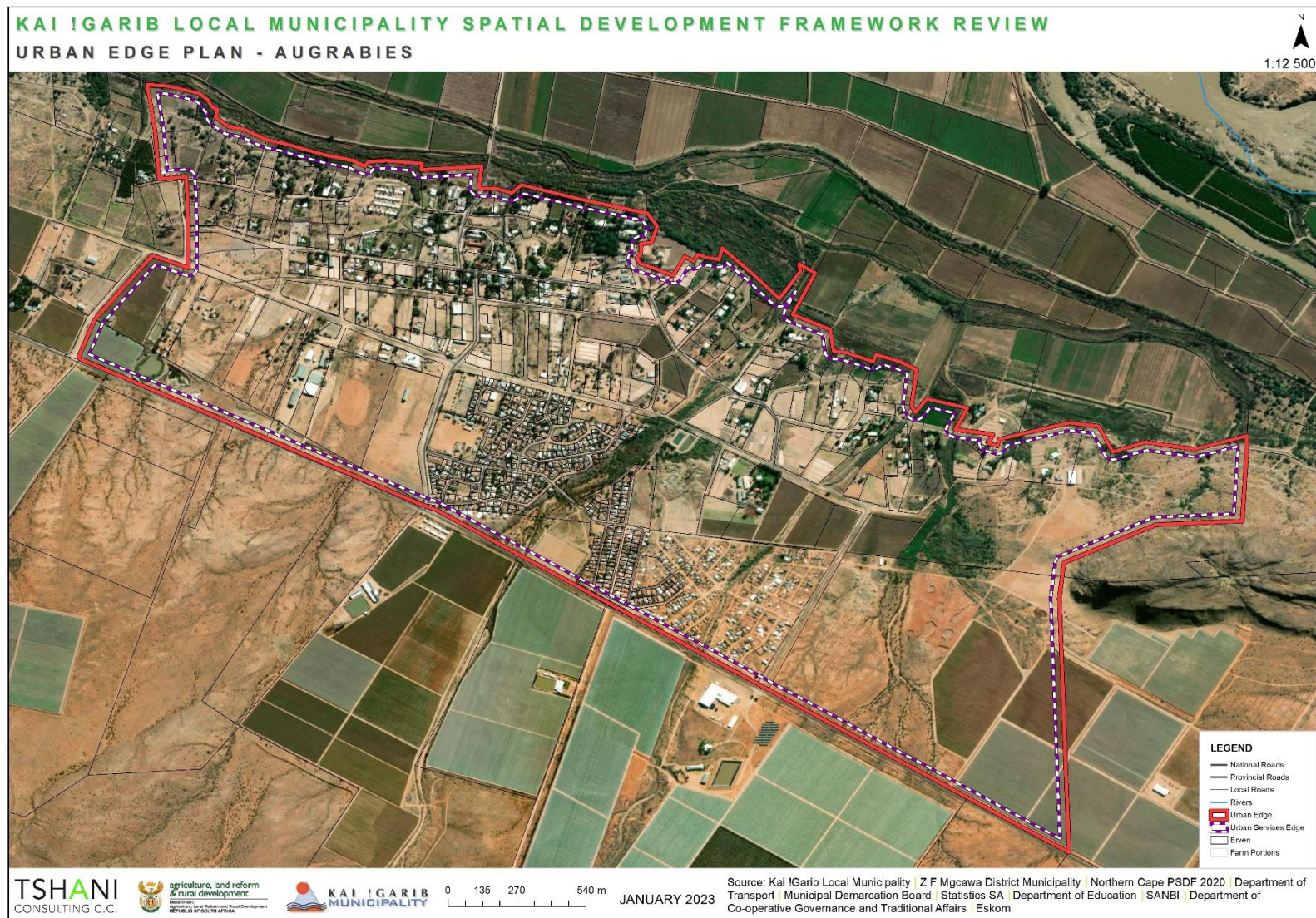
of Industrial activity, Agro processing, and at sometimes Residential and Commercial.

These land uses can be allowed for development provided that the land uses are in line with the spatial pattern and desired spatial form of the area.

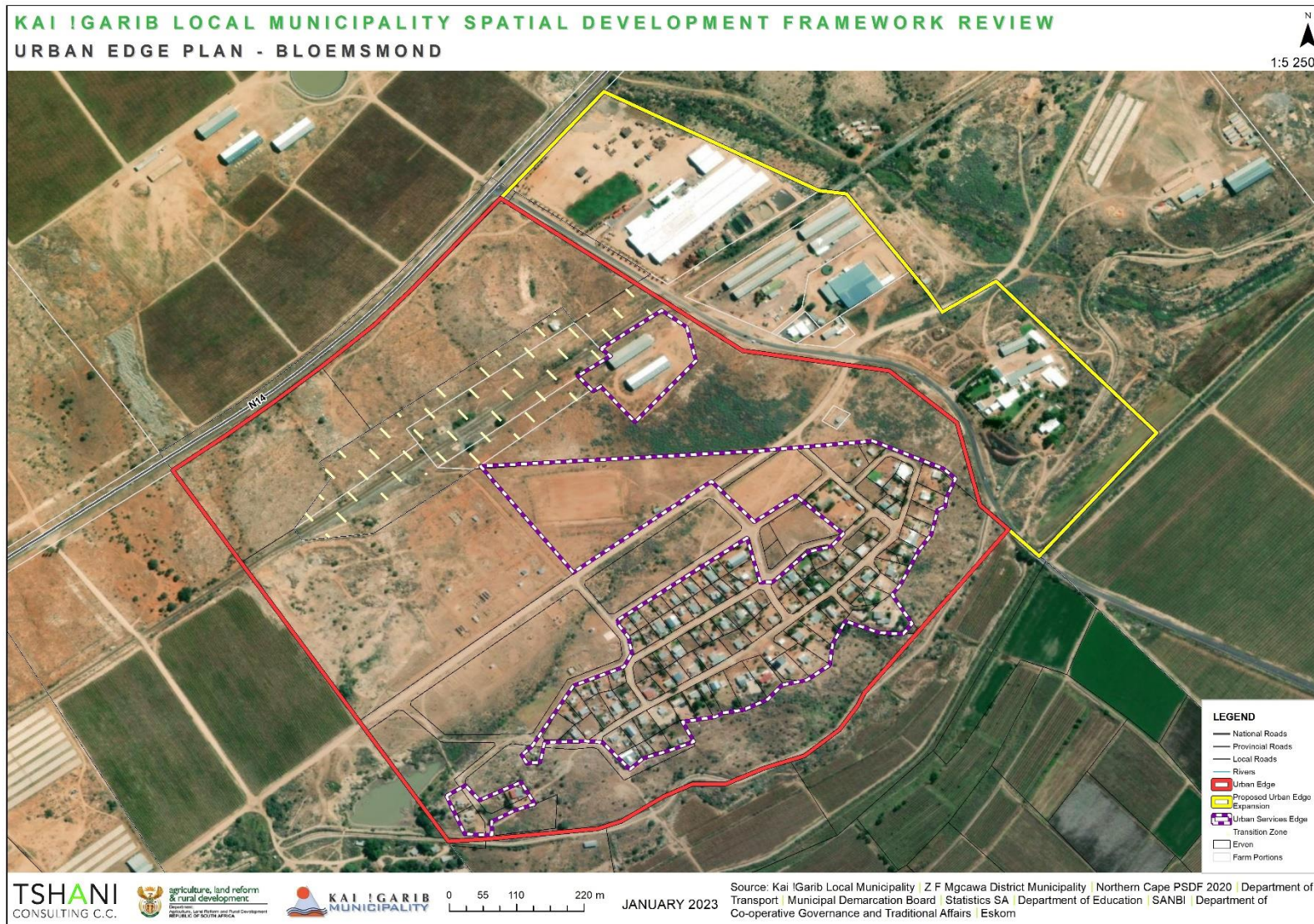
Due to the spatial goal of increased densification within the Urban services edge, Infrastructure provision within the Transition Zone is to the responsibility of the developer.



