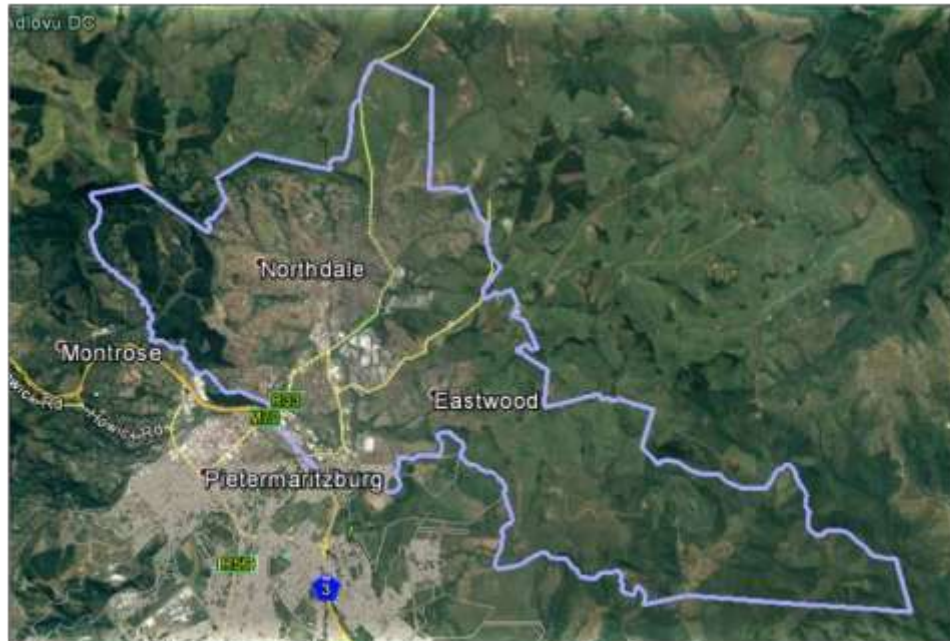




NORTHERN AREAS Local Area Plan

Msunduzi Municipality
October 2017



Draft Local Area Plan Report



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1. INTRODUCTION

As a result of the updated Status Quo report; its findings and key issues identified and discussed with role-players, the broad development concept plan was formulated as described herein. The report provides a brief indication of the existing and potential regional functions of the Northern area which is then translated into a series of associated development Goals and Objectives. These goals and objectives are further linked to performance criteria which guide the spatial development concept illustrated herein.

2. REGIONAL FUNCTIONS OF THE NORTHERN AREA

2.1 Role of the Northern Areas LAP

The Northern Areas LAP (NA LAP) forms part of the Northern Area Based Management areas of Msunduzi Local Municipality. Msunduzi Local Municipality is separated by Area Based Management Zones namely: Northern Areas (Study area), (CBD, Ashburton, Eastern Areas), Edendale(Greater Edendale and Greater Imbali, Vulindlela).

The repercussions of the apartheid era policies created an existing spatially segregated municipality, which resulted in the agglomeration of economic opportunities in the (CBD, Ashburton & Eastern area management zone) and the Northern area management zone. The Greater Edendale and Vulindlela area based management zones are less developed and economically active than the above-mentioned zones.

The NA LAP consists mostly of formal built up areas (along the centre and towards the western boundary) and agriculturally zoned land towards the western boundary and in pockets of the northern and eastern boundaries.

The NA LAP aims to align with the N3 strategic Corridor Development Plan and the goals and objectives contained in the KZN Provincial Growth and Development Plan. The current social, economic, agricultural and industrial opportunities as well as its location along the N3, provides opportunities to connect several local economies within Msunduzi as well as promoting regional priority intervention areas along the N3 intersections.

The CBD, Ashburton & Eastern Area Based Management Zones provide the majority of Employment opportunities within Msunduzi, however the Northern ABM is a very competitive runner up on that regard. The major difference between the two ABM's is that the Northern have been developed to capacity resulting in development and service delivery constraints. The NLAP should consider looking at increasing densities along major corridors, to increase activity along major routes and utilization of existing resources.

2.2 Development Principles

The following provides an overview of principles, approaches and concepts forming the basis for the strategic assessment and the subsequent Spatial Development Concept for the NA LAP. While the IDP identifies a wide range of guiding principles, the following represents a selection of the most important guiding aspects:

- Promoting an Equitable City
- Promoting an Efficient City

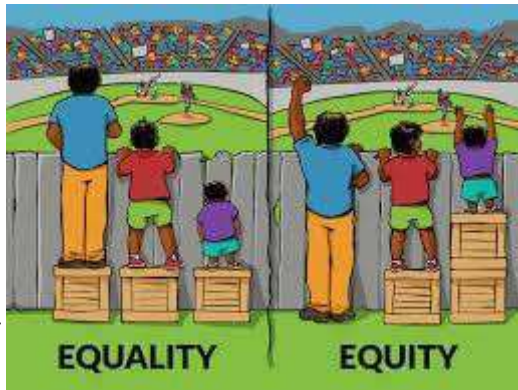
- Promoting a Sustainable City
- Promoting an Integrated City

2.2.1 Promoting an Equitable City

Everyone affected by land use management and land development actions or decisions must enjoy equal protection and benefits. In the past the planning and management of land use has been characterised by extreme inequality. Land use management decision-making must be equitable and must address the inequitable legacy inherited from decades of planning in the interests of a racial minority.

Land use management norms based on this principle are:

- Active participation of Communities in Land Development;
- Public involvement in land use planning and development processes must be inclusive;
- Land use regulators and planning authorities must ensure past injustices are not proliferated;
- The appropriateness of land use must be determined on the basis of its contribution to area;
- Each development proposal should be judged on its own merits,
- Land development should result in security of tenure, including individual and communal tenure;



Where land development takes the form of upgrading an existing settlement, it should not deprive beneficial occupiers of homes or land or, where it is necessary for land or homes occupied by them to be utilised for other purposes, their interests in such land or homes should be reasonably accommodated in some other manner.

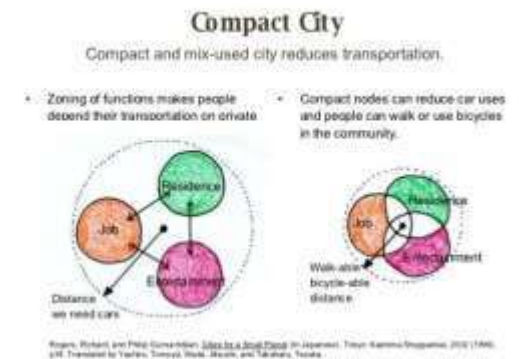
2.2.2 Promoting an Efficient City

The desired result of land use and/or development must be produced with the minimum expenditure of resources.

Optimising land use management and development opportunities requires efficiency in institutional arrangements and operations, adopted procedures, the settlement form or pattern, and the utilization of man-made or natural resources during land planning and development.

Land use management norms based on this principle are:

- Land use planning and development should promote the development of compact human settlements, combating low density urban sprawl;
- The areas in which people live and work should be close to, or integrated with, each other;



- Land development should optimise the use of existing bulk infrastructure and social facilities;
- Land development should take place within the fiscal, institutional and administrative means of the municipality;
- The contributions of all sectors of the economy (government and non-government) to land development must be;
- The municipality should co-ordinate the interests of the various sectors involved in or affected by land development.

2.2.3 Promoting a Sustainable City

The resources making up the natural and built environment should be sustainably managed and used. Land use and development decisions must promote a harmonious relationship between the built and the natural environment. The long-term availability of physical, social and economic resources to support development should be thoroughly investigated.

Land use management norms based on this principle are:

- The use and development of land should promote the protection, enhancement and management of the natural environment;
- Land development should promote the establishment and maintenance of viable communities;



- Land development should meet the basic needs of all citizens;
- Land may only be used or developed in accordance with legal processes;
- Decisions affecting land development and land use should firstly take into account national, provincial or local interests as recorded in approved policy and legislation;
- Land development and planning processes must integrate disaster prevention, management or mitigation measures;
- Decision-making must ensure the safe utilisation of land by taking into consideration risk factors such as unstable geological conditions and flood lines;
- Land which is currently in agricultural use should only be reallocated to other uses where real need exists and prime agricultural land should remain in production.

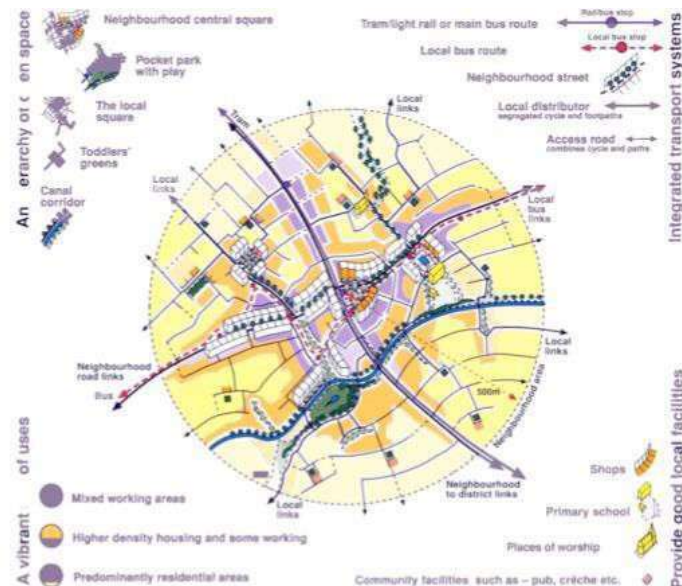
The life cycle costs of land development and its likely side effects on the environment, community, and the economy need to be understood and taken into account to sustain its benefits, while minimising or mitigating any likely negative impacts.

2.2.4 Promoting an Integrated City

The separate and diverse elements involved in development planning and land use should be combined and coordinated into a harmonious whole. The principle of integration reflects the need to integrate systems, policies and approaches in land use planning and development

Land use management norms based on this principle are:

- Land use planning and development decisions should take account of and relate to the sectoral policies of other spheres and departments of government;
- Land development should contribute to the correction of the historically distorted spatial patterns;
- Land use and development should promote efficient, functional and integrated settlements;
- Residential and employment opportunities should be located in close proximity to, or integrated with, each other;
- Land use and development should promote racial integration;
- Land use and development should promote mixed use development.
- A diverse combination of land uses, also at the level of individual erven or subdivisions of land, should be promoted;
- Land use and development should be determined by the availability of appropriate services and infrastructure, including transportation infrastructure;
- Land development in rural and urban areas should be promoted in support of each other.



Large gated estates (business park or residential) tend to have a negative impact on city form, connectivity and integration.

2.3 Spatial Development Directives

2.3.1 Emerging Spatial Structure of the North

The Msunduzi SDF indicates that the municipality's growth structure is largely aligned and influenced by the Sustainable Urbanism Criterion. The pillars within the sustainable urbanism concepts are aligned towards specific departments for future planning and implementation purposes for example;

- Social Inclusivity – Community Services and Social Equity Committee; and
- Sustainable Services – Infrastructure Services ABM Management and Facilities Committee.
- Global Connectivity – Msunduzi Municipality, City Manager;
- Productive Systems – Economic Development and Growth Committee;
- Ecological Infrastructure – Environmental Department;
- Sustainable Transport – Msunduzi Traffic and Transport Authority;
- Quality Urbanism – Corporate Strategic Planning Committee;

The municipal spatial structure aims to address the need for transformation through interventions that seek to bring about growth, development and change. The municipality aims to direct investment equally as opposed to concentrating on the areas of prominence.

