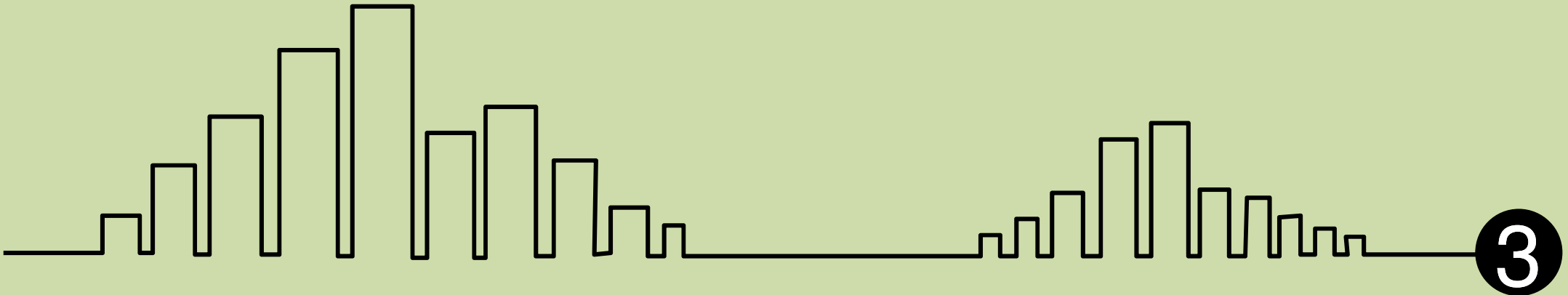


# URBAN DEVELOPMENT FRAMEWORK

Development Objectives  
Development Framework  
Development Scenarios Quantified  
Site Development and Urban Design Guidelines



## 3. DEVELOPMENT FRAMEWORK

### 3.1. Development Objectives

In view of the findings following from the Situational Analysis as documented in section 2 of this document, and in line with the guidelines provided in the study brief for the Menlyn Node as defined by the City of Tshwane, the proposed Development Objectives for the Menlyn Node are defined as follows:

- To allow for the expansion and intensification of economic, social and residential activities in the Menlyn Node in order for the node to develop into a fully-fledged Metropolitan Activity Node as contemplated in the Tshwane City Development Strategy, Metropolitan Spatial Development Framework and the Eastern Region Spatial Development Framework.
- To protect, enhance, and improve the functionality of the entire regional open space system in the area, and to make it more accessible and safe for the surrounding communities.
- To protect and expand the existing community facilities in the Menlyn Node and surrounds in order to serve the social needs of the current and future population residing in the area.
- To upgrade and maintain the movement network in the study area not only to facilitate the efficient movement of various public and

private modes of transport within the node, but also between the Menlyn Node and other activity nodes in the City of Tshwane and Gauteng Province.

- To enhance public transport facilities and services (bus, taxi, BRT and Gautrain feeder system) in and around the Menlyn Node, and provide for easy and safe pedestrian movement and access to these facilities.
- To optimally utilise the economic development potential of the Menlyn Node by catering for a wide spectrum of economic activities as part of a mixed use development typology.
- To alleviate the pressure for horizontal expansion of economic activities into surrounding residential areas by focusing on optimally utilising the vertical space available in the Menlyn Node.
- To promote residential redevelopment and densification around the Menlyn Node in order to:
  - enhance the economic viability of the node by increasing the resident component to the node;
  - improve the sustainability of the node by creating a 24/7 living environment;
  - enhance the economic viability and sustainability of the public transport system in the area as a result of more people residing within walking distance from these facilities and services;
  - create a natural buffer of high value (financial and social) residential development around the Menlyn Node in order to



prevent the horizontal expansion of business activities, and to rather promote the vertical expansion of the node.

- To create a unique character and identity for the Menlyn Node by way of common design elements within/along the public space environment.
- To facilitate the sustainable development of the Menlyn Node by way of ensuring the incremental expansion and continuous maintenance of engineering services in the node and surrounding areas.

## 3.2. Development Framework

The proposed Development Framework for the Menlyn Node is graphically depicted on **Figure 29**. The next sections elaborate on each of the components of the Urban Development Framework individually.