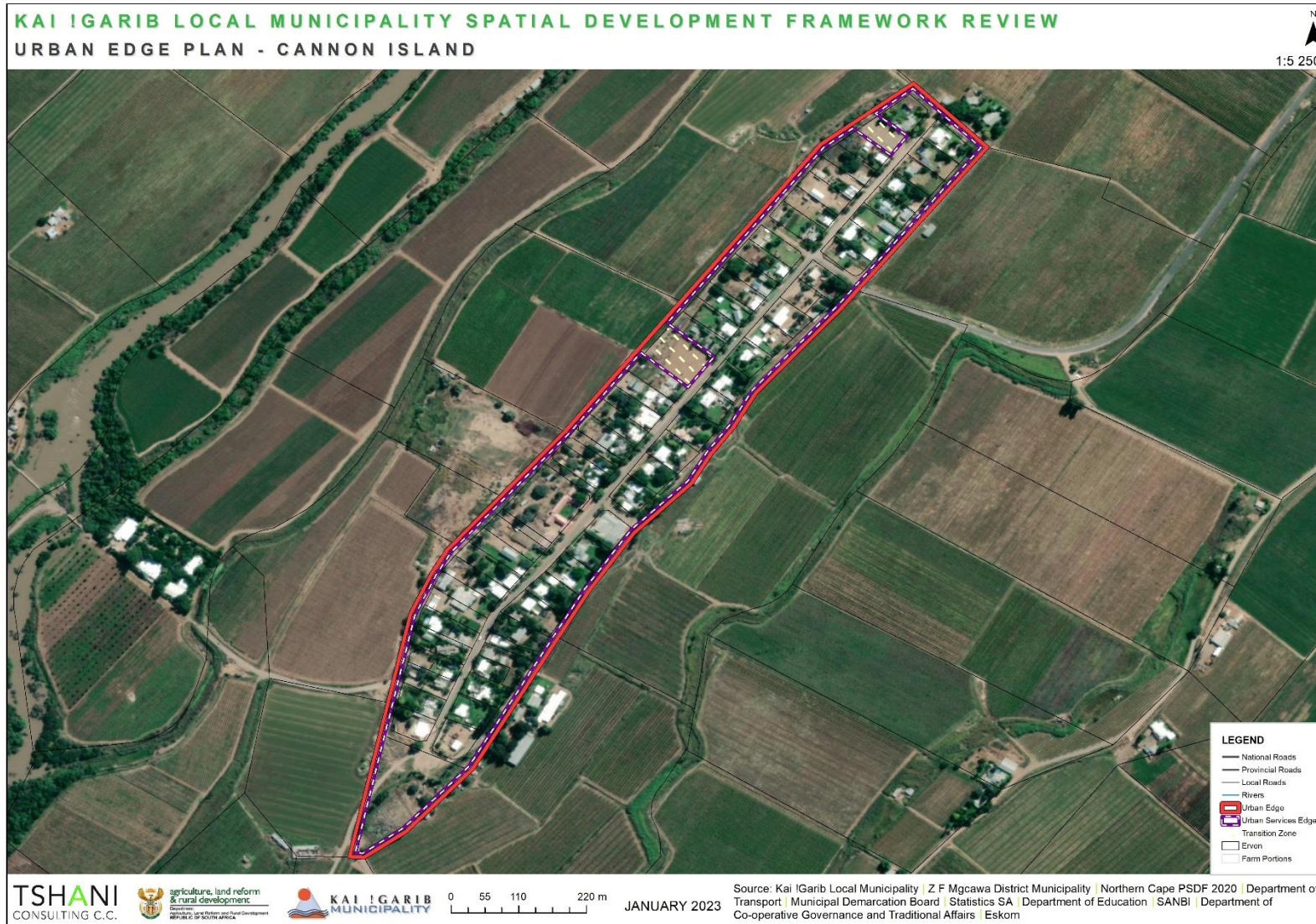
PLAN 5: Alheit Urban Edge



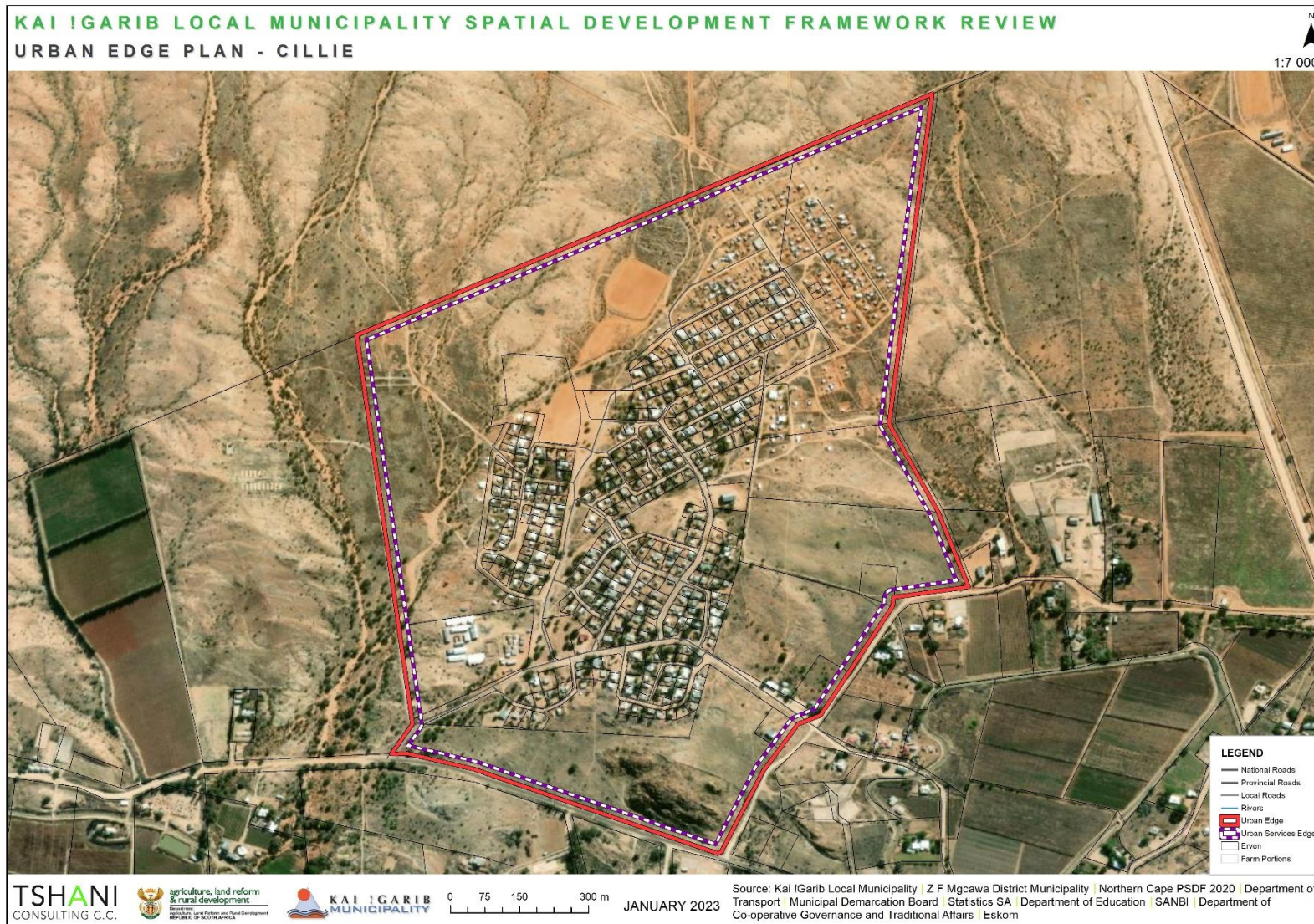
PLAN 6: Augrabies Urban Edge



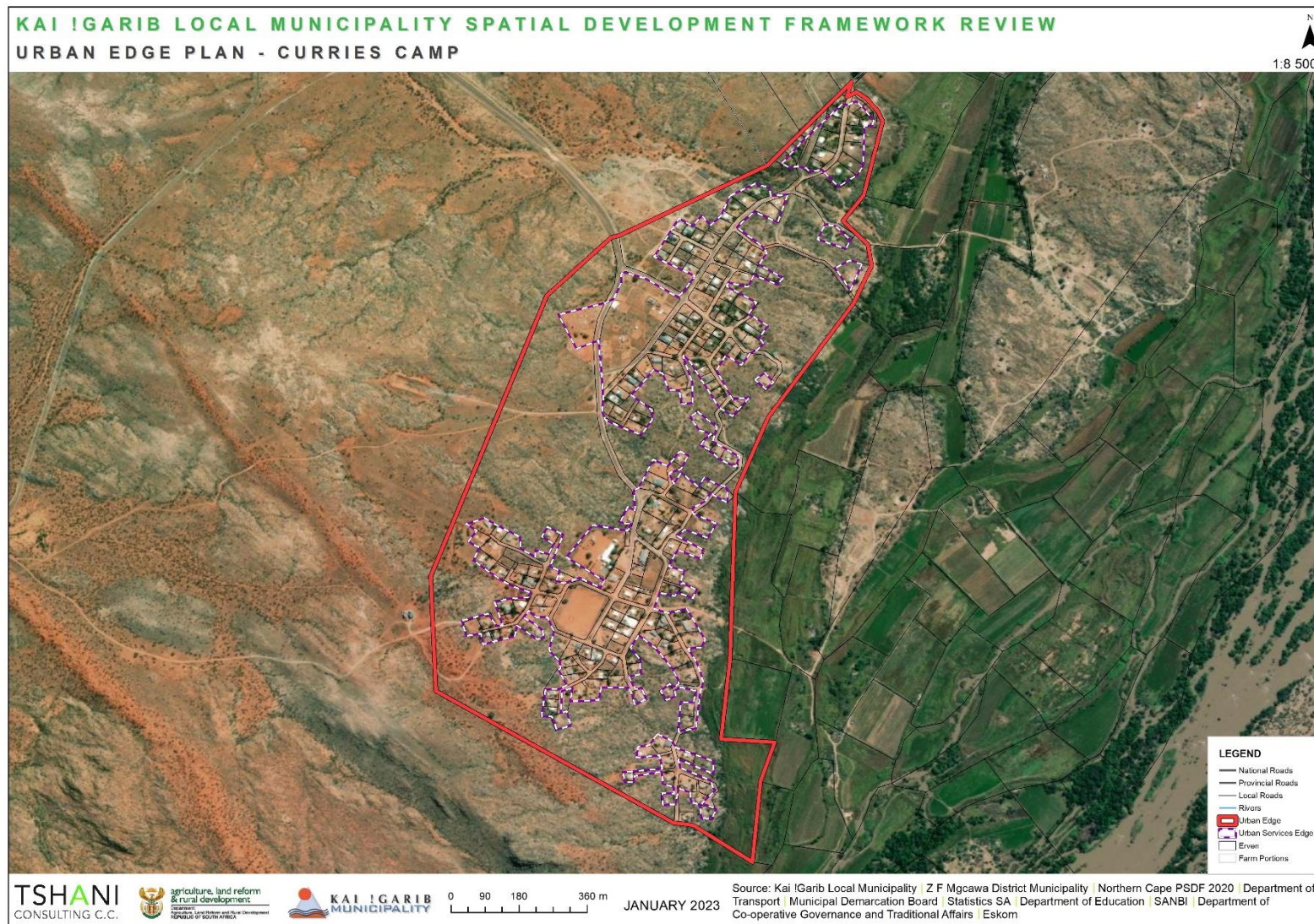
PLAN 7: Bloemsmont Urban Edge



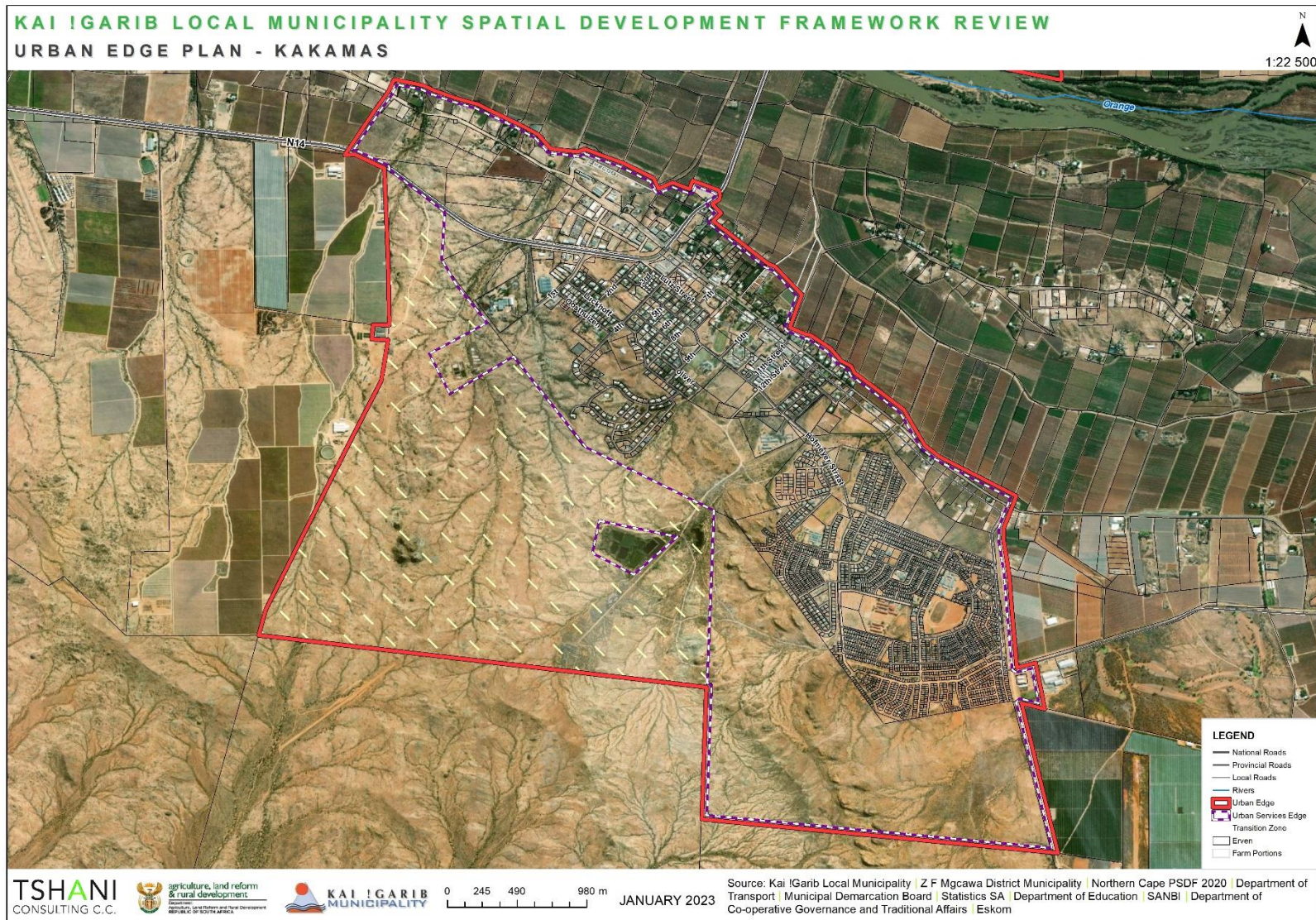
PLAN 8: Cannon Island Urban Edge



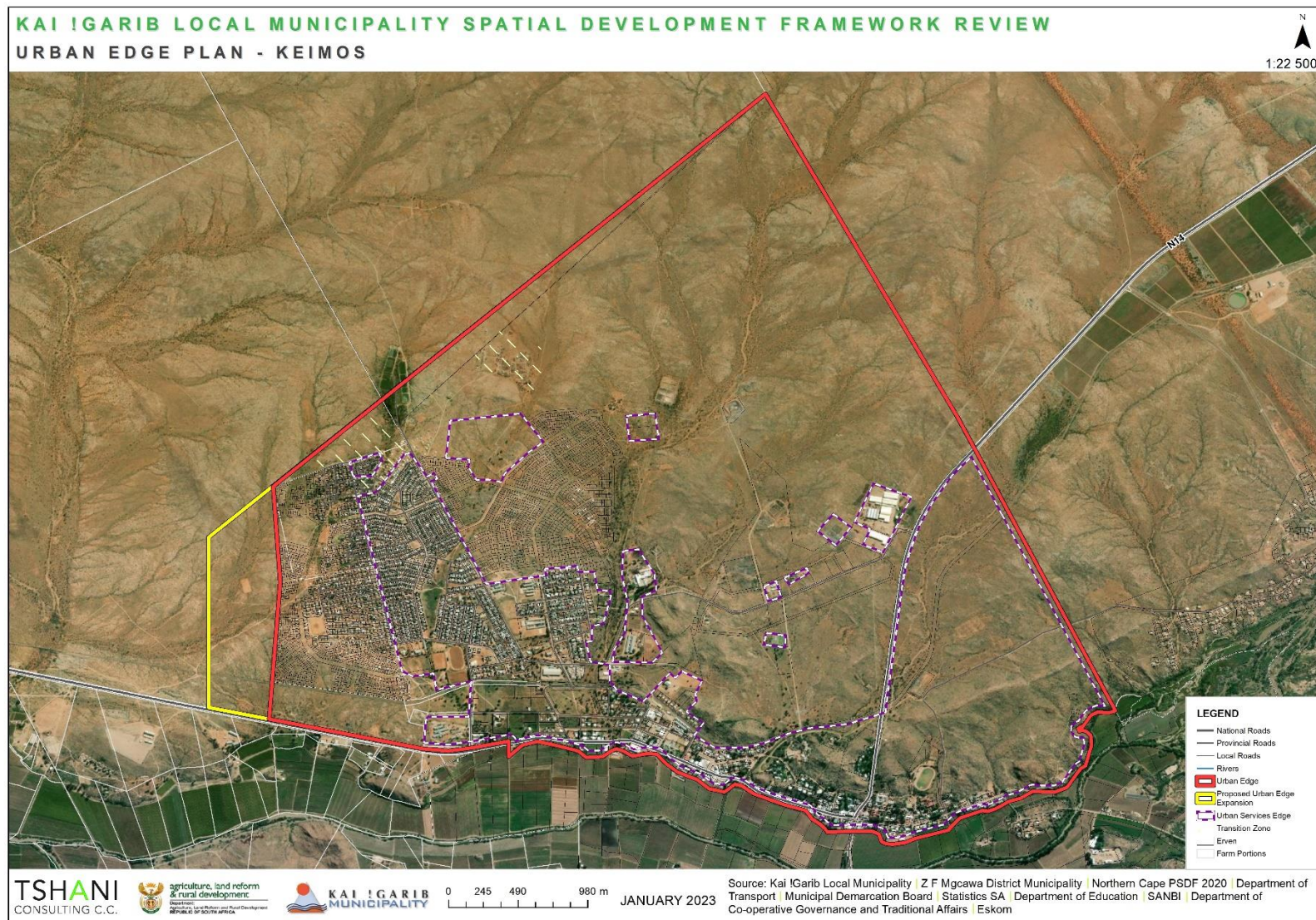
PLAN 9: Cillie Urban Edge



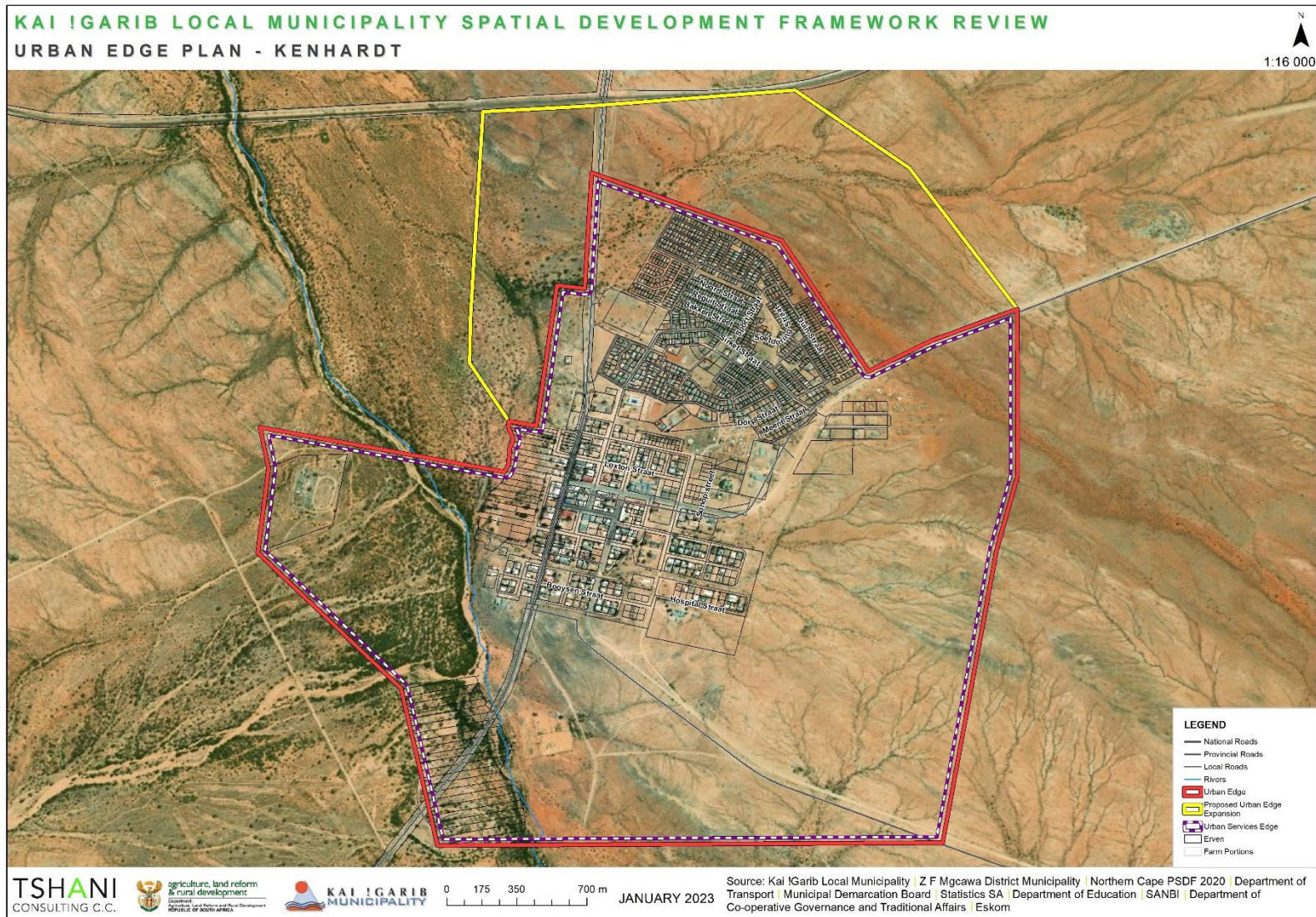
Plan 10: Curries Camp Urban Edge



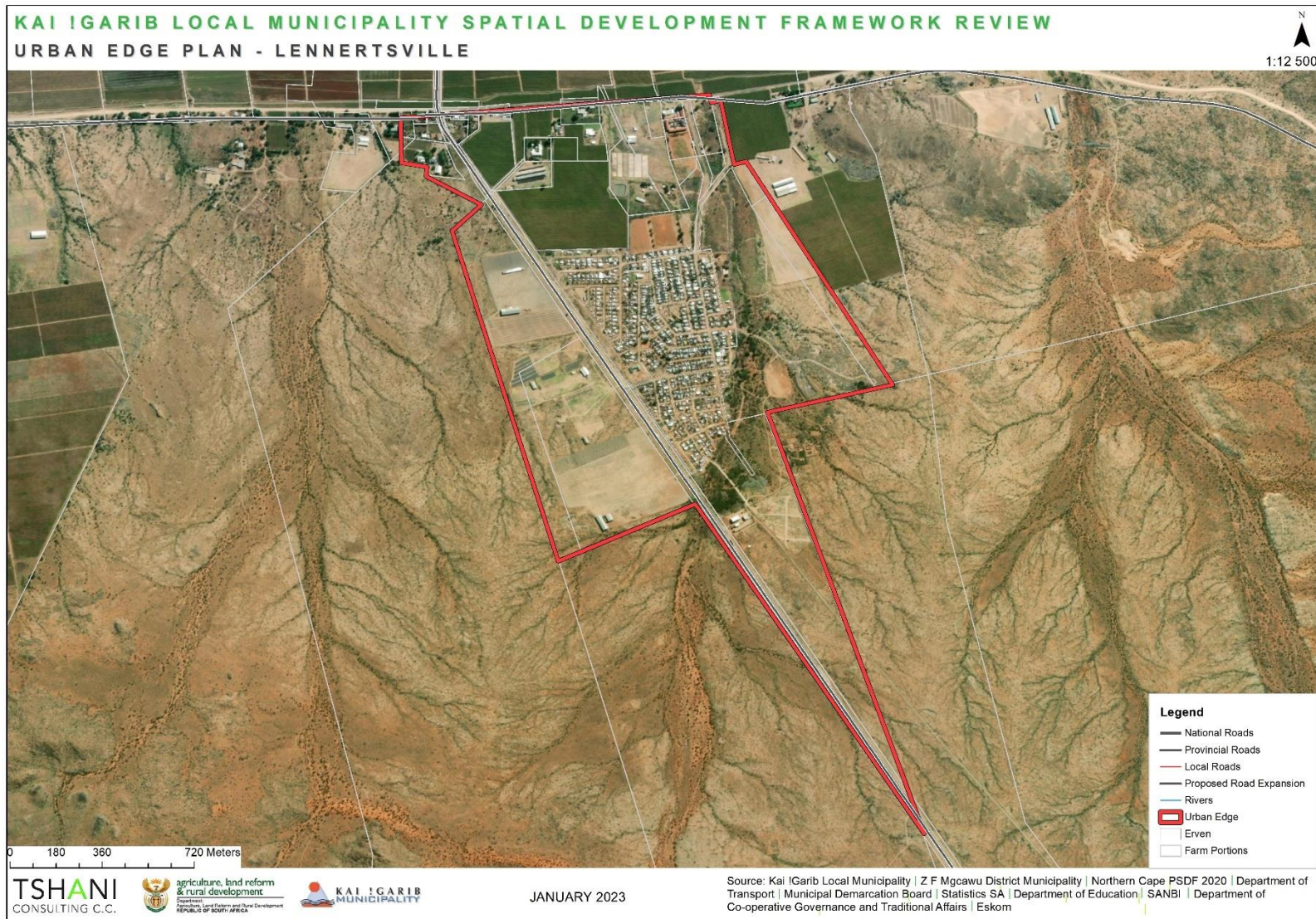
PLAN 11: kakamas Urban Edge



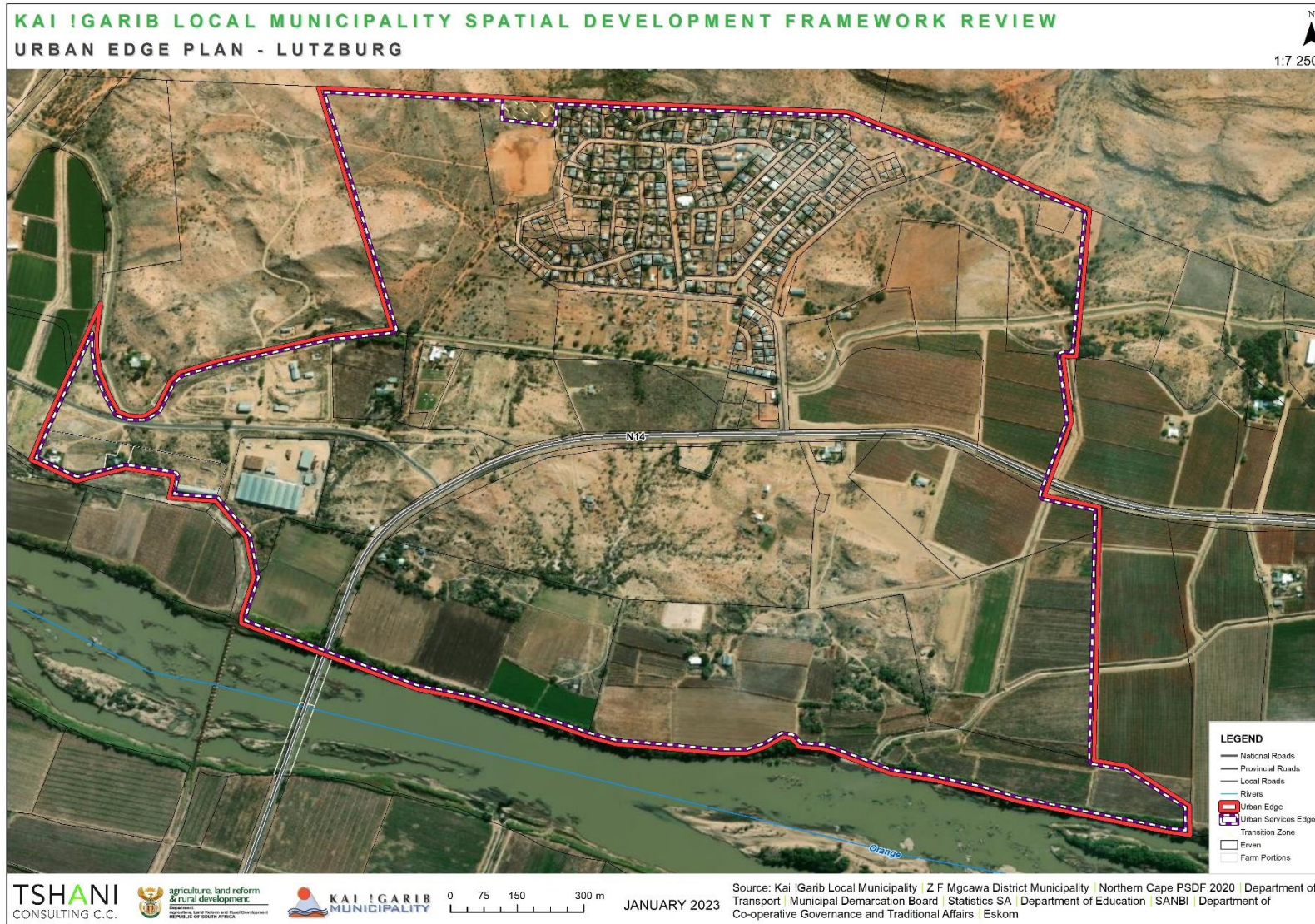
PLAN 12: Keimoes Urban Edge



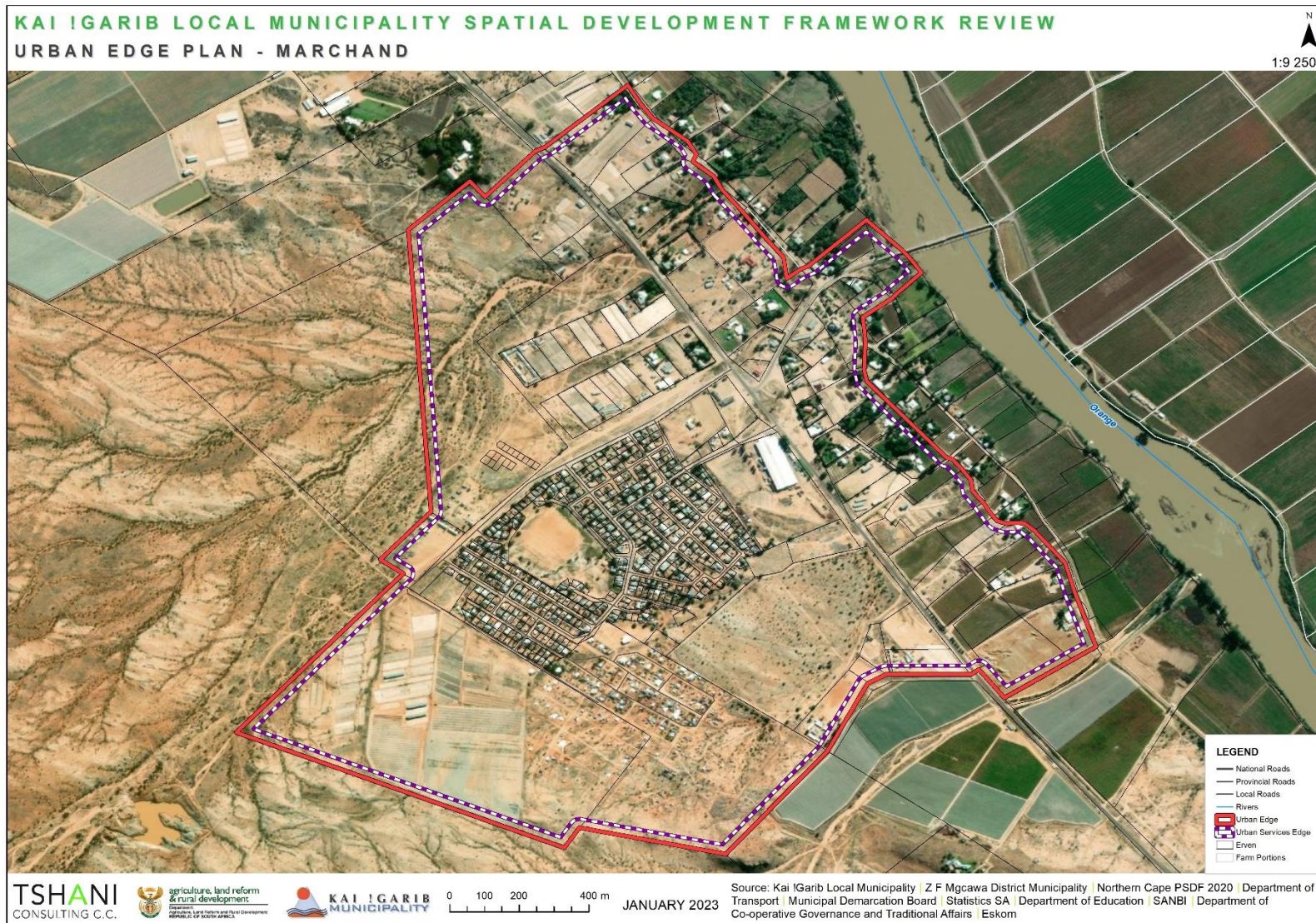
PLAN 13: Kenhardt Urban Edge



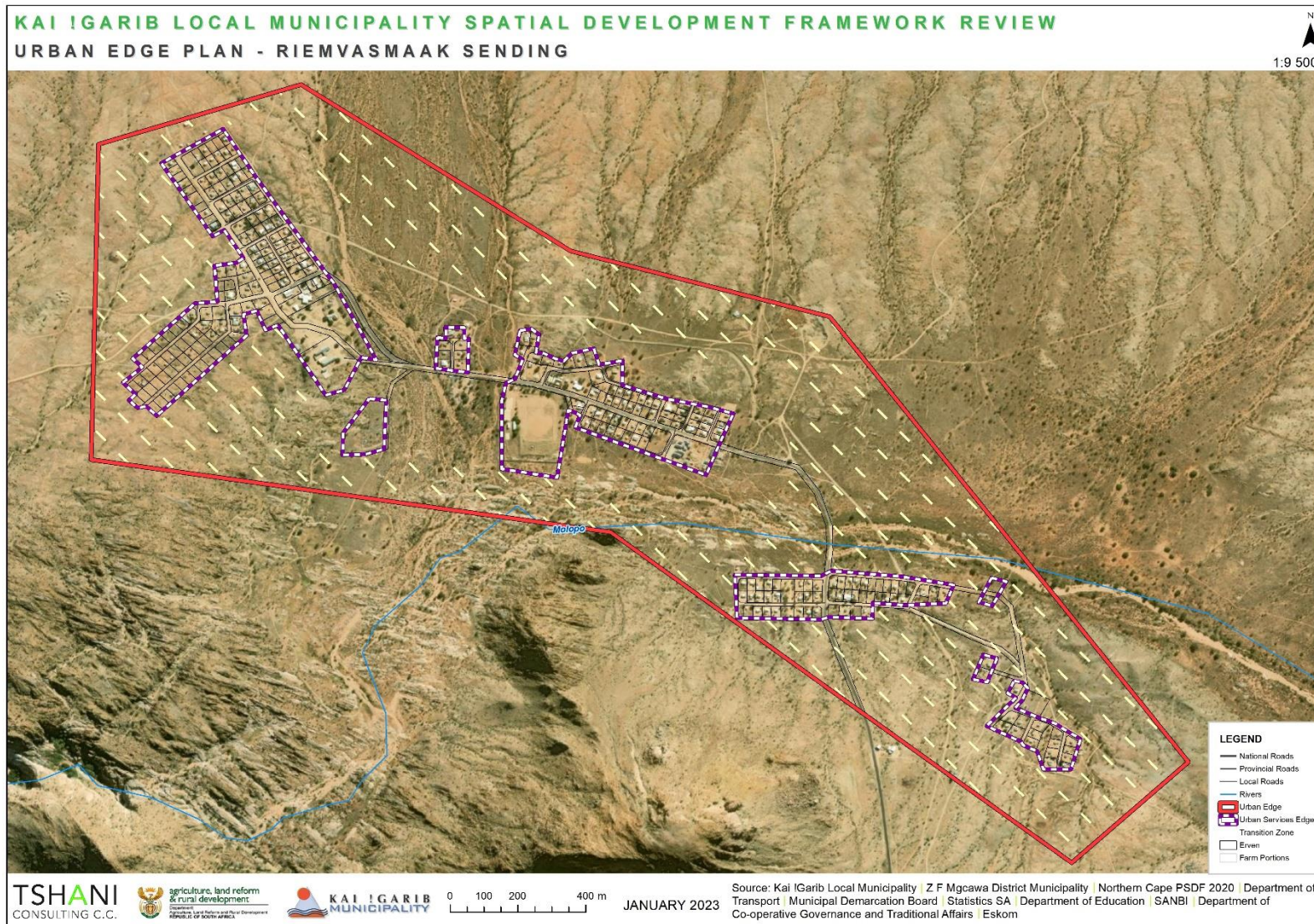
PLAN 14: Lennertsville Urban Edge



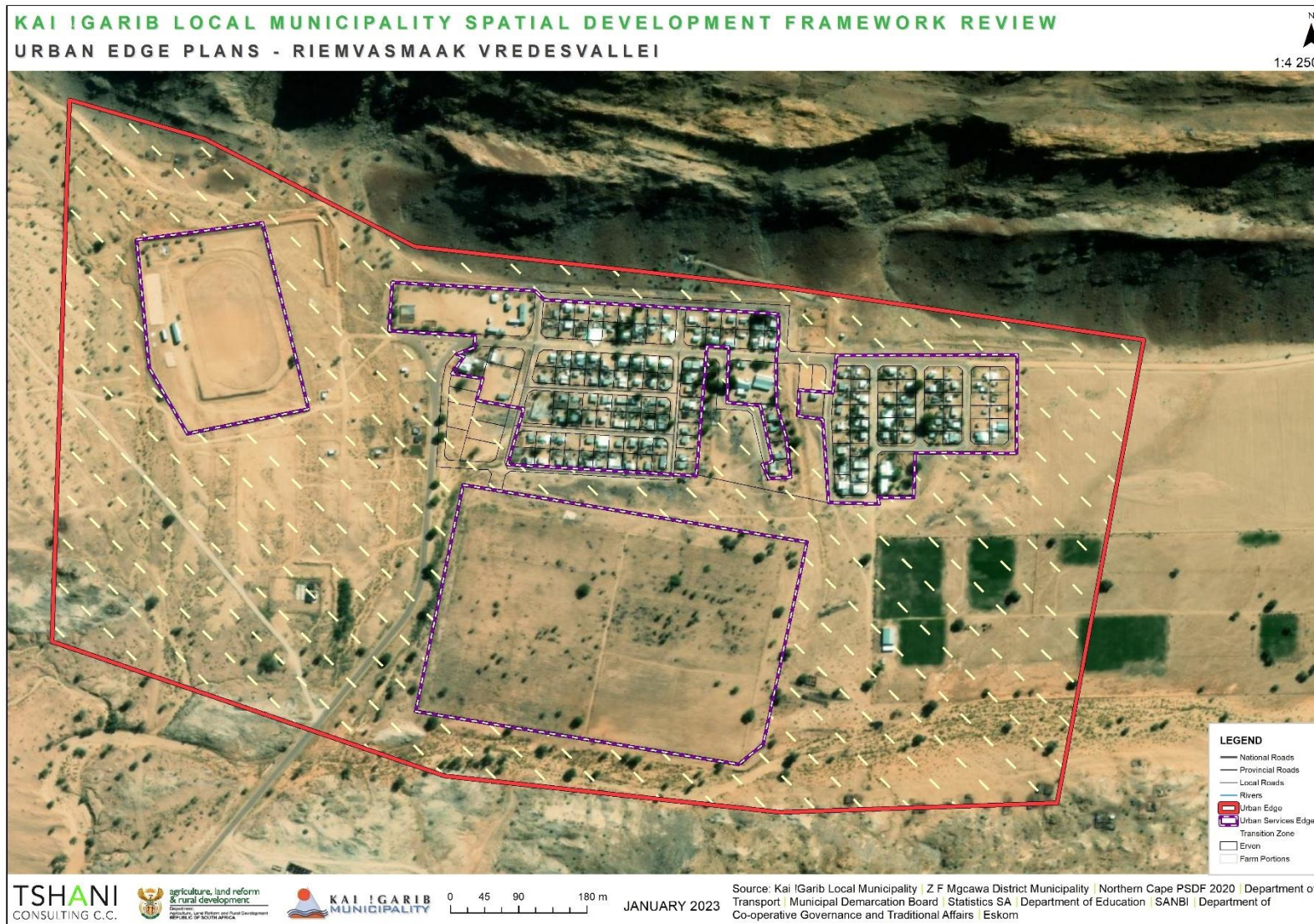
PLAN 15: Lutzburg Urban Edge



PLAN 16: Marchand Urban Edge



PLAN 17: Riemvasmaak (Sending) Urban Edge



PLAN 18: Riemvasmaak (Vredesvallei) Urban Edge

B1.6 Other Structuring elements applicable to the Kai !Garib Local Municipality

Detailing the spatial structuring elements that will be included into each of the settlements and towns, where possible, realistic and applicable to a specific area or community, including:

1. Urban Areas.
2. Mixed Use
3. Activity Street/Node
4. Development Corridors.
5. Activity Spines.
6. Activity Streets.
7. CBD Precinct.
8. Industrial Precinct.
9. Secondary Node Business.
10. Tourism and Hospitality Corridor.
11. Corridor Small Holding.

In the Northern Cape Provincial SDF (NCPsdf 2012), the purpose of spatial structuring elements are to be used by all stakeholders to shape the individual towns within the Municipality, into settlements that are sustainable and where a high quality of life for the residents is ensured.

B1.6.1 Urban Areas

An urban area is defined as an area characterised by concentrated, mixed activity such as residential development, business and administrative functions, social services and infrastructure. Keimoes, Kakamas and Kenhardt all have functioning urban areas which are easily identifiable and surrounded by agricultural areas very characteristic of Kai !Garib..

B1.6.2 Mixed Use

As a spatial term, mixed use can be defined as the mixing of different land uses within a specific location or precinct. Mixed uses can comprise of a combination of residential (mostly higher densities) development, business offices and community facilities. Mixed uses either comprise of different land uses on different erven, but in the same vicinity, or mixed uses in the same building (i.e. the vertical integration of land uses).

B1.6.3 Secondary Node

Nodes are characterised by a concentration of activities around a specific point. High density housing, business, community services, tourism activities and public space (e.g. squares, parks and markets) must be accommodated in the node. Nodes are typically located at the main access points, to aid accessibility. These access points include major road intersections and public transport facilities. Nodes, public transport points and public spaces in and between nodes are important urban structuring elements. These elements can be used to restructure areas where activity is dispersed and where there is no sense of place, legibility or special focus.

B1.6.4 Development Corridors and Activity Streets

Development corridors and activity streets all refer to linear urban development patterns along transportation routes. Land use in these areas typically comprise of higher density development, businesses, offices and community facilities. These areas can therefore be described as linear mixed-use areas. Linear development can take the form of a continuous band of development along the transport system, or nodes of development at certain strategic points along the transport system (e.g. railway stations where the railway forms the spine of the corridor). Linear development allows for land uses and transportation to complement each other. In cases where higher density residential development takes place along the corridor, more people and businesses are located next to transport networks. This in turn leads to the more effective use of public transport systems. Corridor development does however not take place within a short timeframe, and may be seen as a slowly manifesting urban form. It is important that corridors have definite anchors such as nodes, to prevent situations where urban development encroaches onto rural areas along major transport routes.

B1.6.4.1 Activity Street

Development corridors occur along major regional/local movement routes. Although direct access to land uses is generally impossible along the central movement spine, high visibility remains a major feature. The corridor is therefore usually complemented by activity streets that provide access to developments. High visibility development along main routes is not always spatially desirable and should be kept in check. Activity streets are found along

major connector routes, usually between two important destinations (e.g. an activity node on either end). Access to land uses is allowed to some degree along an activity spine, but the effective movement of traffic is still a key component to consider. It is important for an activity street to achieve balance between promoting access, creating a pedestrian friendly environment and accommodating traffic mobility.

B1.6.5 Local Towns

As per the NCPSTDF, the inter-relationship of settlements or local towns should be recognised and understood within the KGLM as a whole.

B1.6.5.1 Keimoes as a Small Rural Service Centre:

Keimoes acts as the main town of significance for the whole KGLM area, economic activity, social services and development opportunities within the Municipality. The town may therefore be described as the municipal node of KGLM, where investment may be concentrated to the benefit of the larger municipality and other settlements (as satellite towns) within the municipality.

B1.6.5.2 Kenhardt as a Small Rural Service Centre:

Kenhardt to the South of Keimoes, forms part of the Small Rural Centre for economic activity, social services and development opportunities within the Municipality. The town was the administrative headquarters of the southern part of KGLM which forms an important link and development opportunity within district of ZFM. The linking of Kenhardt directly with the Namakwa District Municipality forms a possible development opportunity for the area.

B1.6.6 Precinct CBD

Densification and the combination of various land uses must be promoted within the CBD area to promote economic and social integration of the community. Although all of the Urban Related land uses as associated in SPC D categories are to be developed within the CBD, the normal public input will be of the utmost importance to guide and help with decision-making by the Planning Tribunal. CBD's and nodes should be seen as priority areas for road surface improvement, landscaping (both hard and soft), street lighting and placement of infrastructure such as bins, parking and seating. This should be done to build a strong central business identity for each community.

Business development and community services should be encouraged in the CBD earmarked areas. Any commercial endeavour in these areas should be seen in a more positive light than outside of it. High intensity uses can be considered only in CBD demarcated areas, Mixed Use areas and Business Nodes. High intensity uses are:

- a) Liquor/Bottle Stores.
- b) Taverns.
- c) Places of Entertainment such as sports bars & bars.
- d) Casino and Slots (limited to Upington and Rietfontein as Main Towns).

B1.6.7 Corridor Tourism/Hospitality

The Tourism/Hospitality corridor plays a similar role to the concept of a hospitality corridor, as defined in the NCPSTF, namely: Areas where low to

medium density community-based hospitality initiatives and projects are promoted and implemented.

B1.6.8 Corridor Small Holding areas

Due to the unique landscape and the history of the development of the intensive agricultural areas alongside the Orange River, numerous small farming units are present in the KGLM.

B1.6.9 Business Node (Secondary)

Precinct CBD's and the Industrial Precinct areas are areas of high business potential due to locational factors, but which are found outside of the CBD's of settlements.

The locational factors generally include high visibility, high accessibility and strategic locations at road intersections, as well as other existing public amenities. Higher impact/higher order business/ mixed use developments may still be considered in these areas.

These areas are ideal for the consideration of high impact/ higher order land uses which may not be ideal in any other location within residential areas, such as bottle stores, casinos, taverns and places of entertainment normally part of Business Premises usage.

B2. BIOPHYSICAL FRAMEWORK

The Biophysical Framework is broken down into 3 spheres as follows:

1. Environmental Framework
2. Climate Change
3. Agricultural Framework

B2.1. Environmental Framework

There are four (4) different types of conservation areas that can be found within the Kai !Garib municipal area:

- River Systems
- Dams
- Critical Biodiversity Areas
- Threatened Eco-systems.

River systems can be defined as the whole natural water system in a drainage basin. Rivers are an important feature of most landscapes, acting as the principal mechanism for the transport of weathered debris away from upland areas and carrying it to lakes and seas, where much of the classic



sediment is deposited. River systems can also be deposition, accumulating sediment within channels and on floodplains.

A *dam* is a barrier that stops or restricts the flow of water or underground streams. Reservoirs created by dams not only suppress floods but also provide water for activities such as irrigation, human consumption, industrial use, aquaculture, and navigability.

Critical Biodiversity Areas are areas required to meet biodiversity targets for ecosystems, species, and ecological processes, as identified in a systematic biodiversity plan. Ecological Support Areas are not essential for meeting biodiversity targets but play an important role in supporting the ecological functioning of Critical Biodiversity Areas and/or in delivering ecosystem services. Critical Biodiversity Areas and Ecological Support Areas may be terrestrial or aquatic.

Threatened Eco-systems are considered threatened if they are small or shrinking, if life-support systems like soil are being lost, or if crucial processes such as predator-prey relationships are being disrupted. Combining these measures gives an estimate of how likely the ecosystem is to collapse within the next 50 years

B2.1.1 Environmental Guidelines

Owing to the increasing population, urban expansion and development is inevitable. However, urban expansion encroaches upon habitats with potentially high diversity as well as on land with high agricultural potential. Strategic land use planning in Kai !Garib Local Municipality need to be based

on information as contained in the Environmental Studies, discouraging development in environmentally sensitive areas while earmarking other, more suitable areas for development.

The urban concentrations of Kai !Garib Local Municipality are characterized by several river systems near the respective towns. These systems need to be protected from pollution and encroachment by formal developments.

B2.1.2 Formal Residential:

Homeowners will be encouraged to create indigenous gardens within existing residential areas.

Proposed new residential areas will be evaluated, based on their potential impact, whether positive or negative, on the environment. "Environment" in this sense of the word includes the natural, economic, and social environment as well as the general sense of place. Residential development in environmentally sensitive areas with high agricultural potential will be discouraged.

Areas not suitable for residential development due to geological, hydrological, and other constraints such as a lack of infrastructure need to be identified. "No-Go" areas will be "red flagged" and development role players will be made aware of this upfront

Sufficient open space areas need to be retained within new residential developments and where possible kept natural. Landowners should be encouraged to maintain their properties and keep them as natural and

indigenous as possible, creating linkages with neighbouring properties and therefore establishing a natural habitat potential in the area. Where possible, natural habitats should not be disturbed.

B2.1.3 Informal Residential:

The growth of existing informal settlements and the establishment of new settlements need to be avoided at all costs. These settlements have a negative impact due to the lack of infrastructure and basic services. Pollution in these areas is generally high. It is therefore important that these areas be formalized and that, where possible, basic services be provided.

Education, especially about the impact of pollution on the natural and social environment, should be encouraged and facilitated, informing these communities of the possible impacts and how to address these in a responsible manner. Education will contribute to the general upliftment of these communities.

B2.1.4 Industrial / Commercial:

A desired environment should include an area free of or within minimum pollution (air, water, noise, ground). Industries need to be restricted to these areas earmarked for such purposes. Non-agricultural related industrial activities on farms and agricultural holdings should be discouraged.

Strict pollution mechanisms should be implemented and adhered to, especially in sensitive areas such as along water courses. Environmental Management Plans need to be formulated for all industries and will be

monitored on a regular basis by an appointed and dedicated environmental management officer (EMO).

B2.1.5 Indigenous Vegetation

Harvesting of indigenous vegetation such as medicinal plants and firewood for domestic purposes is permissible in all ecological systems. The harvesting of medicinal plants should be restricted to removal of parts of a given plant only such as bark, leaves, or roots.

Removal of whole plants is not recommended in protected areas. Harvesting of firewood may occur in all ecological systems. However, firewood harvesting should be restricted to dry, dead, and fallen branches or trees only. There should be no removal of living branches or trees in protected areas. Areas Identified as Limited Development Areas.

Limited development areas are those areas which (although are sensitive) may be open to specific types of developments which would not jeopardize the ecological or conservation integrity of no-go areas. In other words, environmental impacts resulting from the development of such areas, if any, should be limited and readily manageable. Thus, any development in such areas must be subjected to rigorous environmental impact study.

B2.1.6 Environment

Climate change is a significant global concern. Traditional livestock farming e.g., cattle farming has a major impact on climate change. The practice of cattle farming is also vulnerable during drought events. Game such as sheep

are more resilient to drought. The municipality is currently facing major water shortages due to lack of sufficient water storages.

Areas that are protected formally within the municipal area include areas around the **Orange River**. Other areas of high conservation significance include all the wetlands and areas up to 30m around these wetlands and 100m from the banks of all rivers within the various catchments.

The formal conservation areas within the LM are **The Augrabies Falls National Park, the Natural hot springs in Riemvasmaak** and National Monuments. There are several registered conservancies in the Kai Garib Local Municipality. Some of these have been developed with the tourism sector in mind, while others are purely for conservation purposes.

Environmental Impact Assessments/ Authorisation:

NEMA requires that certain activities need an application for environmental authorisation before commencing such activities. Some of the activities which could trigger the need for environmental authorisations include:

- Most development activities within protected areas as well as within a 5-10km radius of protected areas.
- Development within a watercourse or within 32 metres from the watercourse
- Removal of natural vegetation
- The construction of bulk service pipelines
- Constructing within areas zoned for open space
- The construction or planning of roads

- Railway lines
- Facilities for Agri-industrial purposes outside of appropriately zoned areas
- Mining
- Facilities for the concentration of animals and livestock that exceed certain thresholds
- The transformation of undeveloped, vacant, or derelict land if the development exceeds certain thresholds

Wetlands:

It is recommended that a 100m ecological buffer zone (no development) around wetlands be used as a guide when informing developments located within the study area. This buffer zone will assist in the continuation of the wetland's ecological functioning and protection of natural resources. The width of the buffer zone will depend on the nature and scale of the development.

Developments within 500m of wetlands will be required to apply for a Water Use License under the National Water Act. It is also recommended that no development be allowed within the 1:100-year flood line of rivers and streams or at least 100m where no flood line exists. The National Water Act also requires an application for a water use license to be submitted to the Department of Water and Sanitation for the following activities:

- Road Crossings over a river
- Sewer Crossings over a river

- Potable water pipe crossings over a river
- Attenuation in a river channel
- Attenuation in a wetland
- Housing within a 500m radius of a wetland
- Sewers within a 500m radius of a wetland
- Potable water pipes within a 500m radius of a wetland
- Roads within a 500m radius of a wetland
- Sewage pump station

Open Space:

Natural open spaces protect and maintain the ecological integrity of natural ecosystems. Open spaces play an important role in the social, mental, and physical wellbeing of residents and wildlife. Open spaces also protect the natural visual quality of the area and maximizes the area's attractiveness, liveability, investment, and tourism potential of the area. It is recommended that valuable environmental components and their buffers be zoned as open space. These areas include:

- Wetlands, dams, rivers, streams, watercourses (and their buffers)
- Endangered ecosystems
- Forests (minimum 50m buffer)
- Mountains and ridges

B2.1.6.1 Protection of Sensitive Areas

Environmentally sensitive areas (ESAs) are landscape elements or places which are vital to the long-term maintenance of biological diversity, soil,

water or other natural resources both on the site and in a regional context. They include wildlife habitat areas, steep slopes, wetlands, and prime agricultural lands. (Ndubisi et al, 1995). Environmentally sensitive areas are protected under the National Environmental Management: Protected Areas Act 57 of 2003.

When ESAs are interconnected, they could form greenway corridors consisting of networks of linked landscape elements that provide ecological, recreational, and cultural benefits to a community. The protection of environmentally sensitive areas is a high priority for our municipality as these areas offer a variety of benefits including beautiful scenery, opportunities for outdoor recreation, and plant and animal habitat, to name a few. Preserving sensitive areas often provides an additional benefit of protecting citizens and property against natural hazards. For example, protection of floodplains and the wildland urban interface not only safeguard natural resources; they also help reduce vulnerability to flood and wildfire hazards. Additionally, protecting natural areas helps meet other community goals such as providing for open space, parks and recreation, and habitat conservation.

Kai !Garib local municipality is faced with the pressures of balancing economic development with environmental protection and recognizes that uncontrolled development may lead to an irreversible loss of ESAs. Without an SEA, the municipality will use this exercise to identify these areas.

B2.1.6.2 Critical Biodiversity Areas

The National SDF and the Northern Cape PSDF identifies a framework for Linking the Spatial Planning Categories (CBA Map Categories) to Land Use Planning and Decision-Making Guidelines. The table is outlined below.

Critical Biodiversity Areas are located along the **perennial rivers** and **Dams** running through the Kai !Garib LM. There are also large parcels of CBA1's that need to be excluded from agricultural potential land due to the conservancy of critical endangered species and grassland in the LM.

There is a lot of **intensive farming** and pivots located within the LM especially in the towns along the Orange River that need to be protected for food security.

Biodiversity score is derived from the Northern Cape biodiversity plan which classifies the Northern Cape according to biodiversity importance. Protected areas are given a 0 score as it has no potential for development. CBA1 is also given a 0 since it's seen as critical. Ecological support areas are given a 50% score and already cultivated and used areas are 100 available for development.

Table 4: Critical Biodiversity Areas

CBA MAP CATEGORY	ADAPTION MEASURES
Protected Areas & Critical Biodiversity Area 1 (CBA1)	Maintain as natural conservation or production landscapes that maximize the retention of biodiversity pattern and ecological process: • Ecosystems and species fully intact and undisturbed • These are areas with high irreplaceability or low flexibility in terms of meeting biodiversity pattern targets. If the biodiversity features targeted in these areas are lost, then targets will not be obtained.
Critical Biodiversity Area 2 (CBA2)	Maintain as near-natural production landscapes that maximize the retention of biodiversity pattern and ecological process: • Ecosystems and species largely intact and undisturbed. • Areas with intermediate irreplaceability or some flexibility in terms of area required to meet biodiversity targets. There are options for loss of some components of biodiversity in these landscapes without compromising our ability to achieve targets. • These are landscapes that are approaching but have not passed their limits of acceptable change.
Ecological Support Area 1 (ESA1)	Maintain as ecologically functional landscapes that retain basic natural attributes (generally natural or near-natural areas): • Ecosystem still in a natural or near-natural state and has not been previously developed. • Ecosystems moderately to significantly disturb but still able to maintain basic functionality. • Individual species or other biodiversity indicators may be severely disturbed or reduced. • These are areas with low irreplaceability with respect to biodiversity pattern targets only.
Ecological Support Area 2 (ESA2)	Maintain partly functional ecologically landscapes that retain some natural attributes (generally cultivated areas): • Maintain current land use or restore area to a natural state • Ecosystem NOT in a natural or near-natural state and has been previously developed (e.g. ploughed). • Ecosystems significantly disturbed but still able to maintain some ecological functionality. • Individual species or other biodiversity indicators are severely disturbed or reduced and these are areas with low irreplaceability with respect to biodiversity pattern targets.

Other Natural Areas and No Natural Habitat Remaining	Production landscapes: manage land to optimise sustainable utilization of natural areas.
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B2.1.6.3 Climate Change

The growing awareness of climate change and the crucial role played by the natural environment in providing the essential ecosystem goods and services upon which all life on earth depends is the context for this section.

Sensitive environments are fragile and need to be protected otherwise animal and plant species will become extinct. The mass extinctions of species will impact negatively on the water resources and the food chain which will be catastrophic for economic development at a local and global level. The loss of biodiversity and the degradation of the ecosystem pose a major risk to human survival and development.

Preserving nature is essential to the survival of economic activities such as fishing and agriculture and food security in general. Many communities rely primarily on natural medicines for their health care. Degradation of nature is therefore not purely an environmental issue. It spans economics, health, social justice, and human rights.

Climate change is a significant global concern. Traditional livestock farming e.g., livestock farming has a major impact on climate change.

Climate change initiatives include:

- Explore opportunities for a comprehensive green streets program and the benefits associated with replacing detention pond standards with standards for green streets.
- Encourage aggressive use of “green infrastructure” that maximizes stormwater retention on-site and land development designs for urban runoff that minimize flooding and the need for additional or expanded flood control and conveyance facilities.
- Maintain and enforce location criteria and development standards that minimize financial loss and maximize protection of property in the event of flooding.
- Promote compact, walkable development patterns that support transit and reduce carbon emissions from vehicles and discourage development patterns that rely solely on vehicles for transportation in an effort to reduce vehicle miles travelled
- Encourage the preservation of adequate open space and protect unique and environmentally sensitive areas as identified in applicable Biodiversity Spatial Plans.

- Facilitate the development of Special Use Facilities and ensure that a financial strategy is developed to ensure a sustainable source of revenue for the operation of such facilities
- It would be desirable to have green water used for ablution facilities, in all urban centres, this will respond to climate change and preservation of blue water supply.

Agriculture

- Conduct research on plant breeding and best adapted cultivars that can be grown using non-irrigation methods such as hydroponics.
- Develop livestock and natural vegetation breeding research programmes.
- Support small scale and emerging farmers through capacity building processes and assistance in identifying possible sources of funding.

Human Health

- Conduct research on possible interventions for indoor air quality monitoring.
- Implement existing air quality management plan through a detailed implementation plan.
- Review and scale down existing dust control regulations to be area specific.

Human Settlements

- Eradicate shacks through rolling out of RDP houses.

- Establish equipped satellite firefighting stations in all local municipalities.
- Develop centralised warning systems for communication for all extreme weather events (including hail, heavy rains, fires, heat waves) across the district (including local municipalities) based on a centralised reliable source such as South African Weather Services.

Water

- Develop relocation plans for agriculture within flood lines.
- Develop and implement water conservation and rainwater harvesting campaigns within the district.

Environmental Recommendations

- The local municipality needs to develop a strategic environmental assessment plan, as it will assist in the protection of critical environmental areas.
- The municipality needs to ensure that all required environmental studies and reports are done prior to the construction phase of all municipal projects and that they are zoned correctly.

B2.2 SPC A: Core Conservation Areas

SPC A areas constitute sites of high conservation importance including terrestrial land, aquatic systems (rivers, wetlands and estuaries) and marine areas (beach or rocky headlands). Due to their highly irreplaceable status

such areas should be protected from change or restored to their former level of ecological functioning. Such SPC A areas are a natural resource (capital) of international, national and provincial significance.

A.a	Statutory Protected Areas	Areas designated in terms of legislation for biodiversity conservation, defined categories of outdoor recreation and resource use.
A.a.1	<u>Wilderness Areas</u> (declared in terms of NEMPA 57 of 2003) <i>Areas characterised by their intrinsically wild and pristine appearance and character, or that are capable of being restored to such, and which are undeveloped, without permanent improvements or human habitation. Such areas are declared to:</i> <i>a) protect and maintain the natural character of the environment, biodiversity resources, associated natural and cultural resources ;</i> <i>b) provide environmental goods and services;</i> <i>c) provide outstanding opportunities for solitude and primitive outdoor experiences; and</i> <i>d) provide controlled access to those who understand and appreciate wilderness, and those who wish to develop such an understanding.</i>	
A.a.2	<u>Special Nature Reserves</u> (declared in terms of NEMPA ⁶¹ 57 of 2003) <i>Areas characterised by sensitive, ecologically outstanding ecosystems or natural habitats, natural communities, populations or species, or unique geological or biophysical features conserved primarily for scientific research, educational and limited nature-based recreational purposes.</i>	

A.a.3	<u>National Parks</u> (declared in terms of NEMPA 57 of 2003) <i>Designated to protect areas of national or international biodiversity importance; or containing a representative sample of South Africa's natural systems, scenic areas or cultural heritage sites; or the ecological integrity of one or more ecosystems. National parks provide spiritual, scientific, educational, recreational and tourism-related opportunities which are mutually and environmentally compatible and can contribute to local and regional economic development.</i>
A.a.4	<u>Nature Reserves</u>, including provincial, local authority and registered private nature reserves (declared in terms of NEMPA 57 of 2003) <i>Areas of significant ecological, biophysical, historical, or archaeological interest or that are in need of long-term protection for the maintenance of its biodiversity or for the provision of environmental goods and services. Nature reserves are declared to</i> <i>a) supplement the systems of wilderness areas and national parks in South Africa;</i> <i>b) sustainably provide natural products and services to local communities;</i> <i>c) enable the continuation of traditional resource uses; and</i> <i>d) provide nature-based recreational and tourism opportunities.</i>
A.a.5	<u>Protected Environments</u> (declared in terms of NEMPA 57 of 2003) <i>Areas may be declared as a protected environment to:</i> <i>a) Conserve the area as a buffer zone for the protection of a wilderness area, special natural reserve, national park, world heritage site or nature reserve.</i> <i>b) Enable owners of land to take collective action to conserve biodiversity on their land and to seek legal recognition for such actions.</i> <i>c) Protect the area if it is sensitive to development due to its –</i> <i>a. Biological diversity;</i> <i>b. Natural, cultural, historical, archaeological or geological value;</i> <i>c. Scenic and landscape value; or</i>

	<i>d. Provision of environmental goods and services.</i> <i>d) Protect a specific ecosystem outside of a wilderness area, special nature reserve, natural park, world heritage site.</i> <i>e) Ensure that the use of natural resources is sustainable.</i> <i>Control change in land use if the area is earmarked for declaration as, or inclusion in, a wilderness area, national park or nature reserve.</i>
A.a.6	<i>Forest Wilderness Areas / Forest Nature Reserves (in terms of s 8[1] of National Forests Act 84 of 1998)</i> <i>Declared forest wilderness areas and forest nature reserves include:</i> <i>a) natural forests, i.e. tract of indigenous trees whose crowns are largely contiguous and which comprise all other floral and faunal forest elements;</i> <i>b) woodlands, i.e. a group of indigenous trees which are not a natural forest, but whose crowns cover more than 5% of the area bounded by the trees forming the perimeter of the group; and</i> <i>c) natural habitats or ecosystem components.</i>
A.a.7	<i>Marine Protected Areas (declared in terms of Marine Living Resources Act 18 of 1998)</i> <i>Areas declared as a marine protected area:</i> <i>a) For the protection of communities, populations or species of fauna and the biophysical features on which they depend;</i> <i>b) To facilitate fishery management by protecting spawning stock, allowing stock recovery, enhancing stock abundance in adjacent areas, and providing pristine communities for research; or</i> <i>c) To mitigate any conflict that may arise from competing uses in that area.</i>

A.a.8	World Heritage Sites (declared in terms of World Heritage Convention Act 49 of 1999) Cultural 62 or natural 63 areas that has been: a) Included on the World Heritage List, or the tentative list of the Republic, and has been proclaimed as a World Heritage Site, or b) Proclaimed to be a special heritage site for management in accordance with the Act (such areas cannot be referred to as a World Heritage Site).
A.a.9	<u>Mountain Catchment Areas</u> (declared in terms of Mountain Catchment Areas Act 63 of 1970) Areas declared as mountain catchment areas that provide for the conservation, use, management and control of such land.

B2.3 SPC B: Natural Buffer Areas

The SPC B areas serve to create appropriate buffer areas around or adjacent to SPC A areas that protect the latter against consumptive or habitat-fragmenting land-use impacts. This will allow for the creation of a continuous network of natural resources areas throughout the province that maintain ecological processes and provide ecosystem services (e.g. benefits that people derive from ecosystems). In the Northern Cape, these include the

provision of water, arable soil, disaster amelioration, recreational opportunities, etc.). Only activities that have an acceptable ecological footprint are permitted in SPC B. Where applications are made for such developments the onus is on the applicant to prove the desirability and sustainability of the proposed development.

B.a.1	<i>Areas designated for conservation purposes in terms of an agreement with a conservation agency, or between landowners, a lease agreement, or a servitude. This category includes conservancies and biodiversity stewardship sites.</i>	
B.a.2	<u>Private conservation areas</u> <i>Areas zoned as private open space zone II⁶⁴ in terms of Scheme Regulations made in terms of s 8 of the Land Use Planning Ordinance 15 of 1985 (LUPO), for the primary use of conservation. Also areas unofficially designated and managed for conservation purposes by the relevant land owner.</i>	
B.b	Ecological Corridors	Linkages between natural habitats or ecosystems that contribute to the connectivity of the latter and to the maintenance of associated natural processes.
B.b.1	<u>Freshwater Ecosystem Priority Areas (FEPA)</u> (in terms of National Freshwater Ecosystem Priority Areas Project) <i>Identified river and wetland FEPAs and fish support areas, including a generic buffer of 100m, measured from the top of bank of the river or the delineated riparian areas, whichever is larger, and measured from the outside edge of the wetland (Implementation Manual for Freshwater Ecosystem Priority Areas, Aug 2011).</i>	

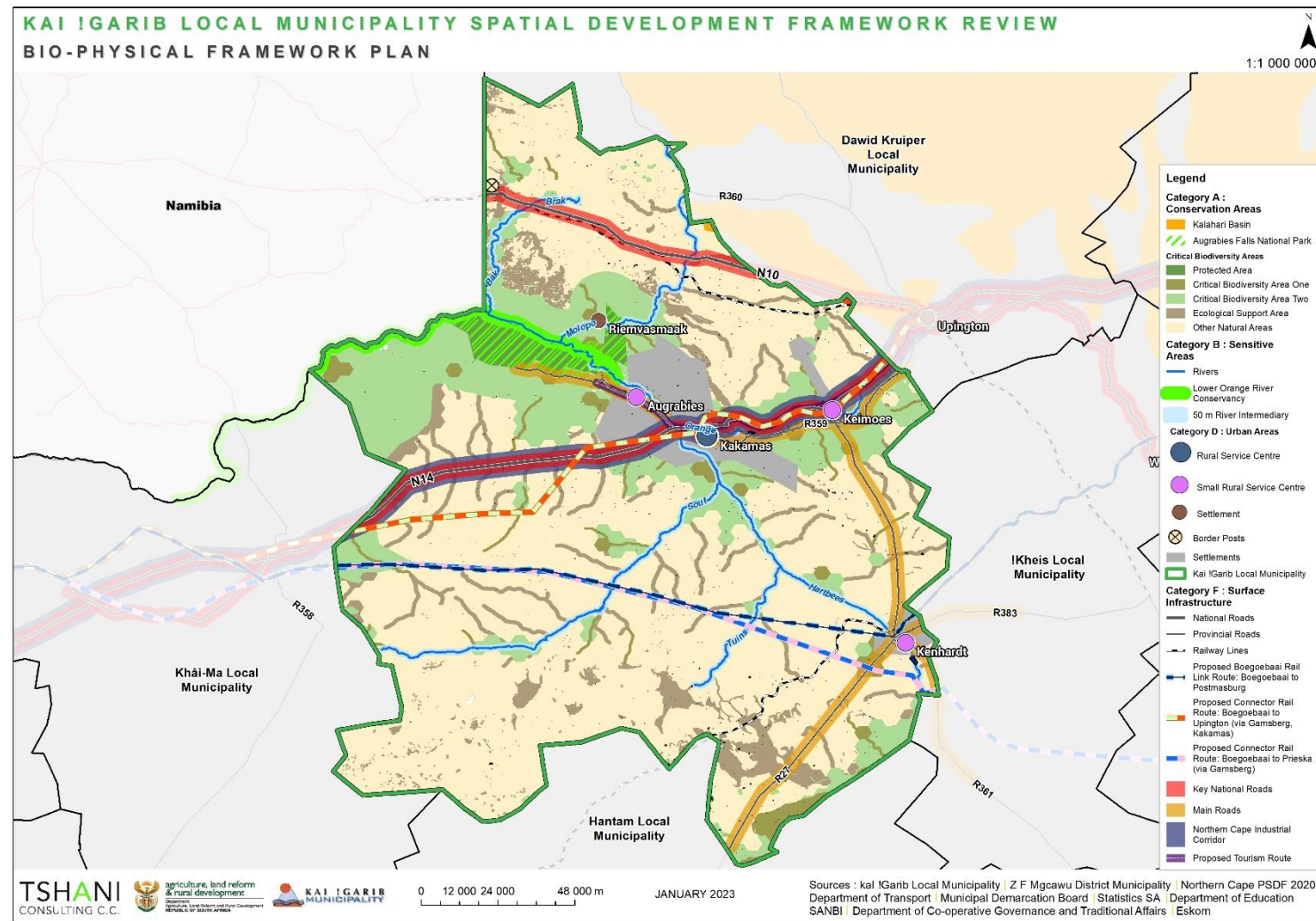
B.b.2	<u>Rivers or riverbeds (incl. 32 m buffer)</u> (in terms of NEMA⁶⁵ 107 of 1998) <i>All other perennial and non-perennial rivers and wetlands, including a buffer of 32m based on the generic buffer width used for aquatic features in the Listing Notices of the Environmental Impact Assessment Regulations, 2010 (GN R544, GNR545 and GN R546).</i>
B.b.3	<u>Other Natural Areas</u> <i>a) Sensitive Coastal Areas.</i> <i>b) Tracts of natural vegetation that form part of, or link ecosystem components (i.e. tracts of natural vegetation acting as a buffer zone between rivers located in FEPA Fish Support Areas and Fish Sanctuaries, and Category C and D areas).</i> <i>c) Any other natural areas that are conservation-worthy and which form linkages to natural areas within Category C and D areas.</i>

B.c	Urban Green Areas	Municipal open spaces (including playgrounds) that form in integral part of the urban structure (including areas zoned Open Space Zone I and II).
B.c.1	<u>Public Park</u>	
B.c.2	<u>Landscaped Areas</u>	

B2.4 Environmental Recommendations

The local municipality needs to develop a strategic environmental assessment plan, as it will assist in the protection of critical environmental areas.

The municipality needs to ensure that all required environmental studies and reports are done prior to the construction phase of all municipal projects and that they are zoned correctly.



PLAN 19: Bio-Physical Framework Plan

B2.5 SPC C: Agriculture Areas

The protection and appropriate use of high potential agricultural land is of critical importance for sustainable economic growth and food security. High potential agricultural land in close proximity to settlements are often subjected to non-agricultural development pressure, while negative social impacts associated with such settlements often have a significant detrimental impact on the production potential of such land. It is therefore imperative that the highest priority be given to the protection of high potential agricultural land and that measures be instituted to create and maintain circumstances conducive to sustainable agriculture.

Commercial agriculture can be defined as the opposite of subsistence agriculture. Commercial agriculture is basically growing crops intended to sell the produce for profit in the local or export market. With reference to Kai !Garib, the most common form of agricultural practice is that of commercial farming, the majority of the crops that are being produced are citrus and grapes. Another major key farming potential is grape farming as the climate is suitable for grape farming.

Those areas identified through the agricultural assessment as having the highest agricultural potential have been reflected on the Spatial Framework Map as areas of agricultural development only. In general, the subdivision of prime agricultural land is discouraged and the development of this land for non-agricultural purposes should only be allowed if:

- The land has already been subdivided to such an extent that it is no longer agriculturally viable;
- The land has already been developed for non-agricultural purposes;
- The proposed development does not compromise the primary agricultural activity of the property;
- The proposed development comprises a secondary activity to supplement a landowner's income;
- It will facilitate the implementation of the Land Reform Programme and Labour Tenant Projects.

Climate Change - Climate Breakdown as it has come to be termed – is regarded as the most significant challenge to human development and, indeed, human survival as a viable species on earth in our era. It is already having – and will continue to have – far reaching impacts on human livelihoods.

The CSIR Green Book is an online planning support tool that provides quantitative scientific evidence on the likely impacts that climate change and urbanisation will have on South Africa's cities and towns.

The Green book presents several adaptation actions that can be implemented by local government to support climate resilient development.

These adaptations include:

- Determining urban edge
- Identify all open spaces.
- Identify all key ecosystems and protected areas.

- Connect open spaces.
- Connect key transit nodes.
- Determining coastal management lines
- Identifying existing vulnerable infrastructure.

The land reform process is very dependent on agriculture to succeed, but in return also provides the opportunity for growth in the agricultural sector. However, the agricultural sector serves as the main food supply source in the Municipality with a huge contribution nationally but makes a very small contribution to the GGP.