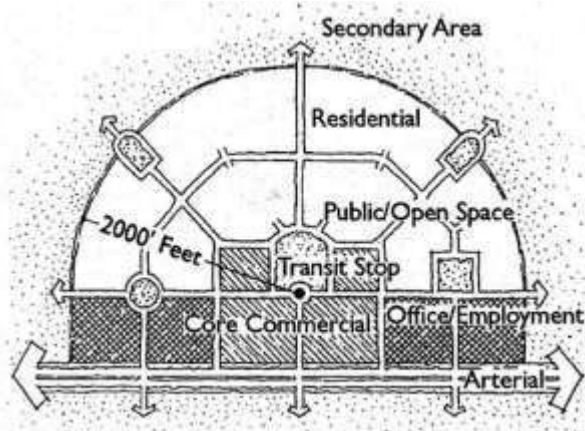
The emerging spatial structure follows the notion of polycentric

growth which breaks down the existing distribution of opportunities through the development of new centers throughout the Municipality. The approach aims to assess all areas of need within the municipality and see the establishment of industrial, commercial and retail investment at different scales over time.

3. DEVELOPMENT GOALS, OBJECTIVES AND FRAMEWORK

3.1 Goal 1: To promote a sustainable settlement pattern

The developed portion of the study area accommodates three major land uses: residential, commercial and industrial. The greater Bishopstowe area is the only area that promotes environmental and agricultural practices.



The need to promote cluster development is deemed relevant towards efficient land use. Cluster development is already a component of the study area, and can be considered efficient. The promotion of other economic practices within the predominantly residential areas,

may allow for greater local economic development, since the economic zones are already oversubscribed.

3.1.1 Residential Clustering

The proposed new housing settlements are intended to become a liveable space with strong social bonds. Residential proposals are made within the existing development footprints to foster efficiency in land use

3.2 Goal 2: To Improve Connectivity and Circulation

Connections and circulation will be enhanced through road upgrades and proposed new links, as well as the medium term plans for the Integrated Rapid Public Transport Network (IRPTN).

Non-motorised transport such as walking and cycling will be promoted through the provision of pathways, pedestrianized streets, pedestrian crossings and bicycle routes.

Public transport in the form of mini bus taxis and buses is the current mode of transport in the area. However, the medium term plan is to roll out the IRPTN to the NBS area.

3.2.1 Public Transport

Circulation networks provide convenient, efficient, affordable and safe movement of people, goods and services (CSIR, 2000). Performing movement networks have the following characteristics:

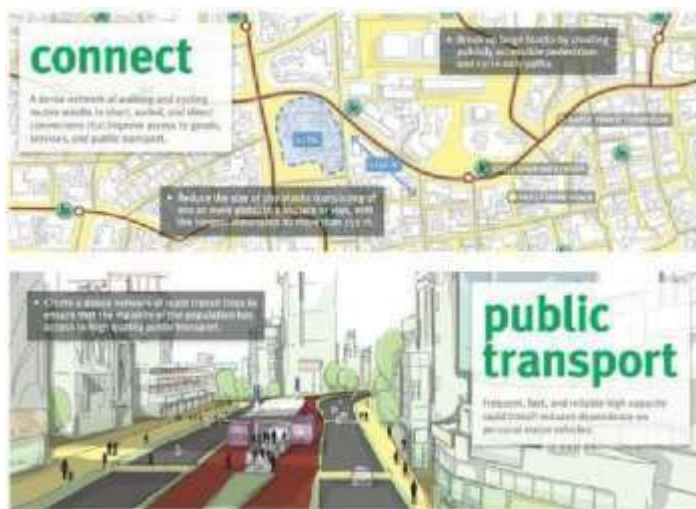
- Give priority to non-motorised modes of transport and the needs of public transport;
- Maintains convenience, safety and multiple use patterns; and

- Accommodates a range of movement demands and socio-economic functions.

The proposed IRPTN routes will be used as the spine for the development of high density residential and will seek to regenerate and consolidate existing commercial, administrative and social nodes.

3.2.2 Enhanced Pedestrian Movement

One of the well-known



sustainable elements of the urban system is the promotion of non-motorised transport options. With the presence of residential development, schools, retail, social and industrial developments in the area, NBS presents itself as a suitable place to encourage non-motorised movement. An enabling factor is the availability of suitable pathways and streets and the future IRPTN.

3.3 Goal 3: To create Opportunities for Economic Activities

The NBS LAP study area has within it, two important economic components which include the retail/ commercial component and the industrial component that provide jobs and revenue to the Msunduzi Municipality.

The retail commercial component can be found along Dr Chota Motala Road, Allandale Drive and Bombay Road etc. The industrial component can be located along Ohrtmann Road, Chesterfield Road, Birmingham Road, Sheffield Road and Willowton Road etc.

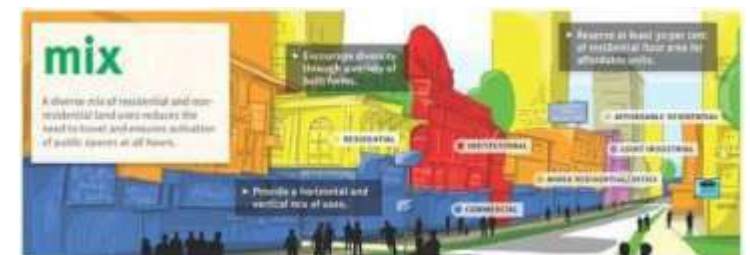
Potential for small-scale agriculture exists on around the Bishopstowe area, with emphasis on tourism opportunities in the area. Using the natural resources base to create opportunities for economic activities in appropriate locations and enhancing connectivity is an essential aspect of the NBS Local Area Plan.

3.3.1 Small scale Agriculture and Tourism

The Bishopstowe settlement is located on environmentally sensitive land. Land within this area can be used to enhance tourism opportunities and where applicable allow for small scale agricultural activities, thereby promoting Local Economic Development.

3.3.2 Mixed Use Precinct

The proposed Mixed Use precinct



is not only to accommodate social facilities but to serve as an avenue for economic activities, as well as to improve accessibility to this area and to promote higher density residential development in line with what the Msunduzi IRPTN is attempting to achieve. Essential retail facilities are already within the corridor, that being Dr Chota Motala Road and surrounds.

3.4 Goal 4: To Promote Infrastructural Development

Adequate infrastructure is essential to facilitate the future growth of economic activity in the NBSS LAP. This includes water and sanitation, movement, waste management and public/social facilities.

3.5 Goal 5: To promote environmental integrity

- Securing critical Ecological Infrastructure

To protect and enhance the supply important ecosystem services in the study area, including buffering people and infrastructure from the impacts of climate change, an integrated approach is needed to facilitate the protection and management of a robust, climate resilient ecological infrastructure and its associated socio-economy. This can be achieved through appropriate forms of development investment that optimise the opportunities presented by the natural environment, and protect the integrity of ecological services infrastructure.

- A sustainable approach to Municipal Servicing

Municipal service infrastructure should be planned for based on current and future development demand and intensity. This

includes the provision of adequate waste collection services and waste drop off / transfer stations to limit the propensity for illegal dumping, particularly of industrial waste. Development implementation phasing should be planned to respond to infrastructure rollout / upgrading timeframes, to limit the risk of environmental pollution and damage from inadequately serviced development.

Green infrastructure design and building approaches should be promoted that enhance the provision of ecosystem services in the built landscape, and reduce negative outputs of transformed landscapes that ecological infrastructure must absorb.

- Using the Natural Environment Sustainably to grow the Green Economy

Harnessing ecological systems to support growth of the green economy should be explored (e.g. harnessing job creation, livelihood and green energy opportunities associated with alien plant biomass, sustainable harvesting and production of indigenous natural products such as medicinal plants and fibres, community based tourism development, etc).

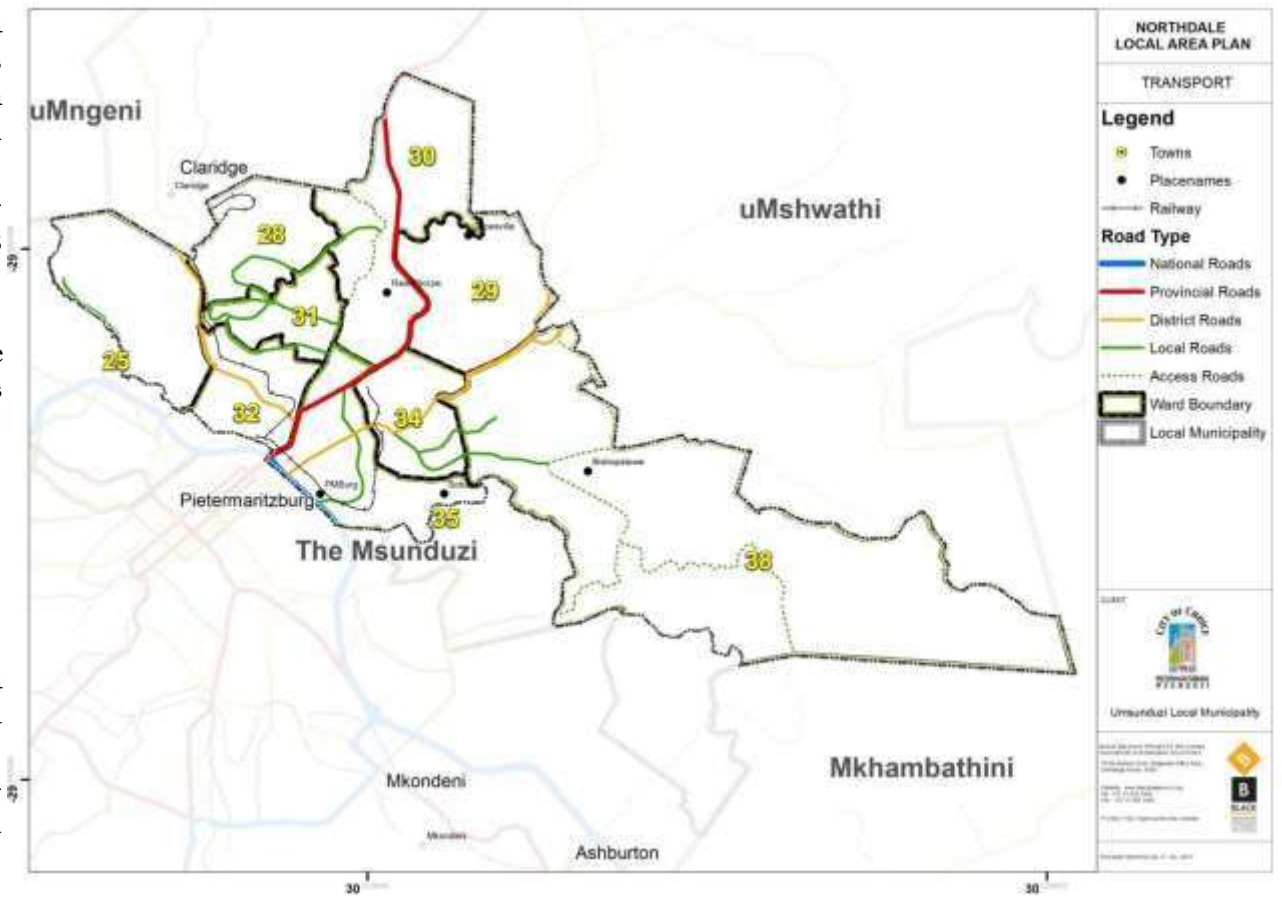
Current and future food security requirements should be addressed through ensuring areas are set aside for urban agriculture, and the adoption of conservation agriculture approaches is promoted in a programmatic manner.