### 3.2.1. Regional Open Space Network

The first and most important component of the Spatial Development Framework is the proposed Regional Open Space Network for the Menlyn Node and Surrounds. As highlighted in section 2 of this document, the existing open space network coincides with the main drainage system running through the study area. This green network (green lungs) is crucial towards the future sustainable development of the node, and to contribute

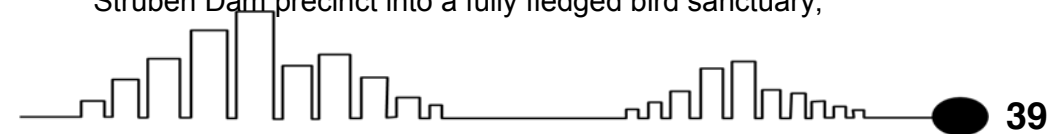
towards the enhanced aesthetic quality of this high intensity/density environment.

It is thus suggested that the entire open space system as reflected on Figure 29 be retained and protected as regional open space for the study area and that no part of the regional open space system be allowed to redevelop into any form of urban activity.

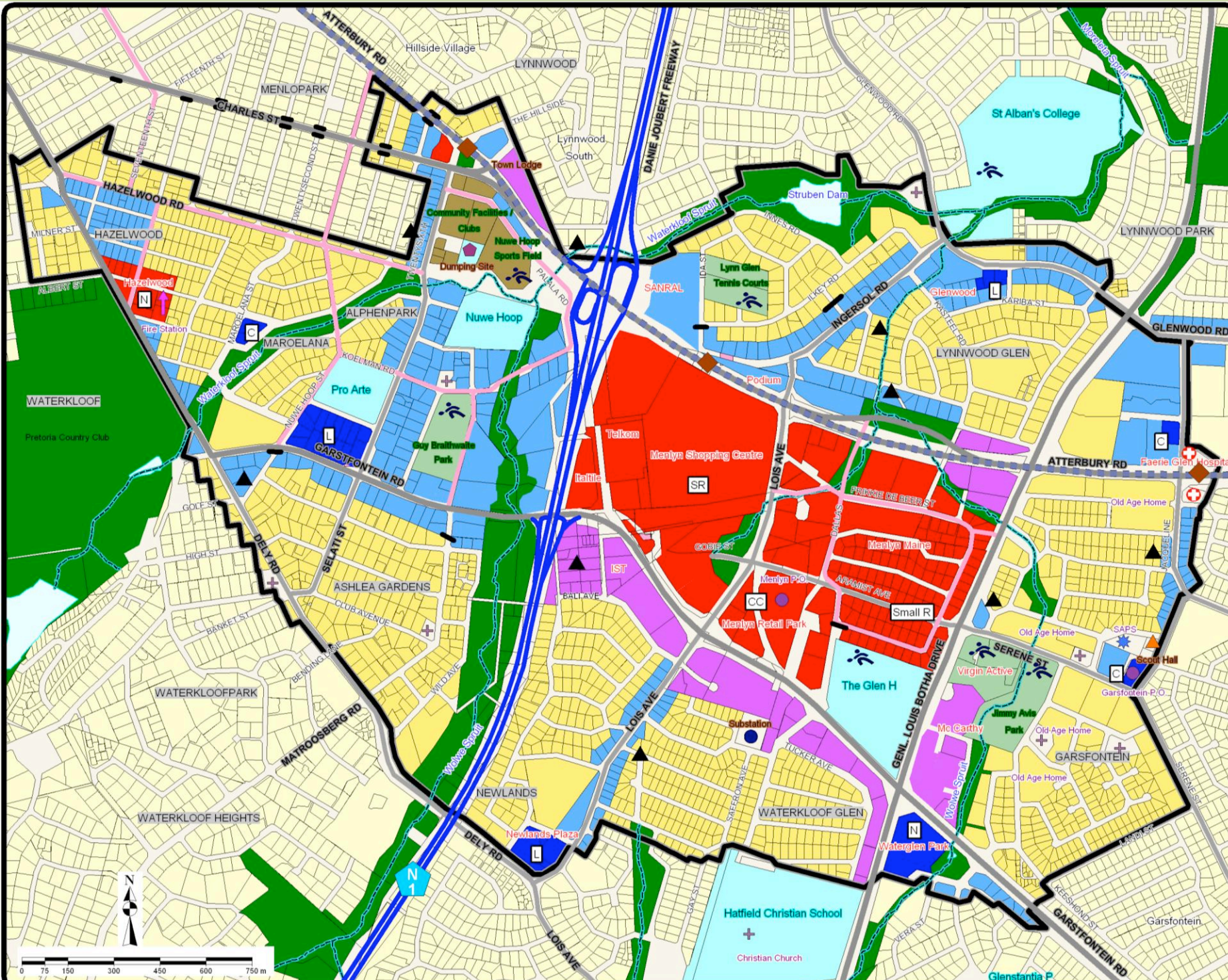
Apart from protecting the open space system, it is also important that it be properly maintained and that it be made accessible and safe to the broader community in order to ensure the optimum utilisation thereof (which is the primary objective).