Whereas many people are already dependent on the agricultural sector, it is now feared that the sector has reached optimal production levels, whilst the demand is increasing continuously. Furthermore, the declining food supply is also threatened by a need to produce additional forms of products such as Biofuels.

B2.5.1 Agriculture Development

When evaluating how agriculture contributes to rural development in general, it is undeniably important in many rural communities. The importance of agriculture and rural development is evident in the instance of Kai !Garib, where unemployment and poverty are considerable. Agriculture is known to generate more jobs per rand invested than any other industry. However, relying solely on agriculture to spur rural development and reduce poverty is ineffective. Therefore, it is essential that initiatives to strengthen the rural

economy go beyond agriculture and consider other economic sectors, access to markets, and the strategic importance of spatial integration.

In this context, the links between rural and urban areas are necessary. Rural communities can create cash to augment their living expenses thanks to market access. Additionally, income encourages the development of the market for goods and services, enables saving, and allows for reinvestment in the rural economy. These promote the creation of self-sustaining growth in the rural economy by accomplishing this.

Key to alleviate poverty in the area would require the following actions:

- Identify and support small scale farmers, with skills development and training.
- Development of transport infrastructure linking rural and urban.
- Facilitate the establishment of cooperatives of small farmers, contract farming and other form of cooperation with the private sector.
- Identify and support competitive small and medium-sized enterprises.
- Create and nurture a useful environment for business and investment to take place.

Growth in agriculture, particularly in high-value supply chains, results in improved wages and employment for urban and rural dwellers. The indirect income effect undoubtedly pulls a lot of rural and or urban households out of poverty through increased farm incomes. Growth in agriculture also results

in reduced food prices which make it possible for poor urban or rural households to afford food.

B2.5.1.1 Agri-Hub Development

The focus of the Agri-park is primarily the processing of 'agricultural products and the mix of 'non-agricultural' industries. Of prime importance will be linkages between the proposed FPSU's and surrounding agricultural land for production.

The **Agri-Hub** approach will include the selection and training of smallholder farmers, as well as selecting farms per province for the placement, incubation, and training of unemployed agricultural graduates and other agro-entrepreneurs. The Agri-hub are to be farmer-controlled.

The **Farmer Production Support Unit** (FPSU) This is a rural small-holder farmer outreach and capacity building unit which provides primary production inputs, mechanisation support, extension services, storage facilities, and training to producers. There will be two FPSU's in KGLM as shown below.

Table 5: Agri-Park Development

Agrihub	FPSU's	Livestock Activities	Crop/Horticulture Activities	Value Chains
Upington		Sheep Mutton Wool	Wine & Table Grapes	Mutton/Sheep Value Chain Raisins

			Vegetables	Value Chain
	Eksteenskuil	Sheep Mutton Wool	Wine & Table Grapes Vegetables	Mutton/Sheep Value Chain Raisins Value Chain
	Riemvasmaak	Sheep Mutton Wool	n/a	Mutton/Sheep Value Chain

Agriculture Programs

Comprehensive Agricultural Support Program (CASP)

According to Progress Report on the Implementation of CASP (2004), the main aim of the farmer support is to create a favorable and supportive agricultural service environment for the farming community.

Table 6: Key CASP projects in Kai !Garib LM Include

Project Name	Municipality	Closest town	Project Type	Commodity
Gansendmond	Kai Garib	Kenhardt	Livestock water supply	Meat
Keimoes Meent water provision	Kai Garib	Keimoes	Livestock water supply	Meat

Kai Garib breeding stock	Kai Garib	Keimoes	Livestock water supply	Meat
Nakop farms	Kai Garib	Kakamas	Livestock water supply	Meat
Nomalangha Trust	Kai Garib	Keimoes	Crop production	Raisins
Eksteenskuil Co- op	Kai Garib	Keimoes	Crop production - grapes	Raisin grapes
Riemvasmaak irrigation	Kai Garib	Vredesvlei	Irrigation infrastructure crop production	Table grapes
Blocuso Trust	Kai Garib	Keimoes	Crop production - grapes	Raisins and Wine

B2.5.2 Agriculture Value Chain

A value chain is a collection of linked activities that improve a product's value while connecting the suppliers of raw materials with processors, marketplaces, and consumers. As opposed to the simplest kind of value chains, where producers and buyers just share price information, cooperative value networks produce higher-quality products and increase income for all parties along the chain. Numerous activities could be included

in value chains. Development and distribution of plant and animal genetic material, input supply, farmer organization, farm production, post-harvest handling, processing, provision of production and handling technologies, grading criteria and facilities, cooling and packing technologies, and post-harvest local marketing are some examples of elements that make up an agricultural value chain.

Key issues include:

- Low yields;
- Limited knowledge and; confidence in especially the commercial agricultural sector;
- Poor quality produce;
- Lack of equipment;
- Labour challenges (capacity and skills development);
- Subsistence orientation;
- Cashflow management;
- Lack of storage facilities;
- Transportation and logistics support;
- No or limited supply guarantees;
- Informal market dominance, creating little value-adding;
- Product diversity; and
- Alignment to market needs.

The Key commodities for the Agricultural Sector in Kai !Garib is as follows:

- Raisins

- Table Grapes & Wine Grapes
- Vegetables
- Goats and Sheep
- Pecan nuts

B2.5.3 Food Security

Land reform is closely linked to agriculture, where production in this sector can either be on a subsistence level, or on a commercial farming level. Either way, both these farming practices makes a certain contribution towards the economy of the municipality, although production from commercial farming forms part of a value chain, which makes products more expensive. To address the high levels of poverty in the municipality it becomes important to firstly produce for the district and to secure food for all inhabitants.

The local economy heavily depends on the agricultural sector. Its contribution to food security and employment is crucial in preventing socioeconomic problems in the region. In the upstream supply chain, agriculture also provides the raw materials for other sectors. This results in the creation of secondary and tertiary jobs in urban areas.

Furthermore, through exports to other regions, agriculture generates much-needed currency. With the demand for manufactured goods such as tractors, vehicles, etc., in the agricultural sector, agriculture help in driving the economy, especially the manufacturing sector.

Interventions through the Agri park initiative include the following; improving compositeness in agricultural products which in turn results in agricultural growth, improving market development for all agricultural produce, increasing value addition, increasing market research, crafting policies which are an inclusive and increasing investment from both the public and the private sector in the agricultural sector.

B2.5.3.1 Key Action Areas

Investments and Re-invest in primary Agricultural supports.

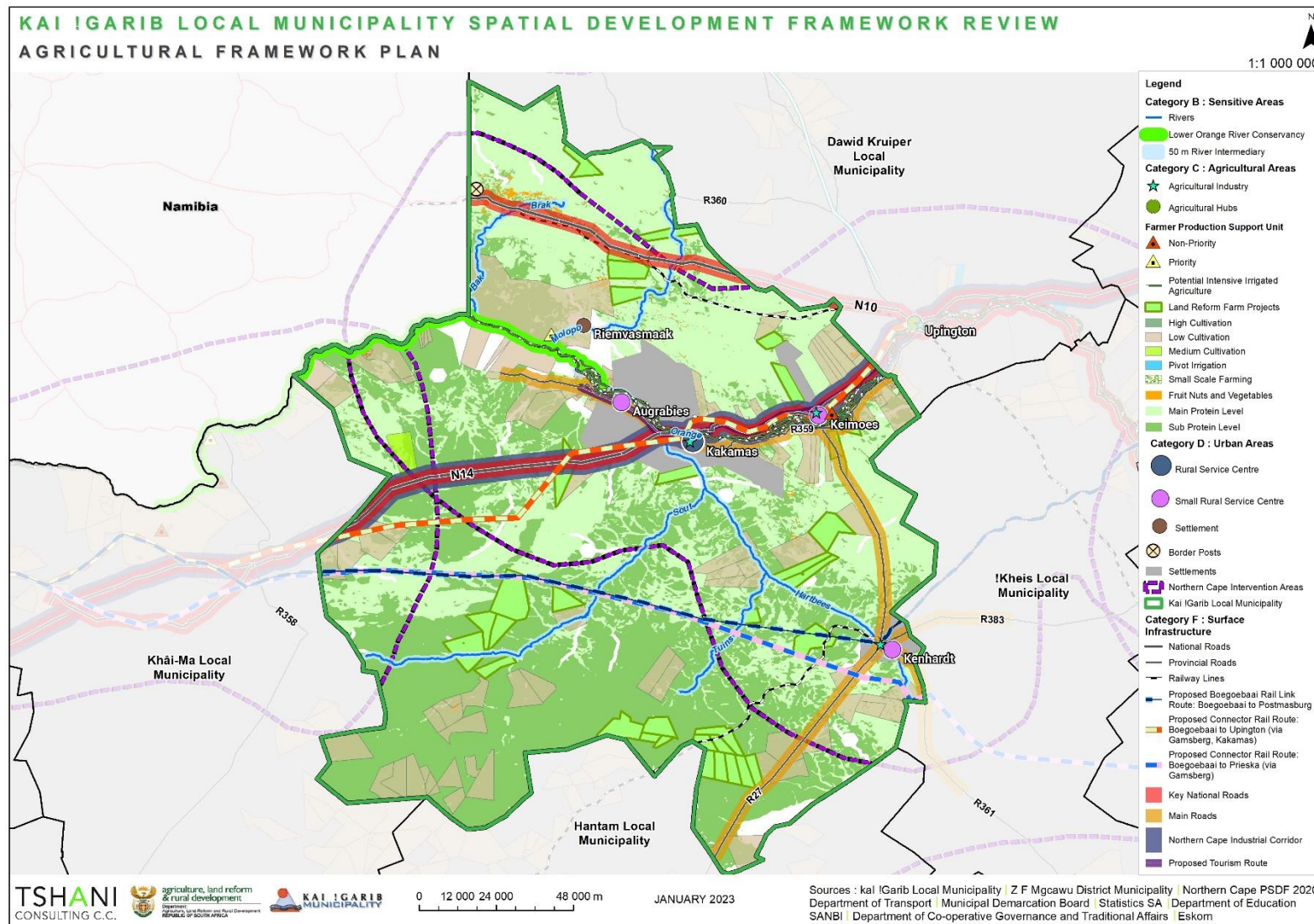
LED will conduct in a municipal farming land availability audit; this will assist the municipality in view of reviving economic activity but also understand the quantity of readily agricultural primary inputs and investment needs to optimise audited farm utilization. The exercise will result in reviving and supporting current storage (Silos) and production structures such as Abattoirs and it will also trigger investment need for a feed mill to support the feedlots in the area and surrounding areas. Adopt Value Chain

Understanding the importance of creating sustainable agricultural economy, it is then vital to adopt value chain as the model from Input to supply and marketing, so we experience growth and sustainability in the local produce.

- Inputs
- Production
- Processing
- Supply Chain (Logistics, Packing, Distribution & Exports) Marketing

C.a	Extensive agricultural areas	Agricultural areas covered with natural vegetation, used for extensive agricultural enterprises, e.g. indigenous plant harvesting, extensive stock- farming, game-farming, eco-tourism.
C.a.1	<u>Bona-fide Game Farms</u>	
C.a.2	<u>Extensive Stock Farms</u>	

C.b	Intensive agricultural areas	Agricultural areas used for intensive agricultural practices, e.g. cropcultivation, vineyards, intensive stock farming on pastures.
C.b.1	<u>Cultivated Areas</u>	
C.b.2	<u>Plantations and Woodlots.</u> <i>Plantations, i.e. group of trees cultivated for exploitation of the wood, bark, leaves or essential oils in the trees; forest produce, i.e. anything which appears or grows in such plantation including any living organisms and any product of it.</i>	



PLAN 20: Agricultural Framework

B3. SOCIO-ECONOMIC FRAMEWORK

The Socio-Economic Framework aims to address the social and economic issues pertaining to the KGLM. This includes skills development in the municipality as well as social amenities that may be required. This framework also addresses the tourism aspects as it has been noted in the SWOT Analysis that the municipality has huge potential for tourism



B3.1 ECONOMIC FRAMEWORK

The following section aims to unpack the Economic Framework underpinning KGLM and aims to highlight the areas of focus to lead to economic growth for KGLM. as per the SONA, President Ramaphosa stated that prioritisation needs to be made to revitalise our economy and end the inequality and injustice that impedes our progress. There is agreement among a broad and diverse range of South Africans that fundamental reforms are needed to revive economic growth, there is a need both to address the immediate crisis and to create conditions for long-lasting

stability and development. To achieve this, South Africa needs a new consensus. A consensus that is born out of a common understanding of our current challenging situation and a recognition of the need to address the challenges of unemployment, poverty and inequality this section thus places this focus through finding the key opportunities for private and government investment that will boost the economy.

The Provincial Spatial Economic Development Strategy (PSEDS) recognises that: social and economic development is never uniformly distributed; apartheid created an unnatural distortion of development, and; this distortion must be addressed through an interventionist approach. PSEDS is part of broader economic developmental policy within the province, hence it should not be implemented in isolation.

In doing this, KGLM can invest in opportunities to accelerate economic growth, job creation and transform the Local Municipal area. Spatial strategies and plans as well as the land use management regime administered by the KGLM must be designed so as to facilitate and enhance the opportunities for sustainable economic development in the area.

MAIN ECONOMIC SECTORS

Primary



MINING
SECTOR



AGRICULTURE
SECTOR

Secondary



MANUFACTURING
SECTOR



ELECTRICITY
SECTOR



CONSTRUCTION
SECTOR

Tertiary



TRADE
SECTOR



TRANSPORT
SECTOR



FINANCE
SECTOR



COMMUNITY
SERVICES SECTOR

Figure 3: Main Economic Sectors

B3.1.1 Agriculture

The climate of the region excludes the production of a number of crops. Similarly, a finite limit to the quantity of land will limit the quantity of agricultural product that can be produced. How these resources are utilized, and risk-managed will ultimately determine the financial and social impact that agriculture will have on the region.

Other economic factors (i.e., rising food and fuel prices) also place continuous pressure on the agricultural sector and innovative solutions need to be found to address the long-term sustainability thereof. Production in the agricultural sector should be increased through research and development

of new and better products and production methods, as well as renewed investment in infrastructure and value-adding opportunities.

The market trends are moving with technological changes, it is therefore important that the Kai !Garib Local Municipality not only focus on opportunities to the agricultural sector, but also to investigate potential improved technology changes that could improve the quality of produce as well as the production methods. Technology changes to investigate include, but are not limited to, hydroponics, aquaculture, new products, etc.

Table 7: Crop Production Within Kai !Garib

Crop Group	Commodities Suitable	Risk Assessment	Suitability For Rural Development
Irrigated vegetable/ tuber crops	- Grapes (Wine & Table) - Raisins - Fruits	- High inputs cost - Commercially viable, while less viable for small scale farming - High water usage - Labor intensive - Hail and frost	- Labor Intensive - Included in rural food basket. - High demand for produce - Added value chain opportunities. - Backyard gardening opportunities - Access towards all farmer groups
Irrigated /dry land grain crops	- Soybeans - Maize - Wheat	- High inputs cost - Commercially viable, while less viable for small scale farming - Low return on investment - High water usage - Labor intensive - Hail and frost	- Labor Intensive - Included in rural food basket. - High demand for produce - Added value chain opportunities. - Backyard gardening opportunities - Access towards all farmer groups

B3.1.2 Mining

The Kai !Garib local natural resources can be beneficiated, which is a crucial step in enhancing the value of local raw materials, fostering skill development, and raising product prices. The significant amount of raw materials exported is a major worry. The smelting and re-smelting of minerals requires a significant amount of electricity, which makes the beneficiation of minerals an expensive process with high capital costs.

B3.1.3 Manufacturing

A lack of manufacturing is experienced therefore the limited production of goods and service in Kai !Garib. Vacant Industrial Sites needs to be optimally used for the purpose to enhance industrial estate. These sites might be confined one or multiple commodities tailored for manufacturing and storage of goods and services especially in the green economic space and agro-processing. This could boost beneficiation, investment, economic

growth and, most importantly, the development of skills and employment in the Kai !Garib Municipal area. Land for the development of manufacturing sites or storage facilities is available in the Kai !Garib Industrial Area.

Kai !Garib Local Municipality consists of mainly Agro Processing of grapes, meat (beef, sheep and game) (Small-Scale). Manufacturing activities are dispersed Kai !Garib Local Municipality with the highest concentration of manufacturing activities located in Kakamas and Keimoes. The three most prominent manufacturing firms in the region in terms of agriculture are Triple D Farms (Pty) Ltd, Redsun Dried Fruit & Nuts (Pty) Ltd and Orange River Wine Cellars. In terms of the renewable industry BRV Electro & Solar Technologies(PTY)Ltd and Metal Works is A3 Engineering.

The manufacturing sector has established linkages with the agricultural and construction sectors. However most of these are small-scale and need to be expanded on. The following linkages could be linked to the manufacturing sector:

Linkage to the agricultural sector:

- Agro-Processing of produce and meat has great potential within the district as a whole.
- Although small-scale activities are being practised these should be expanded on through the promotion of skills training programmes that will enable a skilled labour force.
- Production of packaging materials

Construction sector:

- Production of building materials
- Production of renewable energy plants equipment
- Assemble of steel pipes
- Welding of storage equipment

Other sectors:

- Utilities sector – manufacturing of wind and solar equipment
- Transport and communications sector – vehicles, infrastructure requirements, etc.

B3.1.4 Electricity

Investor confidence and economic development are significantly influenced by electrical infrastructure. In terms of power generation and the availability of liquid fuels, the NDP suggests a variety of alternative energy sources. A crucial step towards releasing the hidden economic potential of the manufacturing and agricultural sectors as well as improving the profitability of current and future high impact projects is the expansion of the electrical infrastructure and its capacity. Recently, large-scale, grid-connected projects built under the REIPPPP have come to represent renewable energy in South Africa. However, it is also possible to employ renewable energy on a smaller, standalone scale where it can directly assist individuals, farms, communities, and enterprises.

Key actions and interventions:

- To maintain electrical infrastructure.
- Refurbishment of Minisubs.

- Replacement of streetlight furniture and lights to solar; and
- General electrical maintenance on the existing electrical infrastructure.
- Prepare an Electricity Master Plan.
- Connection of Households of new developments.
- Upgrade Electrical Network.
- Upgrade electrical bulk supply network.

The region is known for its extremely high temperatures in summer (reaching 42°C). There is ample sun and wind in the Kai !Garib Local Municipality which provides the potential of between 7 and 8.5 kWh/m²/day of solar power (this is the highest potential in South Africa) and moderate wind power of 3-4 m/s.

The Electricity sector is the backbone of future development taking place in the region. The utilities sector will form linkages to all the major economic sectors due to the reliance of activities on both electricity and water.

There is an opportunity for renewable energy strategies in pursuit to improve the Northern Cape Province's environment, and alleviating energy poverty, whilst promoting economic development and job creation in the province whilst developing its green economy. Eskom can introduce a business model that cuts down the load-shedding schedule for the local municipality as it supplies energy to the National Grid, this would attract investors into investing more in the municipality.

B3.1.5 Trade

The Kai !Garib Local Municipality is a large producer of agricultural products. The local municipality also offers a number of tourism attractions and activities, more especially in the Kakamas, Kenhardt and Keimoes towns. There is ample Retail and Wholesale Trade activities throughout the local municipality with major community Shopping centers in the neighboring Local Municipality of Dawid Kruiper, Trade of small-scale agricultural produce, arts and crafts for the tourism markets spread throughout the entire local municipality.

There is an opportunity for shopping centers in the rural service centers to reduce the traffic on the Dawid Kruiper municipality.

B3.1.6 Transport

The core of the economy at all scales and the lifeblood of modern society is transportation. The logistics of ordinary everyday life and business would be unthinkable without it. Given that products and services are moved utilizing existing gravel road networks, the major deterioration of particularly the rural road network has created a less favorable climate to improve rural transformation. Due to the deteriorating quality of the road surface, there have also been more vehicle repairs and damages.

Development of key public transportation routes to improve regional accessibility of especially the tribal areas, this could be done by the clustering of towns whereby central access points can be delineated to develop link roads (access points). This will efficiently be done by:

- Development and upgrading of Roads infrastructure.
- Further development and maintenance of the Rural Routes.
- Prioritization of roads identified as rural-urban linkages.
- Upgrading of internal roads to interlocking block paved roads; and
- Upgrading of gravel roads to double seal and stormwater management of roads.

B3.1.7 Tourism

There are many tourist attractions in Kai !Garib, including those focused-on adventure, historical, and cultural and natural tourism. Additionally, there are a few special prospects that might be made to break into a certain tourism sector.

Numerous travelers use N10 and N14 to go through the Municipality on their way to Namibia, and other nearby provinces and tourist destinations.

Nevertheless, despite the area's unique and important tourist attractions being underutilized, inadequately marketed, inconspicuous, and in poor condition. Building on conservation tourism is crucial to generating more job possibilities by drawing tourists to the region's historical and cultural relevance. This area can develop into a niche tourism destination.

Developing tourism attractions and the identification of new tourism attractions is a good starting point for tourism development, however, if the number of tourist visitations to these attractions is to increase, there needs to be an active marketing strategy to attract these tourists to the area. In doing so the LM will need to develop a Strategic Marketing Plan that should incorporate the following goals and objectives:

- Promoting tourism attractions within the area;
- Update local tourism websites with new tourism activities in the area;
- Market the local accommodation opportunities within each town and help with bookings;
- Understand the motivations and preferences of visitors to the area;
- Marketing of niche markets and combining tourism attractions as packages to increase and diversify tourism product offerings.

B3.1.7.1 Pro-Poor Tourism

The introduction of Pro-Poor Tourism is also vital in increasing the overall impact of tourism within the LM and increase the potential to increase the economic impact as per the sector. Pro-poor tourism is not as much a project as an approach to increase the participation of the poor in the industry. This approach is to enhance the positive impacts or spin-offs of the tourism industry on poorer communities as which is found typically within rural areas.

The poor in Kai !Garib's poorest areas are more likely to benefit from the tourism sector than those who live in the region's affluent areas, according to research by the World Bank. Pro-Poor Tourism has benefits that include improving direct economic participation by the poor. This relates to vendors, micro-entrepreneurs or general workers employed by tourism businesses. This includes unskilled guesthouse and restaurant workers, tour guides, street vendors and transport operators.

To improve dynamic impacts on the tourism industry. The impact of tourism sector stimulation on regional or national economic development that aids in the development of technical skills, opening of markets or differentiation in market penetration, communication links, etc., that has an impact on new ways for the underprivileged to improve their standard of living or take advantage of tourism opportunities.

B3.1.7.2 Tourist Centre

Tourism information centers are an important component in a visitor travel experience. They can help to link visitors to tourist attractions and share the unique history of the area. However, in the digital age, the importance of physical tourism centers has become less important to some extent, thus the combination of different functions relating to tourism in the multi-functional tourist center.

The establishment of a multi-functional tourist center along the N10 and N14 route will serve the region's tourism interest.

Other key economic sectors which can be looked at for the Kai LM are described below; :

B3.1.8 Agro processing

Agro processing refers to a subset of the manufacturing sector that processes raw materials and intermediate products derived from the agricultural sector. The aim is to develop and advance new processing technologies from lab to pilot and commercial scale implementation, using tools to demonstrate product and process capability at various scales.

Competitive performance of the agriculture and agro-processing industries is likely to contribute to inclusive economic growth and sustained development through back-forward linkages. Initially, by providing various opportunities for earning income in the primary food production, then in processing and value-add and distribution, and finally, in the retailing phases of the agro/food value chain. The growth of the agro-processing industry has the potential to stimulate and spur demand for raw material from the agricultural industry and thereby create novel output markets that increase the income of farmers, which in turn enables investment in capital equipment to improve productivity. The growth and development of the agro-processing industry is intertwined with the agricultural industry. Therefore, the latent potential of agro-processing activities is noted as capable to contribute towards the reduction of unemployment, inequality and poverty levels through backward and forward linkages. (DALRRD, 2018)

B3.1.9 Knowledge Economy

The LM should focus developments on science and technology are pointing the way to new directions in sustainable urban and rural developments. Investing in science and technology will allow the LM to become truly integrated into the knowledge economy, and innovative towns can develop significant advantages in globalisation.

At the same time, investing in science and technology will enable high-tech activities that are expected to experience strong growth of the district.

It is essential to ensure growth in knowledge economy for the betterment of the local community as well as to industries that invest heavily in research and development (R&D) and intellectual capital, thereby benefiting from opportunities to cluster and share information. To prepare for future economic growth, the district should support the existing sectors which have the potential to thrive (such as agriculture) as well as future innovation clusters, which will be dynamic, mixed-use small business districts that benefit from sharing knowledge and resources.

B3.2 LOCAL ECONOMIC DEVELOPMENT

Local Economic Development (LED) is an approach towards economic development that encourages local people to work together to achieve sustainable economic growth and development. It is aimed at bringing economic benefit and improved quality of life for all residents within the municipal area. Among other factors, LED seeks to achieve the following:

- Poverty alleviation;
- Improving rural livelihoods;
- Broadening the rural economic base;
- Encouraging the growth of entrepreneurship;
- Encouraging sustainable economic development initiatives;
- Creating employment;
- Promoting innovation and skills development.

Within the municipality, various LED key focus areas are proposed, as part of this SDF. This is aimed at promoting economic opportunities in the predominantly rural areas of the municipality, address the high dependency

on social grants and promote a varied economic base among other factors. The following are key industries for exploration within the municipality to promote LED:

B3.2.1 Township/Rural Economies

'Township economy' refers to enterprises and markets based in the township area. These are enterprises operated by township entrepreneurs to meet primarily the needs of rural/township communities and therefore can be understood as 'township enterprises' as distinguished from those operated by entrepreneurs outside the townships. The term "township" refers to old, new, formal and informal human settlements that are pre-dominantly African, Coloured and Indian characterised by high levels of poverty, unemployment and low incomes as well as distance from the main centres of economic activities.

Township enterprises have different legal forms - for-profit and not-for profit enterprises registered under the Companies Act and for cooperative enterprises registered under the Cooperatives Act. However, majority of township enterprises have high rates of informality.

The following has been identified in the township/rural economy.

Table 8: Township / Rural Economies

SECTORS	CLUSTERS
Retail	- Butcheries - Spaza Shops - Fish and Chips - Fruit & Vegetables
Service Industry	- Hair Salons - Shebeens - Shisanyama - Sewing and tailoring, including shoemakers - Car wash - Burial society
Construction and real estate	- Brick laying - Renting - Construction business
Transport	Taxis
Agriculture	Vegetable production
Finance	- Stokvel - Mashonisa/ lending schemes - Burial societies

Government and Community Services	Feeding Schemes
ICTS	- Internet solutions in townships - Electronic repairs
Green Economy	- Recycling - Coal and wood making

The Department of Small Business Development has developed a programme to support the township economy. This programme is called the **"Township and Rural Entrepreneurship Programme (TREP)"**.

The **Township and Rural Entrepreneurship programme (TREP)** is a dedicated programme to transform and integrate opportunities in townships and rural areas into productive business ventures. The focus is to create platforms which provide the business support infrastructure and regulatory environment that enables entrepreneurs to thrive.

The goal of this programme is to overcome the legacy of economic exclusion by creating a conducive environment for entrepreneurial activity and provide dedicated business support to enterprises in rural and township areas including access to funding.

The following schemes are available for qualifying entrepreneurs:

- Small-scale bakeries and confectioneries support programme
- Autobody repairers and mechanics support programme
- Butcheries support programme

- Clothing, leather and textile support programme
- Personal care support programme
- Spaza-shop support programme
- Shisanyama and cooked food support programme

B3.2.3 Informal Trading

Informal trading is as much a part of the past, present and future of the Kai !Garib Local Municipality as are other forms of economic activity. It contributes towards job creation and thereby helps in the absorption of many who would otherwise be economically idle. As with the formal economy, it helps in the alleviation of poverty, the indirect medium to long-term outcome of which includes reduced levels of petty crime and criminality.

The informal sector is the main source of employment for a considerable portion of the urban and rural poor and accounts for a significant share of economic output in most developing countries. According to Statistics South Africa, over two million people were active in the informal economy (excluding agriculture), in 2015.

The informal economy is most often considered by municipal planners as a spatial problem i.e. where to locate informal trading zones, rather than as an integral part of the local economy and a key factor against ever higher unemployment. It is therefore quite obvious that the regulation of business activity of an informal nature is the responsibility of local government.

Spatial development will focus on the gradual development of aesthetically inferior and poorly serviced demarcated informal trading spaces. Spatial planning requirements for the accommodation of informal trading shall

apply to private property developers as well, especially if the new development displaces a present market, or has potential to attract the interest of informal traders in the long run.

The growing informal sector employment is relevant because the unemployment rate in South Africa. What is remarkable about the informal sector, is the poverty-reducing effect of employment. The government recognizes the informal economy in South Africa as a viable and important form of employment and enabler of economic mobility for the country's poor. The National Informal Business Upliftment Strategy of 2014 set up a framework of government assistance with skills development, marketing, technical support, infrastructure improvements and management training. This "inclusive growth" strategy focuses on enabling South Africa's poor to participate in the economy rather than merely redistributing wealth through social welfare programs.

Key Action and Interventions:

- Formalising Informal trader stalls.
- Permit controlled informal trading stalls.
- By-Laws to prohibit informal trading in certain areas.
- LED to adopt By-law on informal trading.

Key areas for actions and interventions: (These are proposed to be along the corridor activity streets and Precinct CBDs of the following towns)

- Keimoes
- Kakamas
- Kenhardt

- Marchand
- Augrabies

Some examples of formalising Informal trader stalls are shown below.



B3.2.4 Small, Medium and Micro Enterprises (SMME) Developments

SMME developments are aimed at supporting the growth of small and medium enterprises through business management and financial skills development.

SMME developments present a wide spectrum of opportunities for developing entrepreneurs through the growth of innovative industries. SMME developments can be regarded as a critical developmental strategy to boost economic growth and development. The success of SMME developments,

however, is heavily reliant on enabling policies, financial support and enabling environments from local spheres of government.

SMME developments drive economic growth and development in the following ways:

- Job creation;
- Exploration of innovative industries;
- Curb Unemployment;
- Address Inequality
- Some industries require low skill levels;
- Harness entrepreneurial skills.

Due to the predominant rural nature of the municipality, various enabling approaches are needed in order to expand SMME developments to areas outside of the urban areas. Various enabling approaches are needed for the expansion of this sector to various areas of the municipality, these include:

- Awareness;
- Financial support;
- Knowledge empowerment;
- Skills development

SMMEs are also critical tools to promote empowerment, especially empowering previously disadvantaged groups such as women and rural residents. The promotion of SMME developments within the municipality will not only promote employment opportunities but will also promote entrepreneurs and the empowerment of individuals or groups.

Table 9: SMME Programmes

Programme	Specific Intervention	Responsibility
SMME relief programme	Assist local SMME's to access national support programs	ZFM and LM
	Provide a rates reduction intervention to businesses operating in the municipal facilities	LM
	Provide municipal financial support for stock acquisition for SMME's	ZFM, and LM
Informal traders' relief programme	Develop the informal trader's database	ZFM, and LM
	Assisting informal traders to access national support through formalisation	ZFM, and LM
	Waiver permit and licence charges for a prescribed period	LM's
	Offer stock stipends to the informal traders	ZFM, and LM
	Promote and facilitate bulk buying for informal traders to cut on stock costs	ZFM, and LM
	Promote product diversity amongst informal traders	ZFM, and LM
Buy local campaign programme	Conducting campaigns for the local people to buy from the local informal traders	ZFM, and LM
	Conducting campaigns for the local people to buy their goods and services from the local SMME's.	ZFM, and LM
	Facilitate government buying from local SMME's	ZFM, and LM
	Promote business to business buying activities	ZFM, and LM
Capability programme	Educate local communities about the importance of buying local and from informal traders	ZFM, and LM
	Advocate for municipal policy reviews that promotes re-entry into the informal trading sector	ZFM, and LM

B3.3 REDUCTION OF REDTAPE

The creation and promotion of an enabling environment for business is fundamental to a competitive and vibrant economy. The amount of red tape and bureaucracy faced by business when dealing with government is considered a key constraint to economic development and growth.

Directly linked to an enabling environment is the concept of "ease of doing business" (EDB). The World Bank Group defines EDB as the extent to which the regulatory environment is conducive to the starting and operation of a local firm.

Red tape is defined as:

- Non-essential procedures, forms, licenses, and regulations that add to the cost of dealing with government, or
- Anything obsolete, redundant, wasteful, or confusing that diminishes the competitiveness of the province, which stands in the way of economic growth and job creation or wastes taxpayers' time and money.

Red tape interferes with:

- The ability of business to compete in a global marketplace because of unnecessary costs and or delays;
- The rate of establishment of new businesses; and the sustainability and/or growth of existing enterprises.

Reducing Red Tape is all about using a wide range of specific tools that promote service delivery excellence. There are three main determinants of

customer service excellence - people, processes, and technology. They should be viewed as overlapping circles with the so-called 'sweet spot of service quality' being achieved when the three operate in harmony with the customer's preferred method of doing business. Source: Guidelines for reducing municipal red tape, 2013

To effectively reduce Red Tape, it is important to follow a well-organised and managed process, which involves the following stages:

1. Identify what the critical Red Tape problems are facing businesses in the area, and which fall within the control of the municipality, by either conducting a survey or holding a workshop.
2. Design a participative and consultative process that involves both businesses and municipal officials involved in, knowledgeable about and affected by the Red Tape issue.
3. Begin by identifying the various causes of the Red Tape problem (using the Fish Bone diagram).

Develop a Red Tape Action Plan, which includes identifying practical ideas and solutions to address each of the causes and identifying a Red Tape Champion to take responsibility for taking forward and ensuring the Action Plan is implemented.

B3.4 RENEWABLE ENERGY INDUSTRY

The Northern Cape Province is one of the largest suppliers of renewable energy to the National Grid. The Kai !Garib towns and Settlements should also promote the use of renewable energy sources and build low-carbon

eco-cities/towns and should strive to advocate the conservation of resources and to promote environment-friendly materials and manufacturing. The districts cities/towns and their citizens should, in doing so, join together to create sustainable smart districts environment lifestyles and promote an ecological civilisation in which people and built environment co-exist in harmony.

The Kai !Garib should work with the local stakeholders and other government agencies to develop solutions to bottlenecks through transmission modernisation, new facilities, and smart transmission technology. Smart grid technologies can also enable greater integration of distributed generation technologies and allows consumers to better manage consumption, helping to reduce both peak and total energy loads. The district should support the development of a comprehensive strategy to deploy smart grid technologies.

Power regulators and others are looking at what a carbon-minimal future requires and what we need to do to get there, recognising the difficulties of the status quo, including costs. Offshore wind, microgrids, and distributed energy generation can work here as they do in other districts, but the roadblocks need to be removed. Renewable energy sources must account for a significant proportion of the district energy mix.

B3.4.1 Rationale for Intervention

South Africa has committed itself in reducing its emissions below a baseline of 34% by 2020 and 42 percent by 2025. "The approach to mapping out the transition to a low-carbon economy is informed by the need to reach broad

consensus on the challenges and trade-offs involved in implementing South Africa's climate policy" (NDP, Ch5).

The transition to a low-carbon and resilient economy requires a capable state to lead, enforce the regulation of GHG emissions, and respond to the impacts of climate change. The transition to a low-carbon economy depends on the country's ability to improve skills in the workforce, at least in the early phases of the transition.

B3.4.2 The New Growth Path

"The New Growth Path is our vision to place jobs and decent work at the centre of economic policy. It sets a target of five million new jobs to be created by 2020. It sets out the key jobs drivers and the priority sectors that we will focus on over the next few years. It is based on strong and sustained, inclusive economic growth and the rebuilding of the productive sectors of the economy. "(Former President J Zuma)

"Technological innovation opens the opportunity for substantial employment creation. The New Growth Path targets 300 000 additional direct jobs by 2020 to green the economy, with 80 000 in manufacturing and the rest in construction, operations, and maintenance of new environmentally friendly infrastructure. The potential for job creation rises to well over 400 000 by 2030." (NGP). There is no doubt that government views the green industry as a potential sector for job creation.

B3.4.3 Developing the Green Industries

The policy framework indicates high level of willingness from the South African government to transform the economy and seize the opportunity while the window is still open. Interestingly the proposals on localisation of solar plants set-up of the green sector are surely gaining the momentum within the proposed Renewable Energy Zones identified within the LM.

B3.4.3.1 Objective

- To develop KGLM as a centre for Renewable Energy and introduce green opportunities for local companies and green jobs for local people.
- Renewable energy is proposed for all areas within the KGLM

B3.4.3.2 Key Action Areas

1. To develop Kai !Garib as a centre for Renewable Energy and maximise opportunities for local companies and local people

- Promote KGLM through the activities of the ZFM Renewable Energy partnership
- Work in partnership other local authorities within the district to promote the ZF Mgqawu District Municipality, and KGLM specifically as a viable location
- Encourage companies and the municipality to develop a Directory of Green Products that can be produced locally and mobilise necessary investment for implementation purposes.

d) Prioritise local manufacturing of Solar Geysers and Solar panels to support government initiative of installing more solar geyser to low-cost housing

e) Develop a comprehensive range of training and support opportunities through Sol Plaatje University that will bring home better understanding of Green Economy and related products.

B3.5 SPC E Industrial Areas

According to the NCPSPDF a key challenge in municipal areas is to broaden and unlock the opportunities presented by the availability of natural resources. Industrial activities, whether large- or small-scale, have the potential to stimulate economic diversification and development in the province. The overall economic impact of industrial projects is highly dependent on the fullness and depth of the 'cluster' of activities that form and agglomerate around it.

Clustering or linkage development generally results as a direct and indirect consequence of the construction and successful operation resource-based projects. Direct impacts include upstream, side-stream and downstream activities. Indirect impacts refer to the broader economic linkages and beneficiation that are induced in the local economy as a consequence of each of these direct impacts.

These include the linkages that arise between the various resource-based projects themselves as well as different sectors in the immediate vicinity of the project and further afield. The scale and depth of clustering that arises as a consequence of indirect impacts is likely to be much more extensive and

the employment multipliers much greater than those arising from direct spin-offs. It is the degree of direct linkage development, therefore, which ultimately determines the long-term maturity and success of clustering around a project and in the local economy.

Each direct spin-off from the initial industry provides the impetus for further employment spin-offs either in supporting industries and enterprises or the service sector. These indirect spin-offs, in turn, facilitate the diversification of

the economy through the development of additional industrial and service activities as employee demands for different products begins to increase.

E.a	Agricultural industry	Agriculture-related industrial development, e.g. silos, wine cellars, packing facilities (areas zoned Agricultural Zone II), excluding abattoirs.
E.b	Industrial Development Zone	Dedicated industrial estate ideally linked to an international, or national, port that leverages fixed direct investments in value-added and export-orientated manufacturing industries.
E.c	Light industry	Areas designated for light industrial activities associated with the service industry (e.g. repair of motor vehicles) including warehouses and service stations (areas zoned Industrial Zone I and II).
E.c.1	<u>Light Industry I</u> (Industrial Zone I)	
E.c.2	<u>Light Industry II</u> (Industrial Zone II)	
E.d	Heavy industry	Areas designated for robust industrial activities, e.g. chemical works, brewery, manure, processing of hides, abattoirs, stone crushing, crematoriums (areas zone Industrial Zone III).

E.e	Extractive industry	Settlements and infrastructure associated with multiple consumptive resource extraction, e.g. mining (Special Zoning).
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B3.6 SKILLS DEVELOPMENT AND TRAINING

B3.6.1 Rationale for intervention

Training Institutions in KGLM to serve as a focal point to equip KGLM labour force and thereby drive economic growth.

B3.6.1.1 Objectives

- To support economic growth through learning, teaching, research, and commercialisation activities.

B3.6.1.2 Key Action Areas

To support economic growth through learning, teaching, research, and commercialisation activities in the main economic sector.

- Develop new markets and work with representatives of key sectors to develop training and educational content which meets future skill requirements at home
- Build upon existing university research expertise and exploit spin-out and commercialisation opportunities

c) Provide gateways for local and other businesses to access expert staff and skills through a variety of channels, knowledge transfer partnership, sectoral groups, etc

d) Ensure KGLM's key sector expertise including new product and transnational project developments actively shape the key sectors within the area.

B3.7 INFRASTRUCTURE FOR ECONOMIC GROWTH

Northern Cape Industrial Development Corridor

The Northern Cape Industrial Development Corridor namely the N14 bulk corridor depicted by Figure 1 below at its core is the master plan to ensure not only localisation and beneficiation, but a total exploitation of the resources of the province and a total paradigm shift from overreliance to the life of mines at any given time. The corridor consists of several nodes that serves as clusters for services and beneficiation. The "corridor" nodes are as follow: Kathu Industrial Park, the Upington Industrial Park, the Namakwa Special Economic Zone (SEZ) and the, Boegoebaai deep port harbour for

imports and exports. Boegoebaai has garnered global interest for Green Hydrogen production and supply where expressions of interest have been received from a number of global and domestic investors.

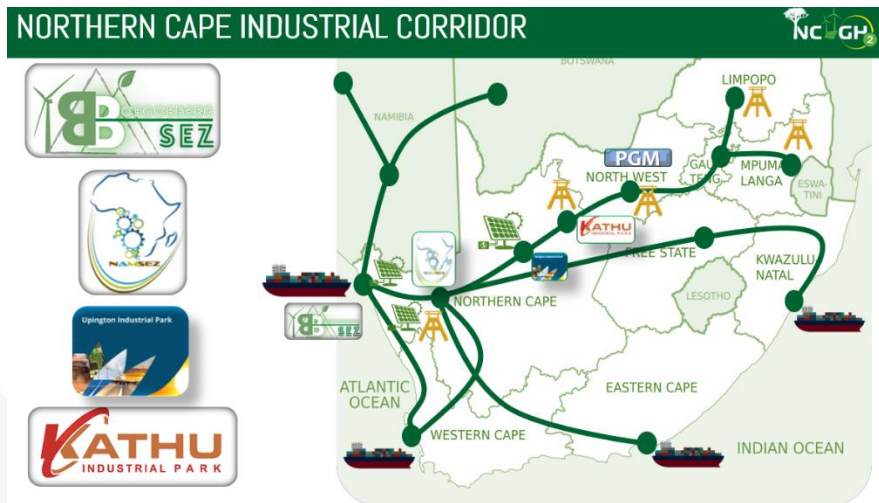


Figure 4: Northern Cape's Industrial Development Corridor.