4. SPATIAL CONCEPT

4.1 Defining the Movement System

The major mobility routes within the focus area are:

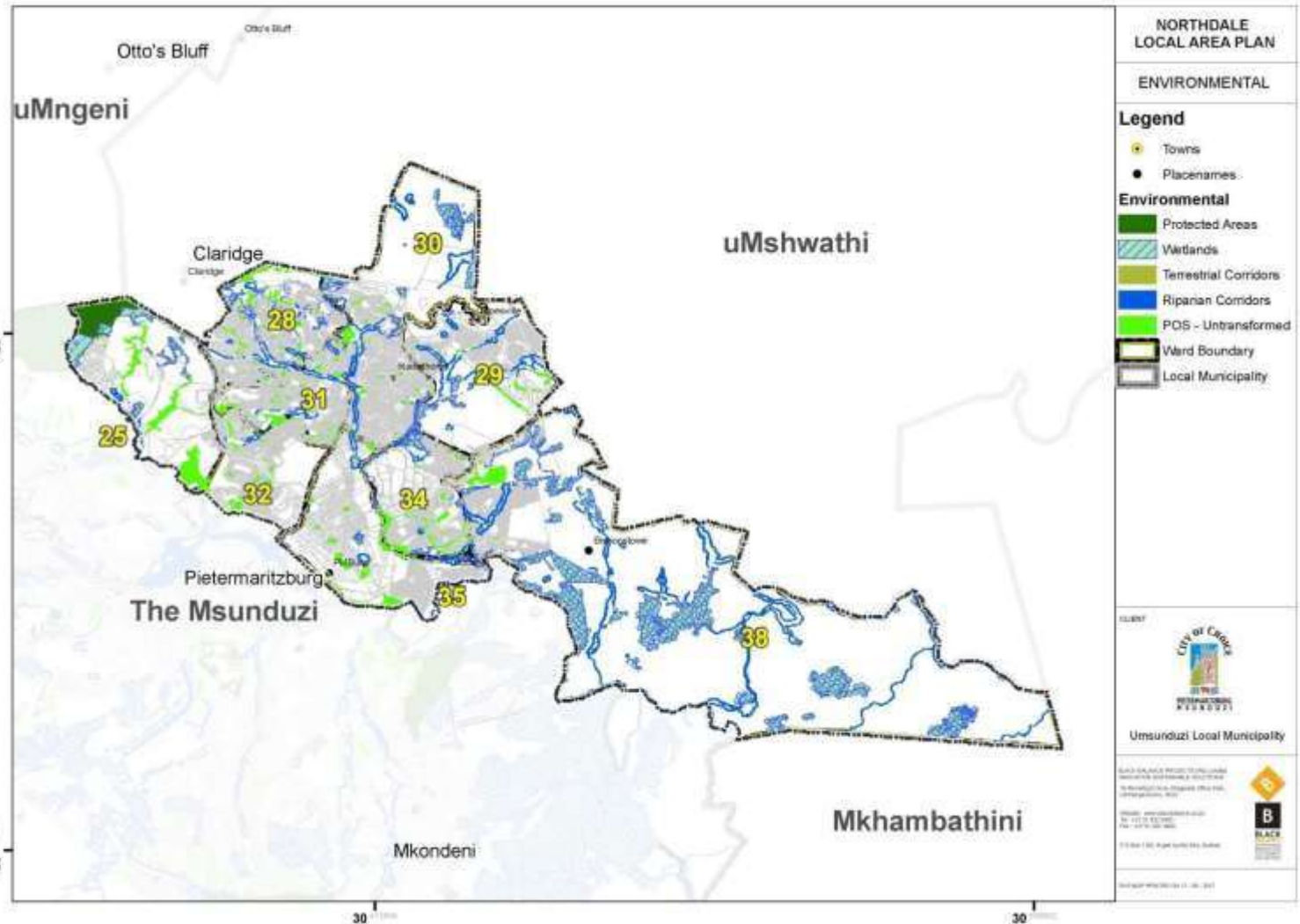
- Dr Chota Motala Road - this road runs in a north-south direction. It consists of two lanes in each direction and is a Class 3 road, north of the R33 and three lanes in each direction and is a Class 2 road to the south of the R33.
- Ottos Bluff Road – this road runs in the east-west direction and is a single lane Class 3 road.
- R33 Bambatha Rd – this road runs in the north-south direction and is a single lane Class 2 Road. It’s a regional road that links Pietermaritzburg with Greytown, Dalton etc.
- Ohrtmann Road – This road runs in the east-west direction and is a single lane Class 4 road with localised widening.
- Bombay Road – Bombay Road creates a loop through the Northdale residential area and ties in with Dr Chota Motala Road at both ends. It’s a single lane road and is classified as a Class 3, however it functions primarily as a Class 4 road.
- Manning Avenue - This road runs in the east-west direction and is a single lane Class 3 road with localised widening.



4.2 Defining Environmental Service Areas

According to the Msunduzi Environmental Services Plan, around 27% (2,110 ha) of the 7,748 ha NA LAP study area comprises open spaces that contribute towards ecosystem services delivery. These include areas of natural ecosystems, ecosystem corridors, public and private open spaces (1,570 ha); also included are 'transformed public open spaces' (540 ha) that have limited biodiversity value but play a role in delivering other amenities / services.

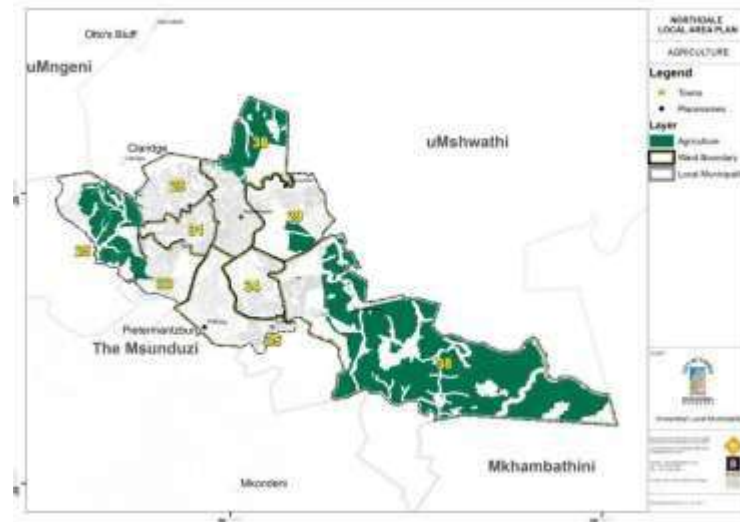
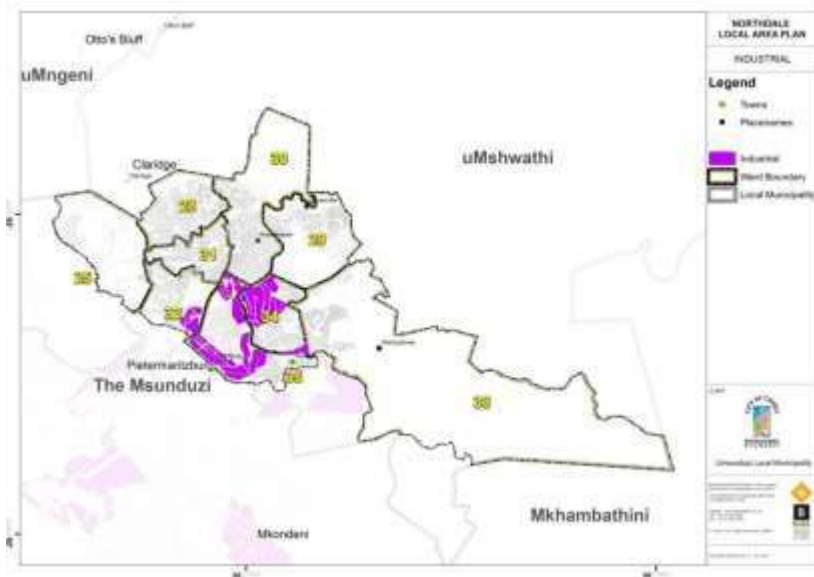
Notably, there are no Protected Areas within the NA LAP study area. However, the Mpushini Protected Environment and Hesketh Conservation areas are located south of the study area, Ferncliffe Nature Reserve to the west, and Cumberland Nature Reserve to the north-east. The ecological infrastructure within the NA LAP study area therefore needs to ensure ecological corridor linkages between these protected areas are retained. This can be achieved by protecting remaining areas of natural, high value ecosystem areas in the LAP, and ensuring continuous linkages between these areas, river corridor systems, and Protected Areas outside of but near the boundary of the study area.



4.3 Defining Key Economic Opportunities

The study area serves as a catalytic industrial hub. The existing of commercial/ retail component as well as the industrial/ logistics component is testimony to availability of employment within these sectors, as well as underpinnings of essential revenue that feeds into the Msunduzi economic base. The following planning and design elements would need to be considered and / or addressed:

- A clear economic development vision should be established for the Study Area. The vision should feed into the debate on the economic development.
- The future role of the Study Area will be a determining factor in decision-making around the location of industrial land, public transport, commercial and social service activities which will guide future investment.



- The diversification of the local economy through the introduction of Industrial Potential/ Expansion, especially in support of other industrial activities should be explored.
- Economic development opportunities in a variety of viable sectors should be considered.
- Identify priority areas for upgrading of housing and service infrastructure.
- Apart from the intention to establish a higher-order economic development within the Study Area, focus must also be placed on protecting and growing local economic opportunities and local nodes, whilst integrating these more effectively with the regional system.

4.4 Defining Key Land Use Reservations

The study area has a significant role to play with the associated undeveloped areas which could accommodate the regional facilities and functions required within the municipality, such as social services, higher density housing development and regional bulk infrastructure and service facilities.