It is thus suggested that the City of Tshwane commence with an initiative towards the formalisation and upgrading of the open space system as depicted on Figure 29. The priority initiatives to be addressed as part of this initiative include the following:

- The upgrading and maintenance of the Waterkloof Spruit section between the Pretoria Country Club and the Nuwe Hoop School;
- The upgrading and redevelopment of the Wolwe Spruit drainage system according to the three phases which were discussed in section 2.3.1 of this document;
- The upgrading and intensification of the initiative to convert the Struben Dam precinct into a fully fledged bird sanctuary;







# MENLYN NODE

## URBAN DEVELOPMENT FRAMEWORK

- Study Area
  - Hospital/Clinic
  - Post Office
  - Police Station
  - Fire Station
  - Scout Hall
  - Dumping Site
  - Bus/Taxi Holding Facilities
  - BRT Stations
  - Substation
  - Business 1
  - Business 3
  - Mixed Use
  - Business 4
  - Residential Densification Zone
  - Educational Facilities
  - Community Facility and Office
  - Sport and Recreation Clubs / Sports Grounds
  - Public Open Space
  - Subject to Access Requirements
  - BRT
  - 1st Order Route
  - 2nd Order Route
  - 3rd Order Route
  - 4th Order Route
  - Street Closure
- SHOPPING CENTRE HIERARCHY**
- SR Super Regional
  - Small R Small Regional
  - C Community Centre
  - N Neighbourhood Centre
  - LC Local Convenience Centre
  - CS Corner Shop



- The entering into joint ventures with the private sector in order to ensure the proper maintenance and improvement of the open space system.

The last bullet above entails an important principle associated with the conservation and maintenance of the open space system in the area. It allows for Council to enter into joint venture agreements with adjacent land owners to become involved in the maintenance and safekeeping of various parts of the regional open space system. Several developers and communities indicated their willingness to “adopt” certain sections of the open space system in order to enhance the quality of the environment surrounding their respective developments/neighbourhoods. This principle should be optimally applied throughout the entire Menlyn Node area.

Two appropriate examples as to how this can be achieved include the open space system at the Gobie Street entrance to the Menlyn shopping centre which is part of a joint venture between the City of Tshwane and Old Mutual, as well as the Jimmy Avis Park adjacent to the east of the new McCarthy Mercedes Benz dealership in the Garsfontein area.

It is also important that the open space system be developed according to a specific common theme which contributes to the overall identity of the Menlyn Node, and that the legibility of the open space network be improved. Safety is a primary concern and Council should ensure that the residents can, without fear for their safety, make use of the entire open

space system throughout the study area. The efficient utilisation of the open space system is the most effective way of protecting it against development pressures.

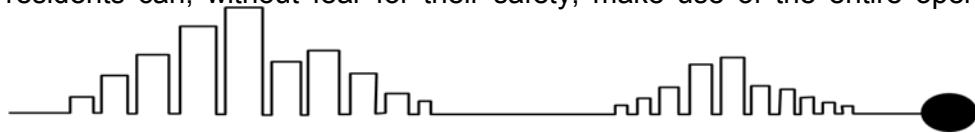
### **3.2.2. Movement Network (Road and Pedestrian) and Public Transport Facilities**

The second important formgiving element to the Spatial Development Framework is the existing and proposed future movement network for the area as reflected on Figure 29.