B3.7.1 Rationale for intervention

The economy requires reasonably developed infrastructure for it to grow and develop. Again, the attraction of inward investment is mainly dependent on conducive environment. Hence, the prioritisation of infrastructure improvement remains central to the economic regeneration programme of KGLM.

B3.7.2 Key Action Areas

Improved physical infrastructure investment and enhanced business development in Kakamas, Keimoes, Kenhardt and Augrabies as the rural service centres. The availability of suitable infrastructure is just one of the key factors in investment attraction and business retention programme. Hence, local authorities need to be a step ahead in terms of achieving broad based infrastructure satisfaction of the business fraternity.

- (a) CBD road improvement programme will be implemented to allow a smooth flow of traffic and delivery trucks.
- (b) Support expansion of the trading centre
- (c) Provide services to agriculture industry sites

B3.8 STRENGTHENING OF INSTITUTIONAL ARRANGEMENTS

B.3.8.1 Rationale

The economic function in KGLM has been constrained and extremely over undermined over a period of time. Hence, the organisation of relevant bodies to participate in Agro Processing was not prioritised.

The level of willingness and enthusiasm from the local partners necessitate the formalisation of the relevant forum and execution of the programme as per conditions of the Partnership Agreement.

B3.8.1.1 Objectives

- To formalise stakeholder engagements thereby allow them to find common economic ground for KGLM.
- To extend the area of responsibility to all people with vested interest of growing SLM to be a home for all races and address collaboratively all existing social ills.
- To understand the scope of planned economic initiatives beyond the public sector or government driven initiatives.

B3.8.1.2 Key Actions

1. Kai !Garib Economic Partnership Agreement

The KGLM Forum is proposed as a new body of stakeholders that will come together to plan that will meet on a quarterly basis and align it with the ZF Mgcawu District Business Development forum which meets on a monthly basis. On the other hand, the municipality will commit to provide secretariat and capable incumbents to drive strategy implementation.

The Kai Garib Local Municipality has a Socio-economic Committee chaired a Councillor responsible for LED or the Mayor is supposed to meet on a quarterly basis to discuss LED initiatives, analyse the current socio - economic challenges in the municipality and the implementation of LED projects and how to address these challenges.

2. Establish Agricultural and Tourism Chamber

In general, the Business Chambers have a strong co-ordinating role to play in any economy and they further represent a united front of businesses that

operate in the area. It is always easy to understand the planned business growth in the area through consultation and liaison with the Chamber.

So, the strategy encourages local business people to drive the establishment of their chamber and the council will co-ordinate initial meetings and provide support where necessary.

B3.9 Small Town Revitalisation

The small-town regeneration approach is one which focuses on a towns unique trait and the key sectors which can be capitalised on in order to build a strong local economic and spatial base. The Spatial Development Framework aims to offer strategic guidelines on the prioritisation of infrastructure in Small Towns. The Kai !Garib local municipalities have been identified by SALGA as one of two municipalities in the ZFM DM that will benefit from the Small-Town Regeneration programmes out of the 16 participating municipalities in the Northern Cape.

The revitalisation programmes aim to promote, encourage and support the economy in and around small towns. Economically vibrant small towns play an important role in economic development, as they provide employment and commercial opportunities for people residing in such towns, as well as in the surrounding rural areas. Many small towns, where communities can fast become economically active and that are situated along the identified transport corridors, have been earmarked for revitalization programmes.

A concept which is been introduced to the study is that of "livelihoods planning". This aims to ensure that planning is centred around people and

people are centred around planning. Such an approach is also focused on developing land use systems so that it fulfils a relevant purpose particularly in our poorer regions of both urban and rural space. Employing such an approach is intended to ensure that cultural and communal zones form an integral component of a land use scheme.

The aim of the Small-Town Regeneration Strategy is as follows;

- To address poverty in small towns
- To address economic marginalization
- To address imbalances caused by spatial deficiencies.
- To build a more inclusive society and economy
- To increase the number of people who are in sustainable economic activity.
- To develop infrastructure
- To reduce unemployment through local economic development initiatives

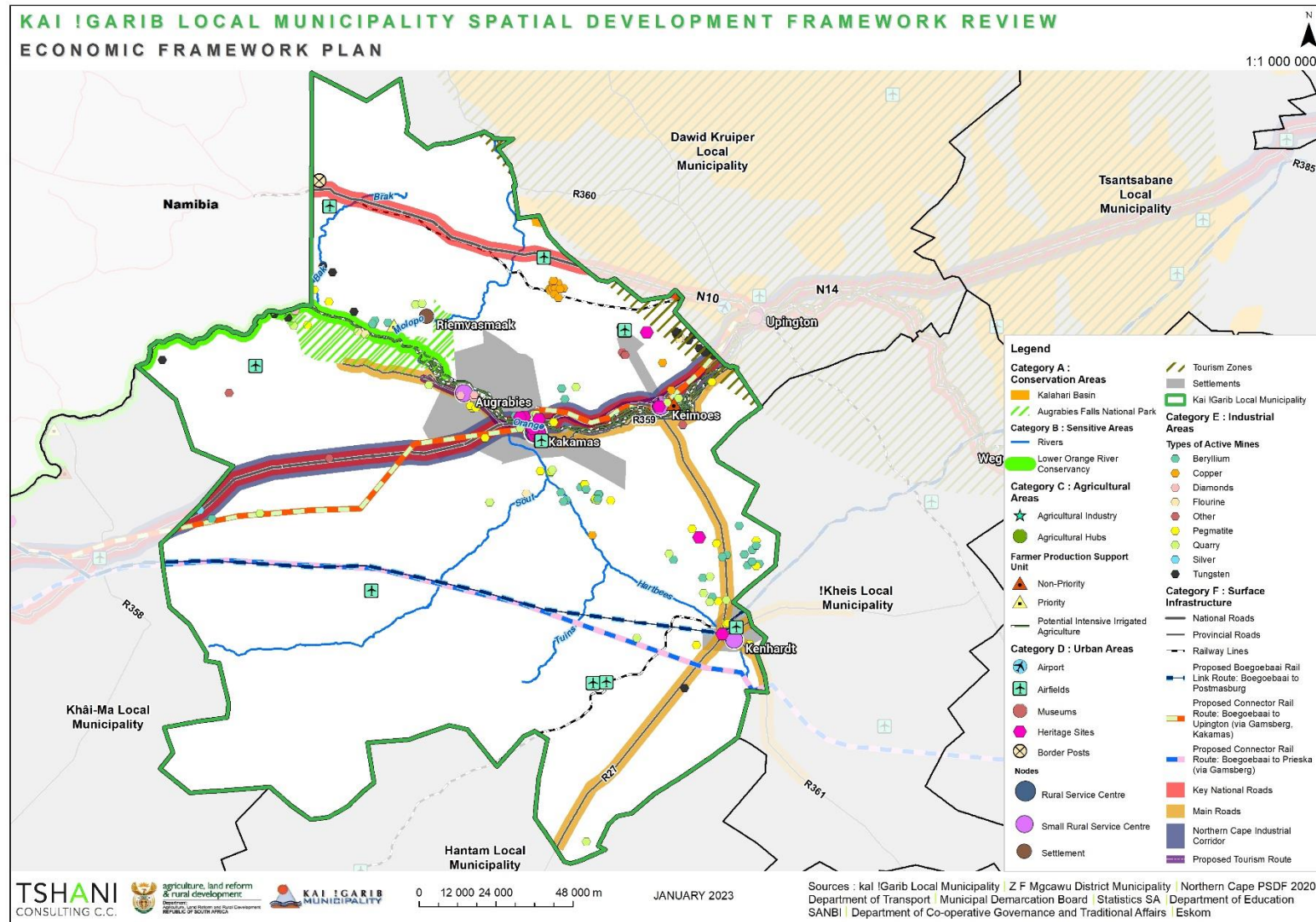
The Integrated Small-Town Revitalisation Strategy also stipulate the current challenges facing the initiatives which make mention of;

- Limited funding or budget
- Individual isolation uncoordinated Projects
- No clearly defined and articulated programme of action
- Duplication of Government effort
- Staffing constraints
- Limited Community

B3.10 Rural Development

Rural development is about enabling rural people to take control of their destiny, thereby dealing effectively with rural poverty through the optimal use and management of natural resources. It is a participatory process through which rural people learn over time, through their own experiences and initiatives, how to adapt their indigenous knowledge to their changing world.

Rural development can be achieved through self-help initiatives as well as through coordinated and integrated broad-based agrarian transformation; through strategic investment in economic and social infrastructure that benefits entire rural communities, and not only those involved in agriculture.



PLAN 21: Economic Framework Plan

B3.11 TOURISM

Tourism can be defined as the non-commercial organisation plus operation of vacations and visits to a place of interest. Whether you visit a relative or friend, travel for business purposes, go on holiday or on medical and religious trips - these are all included in tourism.

This sector still has a lot of potential and although Kai !Garib Municipality has been implementing marketing strategies and plans to stimulate the sector, it has not reached its full potential. Kai !Garib Municipal area witnesses' unique landscape with the Kalahari Desert on the one side and the Orange River on the other side. The area is also known for a variety of birds and animals. The opportunity exists to utilise these natural treasures in order to draw tourists to the area. Some of the tourist attractions include:

- The Augrabies Water Falls
- The Kokerboom (Quiver Tree)

B3.11.1 The Tourism Route.

The Tourism corridor proposed from Upington to Augrabies in the SDF is set to create opportunities for various types of tourism along the N14 and R359. The unique landscape of the route along the side the Orange River creates a unique opportunity for the area to promote various types of tourism activities. Water sport tourism and Agri-tourism would form a unique landscape for tourism in the LM given the unique location of the Orange River and the Agricultural Sector's prominence on the River.

The Tourism route flows from Upington which is viewed as a Tourism Zone which affects the LM by exposing tourists to the attractions within Kai !Garib. Other tourism attractions exist that needs to be unlocked include the following:

- The Tierberg Nature Reserve
- Heritage sites & ancient rock art in Kenhardt
- Historical Routes between islands/ Island Route
- Water tunnels in Kakamas
- Rooibergdam in Kenhardt
- Riemvasmaak historical & cultural values
- Leisure Resort in Keimoes (on N14)
- Adventure tourism
- Fly Fishing

Rural communities surrounding these prominent tourism nodes could greatly benefit from tourism activities that are not limited to selling crafts and artwork to tourists. The limited accommodation within these areas could be an indication of a gap in the industry which the local communities could explore. Ideas of "home stays" could be explored to expand the accommodation spectra, especially during peak months such as the December / January period.

Challenges and Issues faced by the Tourism Sector in KGLM:

- Inappropriate location of Tourism Information Centre

- Lack of a Tourism Association
- Lack of skilled Tourism Officials
- Lack of Community involvement
- Unemployment

B3.11.2 Promoting the tourism sector.

1 Partnerships with other stakeholders

The municipality could facilitate partnerships between investors and stakeholders. Partnerships between municipalities and businesses or community organisations can also provide useful institutional vehicles for LED. Different types of partnerships work well at the programme level and at the project level. The detailed conditions and requirements of the Municipal Finance Management Act need careful investigation in this regard.

2. Partnerships at a programme level

Local government will often form partnerships with other stakeholders to assist in the co-ordination of programme-level LED initiatives, and to help secure a shared community vision as a basis for LED. These have the status of a legal person. This means that the company may contract with other organisations and individuals. It may also hold assets and liabilities in its own name. Expensive and time consuming to establish. The Registrar of Companies has to establish that the company is being formed for the purpose of its stated objective, rather than as a profit-making venture. This makes the process of legal establishment lengthier. Limited liability in the

case of bankruptcy, members of Section 21 companies are protected from being held personally liable for the debts of the company. In this respect Section 21 companies are similar to ordinary companies.

Complex structure. Ownership of Section 21 companies is usually separated from management.

For example, in the case of an LED institution, the owners of the Section 21 company will be community stakeholders, excluding the municipality. However, the company will be run by a Board of Directors. This may make decision making more complex and time-consuming.

Independence allows flexibility and effectiveness. The independence of Section 21 companies allows them to operate with maximum flexibility and effectiveness. Structure and management style of commercial enterprises. Section 21 companies are equipped to undertake a wide range of LED activities, secure funding from a range of sources, and interact with a variety of stakeholders. The accountability framework of a Section 21 company provides safeguards when spending public funds. Further, the company structure helps bind a partnership of stakeholders into the LED initiative through the Board of Directors. The directors are legally obliged to prioritise the interests of companies.

Founders may lose control of the company. The same independence that is mentioned as an advantage has an important negative aspect. Unless community groups are able to retain close control over the Section 21 company through ownership or funding, there is a danger that the institution

may become increasingly distant, and even eventually break away from the founders. Communities should be aware of this danger and be alert to the need to retain effective control over the management of Section 21 companies set up for the purpose of promoting LED Transparency and tight legal framework. The tight legal framework under which Section 21 companies operate tends to enhance transparency and minimise the scope for individuals or interest groups to manipulate or misuse the company.

Partnerships may range from unstructured or informal partnerships to formal and tightly structured arrangements. Some possible types of Programme-Level Partnerships are Informal networks: These are loose networks, which often develop through personal relationships or social ties.

Co-ordinating structures: These structures which do not necessarily have a legal status. A common type of co-ordinating structure is a Local Economic Development Forum Independent implementation organisation: Examples include Section 21 companies and community development trusts.

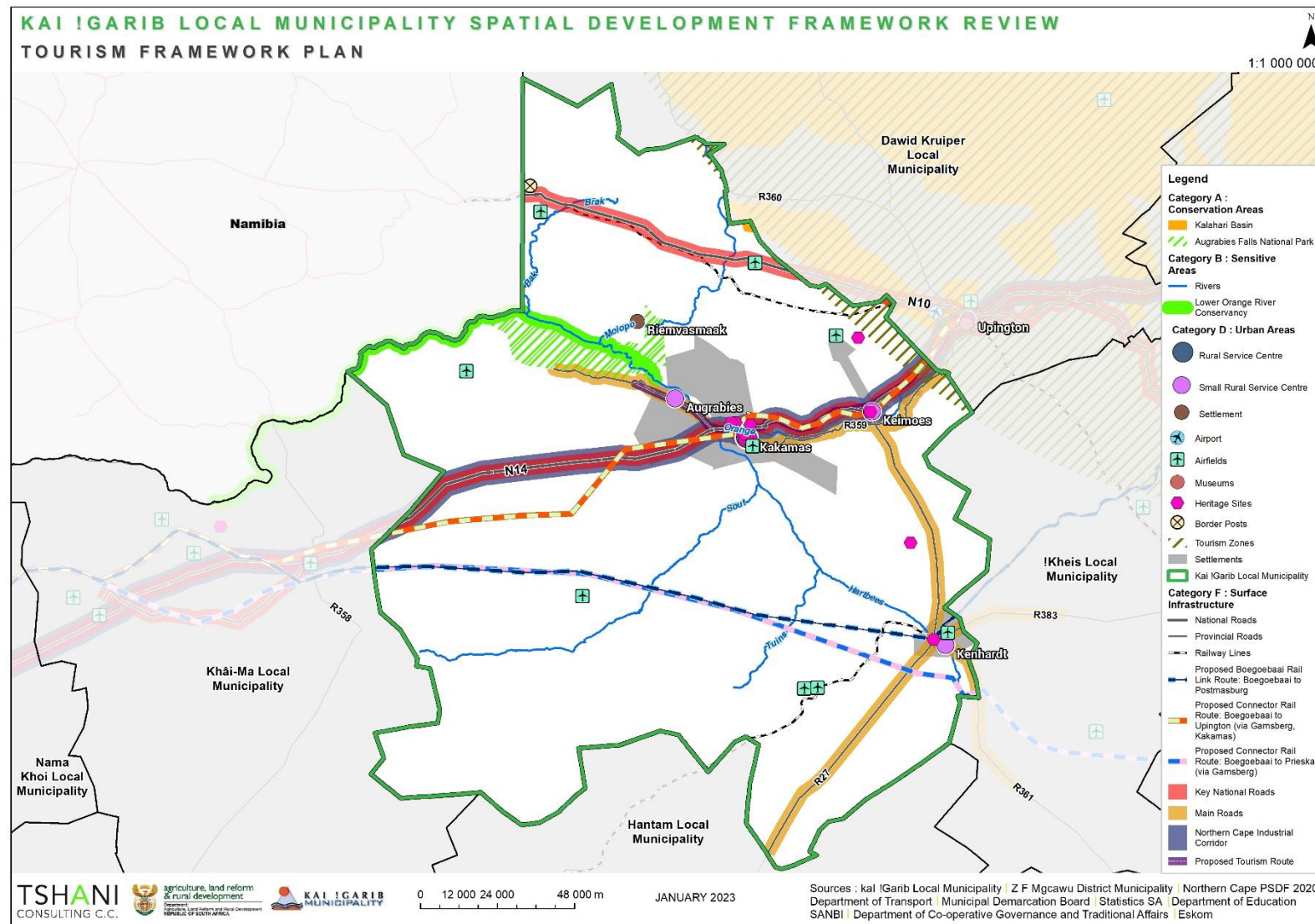
3. Private company or close corporation

Most businesses register with the Registrar of Companies in Pretoria as either a Private Company (Pty) Ltd or a Close Corporation (cc). Application forms are obtainable from a business consultant or chartered attorney.

Key Interventions

- Community awareness campaign
- YEDP programme

- SMME support
- Tourism Product Development
- Tour Guide Training
- Ablution facilities for tourists needs to be erected at attractions.
- Constant maintenance and upkeep of these natural assets
- Promote Township Tourism
- Develop a "Key Places" Cleansing and Maintenance Programme aimed at ensuring that major gateways, routes and destinations in the SLM are beautified and maintained.
- Enhance existing tourist attractions, thus encouraging revisits.



PLAN 22: Tourism Framework Plan

B3.12 SOCIAL FACILITIES

Social facilities are a vital aspect of human settlements as they serve as sources for social and public services; including health, education, recreation, cultural and socializing spaces among other services.

Access to and availability of social facilities is an important factor which attracts and keeps people in an area. Therefore, the section below indicates the number of social facilities within the municipality jurisdiction.

The following strategy for social infrastructure is based on the criteria as stipulated in terms of the CSIR Human Settlement Guideline:

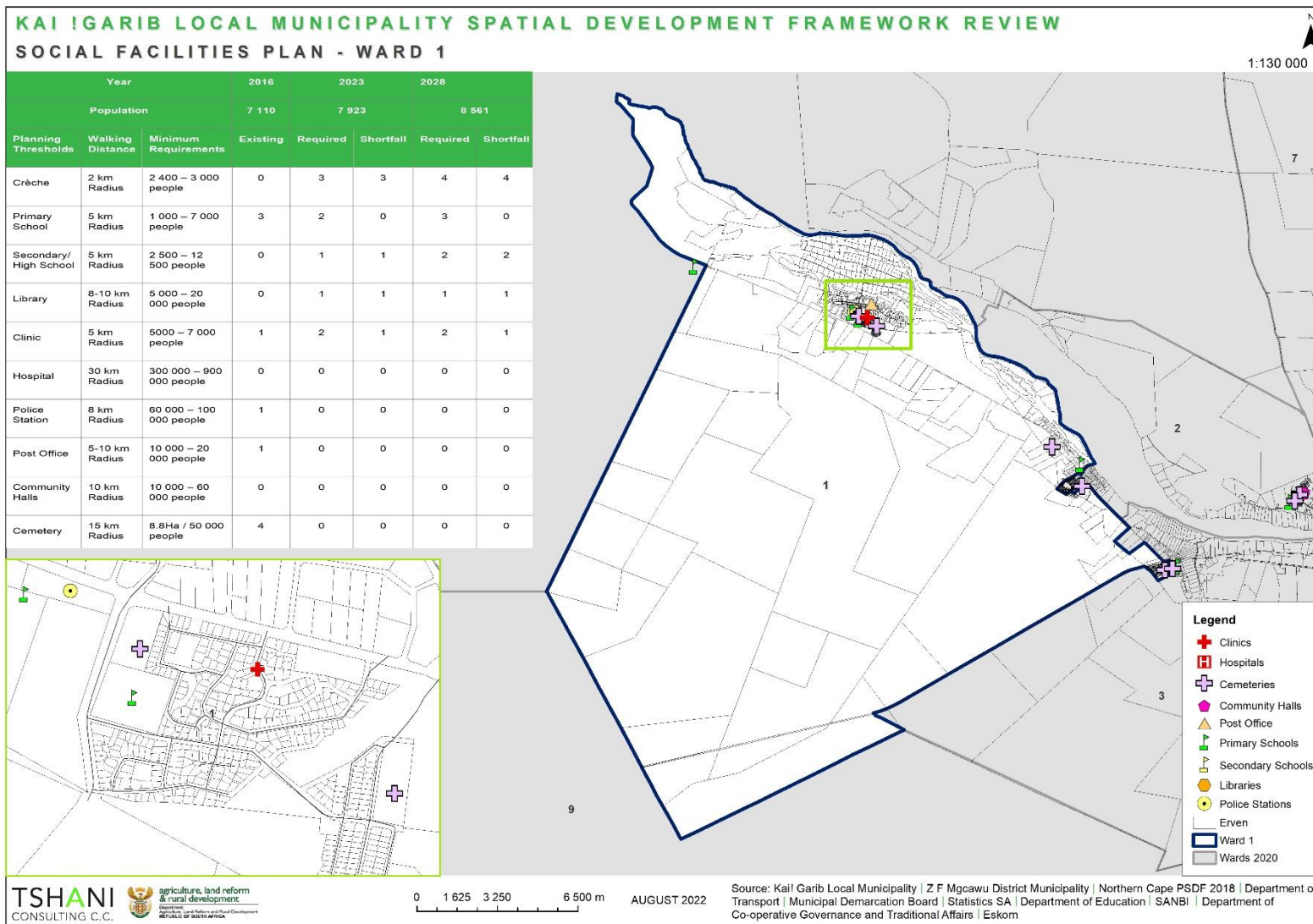
Planning Thresholds	Walking Distance	Minimum Requirements
Crèche	2 km Radius	2 400 – 3 000 people
Primary School	5 km Radius	1 000 – 7 000 people
Secondary/ High School	5 km Radius	2 500 – 12 500 people
Library	8-10 km Radius	20 000 – 70 000 people
Clinic	5 km Radius	24 000 – 70 000 people
Hospital	30 km Radius	300 000 – 900 000 people
Police Station	8 km Radius	60 000 – 100 000 people

Post Office	5-10 km Radius	10 000 – 20 000 people
Pension Pay Points	5 km Radius	Variable
Community Halls	10 km Radius	10 000 – 60 000 people
Shops	10 km Radius	1 x 5000 people
Cemetery	15 km Radius	8.8Ha / 50 000 people

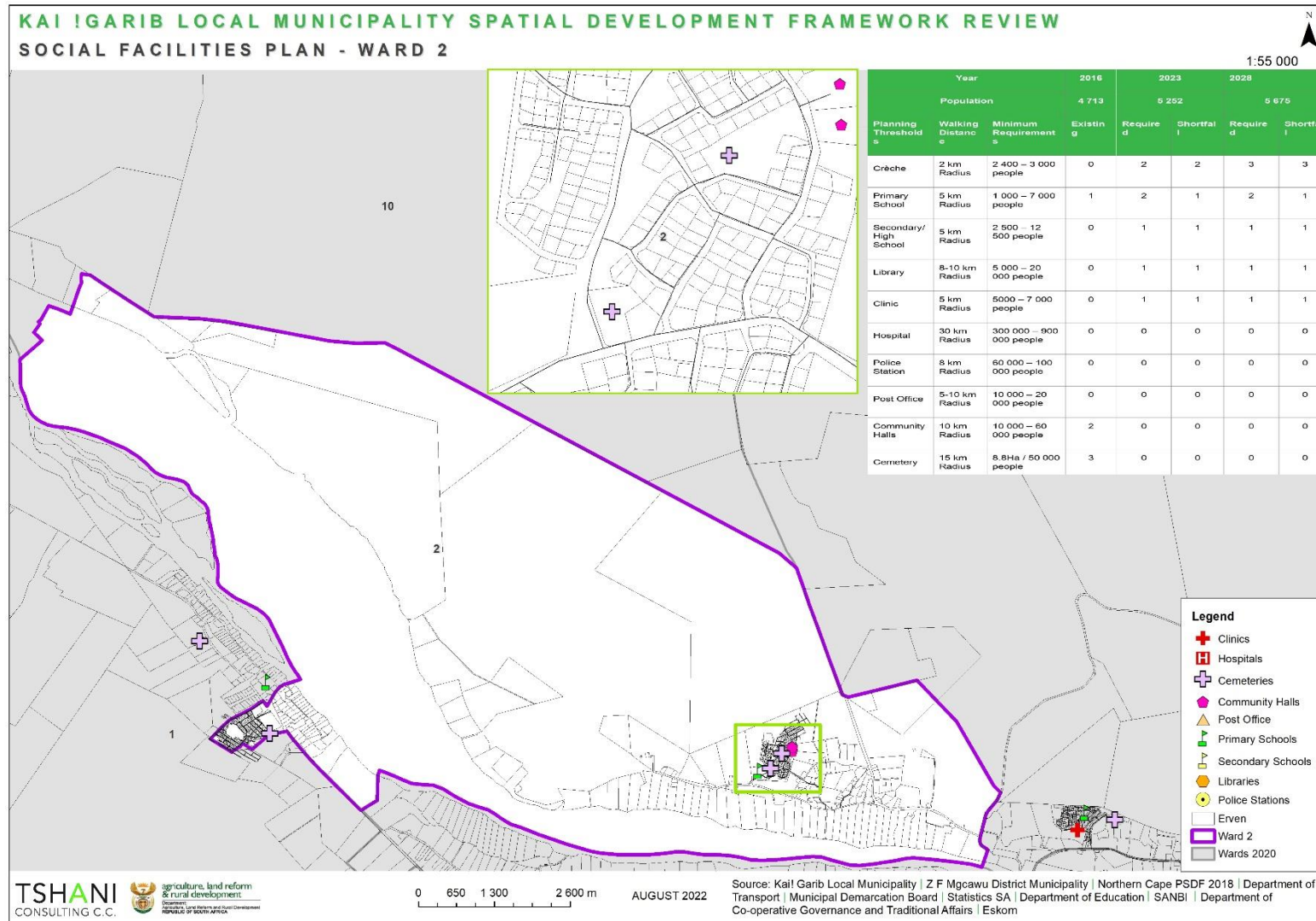
It is important to note the importance of an integrated planning approach towards service delivery to make sure that services are provided along with adequate supporting infrastructure. Based on the existing facilities with the Municipality, the following is a depiction of the number of facilities that are required to meet the population needs of the Municipality. Based on the growth projection of the Kai !Garib Local municipality to the year 2040, a drastic increase in the number of Social Facilities will be required.

The following maps below depict the number of existing social facilities per ward as well as the number of social facilities which should be there based on the current population size and the CSIR guidelines.

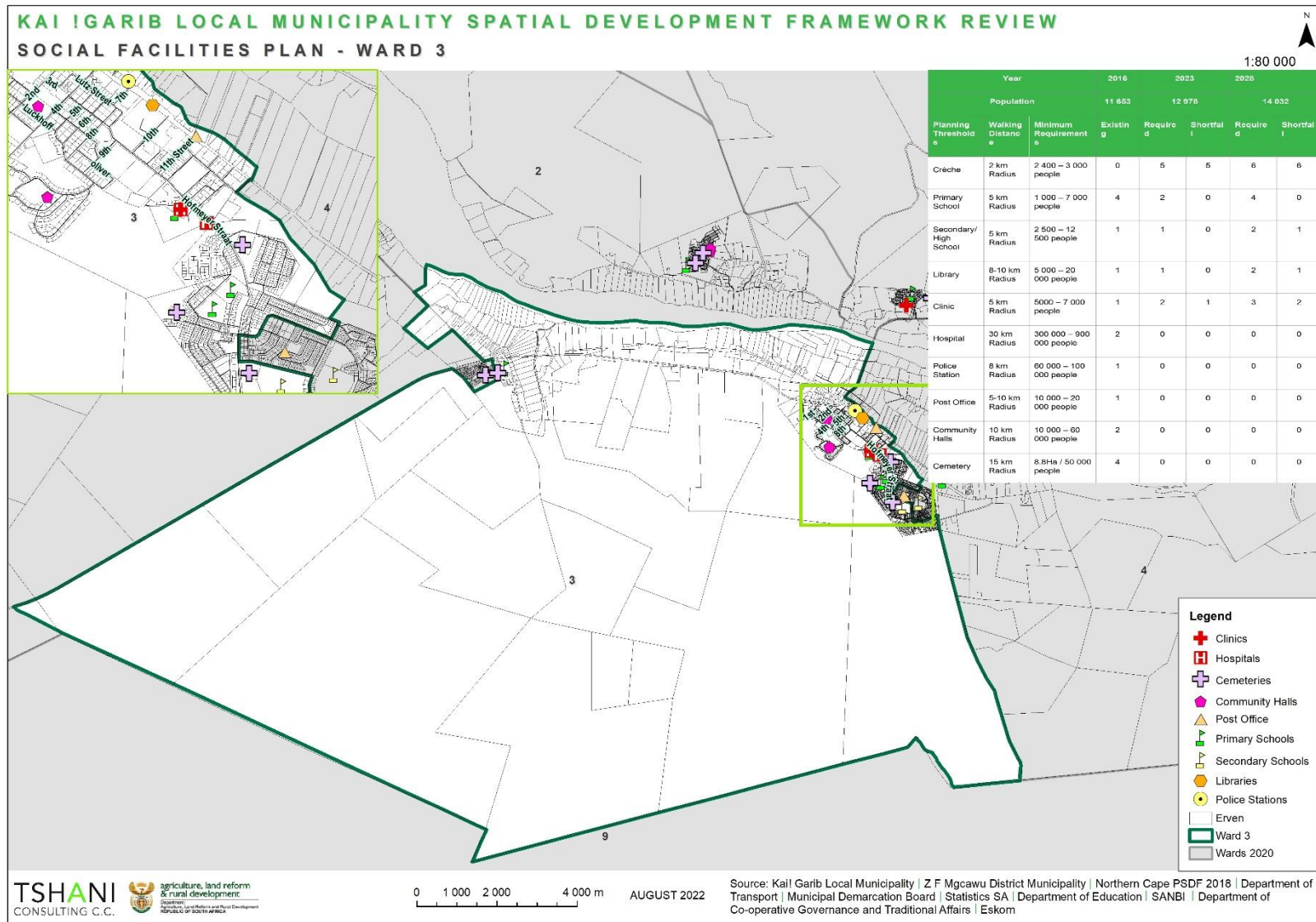
The plans below identifies the current dispersion of social amenities within each ward in the municipality. The table below shows the projections of the population over the next 5 years with 2023 and 2028 highlighted. The shortfalls are calculated according to how many facilities are existing and how many still need to be constructed.