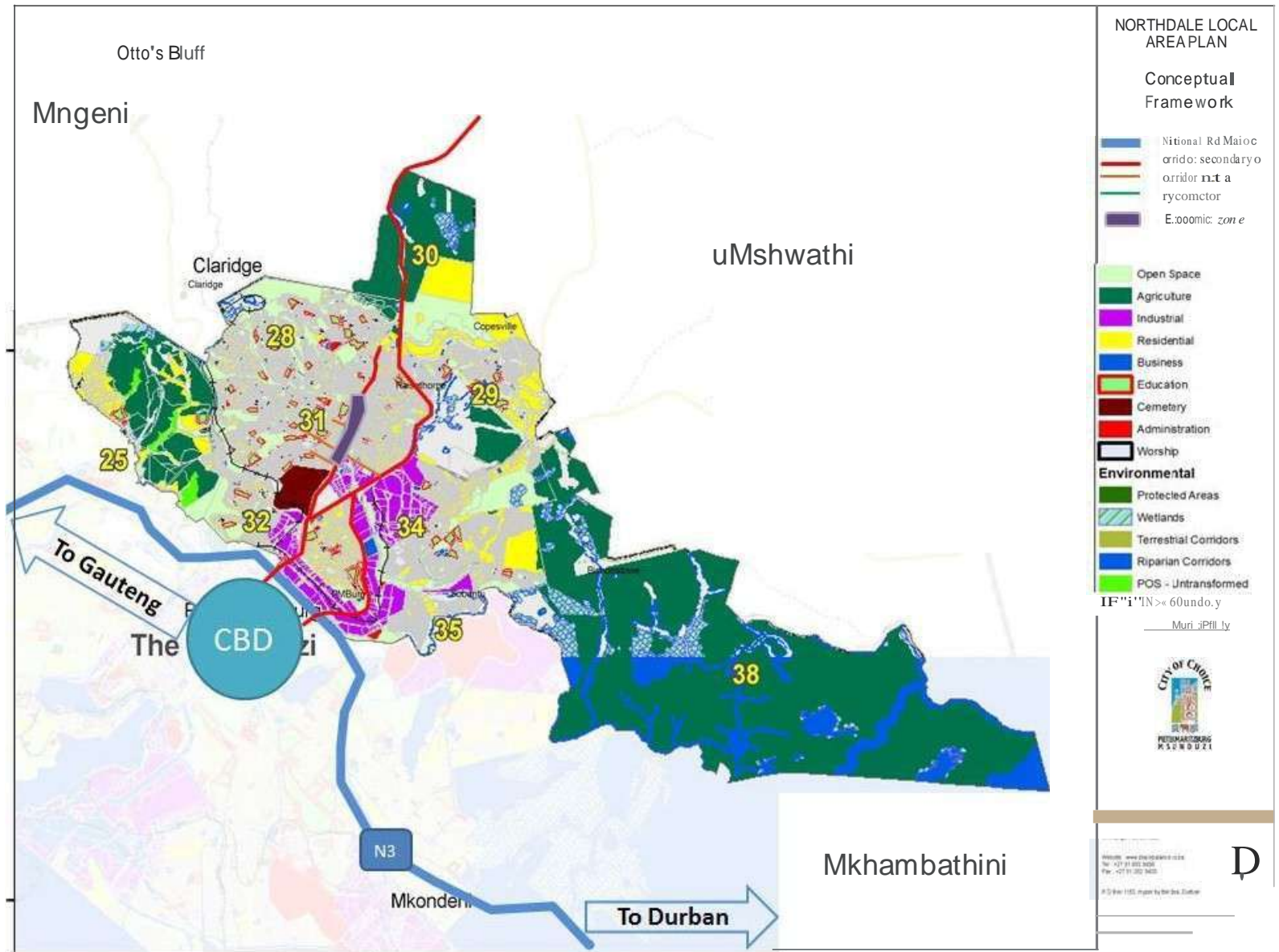
As part of the municipality's housing development strategy, the need for areas to accommodate higher density residential development must be identified as key component towards housing delivery.

Pockets of undeveloped land in close proximity to commercial and industrial nodes should allow for a mixture of land uses by promoting commercial or mixed use development, including housing densification.

From the above the following planning and design elements would need to be considered and / or addressed:

- The potential for extending the role served by the potential commercial and/or industrial nodes in the Study Area must be explored with reference to longer term regional connectivity and development trends.
- Provision must be made for the improvement of social and government services in and around the Study Area.
- A definitive reservation should be put in place for high density housing units, extension of commercial areas and the extension of industrial areas, as well as any reservation required for bulk infrastructure facilities.

Map 1: Consolidated Frame'l.wrk



5. CONCEPTUAL FRAMEWORK

The Conceptual Framework provides details of the development concepts formulated in the preceding section of this report. Strategies will be depicted spatially where applicable to guide the intended spatial future of the Northern Areas. Statements of intent will be made for proposed land uses as these will form the basis of the decision making process towards development in the core economic centre of the Northern areas. The framework does not award land development rights to individual properties, but creates opportunities for public and private investment. Issues of land ownership and acquisition processes will have to be undertaken by either private individuals or the municipality in order to facilitate physical development. The framework could be used by the Municipality to motivate for funding for urban reconstruction initiatives.

5.1 Proposed Land Uses

This section of the report provides details on the land uses being proposed in the different land use designations for the LAP. The land uses proposed will include the following:-

1. Commercial and Retail
2. Residential
3. Mixed Use
4. Public Facilities
5. Industrial

The above land uses are applicable to the entire Northern Areas LAP, however for purposes of this section, the key uses concentrating along the core economic centre will include:

1. Commercial
2. Residential
3. Mixed Use

5.1.1 Commercial and Retail development

The preferred location for retail and commercial uses is within the CBD boundary (see Figure 1). This area represents the core mixed use district which can accommodate a range of commercial, residential and public facilities. Within the core CBD area, a higher intensity of activity is encouraged in order to achieve the optimum use of space. The following parameters are advised in the CBD:-

- The ground floors of all buildings in this core are to be occupied by retail uses, restaurants, coffee shops, banks and other publicly accessible uses.
- Office space and residential uses are to be permitted on upper floors of buildings in this core.
- All ground floors are to be provided with publicly accessible pedestrian arcades.

Another aspect of the commercial component which attention has been given to is small-scale retailing. Designated zones close to the intersection of the main road and taxi rank would be allocated to traders. Formal trading areas will have to be erected in these areas to provide secure trading facilities to micro-entrepreneurs. These areas are located where pedestrian flows are highest.

5.1.2 Residential Development

The idea is to promote choice and a high degree of equal opportunities for affordability. Also, an important determining factor is the current on-site sanitation employed in Msunduzi, thus calling for medium density developments, particularly related to site size. These include the following:-

- High density residential zone is proposed where density can be at 50 dwellings per hectare. This relates to two or three-storey walk-ups and is proposed mainly to be developed along Dr Chota Motala Road, Baijoo Road, Tulshi Road, Mysore Road and Naidoo Road and . This area is located in proximity to the core economic activity area along Dr Chota Motala Road, thus providing a comfortable walking distance for pedestrians and feeds into phase 2 of the IRPTN for Msunduzi Municipality.
- Medium density residential zone is proposed where density can be at 25 dwellings per hectare. This relates to a clustered housing typology, semi-detached units or two storey walk-ups and can be positioned in proximity to the core economic areas, and within walking distance from Dr Chota Motala Road, so as to provide pedestrian movement and a feeder population to the proposed IRPTN.

5.1.3 Mixed Use Development

The mixed use designation refers to areas where a range of commercial, residential and other related land uses can be provided in harmony with each other.

These areas are to be positioned along the vicinity of the core economic activities. There has already been a move along Dr Chota Motala Road, with two storey buildings that are currently retail on the ground floor and residential on the second floor. The opportunity may exist to further develop these into three-storey walk-up units, with the 3rd storey dedicated to residential use.

5.1.4 Public Facilities

Currently there is a concentration of Education institutions (schools) in proximity to the core economic area.

The open space system exists, since a river flows through this area, however emphasis can be placed along further developing these into user-friendly areas, by means of park management and creation of areas for recreation.

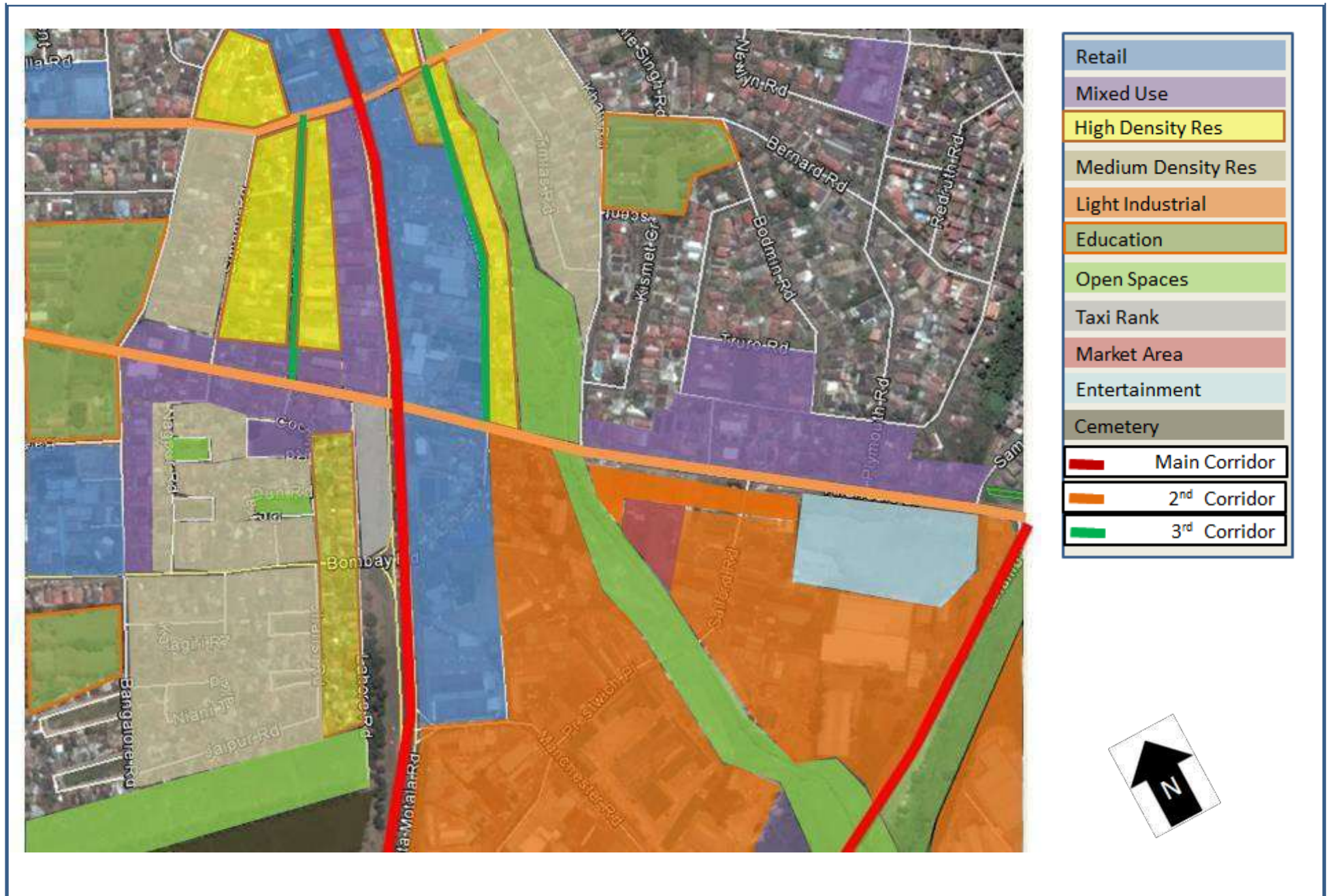
Currently, Taxi's park indiscriminately along Dr Chota Motala Road, further congesting the area, by not allowing for the free flow of traffic. A proposal exists to formalise an area along Dr Chota Motala Road as a Taxi Rank, as well as provide for formal vending areas that will house some of the informal trade occurring along the intersections along Dr Chota Motala Road.

5.1.5 Industrial Land Use

Industrial activity constitutes a major sector in the economy of the Northern Areas. The areas along Orthmann Road is already dedicated to Industrial Activity that can be defined as General Industry. This plan proposes a light to service industrial uses of land along Dr Chota Motala Road, and Allandale Drive that will allow for the free entry of:

Vehicle Repairs; Service Stations; Motor Display Areas;
Parking Areas; Retail and Commercial, as well as Restaurants

Figure 1: Economic Centre- Proposed land Use



5.2 Urban Development Edge

An Urban Development Edge/ Line are generally put in place to prevent disorganised and unwanted development. The edge/line is meant to promote densification and is in place to align to the infrastructure capacity of the Municipality.