#### **3.2.2.1. Road Network and Hierarchy**

As far as the road hierarchy is concerned it is confirmed that the N1 freeway which passes through the central part of the Menlyn Node is the first order route serving the area. Apart from serving regional traffic and providing visual exposure to the Menlyn Node, this route also provides regional accessibility to the Menlyn Node via the two access interchanges at Atterbury Road and Garstfontein Road.

In line with the Metropolitan and Regional Spatial Development Framework the second order routes within the study area comprise Atterbury Road, Garstfontein Road, Dely Road and Genl Louis Botha Drive.



As far as third order routes are concerned the network to the east of the freeway includes the Lois-Ingersol-Glenwood-Jacqueline-Serene-Aramist system as reflected on Figure 29. This network allows for concentric movement serving all four the quadrants defined by the Atterbury-Genl Louis Botha Drive intersection. It also provides for continuous movement both in a north-south and east-west direction through the various sections of the eastern part of the study area.

In the area to the west of the N1 freeway it is suggested that Selati Street should perform the function of a third order route serving the area in a north-south direction parallel to the N1 freeway, and effectively linking Atterbury, Charles, Hazelwood, Garstfontein and Dely Roads to one another.

Even though it is defined as a third order route in the Menlyn Development Framework, it may be technically very difficult to develop it to the geometric standards associated with a Class 3 route due to road reserve constraints.

However, in the context of the Menlyn Node, Selati Street will become the equivalent (a mirror image) of Lois Avenue with Selati serving the area to the west of the N1 freeway, and Lois the area to the east thereof. It will thus be of critical importance that Selati Street be pre-actively upgraded to a sufficient standard to perform this function and to effectively serve the

office precinct which is proposed to be located on this side of the freeway. (Refer to Figure 29).

As far as the fourth order network is concerned, the priority area to the east of the N1 freeway is the Menlyn Maine development area where Dallas and Frikkie de Beer Streets will provide for east-west and north-south movement in the precinct.

To the west of the N1 freeway, the key issue is to provide for effective, continuous movement in the proposed new office precinct between the N1 freeway and Selati Street. As access to this precinct can only be obtained via Selati and Garstfontein Road, it will be of critical importance that Palala Road be extended across the Wolwe Spruit in order to provide for continuous movement around the Nuwe Hoop School, and serving all land uses both to the east and west of the Wolwe Spruit.

Palala Road can then extend across Selati Street into Koelman Road from where it will link up with Nuwe Hoop Street further towards the west. Nuwe Hoop Street will act as an additional north-south link between Atterbury Road and Garstfontein Road through the Alphen Park area which will supplement Selati Street (see Figure 29). The strategic significance of Nuwe Hoop Street lies in the fact that it is one of only a few streets in Alphen Park and Maroelana that will have direct access onto Charles Street/Atterbury Road in future. The proposed road closures to the other



routes intersecting with Charles Street are graphically indicated on Figure 29.

In terms of functionality Selati Street will thus serve predominantly regional traffic associated with the proposed new office precinct, while Nuwe Hoop Street will serve the surrounding local residential community, and provide access in a north-south direction to the various high order routes like Garstfontein, Charles and Atterbury Roads.

Another important aspect is to ensure that Palala Road links to Garstfontein Road via Matroosberg Street in a north-south direction as illustrated on Figure 29.

This proposed fourth order network to the west of the N1 freeway thus ensures continuity of movement across the Wolwe Spruit, and provides two higher order accesses onto Selati Street, as well as a higher order access onto Garstfontein Road in the south between the N1 freeway and Selati Street.

As far as east-west movement through the Maroelana-Alphen Park residential areas are concerned, this function will primarily be served by Hazelwood Road which forms part of the fourth order route network in the area to the west of the freeway (see Figure 29).