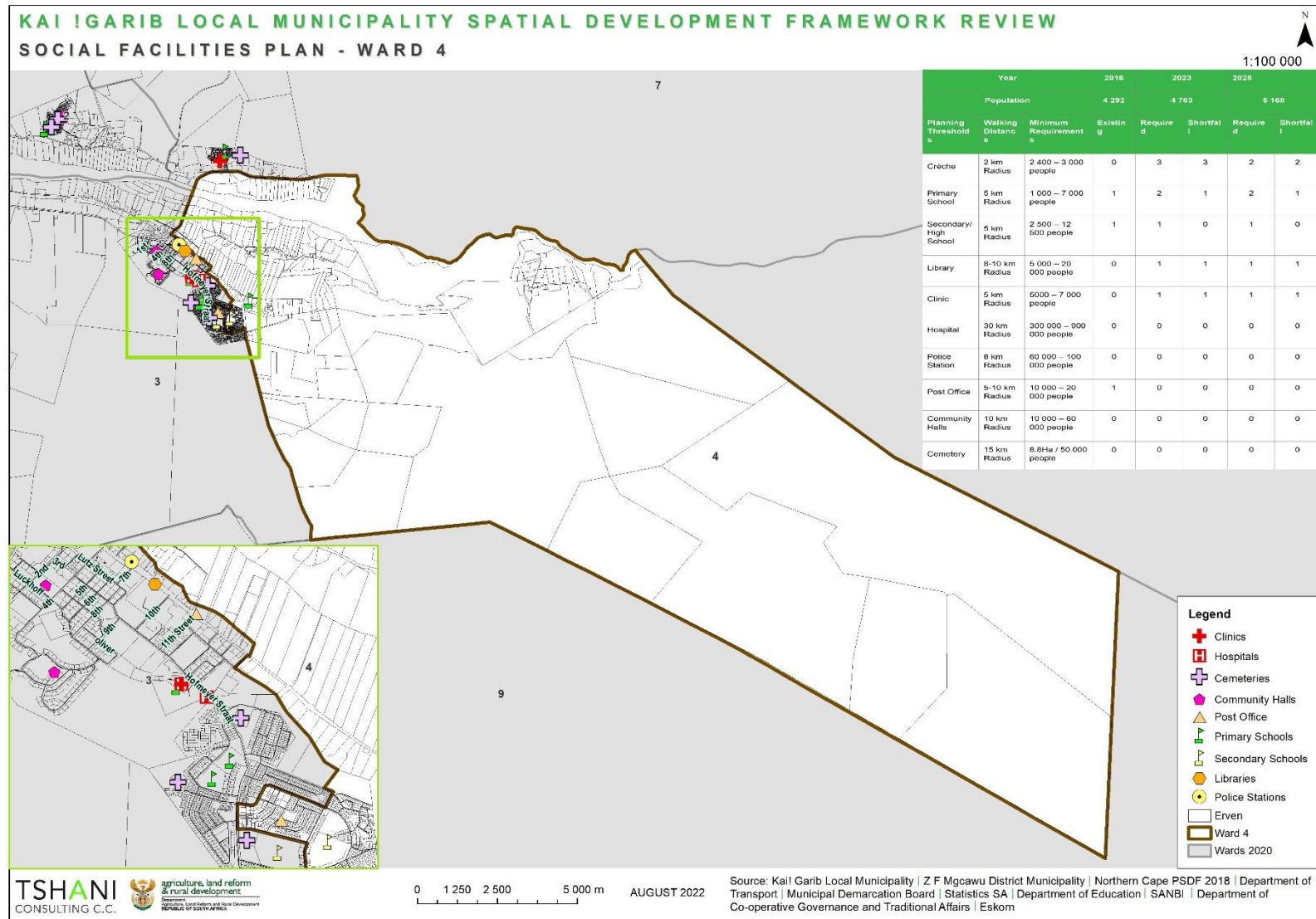
PLAN 23: Social Facilities Ward 1



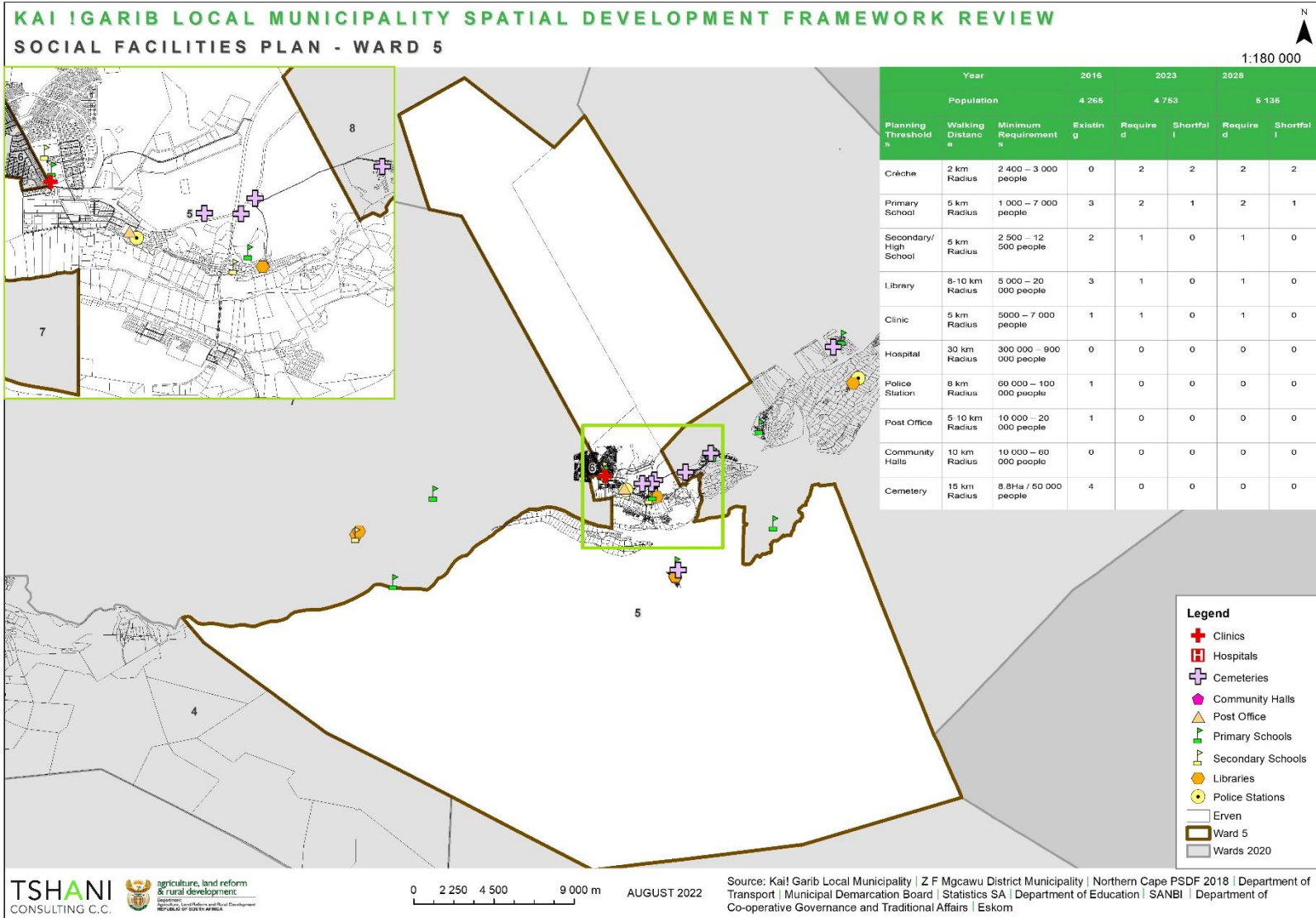
PLAN 24: Social Facilities Ward 2



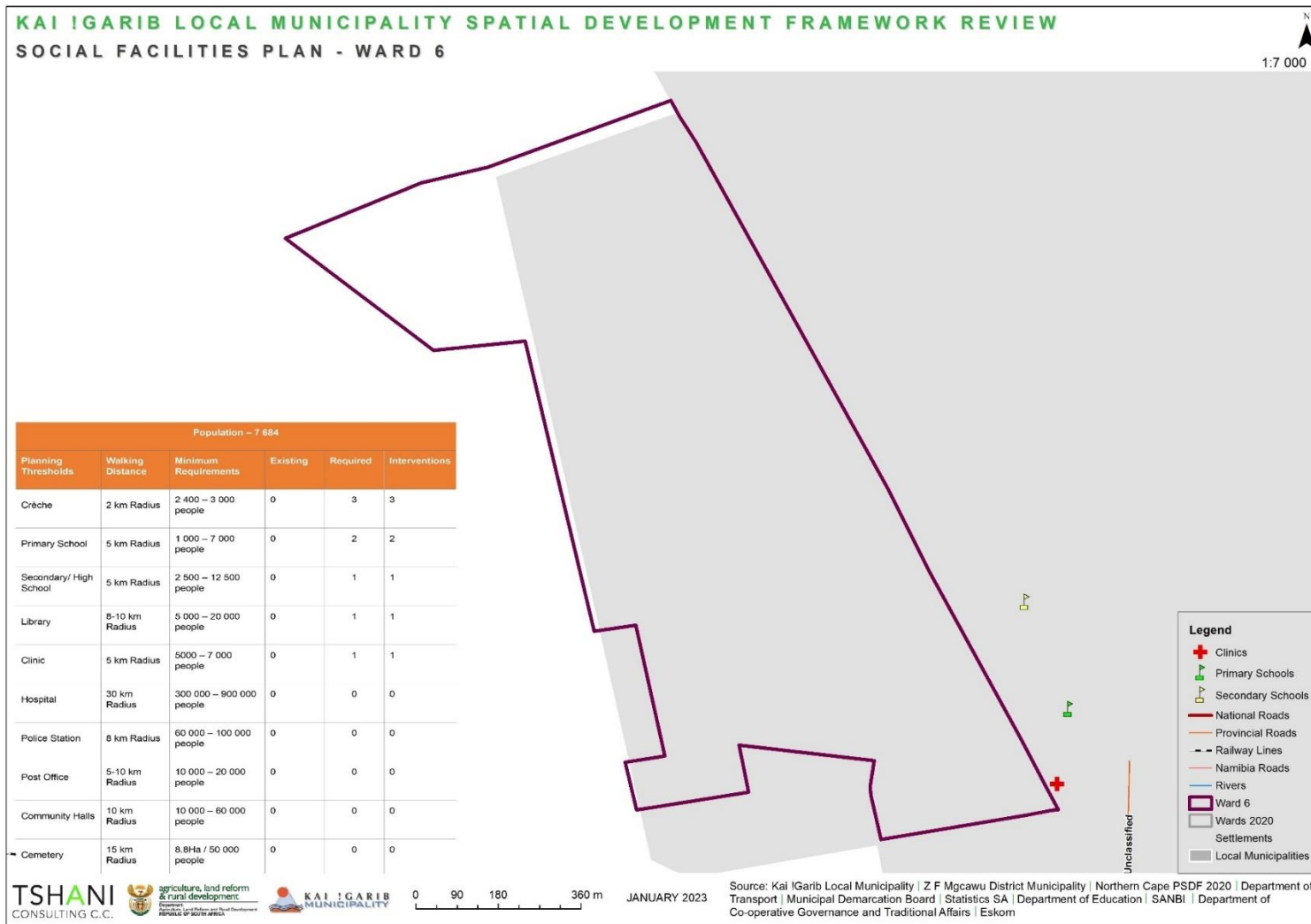
PLAN 25: Social Facilities Ward 3



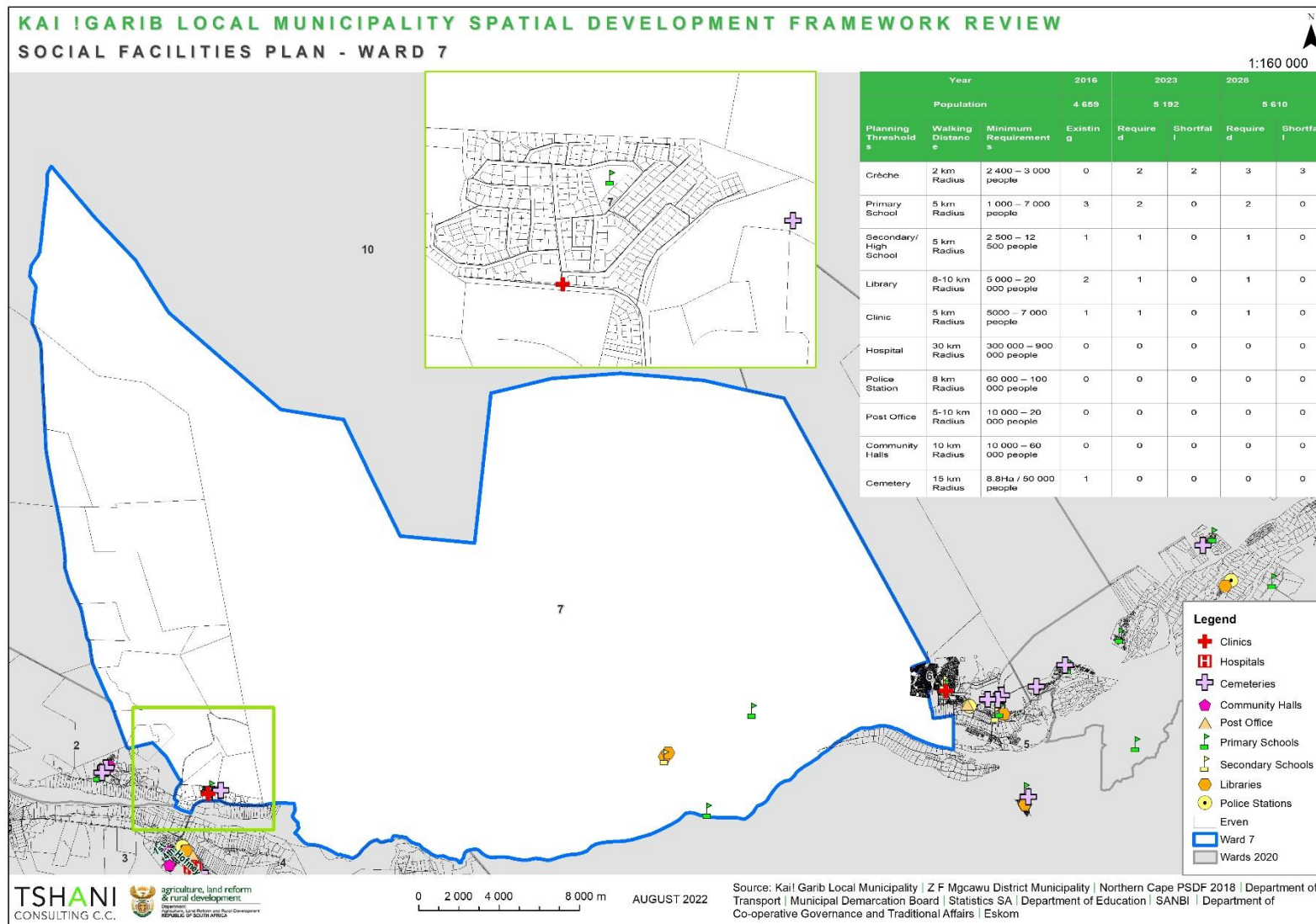
PLAN 26: Social Facilities Ward 4



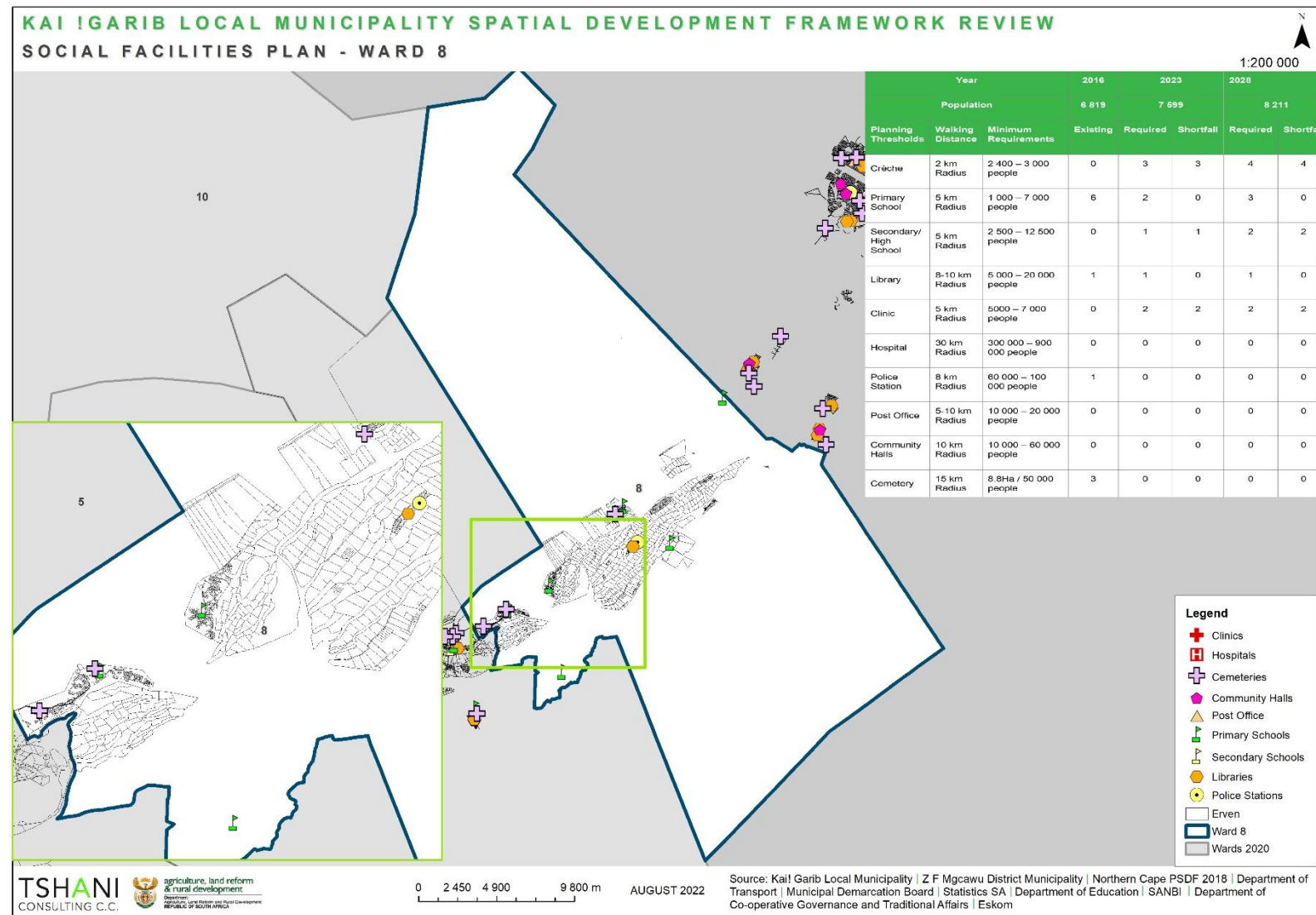
PLAN 27: Social Facilities Ward 5



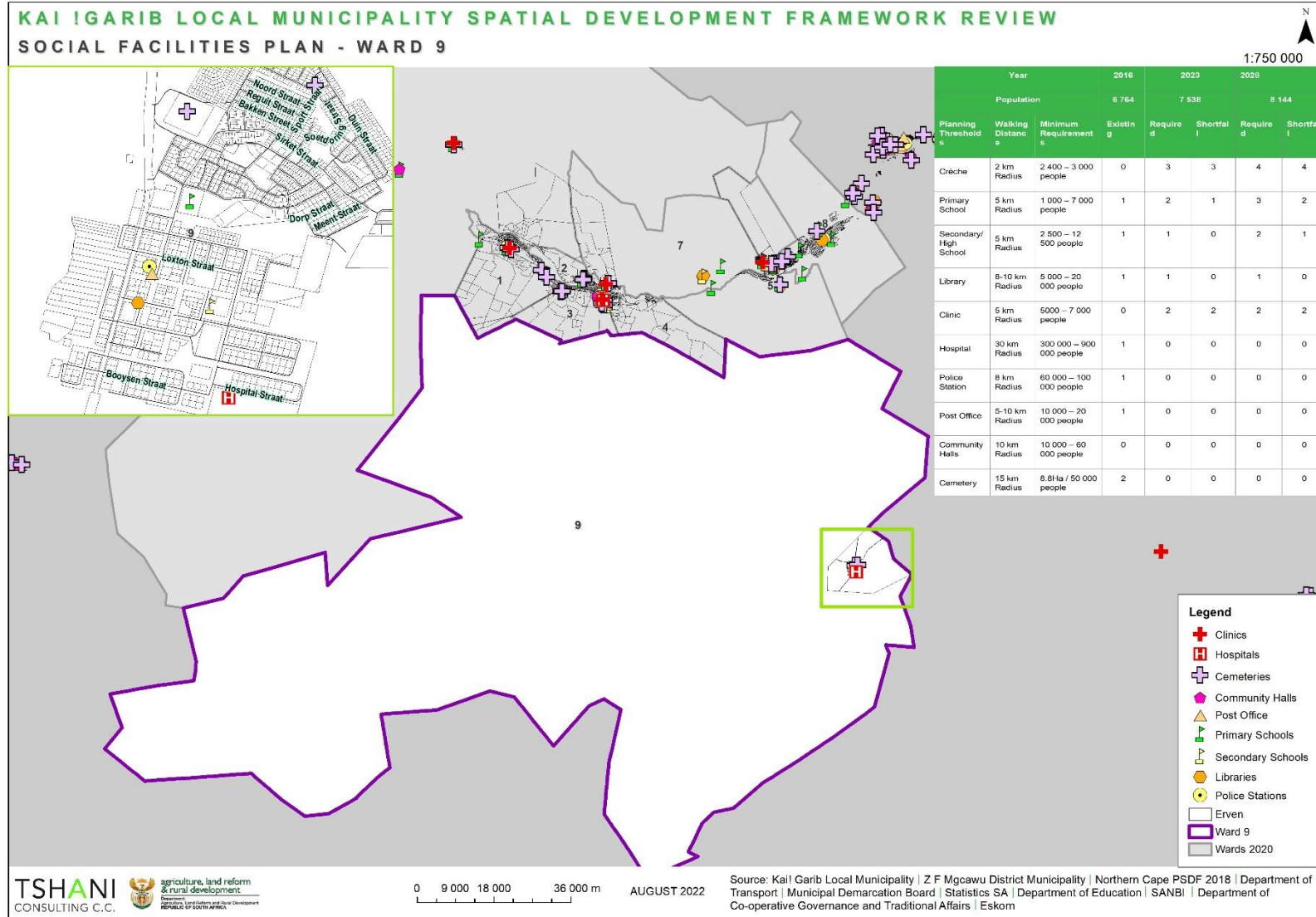
Plan 28: Social Facilities Ward 6



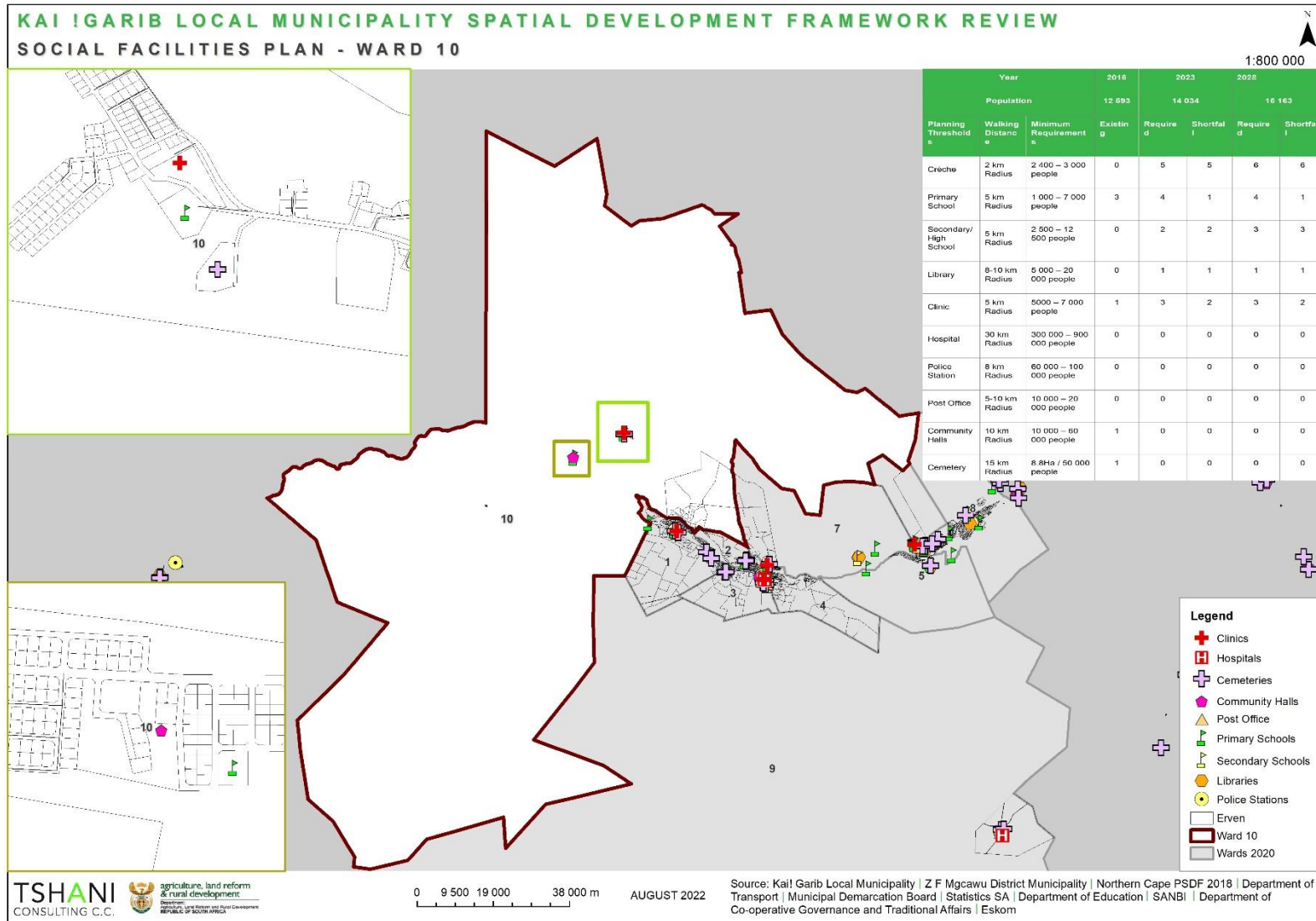
PLAN 29: Social Facilities Ward 7



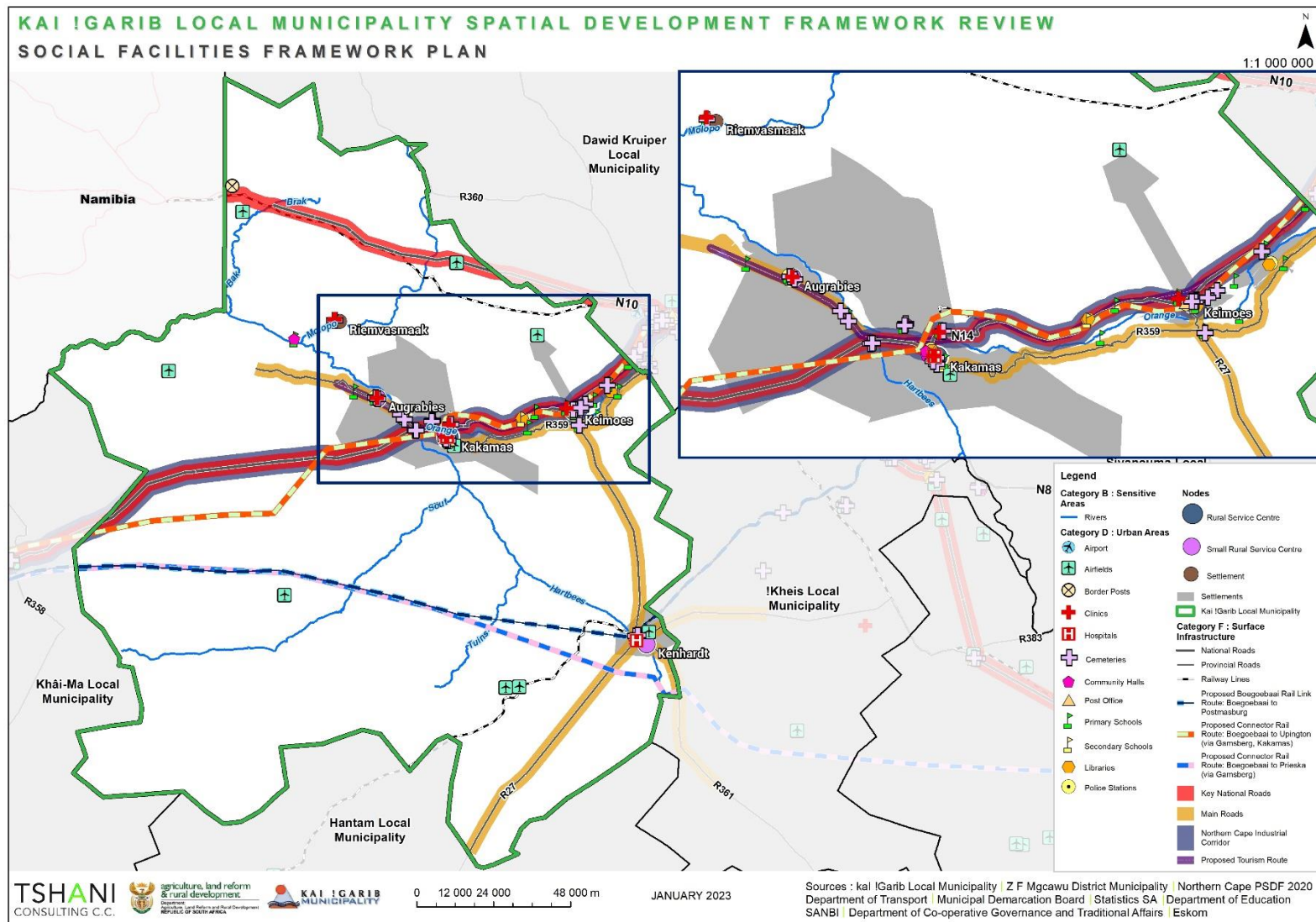
PLAN 30: Social Facilities Ward 8



PLAN 31: Social Facilities Ward 9



PLAN 32: Social Facilities Ward 10



PLAN 33: Social Facilities Plan

B3.13 SPC D: Urban Related Areas

To ensure the sustainability of urban development it is important to achieve a balance between the conflicting interests of land-use planning. In this regard, a key objective of the PSDF is to promote rehabilitation of existing settlement's and to ensure that any future developments are sustainable (i.e. supportive of environmental integrity, human well-being and economic

efficiency). Standard town planning criteria applicable in the evaluation and assessment of development applications, building plan approval, change of land-use, etc. are still relevant and will not be replaced by this policy. These criteria relate to inter alia taking due cognisance of natural and/or unique resources and land and coastal elements, prevention of urban sprawl, preference for strengthening and densification of existing nodes, and taking into consideration the cumulative impact of development.

D.f	Institutional Areas	Areas designated for schools, colleges (areas zoned Institutional Zone I); churches and mosques (areas zoned Institutional Zone II) and areas zoned Institutional Zone III. (District Municipalities).
D.f.1	<u>Place of Instruction</u> (Institutional Zone I)	
D.f.2	<u>Place of Worship</u> (Institutional Zone II)	
D.f.3	<u>Institution</u> (Institutional Zone III)	
D.g	Authority Areas	Areas designated for governmental purposes and other official uses, e.g. municipal offices, offices of parastatals (Telkom, Eskom) (areas zoned Authority Zone I & II).
D.g.1	<u>Government Uses</u> (Authority Zone II)	
D.g.2	<u>Municipal Uses</u> (Authority Zone I)	
D.i	Business Areas	Areas designated for activities associated with retail and service industries, e.g. shops, restaurants, professional offices (areas zoned Business Zone I).

D.i.1	<u>Business Premise</u>
D.i.2	<u>Shop</u>

D.j	Service Related Business	Areas designated for other business activities associated with service trade industries, e.g. launderettes and light manufacturing industries (areas zoned Business Zone II); and industries associated with motor vehicle sales, repairs (areas zoned Business Zone III).
D.j.1	<u>Service Trade Industry</u>	
D.j.2	<u>Service Station</u>	

D.k	Special Business	Areas designated for special business activities associated with casinos and gambling houses (areas zoned Business Zone IV) and areas identified for adult entertainment (areas zoned Business Zone V).
D.k.1	<u>Casino</u>	
D.l	SMME Incubators	Areas designated for Small Medium and Micro Enterprises (SMMEs) and associated infrastructure and services focused on community-based service trades and retail.
D.m	Mixed Use Development Areas	Areas designated for innovative combinations of land use, e.g. residential/light business; light industry/light business (in terms of various municipal zonings).

B4. BUILT ENVIRONMENT FRAMEWORK

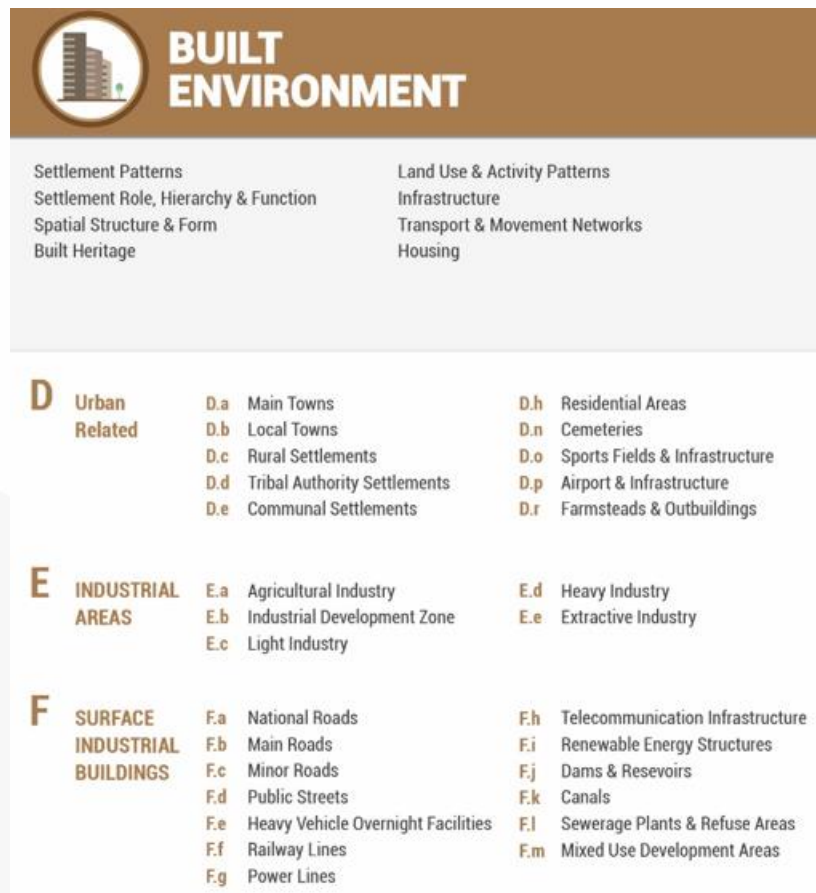


Figure 5: Built Environment SPC

"The man-made surroundings that provide the setting for human activity, ranging in scale from buildings and parks or green space to neighbourhoods and cities that can often include their supporting infrastructure such as water supply or energy networks."

B4.1 SPC D . Urban Related Areas

To ensure the sustainability of urban development it is important to achieve a balance between the conflicting interests of land-use planning. In this regard, a key objective of the PSDF is to promote rehabilitation of existing settlement's and to ensure that any future developments are sustainable (i.e. supportive of environmental integrity, human well-being and economic efficiency). Standard town planning criteria applicable in the evaluation and assessment of development applications, building plan approval, change of land-use, etc. are still relevant and will not be replaced by this policy. These criteria relate to inter alia taking due cognisance of natural and/or unique resources and land and coastal elements, prevention of urban sprawl, preference for strengthening and densification of existing nodes, and taking into consideration the cumulative impact of development.

D.a	Main Town	Towns accommodating Category A Municipalities (i.e. metropolitan areas) and the seat (capital town) of Category C Municipalities (District Municipalities).
D.b	Local Town	Towns accommodating the seat (capital town) of Category B Municipalities (Local Municipalities).
D.c	Rural Settlements	Smaller towns and rural settlements that fall under the jurisdiction of Category B Municipalities (i.e. towns and rural settlements forming part of a Local Municipality).
D.d	Tribal Authority Settlements	Formal and informal residential areas under the ownership of tribal authorities ⁶⁸ , i.e. Kamden, Ga-Sehunelo Ward 1, Gamorona, Heuningvlei, Kleineira, Segwaneng, Cassel, Deurward, etc.
D.e	Communal Settlements	Settlements that have been planned, classified and subdivided in terms of the former Rural Areas Act 9 of 1987 and which, in terms of the Transformation of Certain Rural Areas Act 94 of 1998, can be transferred to a legal entity of the community's choice, i.e. Pella, Concordia, Richtersveld, Steinkopf and Leliefontein.
D.h	Residential Areas	Areas designated for residential purposes, e.g. single title erven, group housing, estates (areas zoned Residential Zone I–IV), 'GAP housing' and residential smallholdings.
D.h.1	<u>Single Residential House</u>	
D.h.2	<u>Group Housing</u>	

D.h.3	<u>Guest House</u>
D.h.4	<u>Flats/Residential Building</u>
D.h.5	<u>Mixed Density Residential Area</u>
D.h.6	<u>GAP Housing</u>
D.h.7	<u>Low Cost Housing</u>
D.h.8	<u>Informal Housing</u>
D.h.9	<u>Small Holdings</u>
D.h.10	<u>Residential Estate</u>

D.m	Mixed Development Areas	Areas designated for innovative combinations of land use, e.g. residential/light business; light industry/light business (in terms of various municipal zonings).
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D.n	Cemeteries	Cemeteries and formal burial parks (zoned Open Space II), excluding crematoriums.
D.o	Sports fields & Infrastructure	Dedicated sports fields together with the associated infrastructure, parking areas, and services.

D.p	Airport and Infrastructure	Area designated as airport together with the infrastructure and services associated with the airport and its activities (Transport Zone I).
D.q	Resorts & Tourism Related Areas	Resorts (areas zoned Resort Zone I) and tourism-related nodes and amenities that form part of a designated Hospitality Corridor.
D.r	Farmsteads & Outbuildings	Main farmsteads, including on-farm infrastructure required for farm logistics, e.g. houses, sheds, packing facilities, etc.

B4.2 LAND USE PROPOSALS

The Kai !Garib Local Municipality has a SPLUMA compliant Land Use Management Scheme that was adopted in 2020 that is aimed at giving effect to the municipal Spatial Development Framework and determines the use and development of land within the municipal area. The KGLM Land Use Scheme, 2020 complies with Chapter 2 of the Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013).

The link between the LUMS and the SDF is the Zoning. Zoning is different to spatial development frameworks, precinct plans, and policy plans associated with forward planning to guide developers and decision-makers. Spatial planning involves planning guidelines for medium- and long-term development and conservation, but do not allocate or take away rights.

Spatial plans include strategies for environmental, economic, spatial, social and infrastructure development, and are essential guidelines for the Municipality and the general public.

Zoning has a more precise application as the legal statement of rights and obligations for a property, although other laws may also apply. Zoning should work in conjunction with (and be linked to) policy plans and other tools in the land use management system, to enable the Municipality to manage land and development in the municipal area. The KGLM LUMS has provision for consent applications, this will enable the spatial proposals to be realised through rezoning applications that is permitted in the different areas of the municipality.

The Northern Cape Provincial Spatial Development Framework formulated bio-regional planning principles and illustrated the desired matrix of land uses to be used throughout the province. The spatial planning categories (SPCs) provide a framework to guide land use planning in the province. These spatial planning categories have been considered in developing the Kai !Garib Land Use Scheme.

Five growth and development strategies are proposed in the 2020 PSDF to assist the municipality in managing future growth of settlements. The first four strategies were developed in line with the findings of the Socio-Economic Potential of Town Study Review. During various consultation processes the need was identified to include an additional strategy, in order to manage development associated with mining activities. These strategies have been adopted for the land use proposals in KGLM.

The SPCs below have been taken into consideration for the spatial proposals.

	A CORE	A.a Statutory Protected Areas
	B BUFFER	B.a Non-Statutory Conservation Areas B.b Ecological Corridors B.c Urban Green Areas
	C AGRICULTURAL AREAS	C.a Extensive agricultural areas C.b Intensive agricultural areas
	D URBAN RELATED	D.a Main Towns D.b Local Towns D.c Rural Settlements D.d Tribal Authority Settlements D.e Communal Settlements D.f Institutional Areas D.g Authority Areas D.h Residential Areas D.i Business Areas D.j Service Related Business D.k Special Business D.l SMME Incubators D.m Mixed Use Development Areas D.n Cemeteries D.o Sports fields & Infrastructure D.p Airport and Infrastructure D.q Resorts & Tourism Related Areas D.r Farmsteads & Outbuildings
	E INDUSTRIAL AREAS	E.a Agricultural industry E.b Industrial Development Zone E.c Light industry E.d Heavy industry E.e Extractive industry
	F SURFACE INFRASTRUCTURE & BUILDINGS	F.a National roads F.b Main roads F.c Minor roads F.d Public Streets F.e Heavy Vehicle Overnight Facilities F.f Railway lines F.g Power lines F.h Telecommunication Infrastructure F.i Renewable Energy Structures F.j Dams & Reservoirs F.k Canals F.l Sewerage Plants and Refuse Areas

Figure 6: Spatial Planning Categories

B4.2.1 Kakamas Node

Kakamas is a rural service centre node in the municipality. The development of Kakamas is denser and there is a very little room for expansion with the surroundings predominantly agricultural land development to prevent sprawling urban expansion. There are areas of farming activity on the outskirts of town. The CBD Precinct of Kakamas is predominantly proposed for the main Movement Route on Voortrekker Way. The Development of Mixed-Use developments along the N14 will enable Kakamas to grow around the main movement route.

According to the growth and development strategies set forth in the PSDF, Kakamas is a settlement with Low Social Need / High Development Potential. It should primarily focus on:

- Strengthening the economic position
- Growth and Expansion;
- Diversification and Identification of new opportunities;
- Provide social services infrastructure;
- Eradicate backlogs in social infrastructure;
- Enhancing the urban environment through ongoing urban regeneration initiatives;

Residential

- The SDF proposes a Mid-High-income housing just off the N14 to support the growing CBD area.

- There are areas earmarked for future growth expansion, this can accommodate more housing projects in the near future.

Business

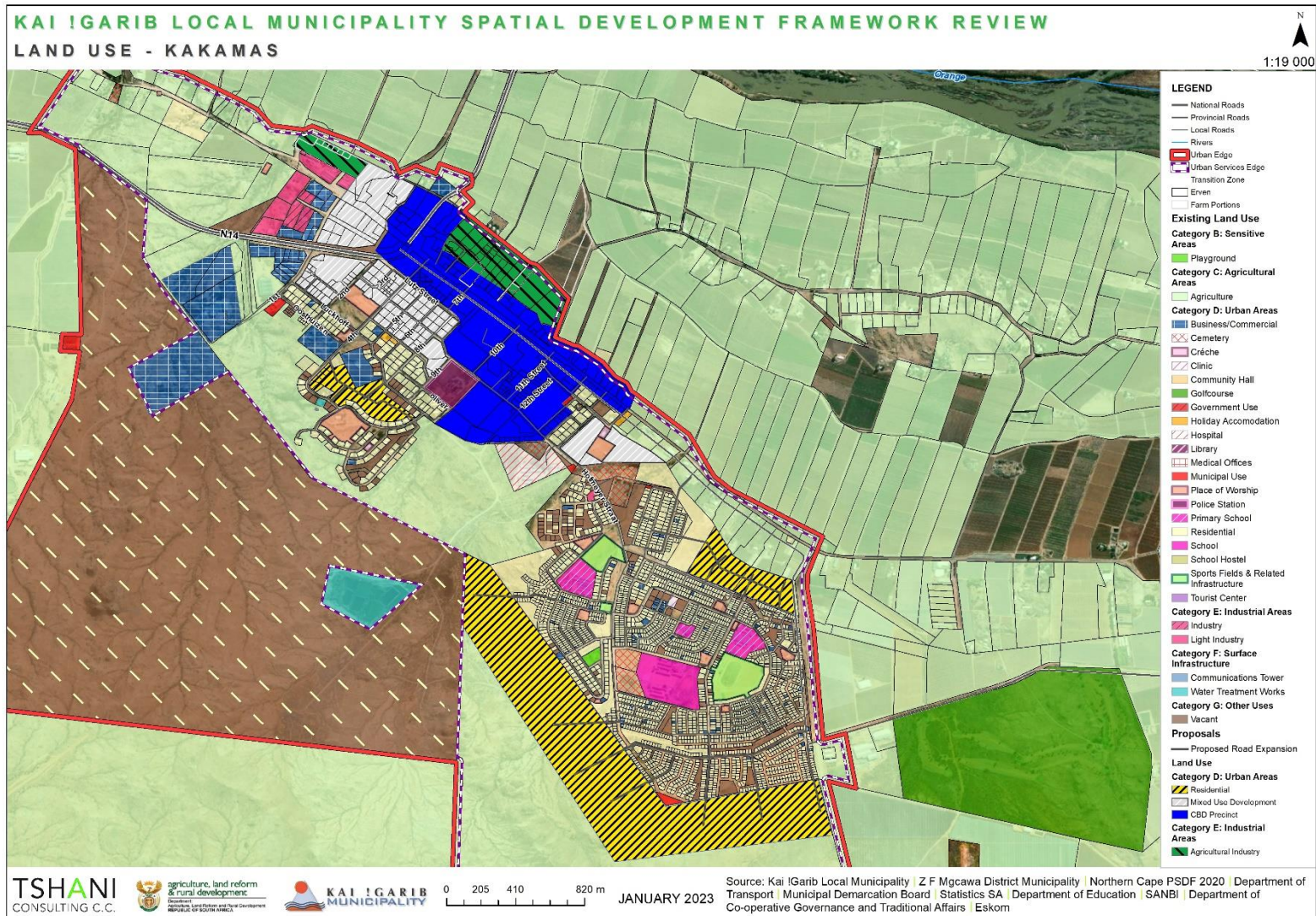
- One of the projects which have been identified is the development of a CBD are along the N14.
- There is potential for a CBD expansion, this will amalgamate the businesses in the area and ensure a larger office precinct that can host a number of offices in the area. This is where there is a lot of commercial activities are taking place.

Infrastructure

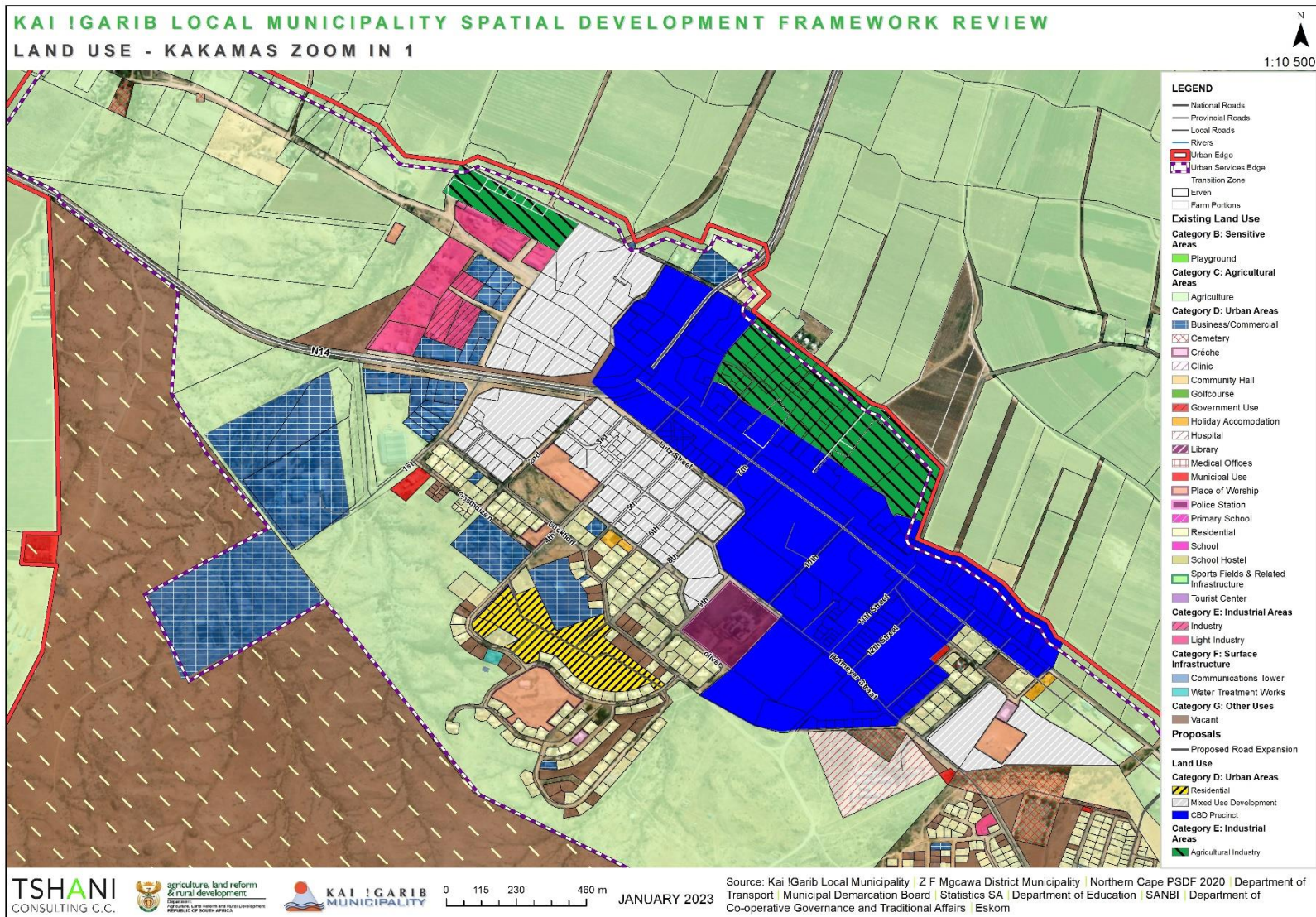
- Proposal for maintenance of the priority road (Voortreker Way). This road can have street designs that give a feeling of the area.
- Construction of a WWTW
- Construct Internal Network
- Upgrade Storm Water Management, Building of Kerb Stones and External Drainage
- Construction of solid waste sites / transfer sites
- Implementation of New Cemetery

Agriculture

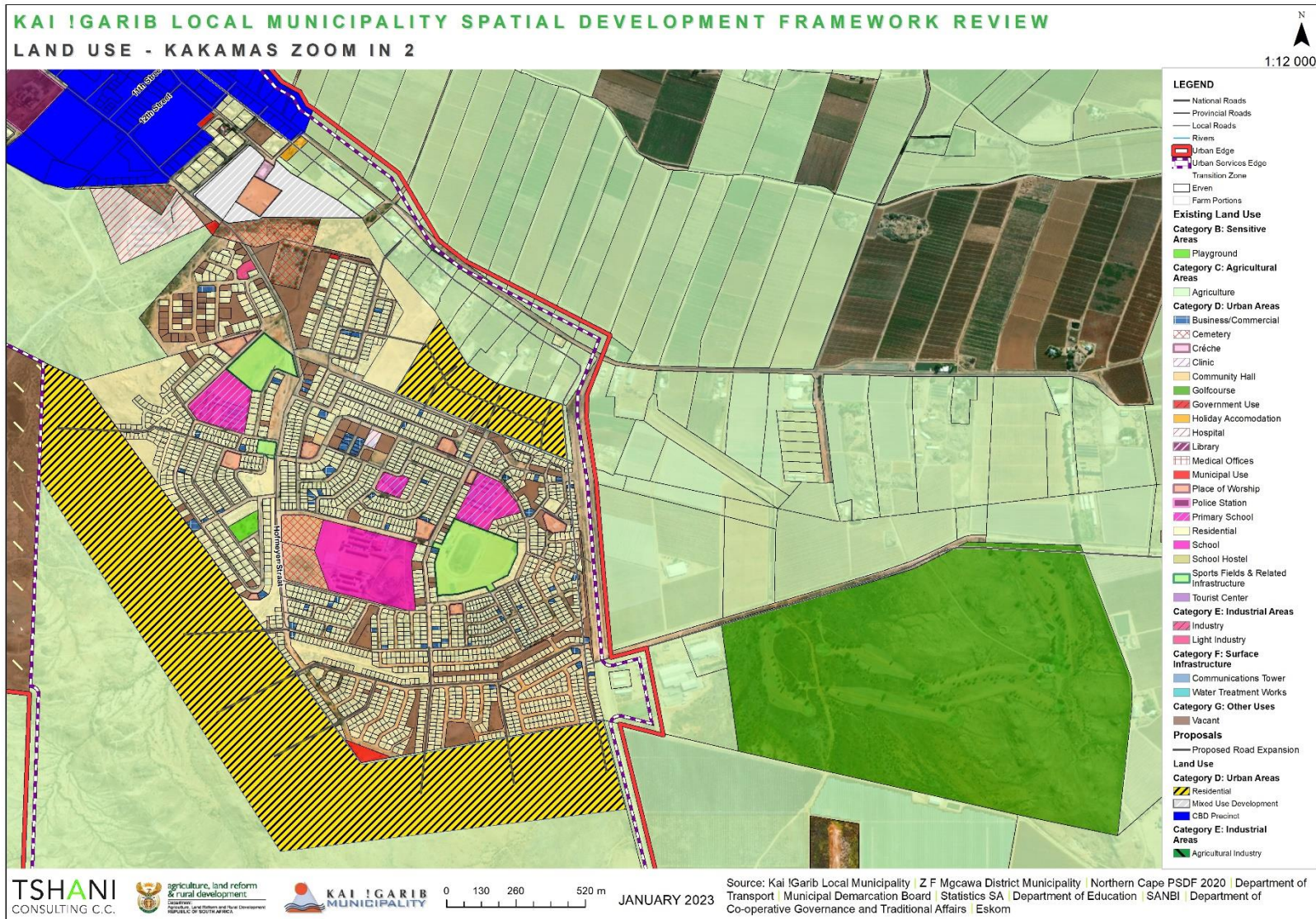
- The SDF proposes an Agri-Industry on the North-East of Kakamas adjacent to the CBD. .