In order to create the feeder population required for the IRPTN (Phase 2) to be economically viable, it is necessary to try and promote higher Density residential as well as retail development. As per the population projections illustrated in the prior section of this report, it is assumed that if the Northern Areas is expected to grow, it will impact on the environmental services as well as the Agricultural land. The table below illustrates the point that the Northern Areas may far outgrow itself, therefore probably taking development in the direction of the surrounding Municipalities of Umswati and Mkhambathini.

Table 1: Land Use Projections

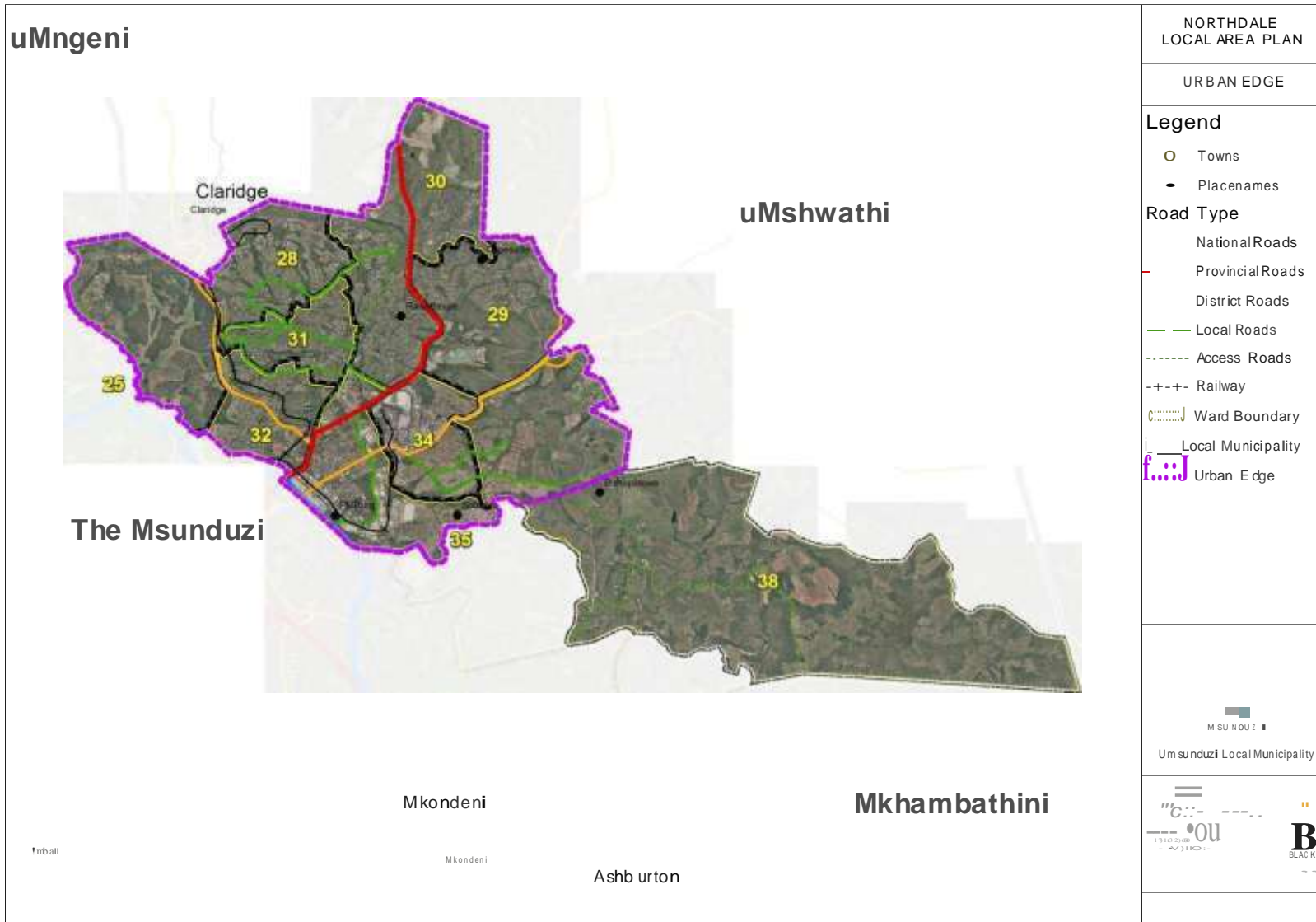
| Existing Land Use | Area in hectares | Growth at 0.4%- Yr 2027 | Growth at 1.12%- Yr 2027 | Growth at 2%- Yr 2027 |
|-----------------------|------------------|-------------------------|--------------------------|-----------------------|
| Agriculture | 2831.63 | 2900 | 3201 | 3521 |
| Industry | 344.57 | 353 | 389 | 428 |
| Residential | 1755.81 | 1799 | 1985 | 2183 |
| Social | 111.68 | 114 | 126 | 139 |
| Environmental | 2111.00 | 2162 | 2386 | 2625 |
| Total Land Use | 7154.68 | 7328 | 8087 | 8896 |

5.2.1 Why an Urban Edge

- The current Northern Areas LAP study area is approximately 7748 Hectares. If the Northern Areas grows at the Msunduzi Municipality growth rate of 1.12%, it is expected that the population by 2027 and associated development would outgrow the study area.
- With increasing development comes increased traffic; currently the Northern Areas experiences traffic congestion during peak hours, further development will lead to more congestion problems.
- To delineate an area where bulk infrastructure can be rolled out, thus leading to more organised development.
- To promote densification, and create more compact cities thus decreasing sprawl and inefficient land use.
- To protect available natural resources, as well as much needed agricultural land, required for food security.

It is therefore necessary to identify and delineate an area that can accommodate higher Density Residential Development as well as associated facilities, without negatively impacting on the environment or Agriculture, as well as promote the most efficient use of land and facilitate the delivery of infrastructure services in an efficient manner. The map below illustrates the proposed Urban Development Line.

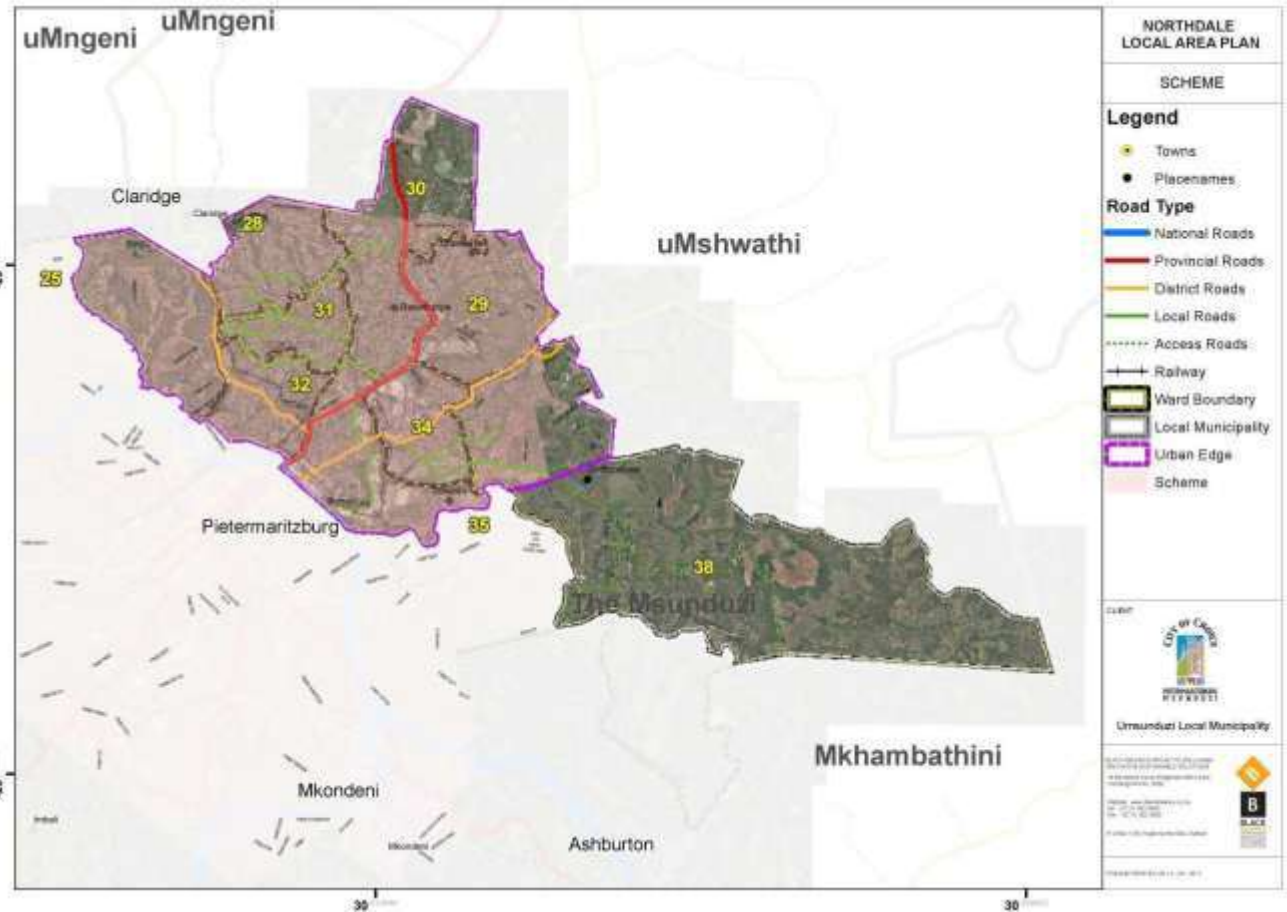
Map 2: Urban Edge Line



5.3 Town Planning Scheme

Map 3: Scheme Area

In order to ensure a compact city model that allows for densification and the suggested land uses described in the preceding sections it is necessary to ensure that the Town Planning Scheme is in place and allows for the proposed uses. The Northern Areas LAP has taken a bold stance to promote densification, in line with the required feeder population for the IRPTN. It is therefore essential that the Town Planning Scheme is revised to promote this densification. It is noted that the Town Planning Scheme for Msunduzi does not include Ward 38, this is primarily agricultural Land. In terms of the Urban Edge Delineation, the map below illustrates the area covered by the Town Planning Scheme, the proposed area outside the Scheme but within the Urban Edge. This would mean that the Land Use Management Section of the Msunduzi Municipality extend the current scheme area to include all areas within the Urban Edge Line. It is apparent that a portion of Ward 30 and a large portion of Ward 38 do not have a Scheme in place.



5.4 Urban Regeneration

Urban regeneration is the attempt to reverse the decline and deterioration of a neighbourhood, or precinct by both improving the physical structure, and, more importantly and elusively, the economy of those areas. In all regeneration programmes, public money is used as an attempt to pump prime private investment into an area.

It is apparent that there has been a change in the appearance of Dr Chota Motala Road, with infrastructure investment, in terms of upgrading the road into a two lane both ways structure, as well as some private investment that has seen the construction of newer buildings, and refurbishment of other buildings (example the Caltex garage), as well as the improvement of the area with newer retail/ restaurants (like MacDonald's). However there seems to still be a mismatch between the old and the new, with private businesses still operating in buildings that are in need to some repair and maintenance. Dr Chota Motala Road, which is the economic core for the Northern areas, is in need of an Urban Regeneration

Allandale Drive which has recently seen a marked increase in retail activity is also in need of regeneration. The figure alongside is an example of how the area can be regenerated.