In the vicinity of Hazelwood it is proposed that Seventeenth Street, together with Hazelwood and Eighteenth become part of the fourth order network - the main reason for this being that these two routes border directly onto the Hazelwood Node, and Seventeenth will also allow access to Charles Street further towards the north in future. These three routes, together with Dely Road to the south-west will ensure proper access to the Hazelwood Node in future.

Following from the above, another important principle is that all non-residential uses along the major routes in the study area should take access from the major routes (subject to the access requirements onto these routes), and not be allowed to take access via the neighbourhood streets as this will, without exception, lead to land use changes along the neighbourhood streets.

This principle is particularly applicable along Atterbury and Garstfontein Roads which attract high intensity developments.

### **3.2.2.2. Public Transport Network**

As far as the public transport network in the area is concerned, the Urban Development Framework confirms the status of the various routes as discussed in section 2.4 of this document. The main public transport routes within the Menlyn Node will thus remain to be Garstfontein Road, Genl Louis Botha Drive, Lois Avenue, Atterbury Road, Ingersol Road and



Glenwood Road, but it is important to expand this network to also include Selati Street to the west of the freeway.

The strategic significance of Atterbury Road from a public transport point of view is evident as this route not only forms part of the current main bus and taxi routes through the area, but it will also carry the Gautrain feeder system, and the BRT system linking Mamelodi to the Inner City of Tshwane.

### **3.2.2.3. Transfer Facilities (Taxi, Bus and BRT)**

As far as transfer facilities are concerned, the most prominent features in the study area will be the three proposed new BRT stations to be located along Atterbury Road as graphically depicted on Figure 29, as well as the three potential sites for taxi/bus holding facilities which are located to the north, east, and south of the Menlyn Shopping Centre.

At this stage there is still no clarity as to which of the three potential sites for taxi/bus holding facilities should be the preferred one (if not all). This matter is currently being investigated by the Transportation department of the City of Tshwane.

It is also suggested that Council should seriously assess the situation to the west of the N1 freeway around the proposed new office precinct as it is expected that the increased economic activity will attract more public transport activity to this area in the near future. The City of Tshwane

should expand the existing Public Transport Plan for the Menlyn Node (see Figure 24) to also include this area.

The informal concentration of taxis during daytime at the Garstfontein Road-Selati Street intersection should be addressed as part of this initiative. One possible approach could be to accommodate these taxis on part of the proposed new shopping centre along Garstfontein Road at the north-western quadrant of the Garstfontein-Selati intersection.

At a finer level of detail the Urban Development Framework confirms the on- and off-loading facilities provided for throughout the eastern portion of the Menlyn Node as depicted on Figures 23 a and b in this report. In line with the proposals reflected above, this network needs to be expanded towards the western side of the Menlyn Node as well, where Atterbury Road, Charles Street, Garstfontein Road and Selati Street should be the priority public transport routes.

Another important aspect of the Menlyn Node road network is the upgrading of Ingersol Street in order to cater for the increasing traffic movement through this area, and to be able to serve the proposed new strip of office developments along Ingersol Road. It can be expected that traffic volumes along Ingersol and Glenwood Drive will increase even more once the Gauteng Highway Toll Strategy is implemented. It is thus suggested that Ingersol be upgraded to a dual carriageway boulevard (2 lanes per direction) with a central median, and with proper pedestrian walkways on both sides of the road to cater for the needs of the public transport users in the area and to enhance the overall aesthetic quality of





this precinct. The pedestrian walkways will also improve access to Atterbury Road which is the major public transport route in the Menlyn Node.

The same principle should apply to Selati Street which will become the main route for both public and private vehicles and pedestrian movement towards Atterbury Road in the western part of the study area.

If at all possible, Council should try to obtain the road reserves required to upgrade both Selati and Ingersol Streets to this functional and aesthetic standard.

One possible approach could be to obtain the extra road reserve from developers in return for the approval of the office rights proposed along both these roads.

As a general principle the second and third order network in the Menlyn Node as reflected on Figure 29 should be the priority routes along which to provide for pedestrian movement by way of pedestrian walkways as these are also the most important public transport routes in the area. (Also refer to the Urban Design Guidelines and Framework (Figure 33) in section 3.4 of this document).