PLAN 34: Kakamas Zoom In 1



PLAN 35: Kakamas Zoom In 2



PLAN 36: Kakamas

B4.2.2 Keimoes Node

The town of Keimoes functions primarily as a rural service centre and the SDF describes it as so. It provides commercial facilities and social infrastructure and services to both the local residents and residents from the greater local municipality which consists of mainly commercial farms. The town is located on the N14 National road and R27 provincial road which links the town of Keimoes to Upington and Kenhardt respectively. The CBD Precinct of Keimoes is situated along the N14 Parallel the Orange River. The Predominantly residential area will have a secondary Node to ease the traffic going into the main CBD.

According to the growth and development strategies set forth in the PSDF, Keimoes is a settlement with Low Social Need / High Development Potential. It should primarily focus on:

- Strengthening the economic position
- Growth and Expansion;
- Diversification and Identification of new opportunities;
- Provide social services infrastructure;
- Eradicate backlogs in social infrastructure;
- Enhancing the urban environment through ongoing urban regeneration initiatives;

Residential

- There is an opportunity for high income housing in close proximity to the CBD. This will ensure that the area accommodates the people that work in the area but stay in areas like Upington.
- There are opportunities for infill development.
- With the agricultural area acting as a constraint for development, development is confined to the West of the town, this provides an opportunity for densification.

Business

- An activity street is proposed, this is where most of the of the commercial activities are taking place.
- The SDF proposes a CBD expansion between R27 and Spoorweg Street.

Industrial

- There is an opportunity to enhance light industry just before the CBD from the west

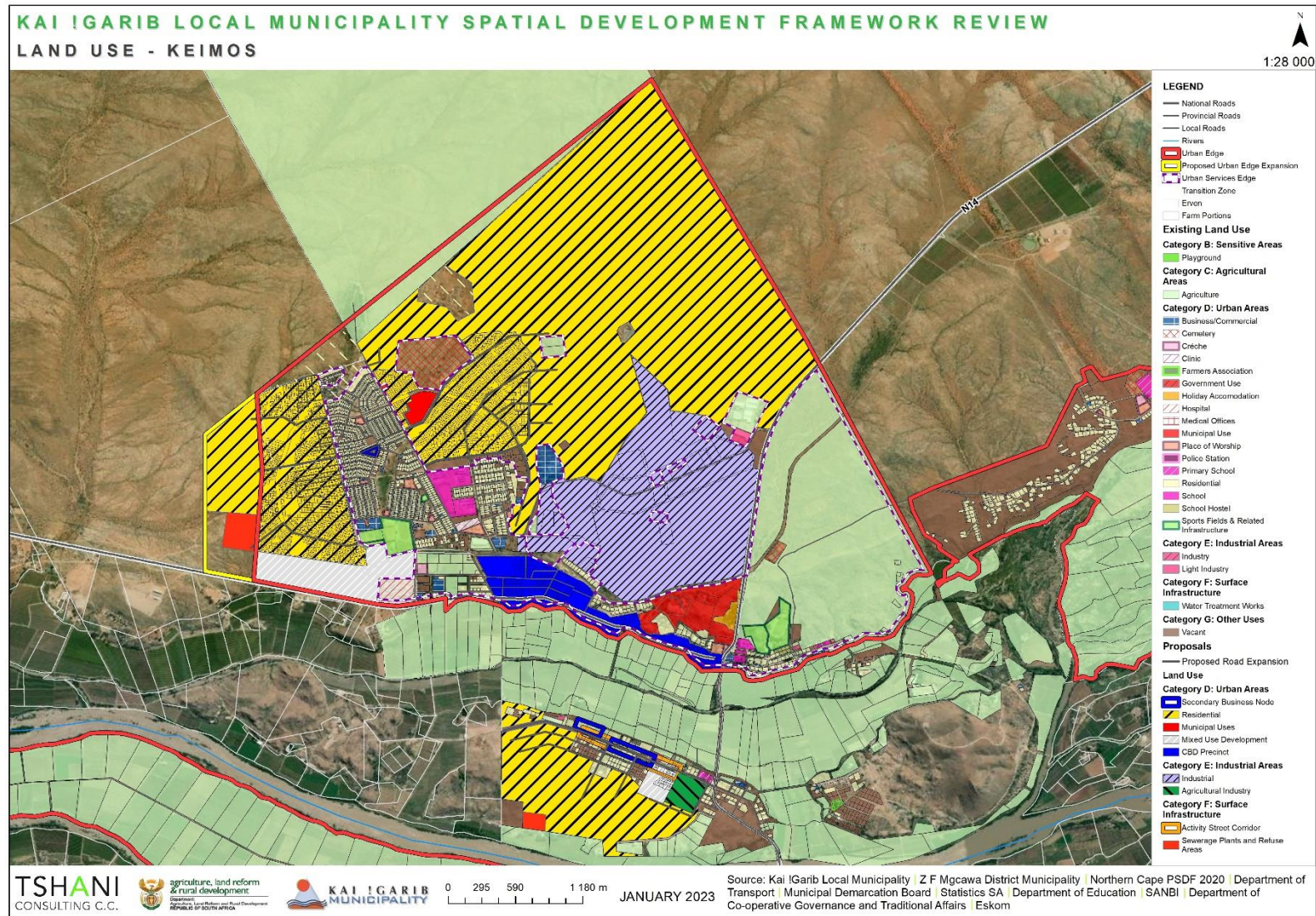
Tourism

- The SDF proposes a tourism route that runs through to the town to Kakamas
- There is an opportunity for more guesthouses in the CBD, this will increase the economic revenue in the municipality by ensuring that tourists passing to Kenhardt and Kakamas should spend time in the area.

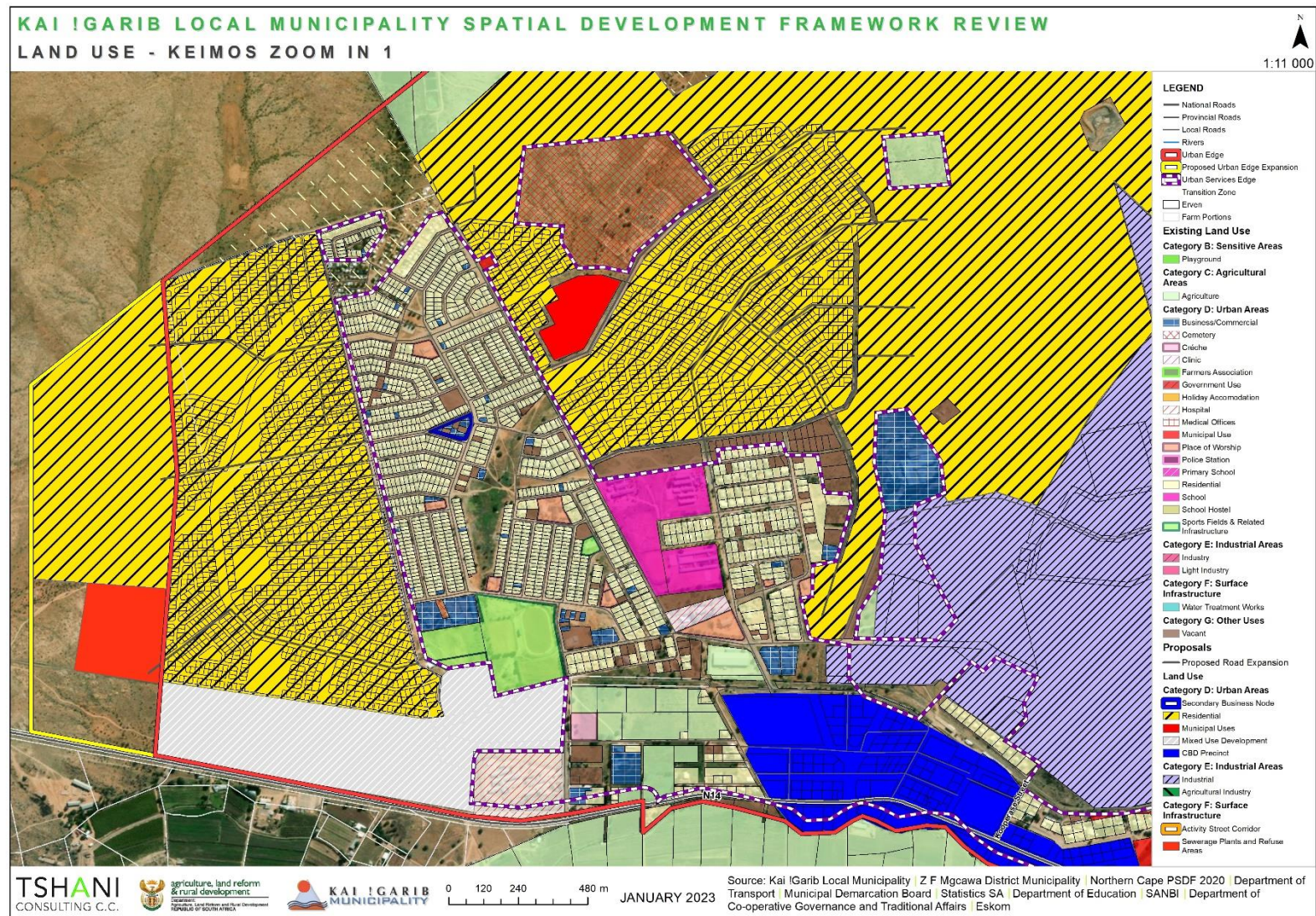
Infrastructure

- There is a proposal to have a route that links the new growing township on the west to the main route. This will improve the connectivity in the township.
- There is a proposal for a WWTW

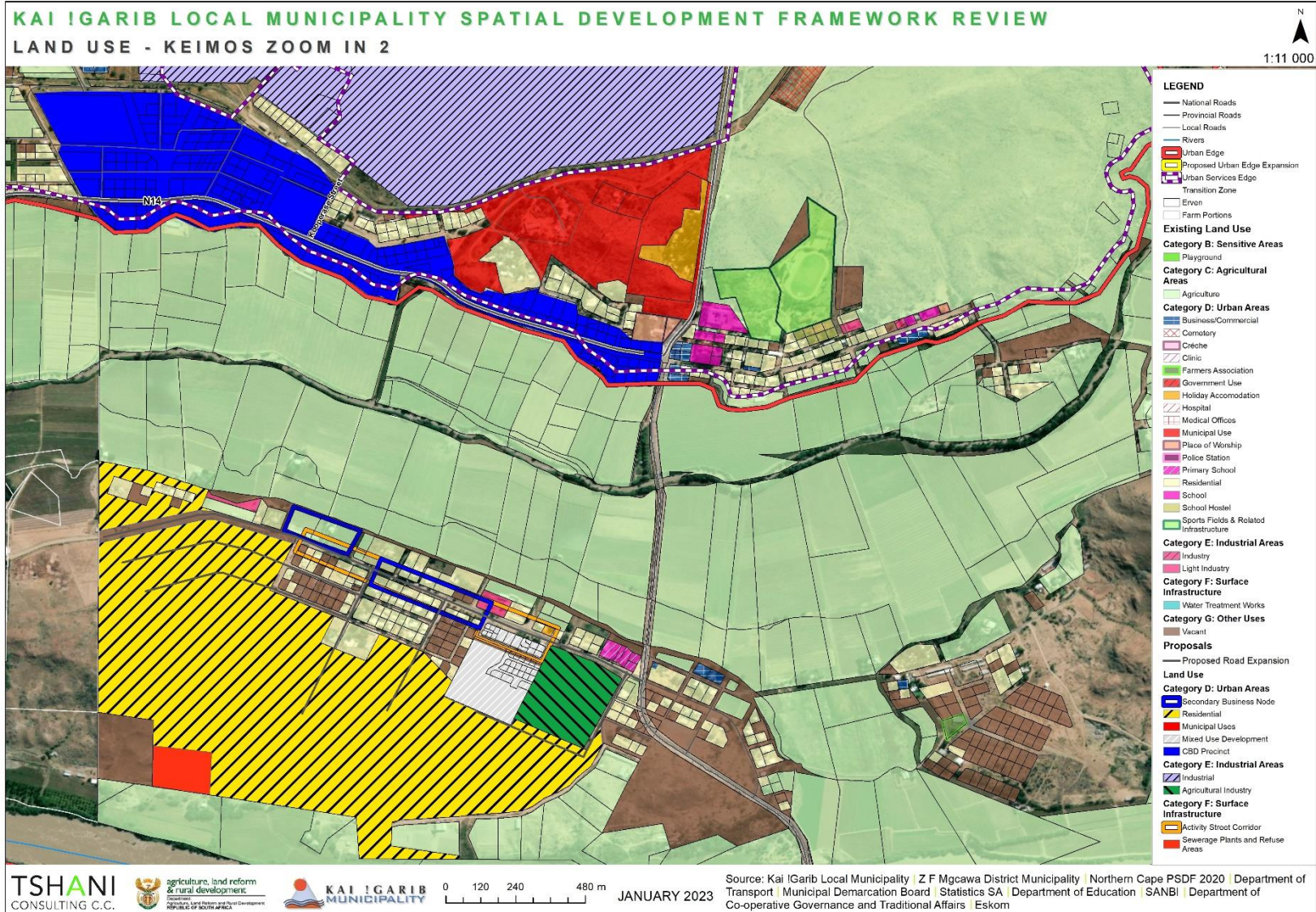
- Proposal for maintenance of the priority the N14 towards Kakamas.
This road can have street designs that give a feeling of the area.
- Construction of solid waste sites / transfer sites
- Upgrading Bulk Water Supply
- Upgrade Storm Water Management, Building of Kerb Stones and External Drainage



PLAN 37: Keimoes Zoom In 1



PLAN 38: Keimoes Zoom In 2







PLAN 39: Keimoes

B4.2.3 Kenhardt Node

Kenhardt is a Small Rural Service Centre Node in the municipality. It has been for a long time the most remote settlement in the North-Western Cape. With time the town developed from under this tree, becoming a municipality in 1909. The Hartbees River, with its many sweet thorn trees, provides a green belt irrigated by the Rooiberg Dam. Kenhardt is famous for being at the heart of the Dorper sheep-farming area. The R27 forms part of the Activity Street/Corridor with most of the social, business and administrative services located in the street along with the CBD Precinct.

According to the growth and development strategies set forth in the PSDF, Kenhardt is a settlement with Low Social Need / Low Development Potential. It should primarily focus on:

- Promoting the movement from a survival economy to economy circulation.
- Ensure effective municipal management and service excellence.
- Rendering sustainable basic services;
- Rendering and maintaining sustainable social services;
- Enhancing human capital;
- Promoting Private investment in cases of Renewable Energy opportunities.

Residential

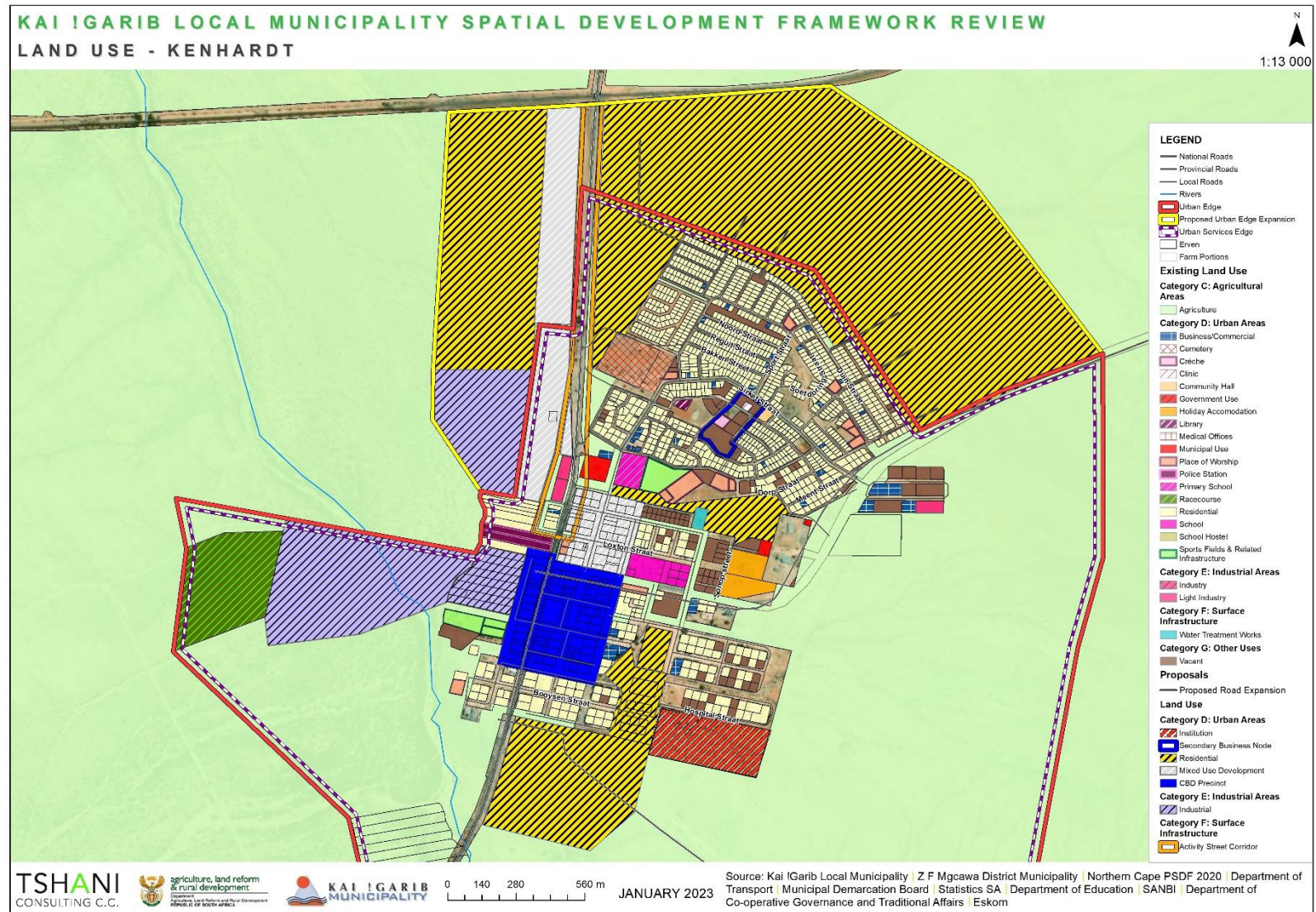
- Kenhardt does not have much of an industrial, manufacturing, retail or services base, there is therefore a very low level of urbanisation. Thus, there is a marginal need for new housing stock.
- The direction of growth goes towards the North-East

Tourism

- The area has a very high potential for tourism. There is a proposed tourism zone which includes the renewable energy plant under construction and the potential tourism opportunities is has.
- Rhodes also needs to investment into the tourism sector in order to capture as much of the tourism market as possible due to its unique nature on the route to Calvinia and Ultimately Cape Town.

Infrastructure

- There is a proposed Upgrade Storm Water Management, Building of Kerb Stones and External Drainage
- Construction of solid waste sites / transfer sites
- Proposal for training centres that will upskill the people in the community.
- Construction of WWTW
- Proposal for maintenance of the internal road system



PLAN 40: Kenhardt

B4.2.4 Augrabies Node

Augrabies is a Small Rural Service Centre node in the municipality. Augrabies is a small town in the Northern Cape province of South Africa, situated on the south bank of the Orange River about 100 kilometres downstream from Upington. It is located on the R359 road just outside the Augrabies Falls National Park, which contains the Augrabies Falls for which the town is named.

The Main road forms the CBD Precinct, and the Activity street extends from the CBD Precinct. the Activity Street offers most of the services required in a settlement from business to socio-economic.

Residential

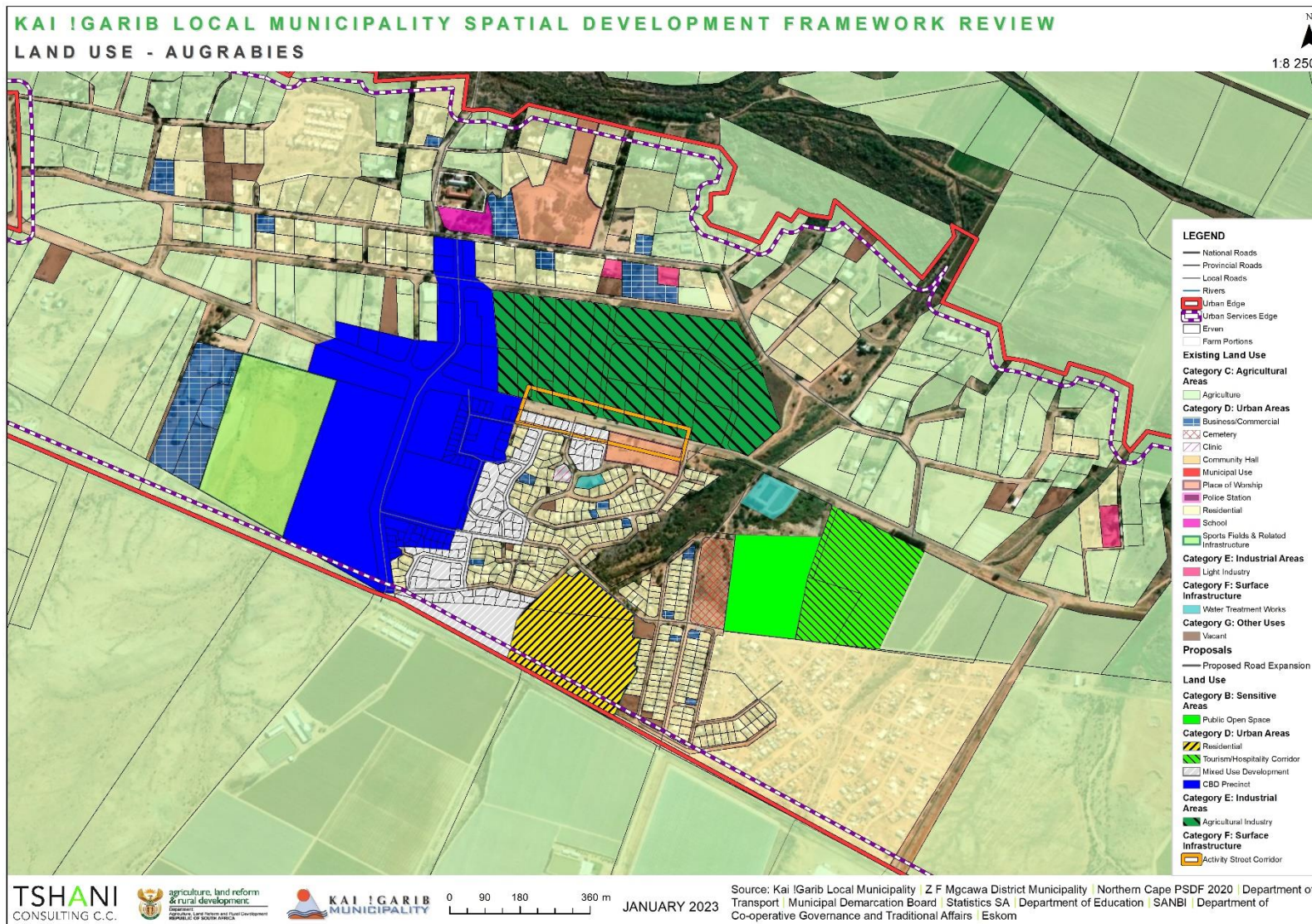
- There is an opportunity for infill development and densification. Within the urban edge
- The direction of growth is towards Kakamas.

Business

- There is a proposal for mixed use development that will mainly focus on Agri-Industry and social services.

Infrastructure

- Proposal for maintenance of the priority road. This road can have street designs that give a feeling of the area.



B4.2.5 Riemvasmaak Node

Riemvasmaak is a settlement node in the municipality. Riemvasmaak is located near the Orange River, close to the Namibian border. The main road into the Settlement is the Activity Street and offers most of the services. The CBD Precinct is located in the northwest portion of the area. The main road also consists of mainly Mixed-Use developments.

According to the growth and development strategies set forth in the PSDF, Riemvasmaak is a settlement with Low Social Need / High Development Potential; The settlement is also a Low Social Need / Low Development Potential. It should primarily focus on:

- Promoting the movement from survival to economy circulation
- Growth and Expansion;
- Enhancing ICT Connectivity;
- Enhance human Capital;
- Providing cost effective services;
- Diversification and Identification of new opportunities;
- Provide social services infrastructure;
- Eradicate backlogs in social infrastructure;
- Enhancing the urban environment through ongoing urban regeneration initiatives;

Residential

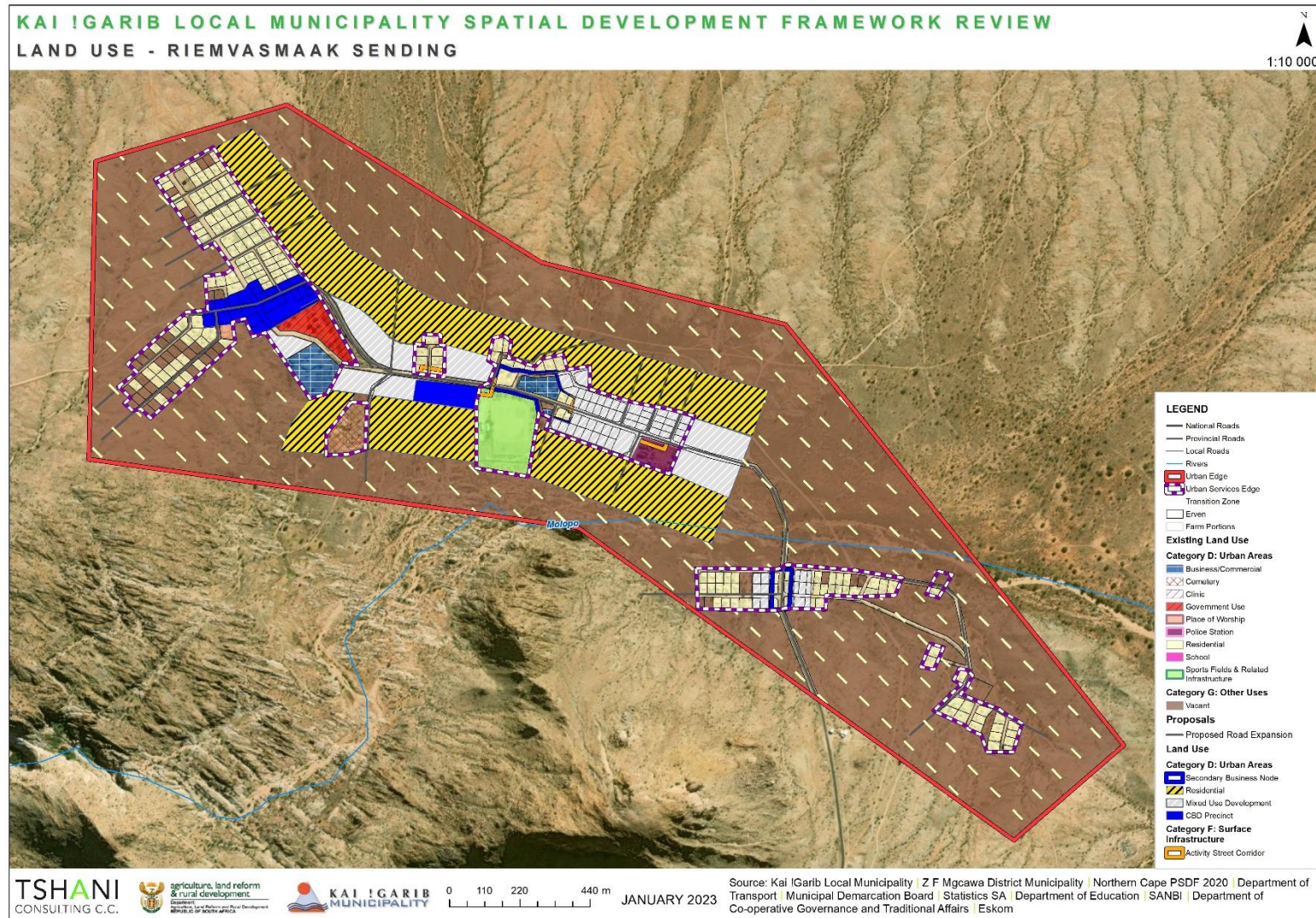
- There is an opportunity for expansion and densification.
- The direction of growth is towards all sides excluding the north side that is mountainous.

Business

- There is a proposal for mixed use development that will mainly focus on social services and Tourism.

Infrastructure

- Proposal for maintenance of the priority road towards Riemvasmaak to accommodate cars that are not 4x4 . This road can have street designs that give a feeling of the area which is mountainous.



B4.2.6 Alheit Node

Alheit is a Settlement node in the municipality. Alheit is a small town in the Northern Cape province of South Africa, situated on the east of the Kakamas Rural Service centre at the intersection between the N14 and R359 to Augrabies. It is located on the R359 road just before the Augrabies Falls National Park, which contains the Augrabies Falls.

The Main road forms the CBD Precinct, and the Activity street extends from the CBD Precinct. The specific location of the settlement within the Tourism Route makes it prominent to expand the CBD Precinct and adopt more mixed-use developments along the N14

Residential

- There is an opportunity for infill development and densification. Within the urban edge
- The direction of growth is towards Kakamas.

Business

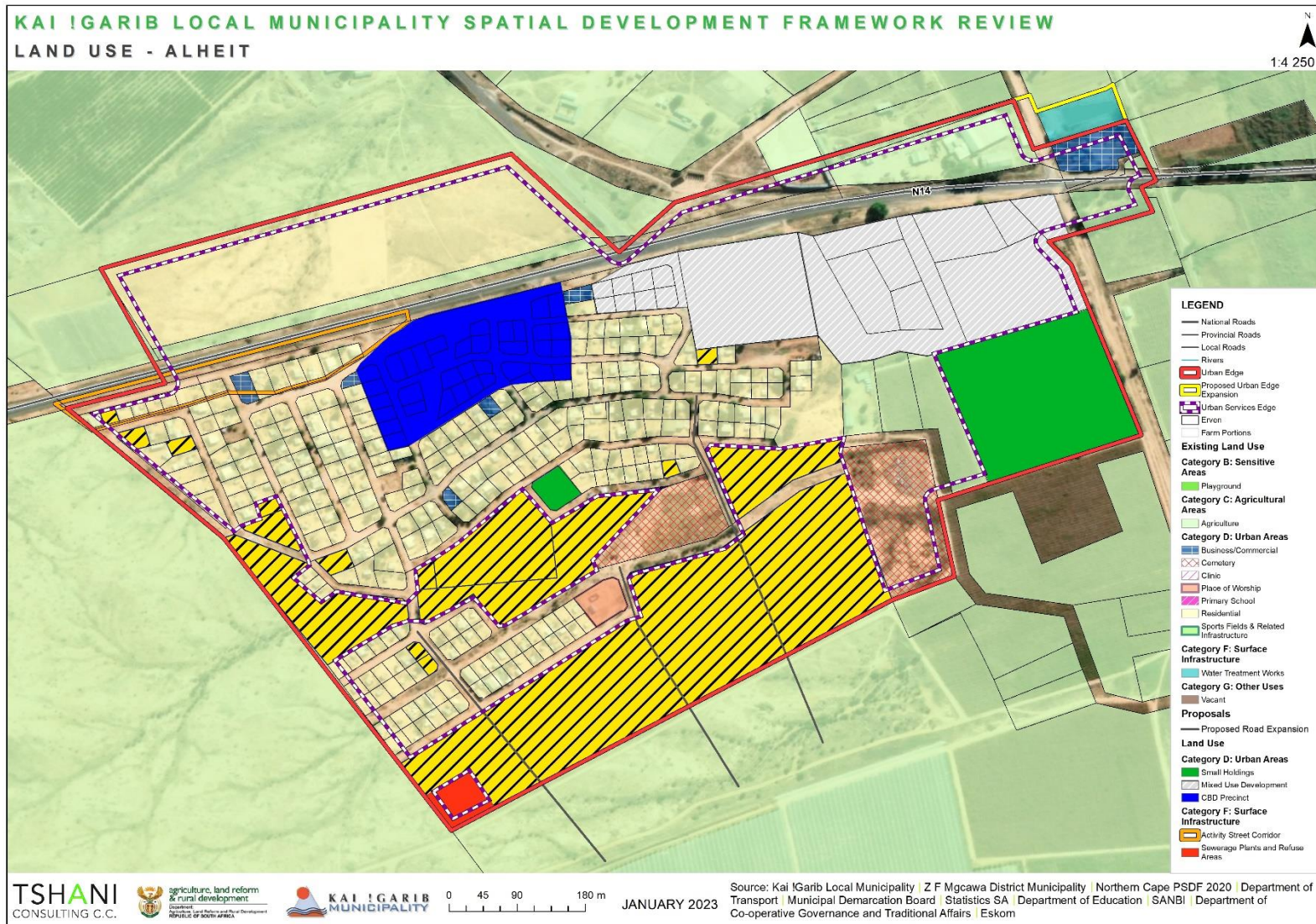
- There is a proposal for mixed use development that will mainly focus on hospitality and social services.

Infrastructure

- Proposal for maintenance of the priority road. This road can have street designs that give a feeling of the area.

Tourism

- Proposal for agri-tourism due to the location.



PLAN 41: Alheit

B4.2.7 Bloemsmond Node

Bloemsmond is a Settlement node in the municipality. Bloemsmond is a small town in the Northern Cape province of South Africa, situated along the N14.

The Main road apart from the N14 forms the CBD Precinct, and the main road consists of Agri-Industry on the opposite site

Residential

- There is an opportunity for infill development and densification. Within the urban edge
- The direction of growth is towards the south.

Business

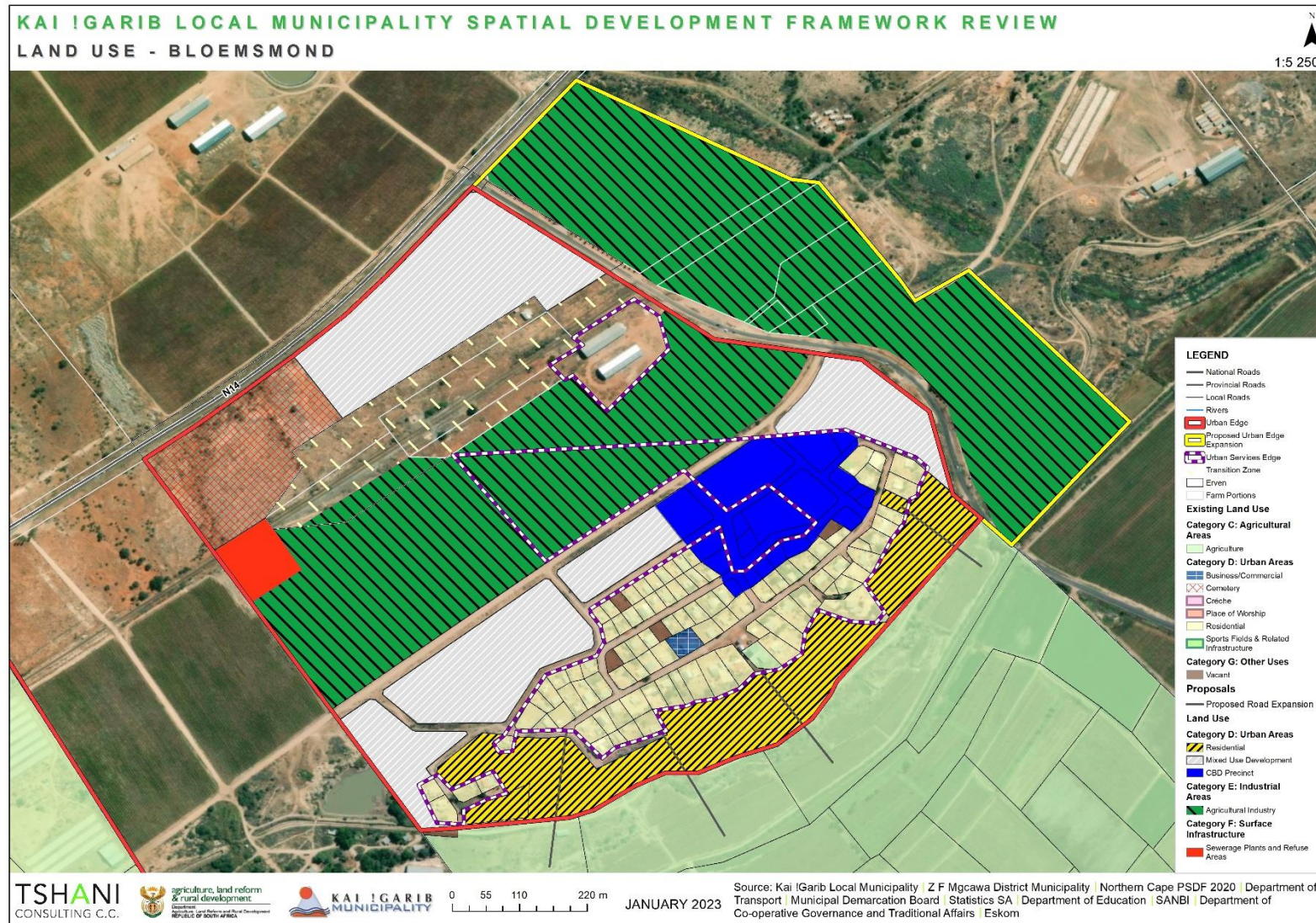
- There is a proposal for mixed use development that will mainly focus on social services.

Infrastructure

- Proposal for maintenance of the priority road. This road can have street designs that give a feeling of the area.

Agriculture

- Proposed Agri-Industry as the main function of the settlement.



PLAN 42: Bloemsmond

B4.2.8 Cannon Island Node

Cannon Island is a settlement node in the municipality. The development of Cannon Island is linear, Meaning it's based on a single movement route. There are areas of farming activity on the outskirts of settlement. The CBD Precinct of Kakamas is predominantly proposed for the main Movement Route..

According to the growth and development strategies set forth in the PSDF, Cillie is a settlement with Low Social Need / High Development Potential. It should primarily focus on:

- Strengthening the economic position
- Diversification and Identification of new opportunities;
- Provide social services infrastructure;
- Eradicate backlogs in social infrastructure;

Business

- One of the projects which have been identified is the development of a CBD are along the main route.

Tourism

- Revitalisation of river/water-based adventure tourism.

Agriculture

- Proposed commercial farming along the Orange River.

KAI !GARIB LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK REVIEW

LAND USE - CANNON ISLAND

1:5 250



TSHANI
CONSULTING C.C.

agriculture, land reform
& rural development
Department of Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

KAI !GARIB
MUNICIPALITY

0 55 110 220 m

JANUARY 2023

Source: Kai !Garib Local Municipality | Z F Mgcawa District Municipality | Northern Cape PSDF 2020 | Department of Transport | Municipal Demarcation Board | Statistics SA | Department of Education | SANBI | Department of Co-operative Governance and Traditional Affairs | Eskom

PLAN 43: Cannon Island

B4.2.9 Cillie Node

Cillie is a settlement node in the municipality. Cillie is a village in Northern Cape and has about 1,970 residents. Cillie is situated nearby to the villages Lutzburg and Kakamas. The Development of Mixed-Use developments adjacent the CBD Precinct will help rejuvenate the economy of the village.