Figure 2: Regeneration Example



5.5 Transport Framework

5.5.1 Proposed Road Upgrades

In addition to the road upgrades that are committed, a set of possible road upgrades have been identified. This was done through an appraisal of the status quo, the future IRPTN system and the proposed land use proposal.

Serious consideration was given to ensuring alignment between the IRPTN feeder/complementary routes and the proposed road upgrades. The idea is that these upgrades act as the precursor for the implementation of the IRPTN system.

Proposed upgrade (a) Prestwich Place to Salford Rd link is a proposal developed out of the need to join and integrate these two commercial nodes and improve pedestrian and vehicle connectivity. This route will also tie in with (3) the Bombay Road Extension.

Upgrades (b to f) i.e. the widening of Larch Rd, Manning Road, Orthmann Rd, Bambatha Rd, Ottos Bluff Rd and Allandale Rd were identified on the back of the site visits. The Larch Rd/Manning Road and Orthman Rd proposals are in particular important as they provide for additional capacity over the N3, thereby reducing reliance on Dr Chota Motala Rd and freeing up capacity for IRPTN.

The proposed (g) Woodlands to CBD link via the rail reserve is a long term opportunity that will require detailed analysis and engagement with rail authority. The idea however is that the transport corridor is in place already and therefore an opportunity exist. The one main advantage is the linkage that would be

provided to the north-western end of the CBD, which currently struggles with access.

The proposed Northdale – Hilton link idea (h) was born out of a high level assessment of the migration of offices from the Pietermaritzburg CBD to Hilton. Northdale which has a high middle to high income population would therefore contribute towards the traffic heading to Hilton. The link will provide an alternate route between the two areas and reduce the reliance on the N3.

Committed Road Upgrades

In the status quo phase a review of the relevant planning documents were undertaken.

From this the committed road upgrade proposals were extracted. These upgrades include the upgrade of the N3 (1), a new link road between Ottos Bluff Rd and Parker Road (2), the extension of Bombay Road (3), new link road between Promed Rd and New England Rd (4) and the Orthmann Rd/N3 interchange upgrade (5).

Map 4: Proposed Road Upgrades



5.5.2 Non-Motorised Network

The idea for the creation of an NMT plan was to identify a network along which appropriate NMT facilities (cater for pedestrian and cyclist) can be provided. This is a high level plan that will require refinement. The intention is to therefore create a starting point.

Like the proposed road upgrades the NMT network was developed through an appraisal of the status quo, the future IRPTN system and the proposed land use proposal.

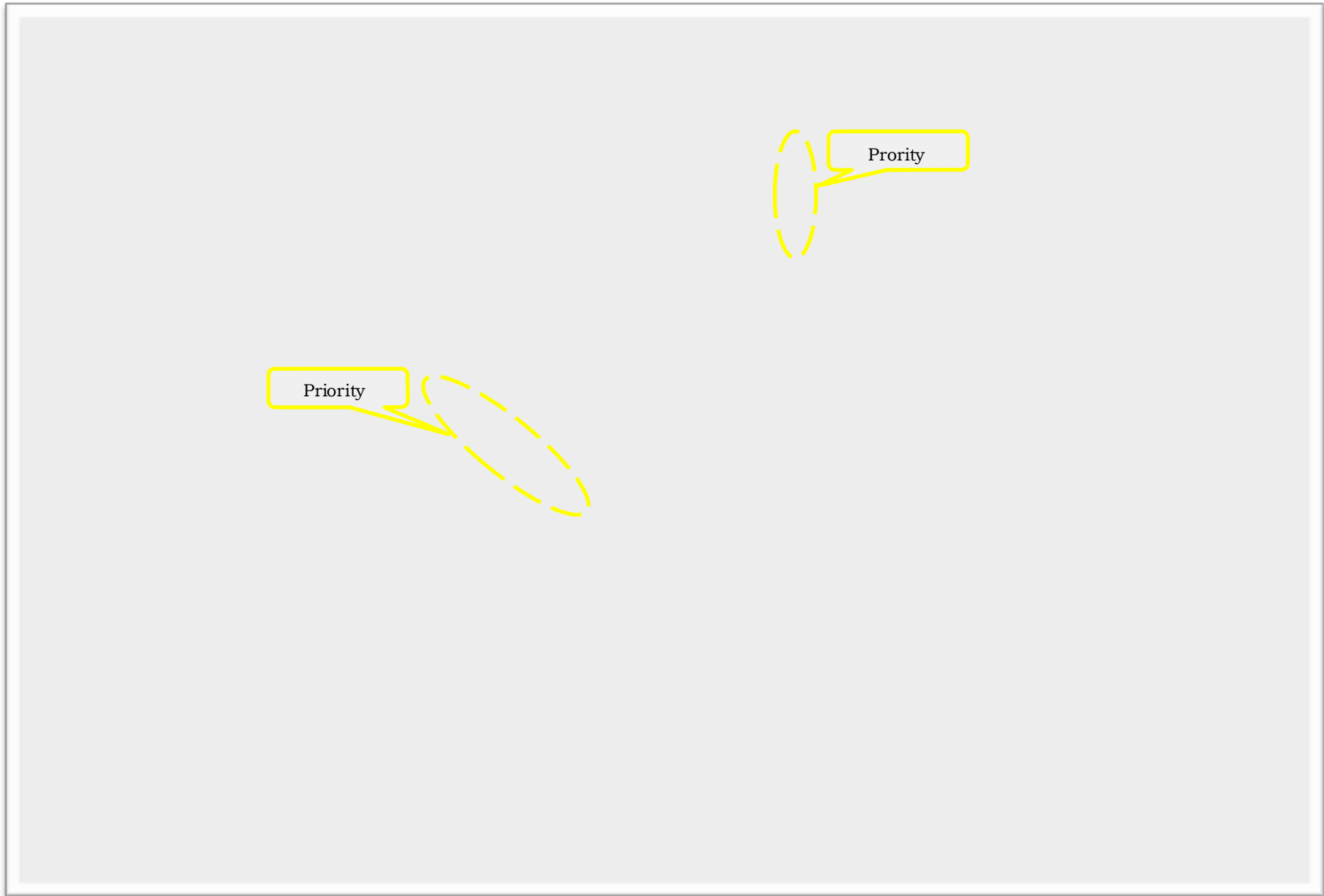
Serious consideration was given to ensuring alignment between the IRPTN feeder/complementary routes and the NMT Network. The idea is that these upgrades act as the precursor for the implementation of the IRPTN system.

The NMT network links the residential areas at an internal level with educational facilities. At an external level it would link with future IRPTN system and neighbouring industrial and commercial nodes.

Urgent Need

- There is an urgent need for NMT facilities along the R33, between the informal settlement north of Copesville and the broader Northern area.
- Pedestrian, including scholars, are seen walking along and on the R33 and across the open fields in and around this area.
- There is also a need for facilities along Ottos Bluff Rd in the vicinity of the residential nodes.

Map 5: Non-Motorised Network



5.5.3 Public Transport

The long term plan for public transport in the area is the development of the IRPTN for the greater Northern area. Therefore, any plans that are implemented should have some level of alignment with the long-term plan.

On-site observations had indicated at least three informal ranks in the study area.

1. In the Sobantu area taxis appear to be ranking at the corner of Khumalo Street and Mendi Street
2. In the Eastwood area, there is an unofficial ranking area in the Carriage Way, just off Harriette Colenso Road

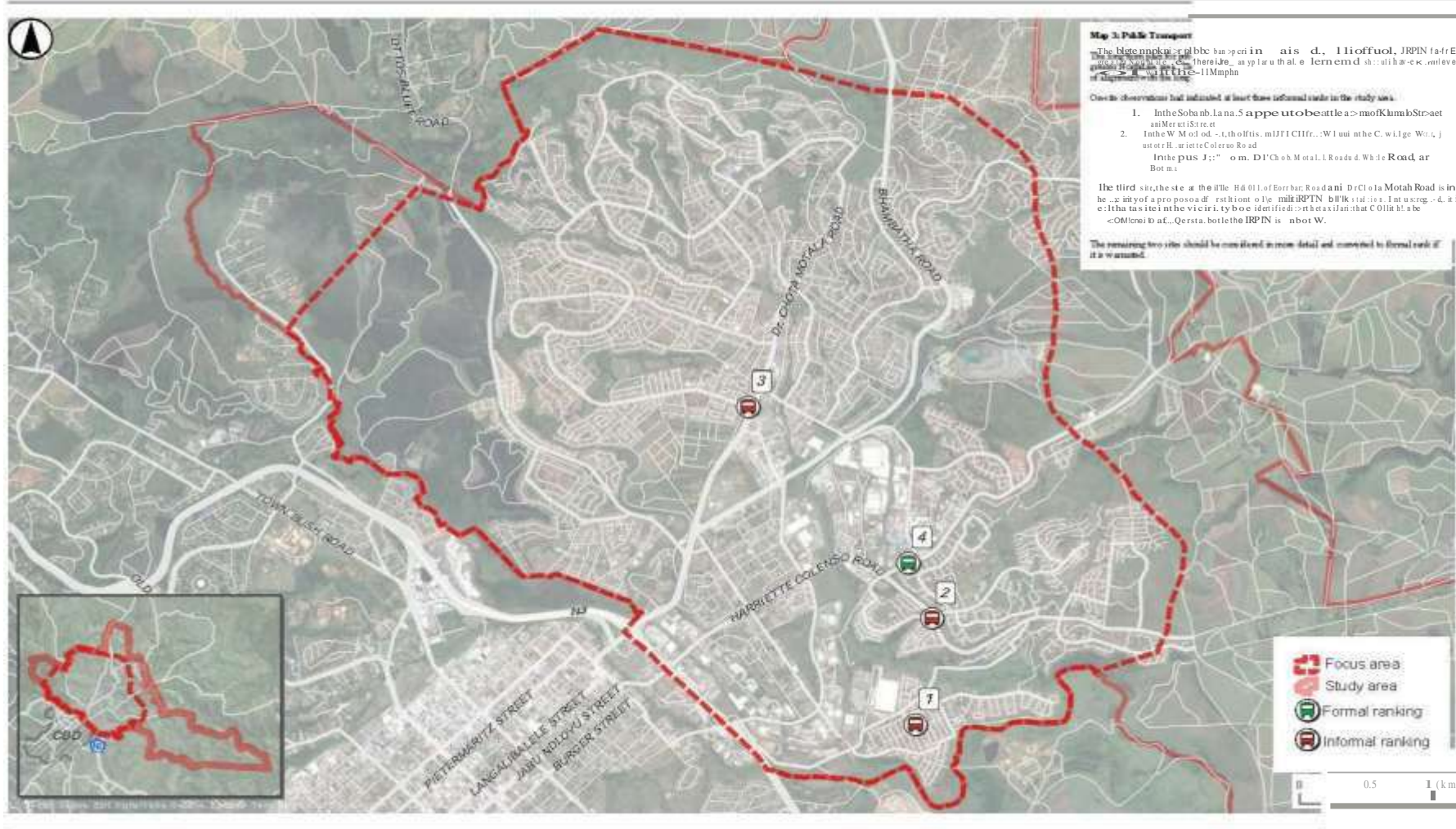
3. In the grass verge between Dr Chota Motala Road and Lahore Road, near Bombay Road.