According to the growth and development strategies set forth in the PSDF, Cillie is a settlement with Low Social Need / High Development Potential. It should primarily focus on:

- Growth and Expansion;
- Diversification and Identification of new opportunities;
- Provide social services infrastructure;
- Eradicate backlogs in social infrastructure;

Residential

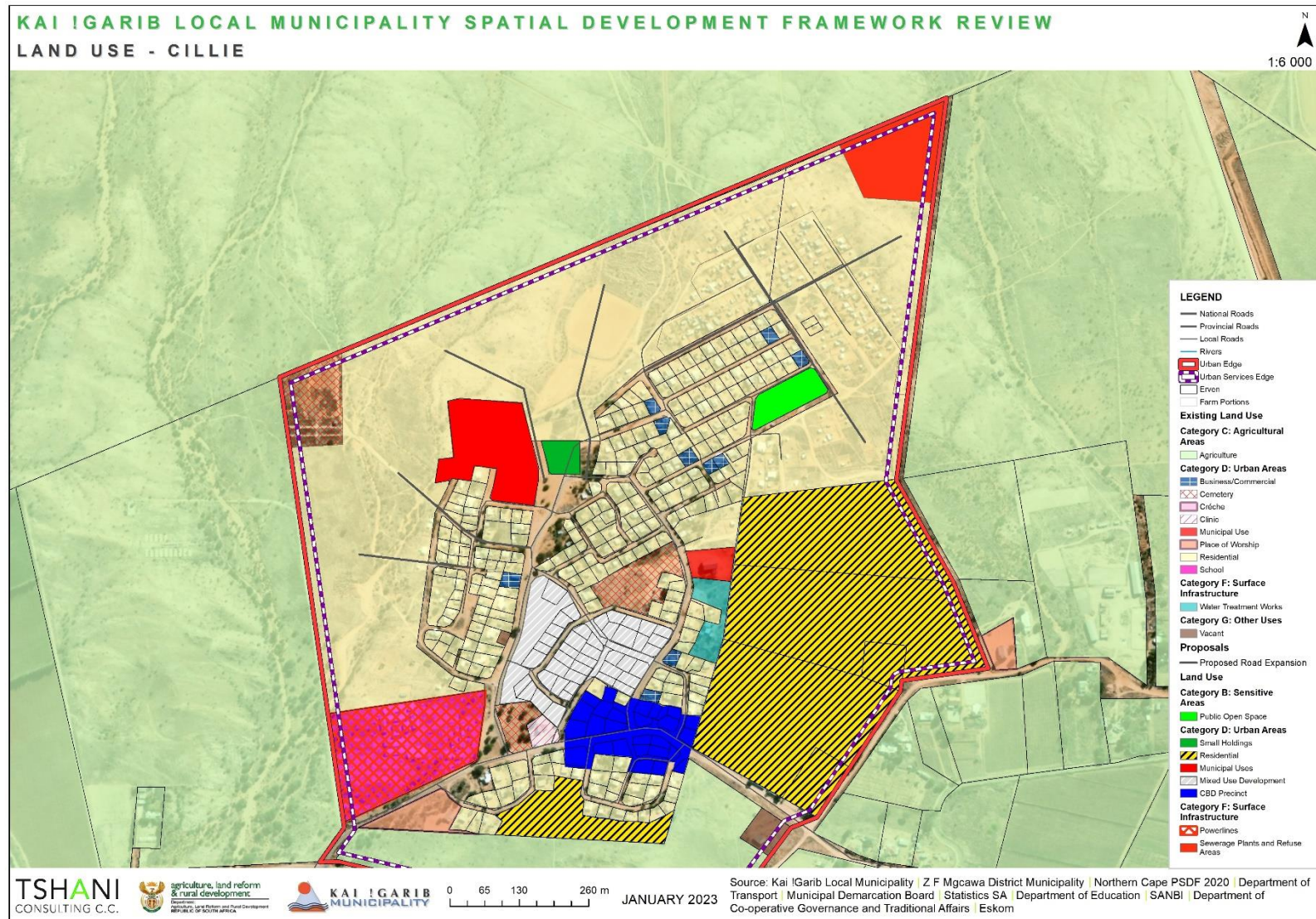
- There are areas earmarked for future growth expansion, this can accommodate more housing projects in the near future.

Business

- There is potential for a CBD expansion, this will amalgamate the businesses in the area and ensure a larger office precinct that can host a number of offices in the area. This is where there is a lot of commercial activities are taking place.

Agriculture

- Opportunities for Agri-Industry can be explored.



PLAN 44: Cillie

B4.2.10 Curriescamp Node

Curriescamp is a Settlement node in the municipality. Curriescamp is a small settlement in the Northern Cape province of South Africa, situated on the east of the Kakamas Rural Service centre, about 5km from the N14 Between Keimoes and Upington.

The Main road forms the CBD Precinct, the settlement is predominantly made up of low-income residents and travel a fair distance to the N14 for public transport. makes it prominent to expand the CBD Precinct and adopt more mixed-use developments he N14

Residential

- There is an opportunity for infill development and densification. Within the urban edge
- The direction of growth is towards Keimoes.

Business

- There is a proposal for mixed use development that will mainly focus on hospitality and social services.

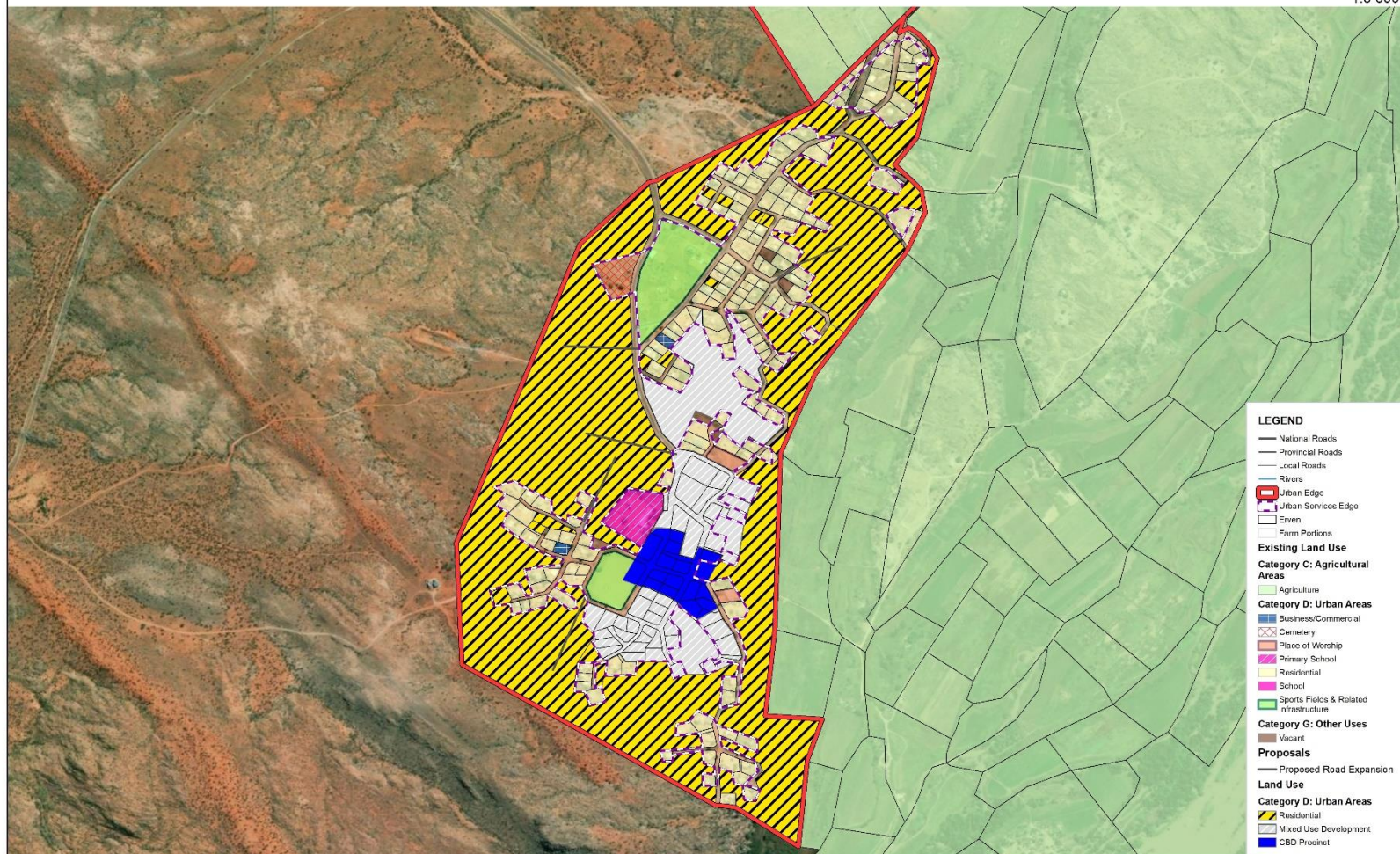
Infrastructure

- Proposal for maintenance of the priority road. This road can have street designs that give a feeling of the area.

KAI !GARIB LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK REVIEW

LAND USE - CURRIES CAMP

1:8 500



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Department of Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

KAI !GARIB
MUNICIPALITY

0 90 180 360 m

JANUARY 2023

Source: Kai !Garib Local Municipality | Z F Mgcawa District Municipality | Northern Cape PSD 2020 | Department of Transport | Municipal Demarcation Board | Statistics SA | Department of Education | SANBI | Department of Co-operative Governance and Traditional Affairs | Eskom

PLAN 45: Curries Camp

B4.2.11 Lutzburg Node

Lutzburg is a Settlement node in the municipality. Lutzburg is a village in Northern Cape and has about 1,420 residents. Lutzburg is situated nearby to the rural service centre of Kakamas and the settlement of Cillie.

The Main road forms the CBD Precinct, the settlement is predominantly made up of low-income. makes it prominent to expand the CBD Precinct and adopt more mixed-use developments just off the N14.

Residential

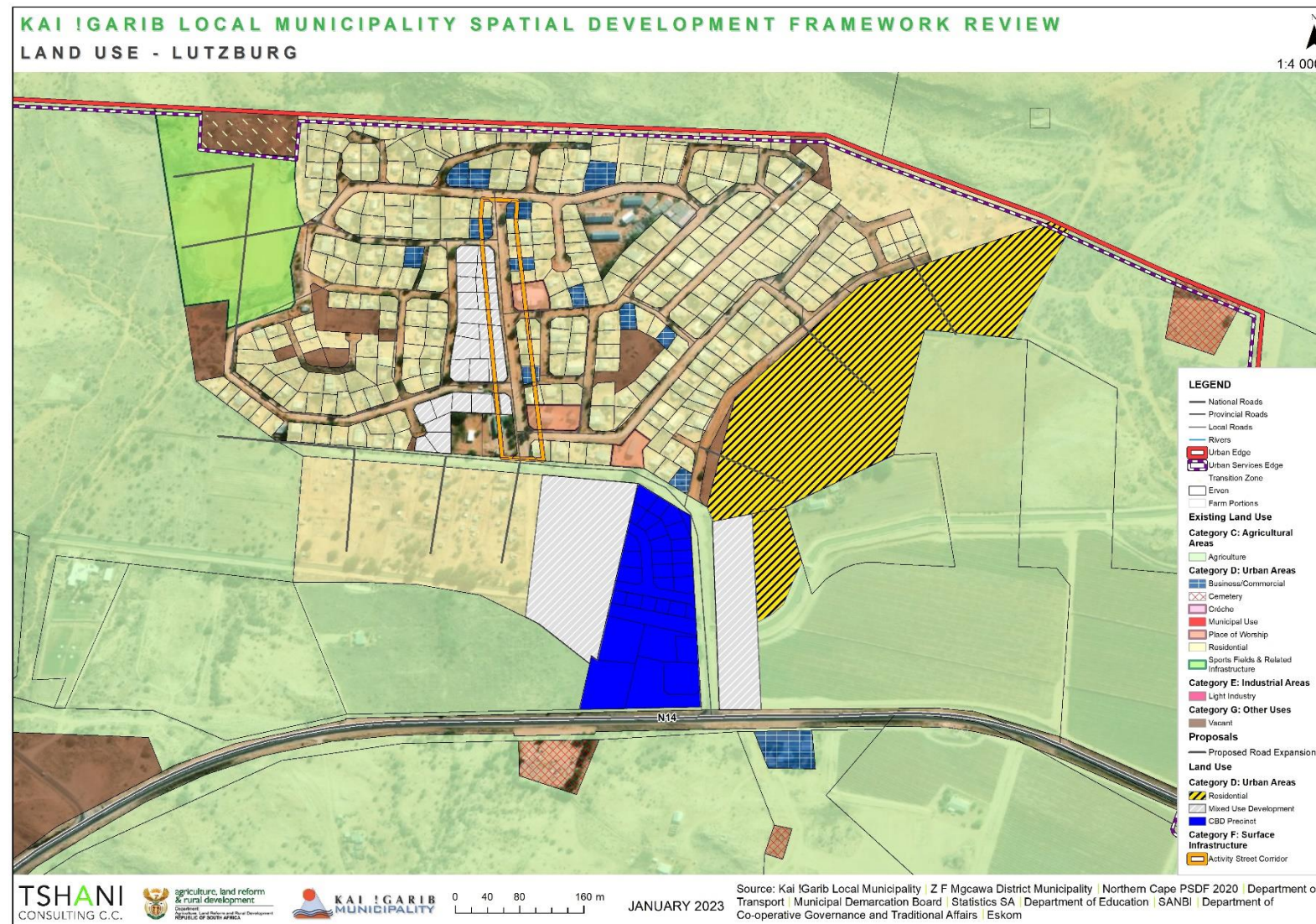
- There is an opportunity for infill development and densification. Within the urban edge
- The direction of growth is towards the east.

Business

- There is a proposal for mixed use development that will mainly focus on business, hospitality and social services.

Infrastructure

- Proposal for maintenance of the priority road. This road can have street designs that give a feeling of the area.



PLAN 46: Lutzburg

B4.2.12 Marchand Node

Marchand is a settlement node in the municipality. The development of Kakamas is denser and there is a very little room for expansion with the surroundings predominantly agricultural land development to prevent sprawling urban expansion with the Orange River to the North-East of the area. There are areas of farming activity on the outskirts of town. The settlement is located on the R359 on the way to Augrabies from Kakamas after Alheit. This provides a unique opportunity for various forms of tourism.

According to the growth and development strategies set forth in the PSDF, Marchand is a settlement with Low Social Need / High Development Potential. It should primarily focus on:

- Growth and Expansion;
- Diversification and Identification of new opportunities;
- Provide social services infrastructure;
- Eradicate backlogs in social infrastructure;
- Enhancing the urban environment through ongoing urban regeneration initiatives;

Residential

- There are areas earmarked for future growth expansion, this can accommodate more housing projects in the near future.

Business

- There is potential for a CBD expansion, this will amalgamate the businesses in the area and ensure a larger office precinct that can

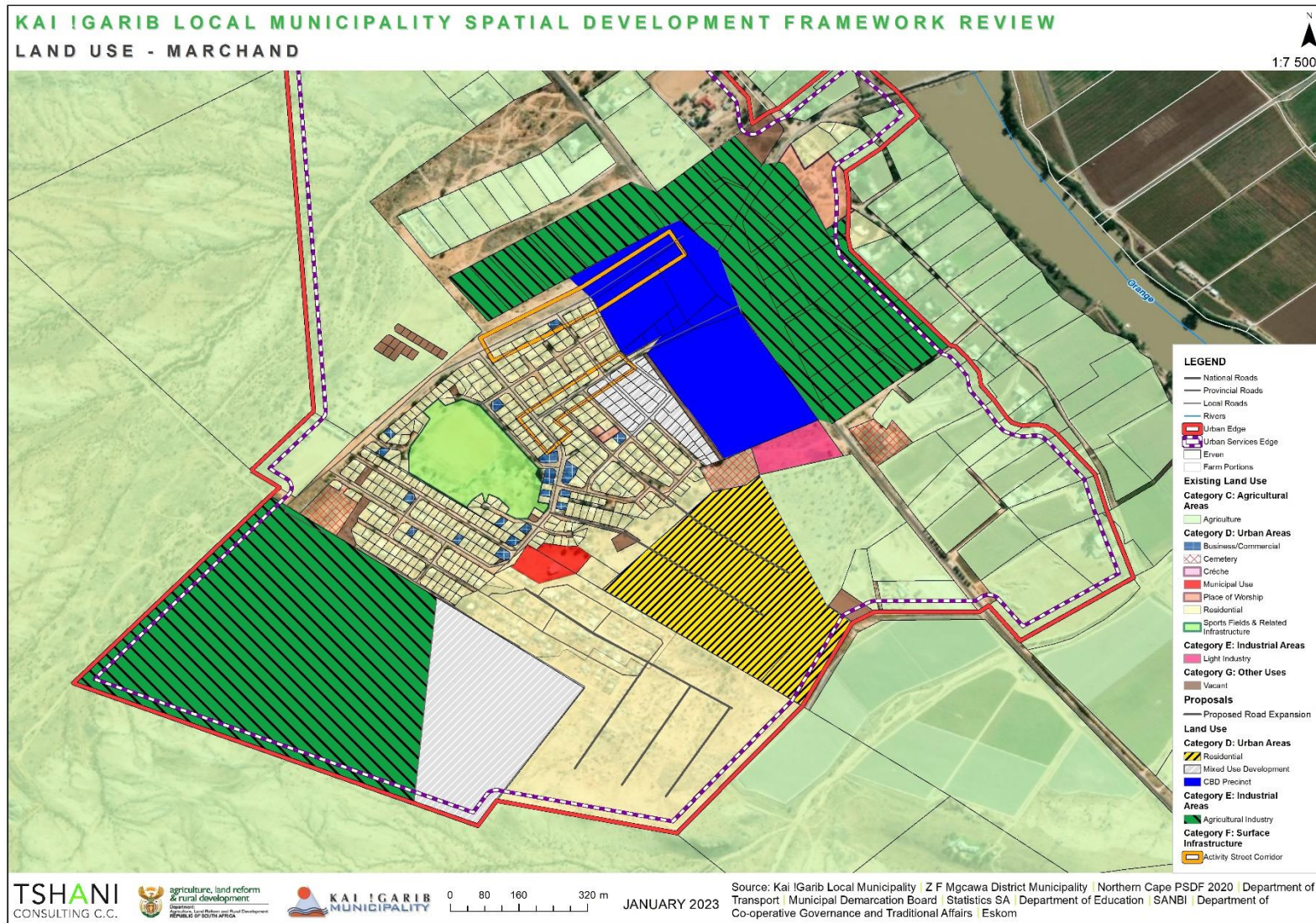
host a number of offices in the area. This is where there is a lot of commercial activities are taking place.

Tourism

- Proposals for various types of Tourism, including adventure tourism.

Agriculture

- Agri-industry proposals due to the unique location of the settlement along the Orange River



PLAN 47: Marchand

B4.3 SUSTAINABLE HUMAN SETTLEMENTS

Housing demand for various sectors, location, and proposed densities (SPLUMA 21 (f)). The preparation of this framework will be entirely based on existing housing development strategies and/or inputs from the various officials within the municipality, based on institutional knowledge of housing needs within the district

Achieving sustainable human settlements is one of the main spatial goals within an area such as KGLM which is characterised by settlement patterns that has encountered a high level of disintegration and fragmentation. In addition, settlements are not static, they respond to change and are continuously in the process of transformation. Housing takes into cognisance the densified areas and the rate at which they are being densified. This assists in planning for the future looking at the current growth projections.

The majority (75.19 %) of people in the Kai !Garib local municipality live in rural communal areas in mostly formal brick housing (50.95 %) and a significant minority (29 %) live in traditional housing (**9 720 households**). A fairly large percentage of the housing demand is therefore vested in the so-called rural areas. These areas are typically characterised by tenure issues viz. private ownership versus communal ownership. It is very important to understand the nature of the need in these areas and to what extent it relates

to tenure; basic infrastructure; and top structure and to use this to plan. Delivery of housing and linkage with the government's land reform programme is unclear. Land reform projects listed in the District IDP within the Kai !Garib LM, are focussed on support and expansion of the agricultural sector (agrarian reform).

The development of housing projects should be considerate of the future trajectory of KGLM and be cognisant of increased growth rates. The type of housing development will have a direct impact on land availability for future settlements or the expansion of the economic nodal areas.

The housing demand is detailed as follow.

Table 10: Human Settlements Housing Projects

Item .No.	Vision/Strategic goal	Project Name	District Area	Municipal Area	Responsible Implementation Department/ Agency	Project Funding	Estimated Project Duration	Developmental Impact	Current implementation status and challenges
1.	Adequate Housing and improved quality living environments	Blaauwskop 50ha	Z.F. Mqcowu	Kai Garib	Coghsta	R966 332	36 months	Town Planning	Running- Township establishment completed
2.		Gamakor 1500	Z.F. Mqcowu	Kai Garib	Coghsta	R575 511	36 months	Town Planning	Running- Township establishment completed

Table 11: Municipal Infrastructure Grant - Kai !Garib

Item .No.	Project Name	District Area	Municipal Area	Responsible Implementation Department/ Agency	Project Funding	Estimated Project Duration	Developmental Impact	Current implantation status and challenges
1.	MIG 1540: Kai !Garib: Lutzburg:	ZFM	Kai !Garib	MIG / LM	R 13 303 371,42	2022- 2023	421 Households- Access to roads & improved storm water collection	Implementation

	Access and Collector Roads							
2.	MIG 1583: Kai !Garib: Kakamas: Access & Collector Roads	ZFM	Kai !Garib	MIG / LM	R 18 001 791,37	2022- 2023	2697 Households-Access to roads & improved storm water collection	Implementation
3.	MIG 1578: Vredesvallei: Upgrading of Water Supply and Distribution Network	ZFM	Kai !Garib	MIG / LM	R 6 843 397,00	2022- 2023	150 Households-Access to Water	Pre-Implementation
4.	MIG 1581: Augrabies: Upgrading of Water Purification Plant	ZFM	Kai !Garib	MIG / LM	R 11 353 375,00	2022- 2023	1389 Households-Access to water	Pre-Implementation

B4.4 URBAN – RURAL LINKAGES

Rural-urban linkages can be defined as the structural social, economic, cultural, and political relationships maintained between individuals and groups in the urban environment and those in rural areas. Rural-urban linkages can also refer to spatial and sectoral flows that occur between rural and urban areas. Spatial flows include flows of people, goods, money, technology, knowledge, information, and waste. By contrast, sectoral flows include flows of agricultural products going to urban areas, and goods from urban manufacturing areas going to more rural areas. Typically, rural-urban linkages are often articulated in the nature and forms of migration, production, consumption, financial and some investment linkages that occur within the rural-urban symbiosis. The exchange of money, goods, visits including social activities, and communication with relatives and friends can all be used as indicators of rural-urban linkages.

Farming areas and cities coexist along a continuum with multiple types of flows and interactions occurring between the two spaces. Typically, it is now widely recognised that there exist economic, social and environmental interdependences between urban and rural areas.

Rural communities are responsible for the stewardship of ecosystem services that are essential for human survival and well-being such as clean air and water, flood and drought mitigation, pollution mitigation, biodiversity, and climate stabilization.

Urban and Rural linkages are critical towards the success of both the rural and urban built up areas, this section deals with push and pull factors that are required to ensure a sustainable balance between both urban and rural divide.

Urban and rural development can no longer be viewed as distinct. Rural and urban economies need to be understood as a united whole and addressed in ways that are more integrated.

In South Africa, rural-urban linkages took place within a capitalist mode of production that developed from a unique type of racial capitalism. Therefore, it is impossible to properly comprehend South Africa's rural-urban linkages without considering the whole structure and function of its political economy.

Even though differences between rural and urban communities have existed for more than a century, they only really started to become a problem when South Africa became democratic. A growing national goal is to improve the living conditions of the rural population. The complexity of poverty and urbanization processes can therefore be better understood by paying more attention to rural-urban linkages.

Benefits of Rural-Urban Linkages:

- that rural development is to large extent dependent on improving the linkages with the urban economy.
- adoption of innovation systems as an approach to local economic development can yield interesting insights for rural urban linkages.

- Infrastructure works as a bridge between rural and urban worlds and between agricultural sectors and other sectors of the economy. In particular, roads infrastructure enhance access to urban markets as well as health and educational facilities which have significant impact on socio-economic development.
- Local government can play an important role in facilitating positive interactions between rural inhabitants and urban markets thereby make markets increasingly work for the poor and spatially marginalized people in the urban-rural continuum./

B4.5 CEMETERIES

There are numerous cemeteries, and graveyards found in Wards 1-10 of the municipal area. These are associated with townscapes, rural landscapes, farmsteads, and church land. Although formal cemeteries are reflected in existing data bases there are no accurate records of informal cemeteries and graves.

Key Interventions:

- Municipalities to review their SDFs and IDPs to map and discuss existing and proposed cemeteries and Crematoria, identify the available land, as well as include future budgeting requirements in relation to acquisition and establishment.
- Ensure that Municipal Schemes have appropriate zones to support such development of such facilities including appropriate additional controls.

- Municipal planning staff engage with relevant business units regarding public focused developments to ensure that the location is optimal and sustainable
- Alternative methods for disposal of human remains need to be explored including impact on the natural environment and opportunities to develop innovative open spaces. The SDF proposes a crematorium in the municipality.
- Communal cemeteries within farmsteads and Traditional Authority areas need to be mapped as part of the development of Traditional Settlement Master Plans and/or as part of the development of a Scheme.

B4.6 BULK INFRASTRUCTURE

Bulk infrastructure offers numerous prospects for job creation and can be seen as the foundation for growth and development. The infrastructure network efficiently provides Kai !Garib's economy with transportation, telecommunications, water, and electricity needs. It further supports manufacturing, trade, and exports. It gives citizens of the province a mean to improve their lives and boost their incomes, effectively contributing to improving the human dignity of all.

B4.7 SPC-F Surface Infrastructure

An effective, competitive and responsive infrastructure network is imperative for ongoing economic development of the province and the local municipalities. The relevant sectoral departments therefore have a vitally important task in providing the infrastructure and bulk services required by

the various economic sectors, the human settlements of the province, and the rural hinterland. Key challenges are a lack of basic infrastructure in rural areas and the proliferation of informal settlements in urban areas. Both these

challenges are beyond the sole institutional and fiscal capabilities of the relevant municipalities. It is therefore important that the relevant funding mechanisms and institutions function efficiently and equitably

F.a	National roads	National roads proclaimed in terms of the National Roads Act 7 of 1998.
F.b	Main roads	Provincial and regional roads proclaimed in terms of the Roads Ordinance 19 of 1976.
F.c	Minor roads	Regional and local roads proclaimed in terms of the Roads Ordinance 19 of 1976.
F.d	Public Streets	Public streets and parking areas within main town and rural settlements (areas zoned Transport Zone II and III respectively).
F.e	Heavy Vehicle Overnight Facilities	Areas designated for heavy vehicle parking and overnight facilities (areas zoned Transport Zone IV).
F.f	Railway lines	Railway lines and associated infrastructure (areas zoned Transport Zone I).
F.g	Power lines	Power lines and associated sub-stations and infrastructure.

F.h	Tele- communication infrastructure	Any part of the infrastructure of a telecommunication network for radio/wireless communication including, voice, data and video telecommunications, which may include antennae; any support structure, equipment room, radio equipment and optical communications equipment provided by cellular network operators or any other telecommunication providers and all ancillary structures needed for the operation of telecommunication infrastructure.
F.i	Renewable energy structures	Any wind turbine or solar voltaic apparatus, or grouping thereof, which captures and converts wind or solar radiation into energy for commercial gain irrespective of whether it feeds onto an electricity grid or not. It includes any appurtenant ⁷² structure or any test facility which may lead to the generation of energy on a commercial basis.
F.j	Dams & Reservoirs	Major dams and reservoirs.
F.k	Canals	Constructed permanent waterways, e.g. irrigation canals and storm water trenches.
F.l	Sewerage Plants and Refuse Areas	Areas designated as municipal and private sewerage treatment plants and refuse areas.

The focus of movement and transportation in the KGLM is on the interplay of viable public transportation with the appropriate pattern of land use and settlement development. It is clearly recognised that public transport functions best and most sustainably when it services a user population that resides at sufficient density within the catchments of the transport services offered. Thus, it is emphasised that the theme encompasses the need to plan for public transportation services in tandem with planning for the transformation of inefficient spatial patterns of development over time.

Furthermore, infrastructure could be broadly defined and widely understood, this report will consider **infrastructure as facilities and structures needed for the effective operation of a business, state or economy**. Infrastructure includes roads, railways, power generation and transmission, communications, water and waste and housing. Infrastructure is a basis for social and economic development; cities and towns, which invest infrastructure increase their chances of competitiveness, and citizen liveability and promotes connectivity with adjacent towns and beyond.

It should be acknowledged that new technological advancements in smart urban systems, green energy, mass transit transportation and telecommunications play a role in assisting cities to become centres of innovation, culture and diversity. These are future trends of the development of cities that compete on a global scale; it is also not too late for the town to follow suit as the levels of urbanisation are increasing drastically over the years.

Engineering services within the municipal area should be of an adequate standard before any new developments or densification may be permitted. Services such as water reticulation and waste management (sewage disposal, solid waste) are particularly important since portions within the municipal area have not been serviced.

The desired environment will be one where all urban areas are serviced sufficiently with water, sanitation, electricity, waste, and stormwater management. Impacts of new service infrastructure on the environment need to be investigated before such infrastructure is installed. It will need to ensure that Sewerage Treatment Works (Water Care Works) and landfills have sufficient capacity to accommodate new developments to avoid pollution in all forms.

B4.4.1 Green Building Design

Green building is the practise of creating structures and using processes that are environmentally responsible and resource efficient throughout the building's life cycle. The Green buildings design may include:

- **Safeguarding water resources:** These may include rain water harvesting for indoor use, minimising water use in buildings.
- **Minimising waste and maximising re-use:** usage of durable materials and generating less waste, demolition waste re-use
- **Promoting health and well-being:** Incorporating natural light and views to ensure users comfort and enjoyment. Creating indoor temperatures through building design or management of systems

- **Energy saving:** Integrating renewable energy usage and low carbon technologies for building's supply energy needs.
- **Creating resilience and flexibility in structures:** Adapting to climate change and resilience against natural disasters such as floods and hurricanes. Designing spaces that are flexible and dynamic, anticipating their changes in use over time so as to avoid demolition and rebuilding.
- **Integration with surrounding environments:** Ensuring transport and distance to amenities are considered on design, encouraging non-motorised transportation (NMT). Exploring information communication technologies to improve communication with the world around us.



B4.4.2 Green Infrastructure Technology

These are some of the proposed interventions to curb the gap of service delivery and infrastructure.

Rainwater harvesting – Rainwater harvesting involves collecting, storing, and using rainwater for other uses. These uses can include household uses (drinking water, sanitation etc) and agricultural uses (irrigation). Rainwater harvesting can be used by those wishing to reduce their carbon footprint, those wishing to reduce their municipal utility bill or those who have no access to formal water supply.

Stormwater harvesting – Stormwater harvesting involves the collection, accumulation, treatment and storage of stormwater runoff for reuse. It differs from rainwater harvesting in that the runoff is collected from roadside drains instead of roofs. Stormwater could be diverted to a collection point which could be used to water gardens and farmlands. In addition, planting trees in the steep areas would intercept rainfall and thus reduce soil erosion.

Solid waste recycling – reduces the amount of waste that ends up in landfill sites. Solid wastes are any discarded or abandoned materials. Solid wastes can be solid, liquid, semi-solid or containerized gaseous material.

Greywater reuse - Greywater is gently used water from bathroom sinks, showers, tubs, and washing machines. It is not water that has come into contact with faeces. Greywater could be collected to water gardens and farms. Greywater can be collected and reused for certain applications. The most common is watering gardens.

Solar panels could be used for electricity as they are less intrusive on the residents & can be locally installed at each house where the resident can take ownership.

A solar panel is a photovoltaic cell which is mounted onto either a roof or support post. The cells generate solar electricity and are generally used in rural areas where there is no formal electricity supply or by people who want to decrease their dependence on fossil fuels or reduce their electricity bill.

B4.4.3 Roads

Key Informants and Policy for Transportation in the KGLM

The National and Provincial Road movement network has been highlighted in the Spatial Structuring Elements.

The N14

The 14th national road is orientated east-west and connects Pretoria in the east with Springbok in the west. The N14 divides the municipal area in a northern and southern section and runs adjacent to the Orange River, from the eastern border of Kai !Garib to Kakamas, where the river and the N14 split from one another. This road forms the main corridor for tourists from Upington to Springbok and commuters from the east visiting the western area of the country and vice versa.

Two of the three service centres in Kai !Garib namely Kakamas and Keimoes (the other being Kenhardt), along with numerous smaller communities, is situated adjacent the N14 road. This occurrence gives prosperous and viable

tourism and agriculture sector opportunities to these towns and communities which should be optimally utilised.

N10

The N10 road connects Namibia (Nakop border post) in the north with the N2 in the south, just north east of Port Elizabeth in the Eastern Cape. The N10 runs through the northern part of the municipality not bordering any of the towns or settlements. This road has minimal to no influence on the municipality as it serves to connect two main nodes situated outside the boundary of the area, namely Upington (Dawid Kruiper Municipality) and the Nakop border post (between South Africa and Karas Region, Namibia).

R27

This R27 road connects Keimoes in the north with Calvinia in the south and later Vredendal in the south west. This R27 road is under the jurisdiction of The South African National Road Agency Limited (SANRAL) and forms the main corridor between the Upington area and the Western Cape Province.

This road is also extremely important for the Kai !Garib Municipality, because of the connection between Keimoes and Kenhardt, two main settlements within the area. The land use adjacent the road is however limited to extensive farming as the distance from the Orange River diminishes the benefits of intensive farming practises.

R359

The R359 road forms part of the famous Quiver Tree and Wine Route and stretches from Upington, through Keimoes and Kakamas to the Augrabies

Falls. This route is instrumental to the well-being and growth of the tourism sector in the Kai !Garib and surrounding municipal areas.

B4.4.4 Rail

It is mentionable that the Sishen-Saldanha railway runs through the southern portion of the Kai !Garib Municipality, in the vicinity of Kenhardt. This however only influences the economy of Kenhardt due to its location close to the mentioned line. The maintenance crews normally make use of the overnight facilities of Kenhardt and the surrounding farms, thus contributing to their income.

There is a proposal by NCEDA for a new rail link to assist on the strain experienced by the current railway infrastructure. The railway will run from Kuruman, traversing the local municipality through to Boegoebaai in the Namakwa district.

B4.4.5 Electricity

The provision of energy is vital in a modern society. The availability of energy remains a serious resource challenge. ESKOM does not have the generation capacity to meet the rising energy demand resulting from the rapid economic growth in South Africa (DME-2008). Electricity fuels industry. Electrical railway transportation, telecommunications and determines among other aspects what cooking methods a household uses, how households warm themselves and what methods they use for lighting.

The provision of energy is vital in a modern society. The availability of energy remains a serious resource challenge. ESKOM does not have the generation capacity to meet the rising energy demand resulting from the rapid economic growth in South Africa (DME-2008). Electricity fuels industry. Electrical railway transportation, telecommunications and determines among other aspects what cooking methods a household uses, how households warm themselves and what methods they use for lighting.

B4.4.6 Renewable Energy Industry

The New Growth Path

"The New Growth Path is our vision to place jobs and decent work at the centre of economic policy. It sets a target of five million new jobs to be created by 2020. It sets out the key jobs drivers and the priority sectors that we will focus on over the next few years. It is based on strong and sustained, inclusive economic growth and the rebuilding of the productive sectors of the economy." (President J Zuma)

"Technological innovation opens the opportunity for substantial employment creation. The New Growth Path targets 300 000 additional direct jobs by 2020 to green the economy, with 80 000 in manufacturing and the rest in construction, operations, and maintenance of new environmentally friendly infrastructure. The potential for job creation rises to well over 400 000 by 2030." (NGP). There is no doubt that government views the green industry as the potential sector for job creation.

Industrial Policy Action Plan 2 and Renewable Policy instruments

The IPAP2 notes establishment of energy-efficient and green industries as critical in the development of the sustainable economy. It further acknowledges the high solar intensity and the potential of solar power generation in Southern Africa.

“A co-ordinated effort is required to scale up the manufacturing and installation of solar water heaters.

An important contribution to establishing this market in South Africa will be the phasing in of mandatory requirements relating to the installation of solar water heaters.”(IPAP2). Undoubtedly the IPAP2 sets the clear framework and guidelines towards industrialisation of green economy and attainment of IRP 2 targets.

Developing the Green Industries

The policy framework indicates high level of willingness from South African government to transform the economy and seize the opportunity while the window is still open. Interestingly the proposals on localisation of solar geysers and panel manufacturing and improvement of investment climate within the industrial set-up of the green sector are surely gaining the momentum.

Objective

- To develop KGLM as a leading centre for Renewable Energy and introduce green opportunities for local companies and green jobs for local people.

Key Action Areas

1. To develop KGLM as a centre for Renewable Energy and maximise opportunities for local companies and local people

a) Promote KGLM through the activities of the KGLM Renewable Energy partnership

b) Encourage companies and the municipality to develop a Directory of Green Products that can be produced locally and mobilise necessary investment for implementation purposes.

c) Partner with Industrial Development Corporation Green Fund to implement strategic green projects.

d) Prioritise local manufacturing of Solar Geysers and Solar panels to support government initiative of installing more solar geyser to low-cost housing

e) Develop a comprehensive range of training and support opportunities that will bring home better understanding of Green Economy and related products.

With the price of electricity increasing over the past few years and negative impacts of load shedding, studies need to be undertaken to determine the prospects of Renewable energy to supplement the current supply of electricity.

The provision of alternative sources of energy has major financial implications which are connected to providing the required infrastructure and increasing accessibility. It also has environmental impacts that need to be taken into consideration, according to the following categories:

- Highly sensitive areas which may have potential for hydro and solar energy but have been classified as no go areas.
- Moderately sensitive areas that can be used for generating hydro and solar energy but will require environmental authorisation and may require certain establishing certain conditions to protect the natural environment.
- Locations that are already transformed and do not have major environmental implications that cannot be mitigated against.

Solar Energy

Solar energy is an important source of renewable energy and includes techniques such as photovoltaic systems (PV), concentrated solar power and solar water heating. PV systems range from small, roof-top mounted or building-integrated systems with capacities from a few to several tens of kilowatts, to large utility-scale power stations of hundreds of megawatts. The technology can be easily installed on both rooftops (residential,

commercial, and industrial) as well as on ground installations. The core criterion for viable PV systems is finding land that is available, meets the environmental impact assessment criteria and has a sufficiently high level of solar irradiation.

According to the electricity masterplan, this technology is now making significant strides into South African communities, it is still unaffordable for the ordinary South African because of its initial capital cost, especially regarding its energy storage.

The forecasts assume that no major government driven incentive programs are implemented during the forecast period, there are minimal ongoing cost reductions for PV systems, and the residential PV market remains impenetrable due to prohibitive PV technology costs.

These are some of the remedial interventions that can be employed;

- Implementation of a litter control programme for the Kai !Garib Local municipality
- Possible Recycle strategies to be implemented.
- Development of partnerships with community-based Organisations & Non-Government

B4.4.7 Water

As water is crucial to sustaining life and any other development, it is key to conserve water resources within the district. Emphasis should be placed on the re-use and reticulation of water, rather than exploring untapped water

resources. It is crucial to consider future developmental and financial gains with that of water security and quality over the long-term period. All available water must be used effectively, efficiently, and sustainably to reduce poverty, improve human health and promote economic development. Both surface water and groundwater resources must be managed to ensure a balance between usage and availability to meet the country's present and future water demands. Both surface water and groundwater resources must be managed to ensure a balance between usage and availability to meet the country's present and future water demands.

Key initiatives include:

- Groundwater management strategy for the Municipal region.
- Water use and management initiatives to capacity the local community of the sustainable use of water resources.

The department of Water and Sanitation has a pipeline of water projects for the local municipality, and this will be shown in the implementation plan.

B4.4.8 Sanitation

The region within ZF Mgcawu with the highest number of flush toilets is Dawid Kruiper Local Municipality with 26 300 or a share of 42.43% of the flush toilets within ZF Mgcawu. The region with the lowest number of flush toilets is !Kheis Local Municipality with a total of 2 180 or a share of 3.51% of the total flush toilets within ZF Mgcawu District Municipality.

When looking at the sanitation backlog (number of households without hygienic toilets) over time, it can be seen that in 2011 the number of

Households without any hygienic toilets in ZF Mgcawu District Municipality was 9 500, this decreased annually at a rate of -1.49% to 8 170 in 2021. There is still a need to cater for the backlog in the district.

The department of Water and Sanitation has a pipeline of sanitation projects for the district and this will be shown in the implementation plan.

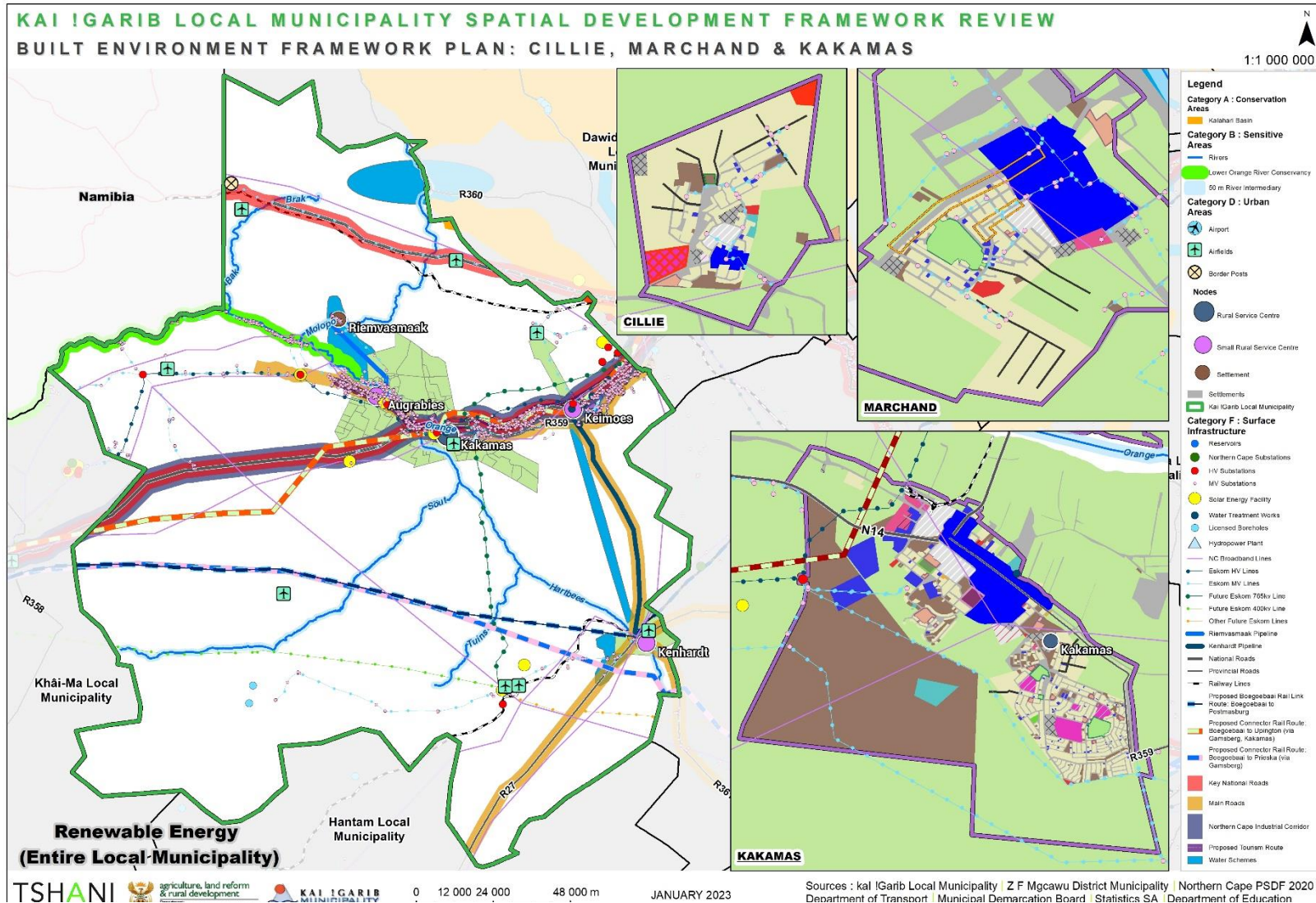
B4.4.9 Refuse Removal

A professional waste management strategy should adhere to the following principles as stipulated in the National waste management Strategy:

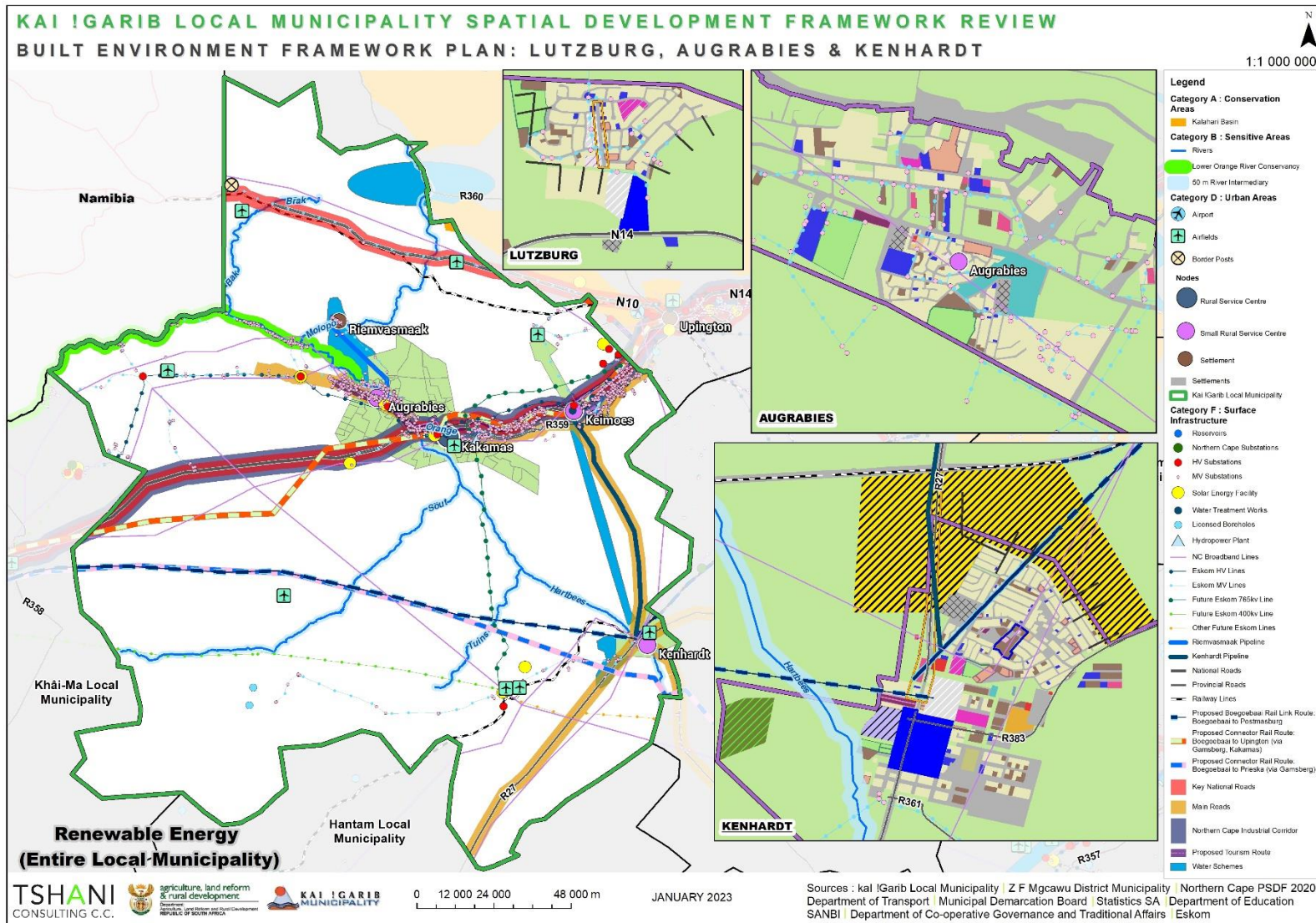
- Waste management planning should be addressed on an integrated manner;
- Waste should be minimized by the recycling process;
- Waste collection and transportation facilities to be managed; and
- The proper management of waste treatment and disposal.

These are some of the remedial interventions that can be employed;

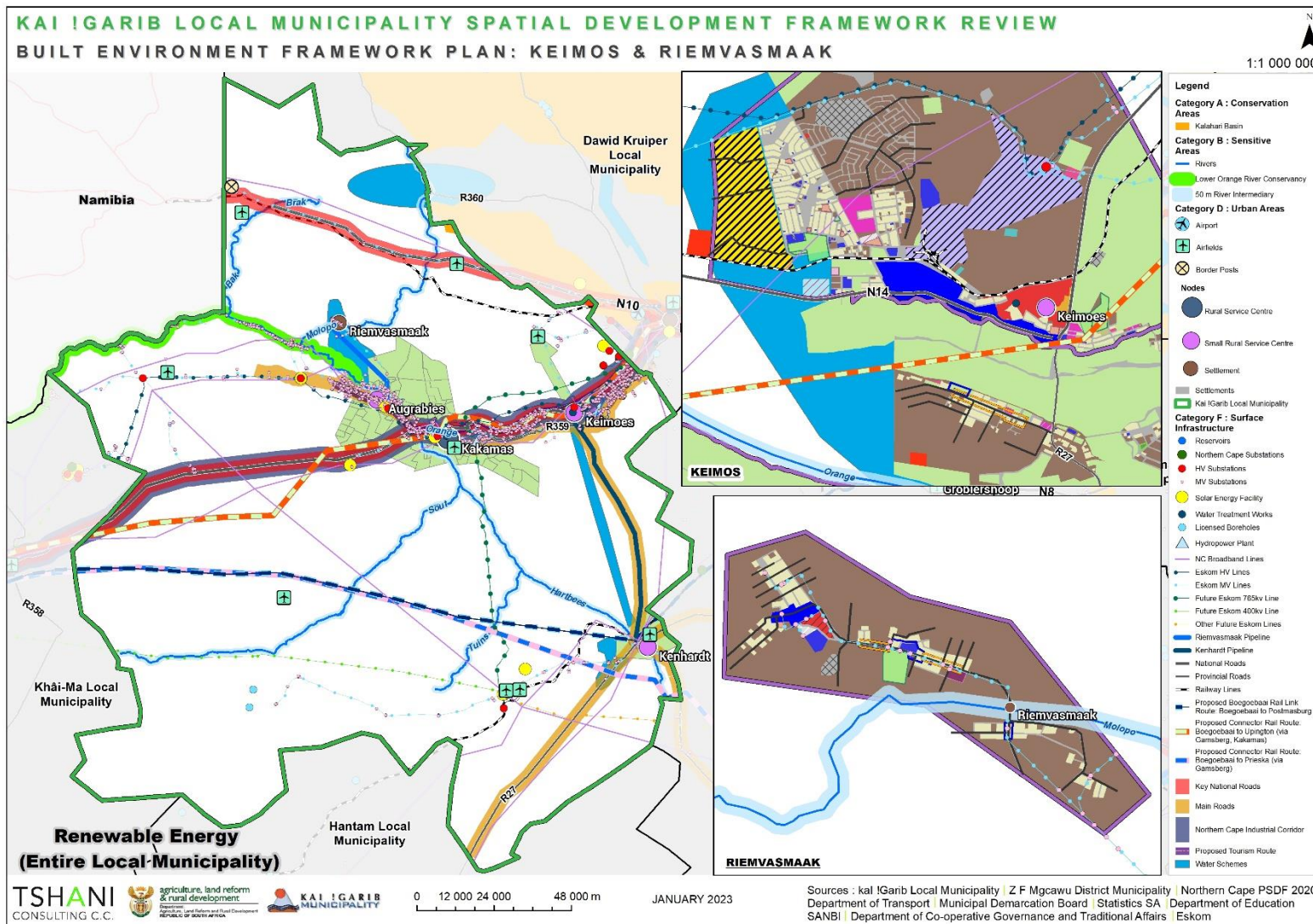
- Implementation of a litter control programme for the Local municipalities in the district
- Possible Recycle strategies to be implemented.
- Development of partnerships with community-based Organisations & Non-Government
- Organisations involved in environmental programmes.
- Identify additional, suitable waste sites for all the local municipalities.



PLAN 48: Built Environment Framework (1)



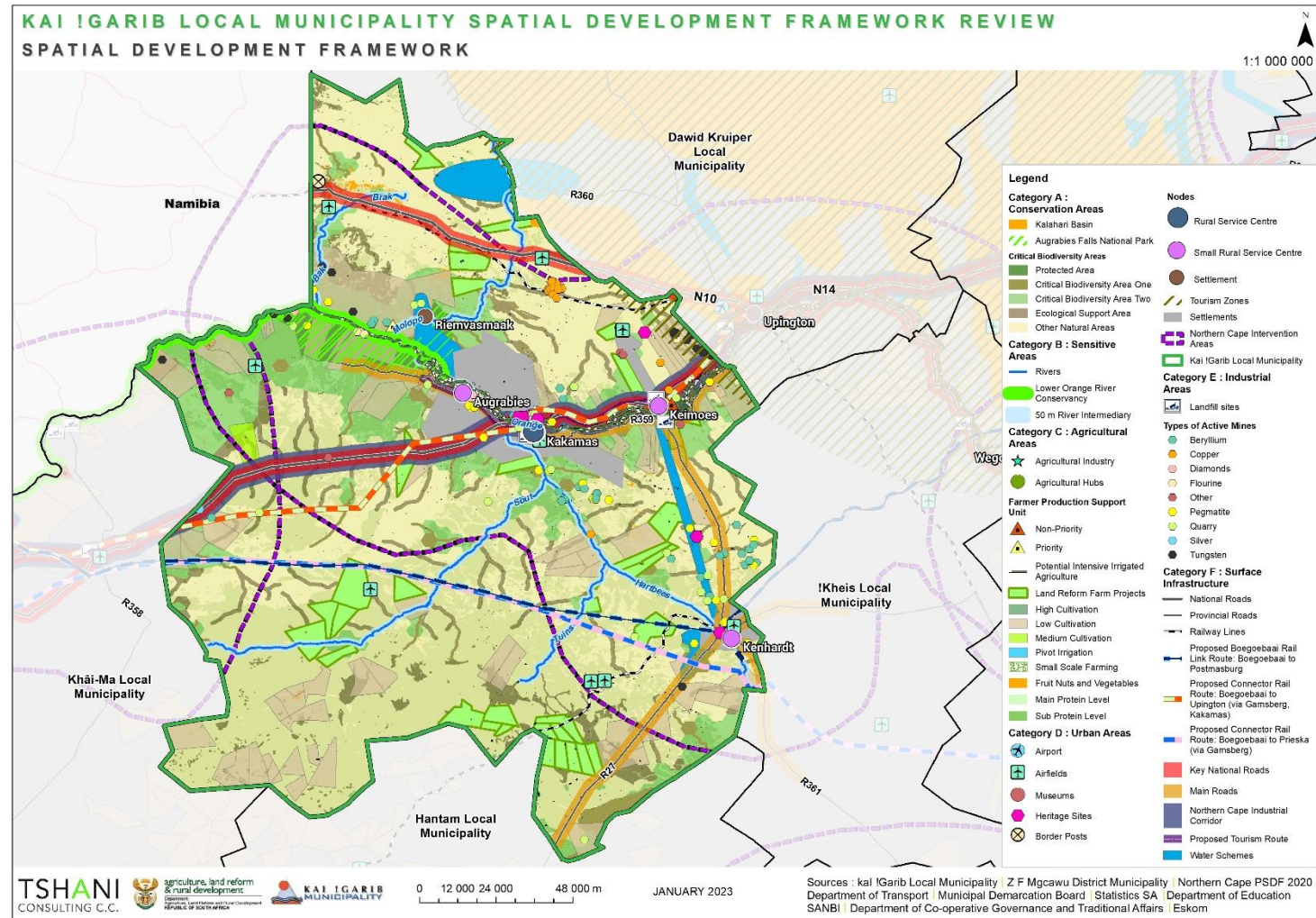
PLAN 49: Built Environment Framework (2)



Plan 50: Built Environment Framework (3)

OVERALL SPATIAL DEVELOPMENT FRAMEWORK

The overall Municipal Spatial Development Framework is an accumulation of all the identified frameworks; built environmental, socio-economic and biophysical frameworks. These frameworks thus serve as basis for the future development trajectory of the municipality



PLAN 51: Composite Spatial Development Framework Plan

SECTION C: LAND USE MANAGEMENT GUIDELINES

"Bringing nature back to the city is a way to deal with urban sprawl. If cities feel a little more natural, people like to live there rather than moving out and dividing up another piece of land that shouldn't be touched. " -Stone Gossard

Land Use Management is the system of legal requirements and regulations that apply to land, to achieve desirable and harmonious development of the built environment. Land Use Guidelines and regulation of land includes Zoning Schemes and building Regulations.

PURPOSES OF A LAND USE MANAGEMENT SYSTEM:

The purpose of a Land Use Management System is to promote coordinated and environmentally sustainable development. The following are of importance for LUMS:

- Address spatial inequality;
- Promote efficient land systems;
- To promote wall-to-wall planning;
- Promote development in previously disadvantaged areas;
- Preserve environmentally sensitive areas;

- Balance opportunity for human and economic development with requirements for biodiversity persistence
- Maintaining landscape connections (ecological corridors) that connect CBAs;
- Promote infrastructural improvement and efficient public transport systems.
- To preserve archaeological and historic heritage

The Kai !Garib Local Municipality has a Land Use Management Scheme, approved in 2020 which manages Land use within the municipal area and guides development restrictions, etc.

The scheme identifies the controls applicable to a particular zone. certain zones aim to promote and allow for the reality of the vision and proposals as outlined in this SDF.

Spatial Planning Categories

SPCs are generally consistent with UNESCO's MAB Programme and include all land zonings that are provided for under the existing Zoning Scheme Regulations. The designation of SPCs does not change existing zoning or land-use regulations or legislation. SPCs merely help to clarify and facilitate coherent decision-making that can lead to better zoning, laws and regulations.

The SPCs, furthermore, provide a framework in terms of which land-use decisions can be standardised throughout the province. It is advisable that all zoning scheme regulations be aligned with the SPCs. The SPCs are to be applied in land-use classification at all levels of planning in the Northern Cape (refer specifically to the preparation of IDPs and SDFs).

A comprehensive set of SPCs and Sub-Categories have been created to serve as a guide for more detailed land-use planning at the district and local municipal sphere. The sub-categories may be refined as required to address site-specific needs at the district and local municipal sphere.

The Kai !Garib LUMS has also been developed in alignment with the SPCs.

Some of the key applications of SPCs in decision-making and planning include the following:

1. The SPCs provide a system in terms of which all land units or entities within the district will eventually be recorded in the Spatial Planning

Information system (SPIsys), facilitating effective administration of land-use issues.

2. The SPCs can be used to indicate both the status quo of official land-use and the desired land-use of all land within a planning area. In addition, they identify specific types of land-uses that are not included in the existing Zoning Scheme Regulations, providing for a non-statutory and more detailed land-use classification.
3. The SPCs indicate desired land usage which might in certain instances be aligned with the current zoning of properties and in other instances differ from that.
4. Existing Zoning Scheme Regulations are to be amended/upgraded in order to include these new concepts. It is envisaged that the Provincial Model Scheme Regulations will contain certain new overlay zonings in this regard.
5. The SPCs facilitate decision-making regarding applications for a change in land-use. In this regard, it is important to note that an SPC designation which differs from the current zoning, implies that any new development will be considered a diversion from the status quo, requiring that applications will have to be considered by the relevant authorities in accordance with specific guidelines.
6. Application of SPCs in natural landscapes – SPC A and SPC B and, to an extent, SPC C areas primarily relate to the natural landscape, which contain the inhabited (human-made) landscape (SPC C.b, D, E, and F).

Spatial Planning Category A & B: Core and Buffer Areas

SPC A areas constitute sites of high conservation importance including terrestrial land, aquatic systems (rivers, wetlands and estuaries) and marine areas (beach or rocky headlands). Due to their highly irreplaceable status, such areas should be protected from change or restored to their former level of ecological functioning.

Below is an excerpt from the NC PSDF with relation to the Spatial Planning Categories

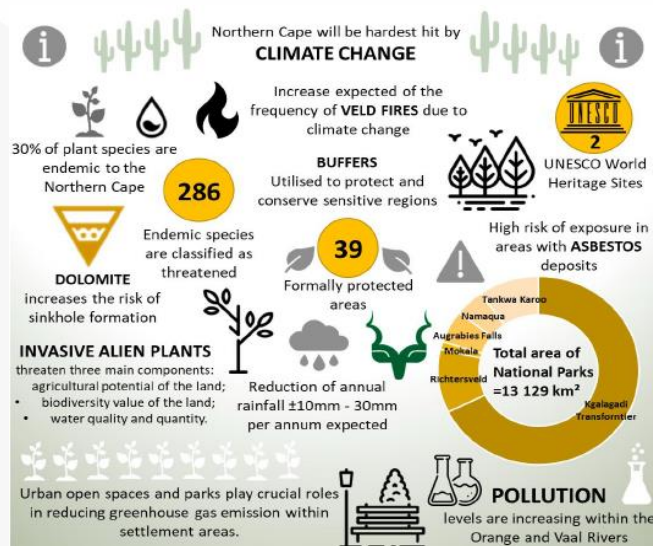


Figure 7: Climate Change

The Key Strategies and Interventions related to A & B is as follows:

- Implementation of the provincial and a local municipal air quality and waste management plan.
- Conserve existing ecological corridors and consolidate and rehabilitate any remnants of corridors that link coastal ecosystems with one another and with terrestrial ecosystems.
- Secure additional potential SPC A areas with the aid of institutions such as the WWF, IUCN, SKEP, SANParks Private Sector and GEF.
- Establish a system of protected areas incorporating the diverse coastal landscapes, ecosystems, habitats, communities, species, and culturally significant sites. The Special Management Area concept in combination with an efficient Stewardship agreement is to be implemented.

Spatial Planning Category C: Agriculture Areas

The protection and appropriate use of high potential agricultural land (in particular the areas along the Orange River, Vaal River and Harts River and those falling within the existing irrigation scheme areas) is of critical importance for sustainable economic growth and food security. High potential agricultural land in close proximity to settlements are often subjected to non-agricultural development pressure, while negative social impacts associated with such settlements often have a significant detrimental impact on the production potential of such land. It is therefore imperative that the highest priority be given to the protection of high

potential agricultural land and that measures be instituted to create and maintain circumstances conducive to sustainable agriculture (PSDF, 2018)

Below is an excerpt from the NC PSDF with relation to the Spatial Planning Categories

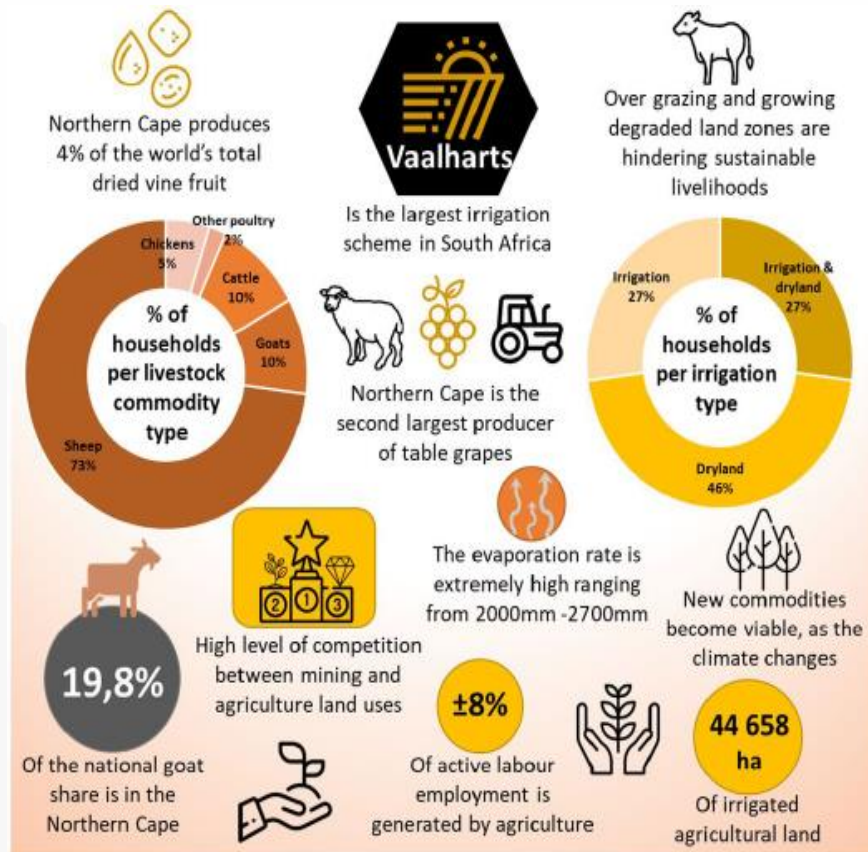


Figure 8: NC Value Chain

The Key Strategies and Interventions related to C is as follows:

- Give effect to the ideals of the sustainable Development Goals (SDG 2 and 12) pertaining to the promotion of sustainable agriculture and rural development.
- Development of an Agricultural Master Plan for the Province to identify and protect the most fertile land for cultivation and food security purpose.
- Consider the rezoning of low-potential agricultural land as a mechanism to promote sustainable economic development by unlocking the latent capital vested in non-agricultural uses through the Sustainable Development Initiative (SDI) approach.
- Encourage bona fide game farms to combine their landholdings to create extensive SPC B areas that would support biodiversity conservation in a meaningful manner. Such areas should be managed as Special Management Areas.
- Encourage local processing of farm products and the provision of local farm services to enhance the rural economy, increase the viability of agricultural production and reduce rural poverty.

Spatial Planning Category D: Urban and Rural Areas

The relationship between rural and urban areas is increasingly changing throughout the world. Rural and urban areas are no longer mutually exclusive. Farming areas and cities coexist along a continuum with multiple types of flows and interactions occurring between the two spaces.

Typically, it is now widely recognised that there exist economic, social and environmental interdependences between urban and rural areas.

Below is an excerpt from the NC PSDF with relation to the Spatial Planning Categories

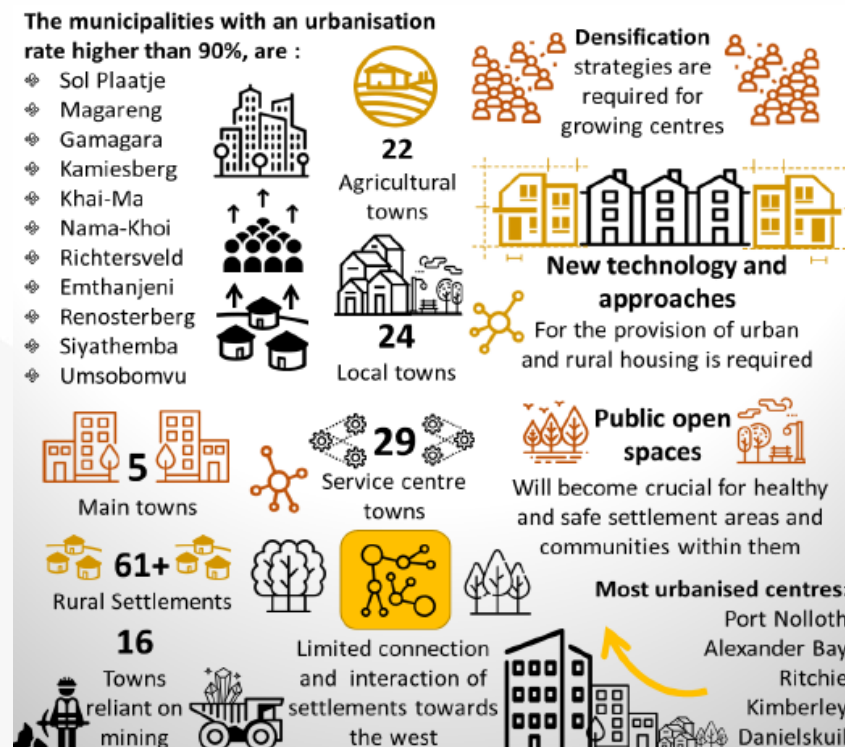


Figure 9: Spatial Planning Category D

The Key Strategies and Interventions related to D is as follows:

- All spheres of government, especially municipalities, must provide quality spatial data and interpretation to land managers to assist

decision-making and adaptive management, and make regional natural resource information and knowledge widely available or accessible (i.e. the SPISYS).

- Accelerate and streamline township establishment processes and procedures to ensure sustainable development.
- Prioritise government spending and private sector investment in urban and rural development in accordance with a settlement category determined by the socio-economic potential of towns and the needs of their inhabitants.
- Improve the quality of subsidised housing settlements through innovative urban planning and design and cross-subsidising.
- Ensure that development scale and design are determined by the carrying capacity of the environment.

Spatial Planning Category E: Industrial Areas

A key challenge is to broaden and unlock the opportunities presented by the availability of natural resources. Industrial activities, whether large- or small-scale, have the potential to stimulate economic diversification and development in the province.

While immediate industrial development opportunities related to mining in the Northern Cape, the Kai !Garib local Municipality lie in brown-fields expansions and various types of downstream value-added activities (art, jewellery, souvenirs etc.) there are a number of other possibilities in side-stream and indirect activities. 'Side-stream' activities refer to the service network, vendors and key contracting firms directly affiliated with a particular

mineral project's operations. Not only is this sector significant in terms of contributing to broadening the local and provincial employment base and enhancing the potential for further employment spin-offs, but it is of critical importance to the functioning of all departments within a particular mineral-based operation.



Figure 10: Spatial Planning Category E

The Key Strategies and Interventions related to E is as follows:

- Develop the required industrial amenities and infrastructure in the defined development corridors which respond to the availability of

Environmental Capital (e.g. water, suitable agricultural soil, mining resources, etc.) and Infrastructural Capital (e.g. roads, electricity, bulk engineering services, etc.).

- Develop and adopt strategies for efficient water use and increase water conservation at mine sites.
- Continuous rehabilitation of mined land for agricultural and other rural development projects.
- Adjusting existing risk-identification processes to incorporate additional heat related health risks for industrial activities, such as underground mining.
- Prepare a provincial industrial development strategy.
- Prepare a Provincial Disaster Risk Reduction and Adaptation Plan.

Spatial Planning Category F: Surface Infrastructure and Buildings

An effective, competitive and responsive infrastructure network is imperative for ongoing economic development of the province, the FBDM, and KGLM.

The KGLM's ability to convey goods effectively and efficiently through the N10 and N14 is a key aspect to be addressed. The relevant sectoral departments therefore have a vitally important task in providing the infrastructure and bulk services required by the various economic sectors, the human settlements of the province, and the rural hinterland. Key challenges are a lack of basic infrastructure in rural areas and the proliferation of informal settlements in urban areas. Both these challenges are beyond the sole institutional and fiscal capabilities of the relevant

municipalities. It is therefore important that the relevant funding mechanisms and institutions function efficiently and equitably.

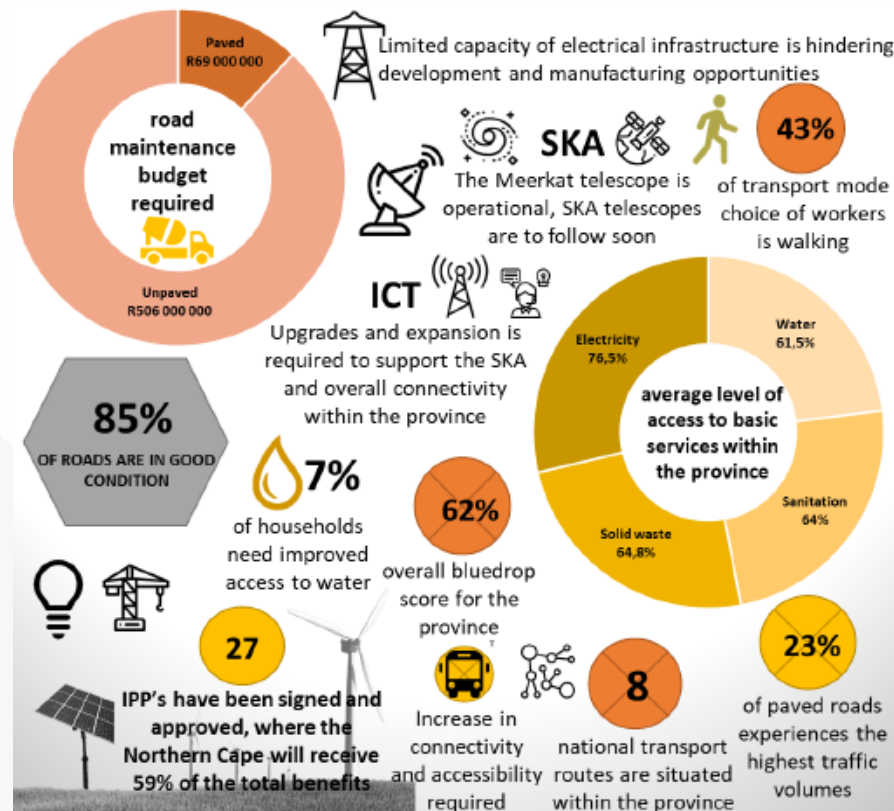


Figure 11: Spatial Planning Category F

The Key Strategies and Interventions related to F is as follows:

- Development of a Master Infrastructure Plan to align and coordinate infrastructure investment Improve the levels of mobility,

infrastructure development, and synergies in the transport planning activities.

- Maintain road, built and bulk infrastructure development and integrate into the infrastructure planning activities throughout the province.
- Conduct Strategic Environmental Assessments in areas suited for renewable energy generation, to incentivise and streamline the administrative and development processes.
- Consider a carbon tax with tariffs that effectively penalise producers and emitters of high levels of carbon dioxide either in the manufacturing or vehicle industry.
- Investigate how affordable and sustainable mobility in rural areas can be enhanced through the roll-out of non-motorised transport initiatives, including the provision of safer pedestrian pathways and facilities.

General Guidelines for Development:

The Spatial Planning and Land Use Management Act, Act No 16 of 2013 (SPLUMA), requires all municipalities in the province to develop and introduce wall-to-wall Land Use Schemes throughout their area of jurisdiction. This has to take place within 5 years from the promulgation of SPLUMA which implies that the target is now 2018. According to the Municipal Systems Act, a Land Use Scheme is a key component of the Integrated Development Plan (IDP).

Table 12: Land Use Categories

LAND USE CATEGORY	DEVELOPMENT OBJECTIVE	LAND USE TYPE	COMMON TERMS	LUMS GUIDELINES PREFERRED OUTCOMES
Environmental Areas	To protect main biodiversity areas, natural resources, and the ecological systems through the integration of SDFs, environmental policy and other spatial frameworks	Conservation	Nature Reserves, heritage sites, cultural tourism	<i>Typical Land Uses:</i> Conference facilities; tourism, leisure, and adventure activities, limited residential accommodation <i>Level of infrastructure and services:</i> limited infrastructure, management should include maintenance of existing trails and limited facilities, access
		Core	Wetlands, Protects areas	
Human Settlements	To manage and facilitate the development of integrated sustainable human settlements, with appropriate infrastructure, socioeconomic opportunities, and social amenities	Towns and Settlement Regions	Small Towns/ Local service centres	<i>Typical Land Uses:</i> Residential, business and offices, industrial parks, government and administration, transportation, leisure, and recreation <i>Level of infrastructure and services:</i> Basic to Full municipal services
		Major Settlements	Cities/ Large Towns/Large urban built up areas with CBDs, industrial complexes etc	<i>Typical Land Uses:</i> Residential, large business and offices, industrial parks, government and administration, transportation, leisure and recreation, busy CBD <i>Level of infrastructure and services:</i> Full municipal services

		Dispersed Settlements	Villages/homesteads/Resorts	<i>Typical Land Uses:</i> Residential, agriculture and farming, shops, sporting facilities, resorts, nature, taverns, access roads <i>Level of infrastructure and services:</i> Basic services
		Informal Settlements	Informal settlements	<i>Typical Land Uses:</i> Residential, social facilities, shops, access roads, <i>Level of infrastructure and services:</i> Basic services
Resource Areas		Agriculture, forestry, oceans	Commercial and subsistence farming, commercial plantations,	Tourism attraction, agricultural activity, rural development, youth empowerment, infrastructure development
Infrastructure	To promote efficient and integrated infrastructure and transportation systems	Strategic transport routes, telecommunications, sustainable energy	Higher order infrastructure (rail, roads, sea, air), radio telecommunications, green buildings, solar panels, cellular masts, water services	-Requirements of NEMA are applicable; -Certain applications will require EIA and Special Consent Applications (e.g., cellular masts, radio telecommunications)

All applications are required to comply with the requirements of the applicable legislation such as the Spatial Planning and Land Use Management Act, Municipal Town Planning By-Laws. The following general guidelines are applicable to applications:

- A Site Development Plan for all developments must contain details of the proposed development, density, coverage, layout, landscaping, position of all structures, property building lines, proposed parking, internal roads and the 100-year flood line above any water course;

- Any developments occurring in properties with a water body, a Water Use License Application (WULA) should be submitted to the DWAF;
- 100-meter buffers (preferably 50 meters) are applicable to rivers;
- The abstraction of water for any use, from any river, must have prior approval from DWAF and should require a full EIA to ensure that environmental impacts are negligible;
- All developments on heritage structures should comply with processes of the National Heritage Act;
- All applications pertaining to land development on or change the land use which has a high impact on the community must be applied for at the Municipality, in a manner provided for in the municipal planning by-law;
- Newly developed buildings should comply with Green Building Standards and Norms.

Defined Nodes Outside of the Urban Edge:

These encompass the proposed rural service centres. Shops; service industries, offices and limited size tourist related businesses could be allowed at such nodes. In addition, social, health, education and safety and security facilities are to be encouraged to locate in these nodes. Standard provisions of approved policies, Town Planning controls, building by-laws, aesthetic and signage controls are in place for these areas as defined in municipal policy documents and this SDF.

Natural Tourism Areas

These are areas where limited development may occur subject to an environmental assessment and management plan, the STEP guidelines, and associated protocols.

- Limited and regulated tourism facilities; Small accommodation facilities that are low-key, low-impact and in harmony with the natural environment;
- Agricultural activities;
- Existing rural settlement.

Any development contemplated in the Nature Tourism Areas would need to adhere to the following guidelines:

- The development of a site must not be dependent on the creation of a new road. Existing roads may be upgraded to improve access but where there is no existing road, this should inform the type of tourism facility that is developed.
- The maximum carrying capacity for all development sites, until an SEA or EIA has taken place, is 36 beds or 20 small units. All development sites should be well located in the Nature Tourism buffer area to safeguard the sense of place and eco-tourism opportunities available to that site.
- Development of these sites requires a full EIA and a live Environmental Management Plan that addresses, inter alia, the disposal of solid waste.
- Full IEM procedures are to precede any development whereby the precautionary principle shall apply with approval conditions

requiring rehabilitation of the environment and specifications regarding the use of the remainder (for example; conservation, private nature reserve etc);

No Development Areas

There are areas that have experienced land loss and have been exposed to various ecological threats within the province, hence, they should be preserved. Areas that are highlighted as “no development areas” include, but not limited to the following:

- Areas of high environmental sensitivity;
- Within 500 meters of a sewage treatment facility;
- 50 meters within a wetland area;
- Below 7775-meter contour around an estuary;
- In areas with slopes of 1:3;
- Along ecological corridors

Limited Development Areas

There are areas that indicate limited impacts on the environment and offer reasonable economic benefits. These are also areas that can be regarded as safe for development although they have certain levels of limitation and

should thus follow applications of certain legislation and authorisation. These areas are:

- Areas outside of the urban edge; although authorisation is required;
- Urban Settlements;
- Resort Developments;
- Areas of heritage value and importance.

The guidelines noted in this section should be effectively implemented and enforced to ensure that the municipality achieves the goals of a Land Use Management System. Various policies and legislation should serve as a base to enforcing the requirements of the Land Use Management Systems.

Subdivision of Agricultural Land

The subdivision of farms into multiple individual farms to avoid the rezoning process and/or to achieve de facto residential development is not considered desirable, as it negates the intention and spirit of the zoning categories provided in the Subdivision of Agricultural Land Act 70 of 1970.

The Subdivision of Agricultural Land Act 70 of 1970 (SALA), Scheme 8 Regulations, indicate that the minimum subdivision of agricultural land is 0.8 Hectares. Where no subdivision is involved, a density of 1 dwelling unit for every 10 Hectares, up to a maximum of 5 dwelling units, is permitted, subject to consent and proof that the farming programme is sustainable and economically viable.

Accordingly, and with due cognisance of the trends and pressures for land development on land currently zoned for agricultural purposes, it is proposed that the guidelines of Subdivision of Agriculture Land Act 70 of 1970 be applied within the Kai !Garib Local Municipality, but with a recommended minimum subdivision size of 10 Hectares for agricultural land.

Should an applicant wish to pursue intensive farming activities on land holdings smaller than 10 Hectares, the application for Subdivision of Agricultural Land must be accompanied by a full motivation, including an Agricultural Feasibility Report indicating sustainability of the proposed enterprise.

The development of this land for non- agricultural purposes should only be allowed if:

- The land has already been subdivided to such an extent that it is no longer agriculturally viable;
- The land has already been developed for non-agricultural purposes;
- The proposed development does not compromise the primary agricultural activity of the property;
- The proposed development comprises a secondary activity to supplement a landowner's income;
- It will facilitate the implementation of the Land Reform Programme and Labour Tenant Projects.

The Department of Agriculture does not consider anything less than 20 Ha as a viable unit; therefore, it is proposed that subdivisions of less than 20 Ha

should not be allowed. This information is also recommended for inclusion into the draft Land Use Management Guidelines.

Cooperative Governance Approach to Spatial Planning

The Constitution makes it clear that all the three spheres of governments are interdependent and interrelated. The Constitution therefore assigns planning responsibilities to the provinces to undertake the following:

- Implementation of provincial and regional planning policies and regulations as enshrined in Schedules 4 and 5 of the Constitution;
- Implementation and regulations to monitor and support municipalities in exercising their municipal functions.

The Spatial Planning and Land Use Management Act, 2013 (SPLUMA) is a framework act for all spatial planning and land use management in South Africa, which seeks to promote consistency and uniformity in procedures and decision-making as well as addressing historical spatial imbalances and the integration of the principles of sustainable development into land use and planning regulatory tools and legislative instruments. SPLUMA, mandates the Eastern Cape province to be responsible for the co-ordination, integration, and alignment of the following:

- Provincial plans and development strategies with policies of National Government;
- The plans, policies, and development strategies of Provincial Departments; and

- The plans, policies and development strategies of district and local municipalities.

There should be inter-governmental relation (IGR) structures that should be used to facilitate implementation of the SDF, that is, there should be co-operative approach to spatial planning and land use management to achieve sustainable governance system in the SDF.

In the Kai !Garib Local Municipality, proposals for SDF governance, amongst others, should include the following:

- A need to establish interdepartmental spatial coordination committee in the Office of the Premier with the necessary oversight to formulate the SDF, resolve the responsibilities for spatial planning within the provincial government level, remove duplications and recommend that COGTA be responsible for overseeing spatial planning in the province.
- Ensure limiting peri-urban sprawl through strong local land use controls.
- Establish an integrated LUMS in the province involving all stakeholders.
- Preparation of credible “wall-to wall” SDFs by LMs with both technical and tradition leaders / indigenous approach to land use management.
- Regular capacitating of municipal planners with guidelines from SACPLAN

- There should be CoGTA's capacity assistance to LMs in terms of co-operative governance.

Shortened Application Procedures

From an administrative and institutional point of view there is also more flexibility and responsiveness built into Schemes. SPLUMA talks about incremental introduction of regulations, shortened provisions in certain areas, promotion of incentives and providing provisions that can respond to the application of policy and priorities. Together with the flexibility and responsiveness, there is stronger emphasis on provisions to allow a municipality to enforce a Scheme.

SECTION D: CONCLUSION

"There is no logic that can be superimposed on the city; people make it, and it is to them, not buildings, that we must fit our plans."- Jane Jacobs

In concluding, this section serves as a Draft Spatial Development Framework for Kai !Garib Local Municipality.

Based on state investment in infrastructure linkages and private sector investment in existing and new industries, the major settlements identified for opportunity, support, enablement, research, diversification, and connectivity, it is envisaged that an integrated and well planned, good quality human settlements and increased employment will accompany the growth within the Municipality.