The third site, the site at the intersection of Bombay Road and Dr Chota Motala Road is in the vicinity of a proposed feeder station to the main IRPTN trunk station. In this regard, it is recommended that a site in the vicinity be identified for the taxi rank that could then be converted to a feeder station once the IRPTN is operational.

The remaining two sites should be considered in more detail and converted to formal rank if it is warranted.

Map 6: Public Transport Facilities

Map 3 - Public transport facilities



6. FRAMEWORK OF ECONOMIC ACTIVITY AREAS

6.1 Delineation of Economic Activity Areas

As part of the further planning, a process of physically delineating of Economic Activity Areas has been undertaken to determine the priority intervention areas as well as to engage key role-players of the further development of the concept.

Unlike developing/rural areas, the NA LAP has been fully developed with the relevant and essential services required to deem an area as urban. However most of the major Economic Activity Areas function in isolation to the lower order services located within residential areas, which hinders the achievement of a broader based growth where people have efficient access to services, while enjoying the opportunity to work, live and play within the same vicinity.

The Msunduzi SDF aims to achieve a polycentric structured growth within the whole of Msunduzi, therefore it's essential that the NLAP aligns to the objectives of the MSDF when planning for the future. The economic centres are proposed to be consolidated and expanded in line with the 'polycentric urbanism' concept, resulting in expansion of commercial and industrial land uses in certain locations.

The analysis of these Economic Activity Areas has been done so with the use of the following criteria:

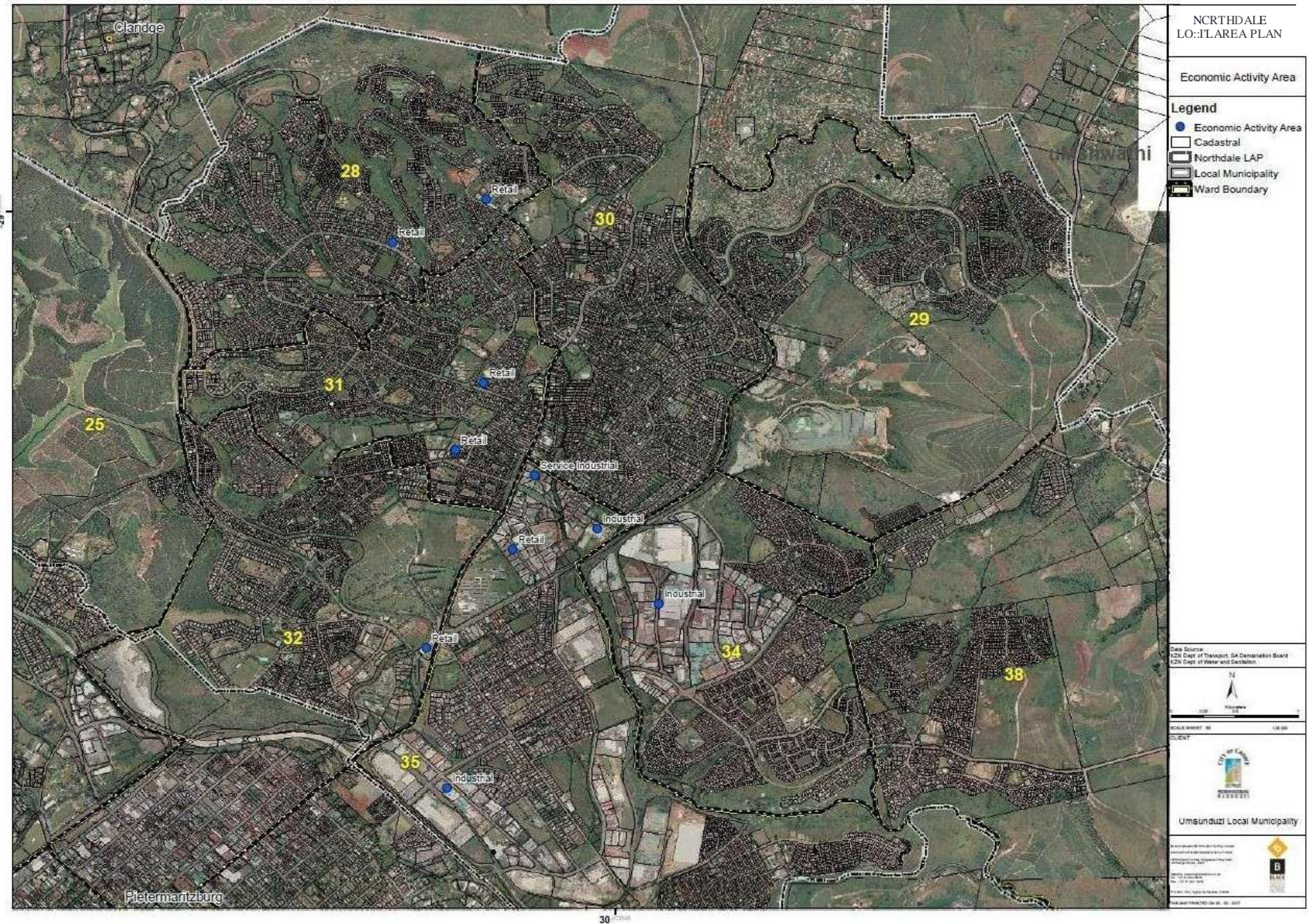
- Economic activity
- Transport
- Social/community uses
- Political/administrative activities and;
- Educational activities

Each of these functions either has the characteristics of an urban centre or a focal point, or they have the potential to become an urban centre or focal point within that area.

6.2 Overview: Delineated Economic Activity Areas

The following Economic Activity Areas were delineated as priority intervention areas and catalysts for the future growth of the NA LAP.

1. Orthmann Industrial District
2. Willowton Industrial District
3. Northway Mall Precinct
4. Factory Warehouse Precinct
5. Bhambatha Industrial District
6. Chota Motala Economic District
7. Bombay Service Centre
8. Newholme Service Centre
9. Highgate Service Centre
10. Khan Service Centre



1. Orthmann Industrial District



I. Role

The Orthmann Industrial area is located within the southern region of the NLAP. The area consists of mostly light industrial uses which are surrounded by residential units and open space systems. This area contributes significantly to the industrial job opportunities within the north.

II. Access

The strategic location of this area, allows efficient access to the site from the N3 along Orthmann Road towards the south. Access is also achievable along Bhishopstowe Road along the east and Chief Mhlabunzima Road towards the North.

III. Key Interventions and LED Opportunities

- Utilization of vacant portions of land for either the expansion of residential, Industrial or Commercial Land.
- Opportunity to split the Industrial area, and create two separate yet inter-related Precincts: Industrial Precinct and a Mixed Use Precinct.

2. Willowton Industrial District



I. Role

The Willowton Industrial area is located along the southern region of the NLAP along the N3 corridor. The Industrial district consists of a mix of light to heavy industrial uses. Most of the industrial job opportunities are found within this area.

II. Access

The area is highly accessible from the southern boundary along Orthmann road which comes from the N3. Larch Road offers a North-South access route into the area, this route also provides direct linkage between Northdale and Msunduzi CBD. Lastly Willowton Road which traverses the area provides east-west access into the site.

III. Key Interventions and LED Opportunities

- Widening of Orthmann Road/N3 Interchange to accommodate heavy vehicle access as well as heavy pedestrian traffic.
- Promoting residential densification along single residential units, to optimally use existing resources and provide more housing opportunities along places of employment.

3. Northway Mall Precinct



I. Role

The Northway Mall Precinct is a convenient centre which offers a range of fast food franchises, as well as day to day commercial amenities. The precinct also consists of a petrol filling station to service the southern residential settlements in Northdale. The area offers flexibility in choice to those who prefer shopping in less congested areas.

II. Access

The Precinct is located along the Dr Chota Motala Road at the intersection of Bhambatha Road. The convenient location allows it to service commuters and pedestrians travelling at any direction towards the precinct.

III. Key Interventions and LED Opportunities

- Identification of areas with densification potential.
- Upgrade and maintain existing service infrastructure to ensure on-going capacity is maintained

4. Factory Warehouse Precinct



I. Role

The Factory Warehouse Precinct bridges the gap between formal and informal trading. It offers a vast amount of trading space for low rent, in order to allow people to sell in Bulk. It consists of a number of factory shops which sell a wide range of clothing at low costs. This precinct integrates the low and middle income groups.

II. Access

The strategic location of this precinct allows it to enjoy access from the two major roads within the NLAP. Dr Chota Motala on the western access and Bhambatha Road towards the south-eastern access.

III. Key Interventions and LED Opportunities

- Expansion of precinct to offer more rental space for more entrepreneurs.
- Upgrading and maintenance of dilapidated infrastructure to make place more welcoming for all types of customers.

5. Bhambatha Industrial District



I. Role

The Bhambatha Industrial District is a smaller scale of a range of light industrial companies and warehouses. It provides the opportunity to rent for the purpose of running a business or storing of essential items.

II. Access

The site is accessible from Bhambatha Road towards the south-east boundary of the site. There are not many access points within this industrial district, which is a disadvantage for companies are not easily seen, without actually knowing it exists there.

III. Key Interventions and LED Opportunities

- Integrate the Factory ware house precinct to transform the area into a single mixed use precinct.
- Pockets of environmentally sensitive land need to be conserved and introduce programmes aimed at identification of these areas.

6. Chota Motala Economic District



I. Role

The Chota Motala Economic District provides mixed use services which range from social, economic, industrial, administrative etc. The district offers a range of employment opportunities. The densities for the services provided is very high, however the residential densities of the houses within the vicinity is low.

II. Access

The Main access to this area is along Dr Chota Motala which links Msunduzu CBD and Northdale CBD while intersecting the N3. The major east west access points are found within the Bombay Road and Khan Road Interchanges.

IV. Key Interventions and LED Opportunities

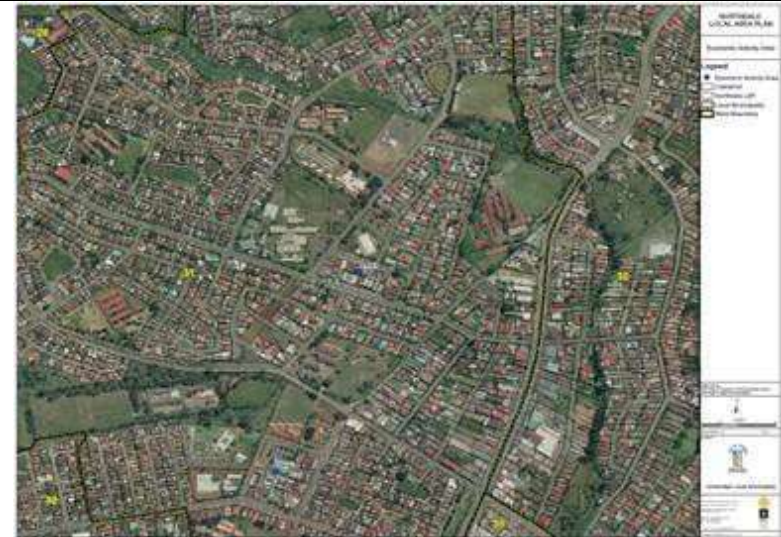
- Increase residential densities where the scheme only allows for single residential densities.
- Revitalisation, in the form of Urban Regeneration of the area to increase aesthetics and street beautification.

7. Bombay Service Centre



- I. **Role**
The Bombay service centre offers mixed use commercial/residential services to households located along Bombay Road towards the western region of the NLAP.
- II. **Access**
The main access to the site is along Bombay Road which also offers direct linkage with Dr Chota Motala Road which is the main access route within the NLAP. The service centre offers different types of commercial uses as well as a petrol filling station. The area can also be accessed via (the north-south) Bangalor Road.
- II. **Key Interventions and LED Opportunities**
- Upgrade and maintain area to accommodate the youth from neighbouring schools as well as the elderly receiving government grants.

8. Newholme Service Centre



- I. **Role**
The Newholme service centre consists of mixed use buildings which offer a range of commercial, residential and office use buildings.
- II. **Access**
The site is easily accessible from one of the major Chota Motala/Naidoo Road intersection, towards the western region of the NLAP.
- II. **Key Interventions and LED Opportunities**
- Increase housing densities along the road to promote compaction and optimal use of available resources.
 - Maintenance of buildings and street furniture to attract more office use buildings.

9. Highgate Service Centre



I. Role

The Highgate service centre is located far from the main Dr Chota Motala commercial corridor. It services residents located in the far north-western region of the NLAP. It offers a small range of commercial services.

II. Access

The Highgate service centre is located towards the northern end of Bombay Road.

III. Key Interventions and LED Opportunities

- Expansion and upgrade of existing infrastructure onto the vacant land, to service a wider range of customers.
- Propose precinct plan to efficiently utilize vacant space.

Khan Service Precinct



I. Role

The Khan service precinct offers a range of services which conveniently provide for the north-western region of the NLAP. The precinct offers the same type of services that would be found in a mall, however in a lower scale.

II. Access

The precinct is located at the intersection of Bombay and Khan Road, which are two major roads that intersect with Dr Chota Motala Road.

III. Key Interventions and LED Opportunities

- Integrate the precinct with the petrol filling station, to make use of the vacant adjacent property.
- Propose precinct plan to efficiently utilize vacant space.

7. KEY DEVELOPMENT PRINCIPLES

Based on the development vision, concepts and strategies suggested in the previous phase of the report, a number of key development principles are outlined as part of guiding this Local Area Plan. These principles are intended to influence the spatial and non-spatial decisions towards the successful implementation of the LAP.

These principles include the following:

- Growth Intensification,
- Quality Living Environment,
- Building Area Character

7.1 Growth Intensification

The Northern Areas has a potential to grow but this will have to be guided by the ability to maximise the fixed assets of the town – land. In order to meet the growing demand for housing and economic ventures in the town, a number of proactive measures will have to be adopted as part of the revitalisation process. To this effect, the following guides are suggested:

- Densification will have to undertake in appropriate locations within the town. Areas around the CBD where capacity still exists for further development will have to be harnessed.
- Composite building typologies will have to be adopted as part of promoting intensification of activities within the CBD core.
- A phased approach to development should be adopted to discourage leapfrogging. Direction of growth should be

guided by the short and long term development edges and influenced by infrastructural capacities.

- Public places should be embedded within reach of the general public without negative impacts on travel costs.

7.2 Quality Living Environment

The quality of the living environment is essential in retaining businesses and the population of towns. With this as a backdrop to revitalising development, it becomes relevant to ensure that all aspects of the living environment are able to promote a better quality of life. This will include devoting attention to the following:

- Residential development should offer choice to all income groups as part of promoting spatial equity.
- Public spaces should be maintained and managed properly in order to make them attractive to use. Constant use of such facilities will decrease the tendency for vandalism.
- Maintenance programmes should involve residents of the town as part of creating awareness of ownership.

7.3 Building Area Character

Carving a character for this area lies in the distinctiveness of each functional district yet considering the complementary roles they each play within the urban system. With this as a backdrop, the LAP proposals on land designations have been used as a tool to create a cohesive and functional character within the town. In order to promote character building, the following parameters would have to apply:

- The preferred land uses in the various land designations should be used as a guide to where certain activities can occur and not occur.

- Neither public nor private investment should be permitted to determine how and where development. A balance of the different interests should be sought at all times.
- The opportunity for a gateway presents an opportunity to create the initial impression of the town. Facilities within the Gateway (along Dr Chota Motala Road) should promote the town's identity by providing information such as a town map, places of interest and location of public facilities.
- The elements of the public realm must reflect local culture and identity as part of reinforcing the character of the town.

8. DEVELOPMENT AND DESIGN GUIDELINES

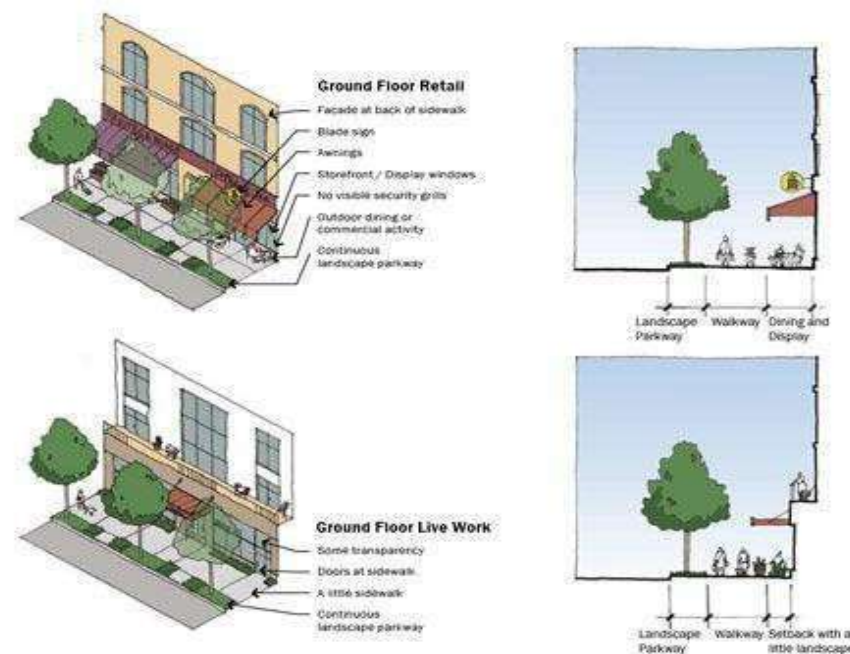
This section of the report makes suggestions to development and design guidelines to inform the physical make-up of the town. It involves suggestions to various techniques for ensuring appropriate built form and the public realm.

8.1 Built Form

- Building design within the town centre should promote and encourage passive surveillance through reduced setback lines.
- Buildings are to be street facing to increase surveillance on public and semi-private spaces especially within the CBD.
- Access and entrances to individual buildings should be visible from adjacent streets.
- High and opaque fences should be discouraged and possible avoided.
- Mixed-use buildings where commercial activities occur on the ground floor and residential uses on the upper floors should be encouraged within the CBD and in zones where commercial

activities are allowed. See figure below which illustrates the design guidelines required for retail residential spaces.

Figure 3: Retail/ Commercial Space



(Source: planetzen.com)

- Buildings at gateway entrances should have a strong and appropriate architectural articulation.
- Design of buildings should reflect the character of the area, showing rich history and include cultural influence.
- Buildings and public spaces should be designed a human scale to promote intimacy between users and buildings.
- Buildings should be orientated appropriately to allow for natural lighting through windows and other openings.

8.2 Pedestrian Circulation

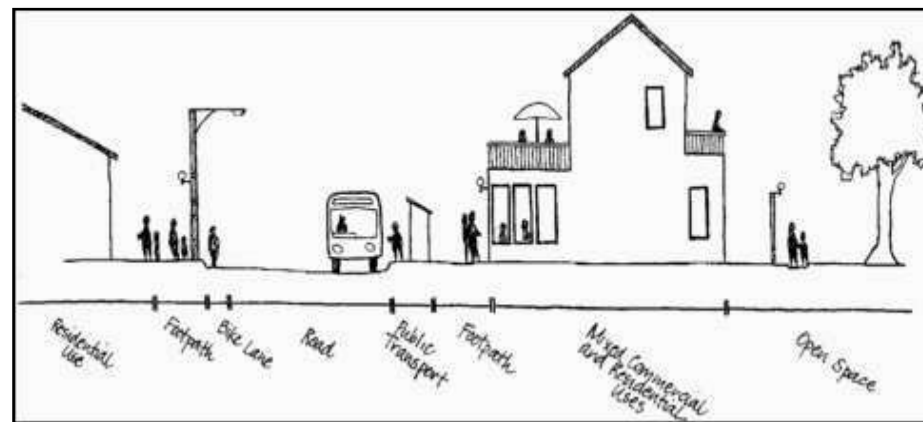
- Sidewalks should be paved with non-slippery material to allow for safe and ease of movement.
- Pedestrian crossings are to be clearly marked to encourage pedestrians to cross the street at such designated pedestrian crossings.
- Pedestrian arcades are to be sufficiently well lit and maintained.
- Adequate signage should be displayed to inform and caution pedestrians of constraints along streets and other public places.

8.3 Public Places and the Public Realm

- Landscaping should be placed along the entire length of the street where traffic calming is desired, on both sides of the street. It is particularly critical to place landscaping that narrows the optical width of the roadway and communicates that the road is changing in the transition zone where the largest decrease in speed is sought.
- Landscaping is to be done in such a way as to prevent pedestrians from crossing the streets at random points.
- Landscaping should be carried out in a way which does not obstruct sightlines.
- Public open spaces should be designed to promote interaction by clustering outdoor furniture in an appropriate manner. This increases visibility and consciousness of being in a public space.
- A hierarchy of space should be reinforced by means of fencing, landscaped buffers to distinguish between private, public

and semi-private open spaces (see figure below). Opaque and long fencing should be avoided at all cost unless for land uses requiring such special privacy requirements.

Figure 4: A Hierarchy of Space



(Source: Illustrated CPTED Guidelines)

8.4 Formalized Trading Areas

Current Informal traders are to operate only from permanently erected shelters erected in designated zones.

These zones are located in core business area and on the streets forming the main streets and public transport points.

Public ablutions are to be of high quality design and are to be erected within the Taxi Rank.

9. TOWN DEVELOPMENT AND LOCAL AREA PLAN

The Northern Areas Local Area Plan proposals as discussed in the report have been influenced by the situational analysis which preceded the formulation of strategies, and the subsequent translation of these strategies into the local area plan proposals.

The Northern Areas Local Area Plan is a tool to be used in spatial and programmatic decisions which affect the town. Proposals made have the ability to revitalise the core economic centre in the following ways:

- to inform and advance the orderly and desirable spatial development of identified priority areas
- to create a climate conducive to private sector investment and provide a clear spatial logic that would facilitate such decisions on investment and accordingly to encourage investment decisions, not only in pursuance of optimal returns, but also in support of a shared spatial vision for the town;
- to deliver economic growth that does not continue to generate environmental loss, a natural environment threatened by poor resource management, resource intensive economic growth and a carbon dependent energy base.
- to respond to the spatial marginalization of the economy as well as a range of market and sector demands, promoting the optimal participation in the economic affairs and activities of the town;

The Northern Areas Local Area Plan as proposed seeks to articulate and advance the spatial restructuring of the post-apartheid town and identify strategic areas for intervention to

promote the integration of social, economic, institutional, environmental and physical aspects of land development.

The development of the Northern areas hinges on the ability of these proposals materialising through available funding and the efficiency of institutional capacity to oversee the proposed projects. Most importantly, the proposals are required to be acceptable to the various stakeholders, particularly development partners and the daily users of the town.