### 3.2.2.4. Gautrain

The Urban Development Framework as reflected on Figure 29 also acknowledges the status of Atterbury Road and Jacqueline Drive as being part of the Gautrain feeder system.

### 3.2.3. Proposed Land Use and Spatial Structure

As far as land uses are concerned, it was decided to link the land use categories defined in the Urban Development Framework for the Menlyn Node as closely as possible to the zoning categories as contained in the Tshwane Town Planning Scheme (2008) in order to enhance the compatibility between the UDF and the Tshwane Town Planning Scheme. Economic activities/land uses in and around the node were thus aligned with the following four zoning categories. (Refer to **Table 4**).

**Table 4: Zoning/Land Use Categories**

Business 1	Business 3	Business 4	Mixed Use
Business Building Dwelling-units Government Purpose Guest House Institution Light Industry subject to Schedule 10 Parking Garage subject to Schedule 10 Parking Site subject to Schedule 10 Place of Instruction Place of Public Worship Place of Refreshment Residential Building excluding Boarding House, Hostel and Blocks of Tenements Retail Industry Shop Social Hall Sport and Recreation Club Vehicle Sales Mart subject to Schedule 10 Vehicle Sales Showroom Veterinary Clinic	Bank Building Societies Dwelling-unit Office Medical Consulting Room Place of Refreshment Retail Industry Shop Veterinary Clinic	Dwelling-unit Medical Consulting Room Office Veterinary Clinic	Commercial Use (Excluding transport depot and distribution centres) Funeral Undertaker Retail Industry Showroom Business Building Dwelling Units Hotel Conference Place of Refreshment Place of Instruction Public Garage



**Business 1** represents the widest range of mixed uses and the highest intensity of development in the node, and is mainly reserved for the Menlyn core area between Genl Louis Botha Drive, Atterbury Road, Garstfontein Road and the N1 freeway as depicted in red on Figure 29. This category includes retail facilities, residential development and office development in the wider sense of the word. In terms of the previous Menlyn Nodal plan this is also the area of highest intensity. (It should be noted that the Hazelwood Centre has Business 1 zoning, and therefore this site was also included under this category on Figure 29).

The second category is **Business 3** which is mainly reserved to provide for shopping centre development in and around the node. As illustrated on Figure 29 the Menlyn Urban Development Framework acknowledges and maintains the status of all the existing shopping centres within the node which include the following:

- Menlyn Shopping Centre: Super Regional
- Menlyn Maine: Small Regional (Current application)
- Menlyn Retail Park: Community Centre
- Hazelwood: Neighbourhood Centre
- Waterglen Park: Neighbourhood Centre
- Glenwood: Local Convenience Centre
- Newlands Plaza: Local Convenience Centre
- Proposed New Alphen Park: Local Convenience Centre

- Various corner shops throughout the area.

The only new proposal as far as shopping centres are concerned is that the area between Nuwe Hoop Street, Selati Street, Garsfontein Road and the Pro Arte School to the west of the freeway be earmarked as Business 3 which would allow the future establishment of a local convenience centre in this block. Detailed market research/feasibility studies will however have to be done before any applications can be approved in this regard.

The site is strategically located between Selati and Nuwe Hoop Streets which will be the two main north-south movement routes to the west of the freeway, with Selati intended to mainly serve the regional traffic, and Nuwe Hoop Street to serve the local surrounding residential communities. As a result, this retail facility will perform a dual function serving the needs of both the surrounding office workers and residents located to the west of the N1 freeway.

**Figure 30** illustrates the current spatial distribution of shopping centres in and around Menlyn Node, and it also indicates the proposed new Small Regional Centre at Menlyn Maine, and the proposed Local Convenience Centre at Alphen Park. It is clear from this that the Local Convenience Centre at Alphen Park will complete a pattern of distribution of Local Convenience Centres comprising the Newlands Plaza, Serene Shopping Centre, Glenwood, The Hillside, Menlo Centre and Club Shopping Centre.








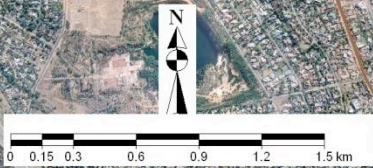
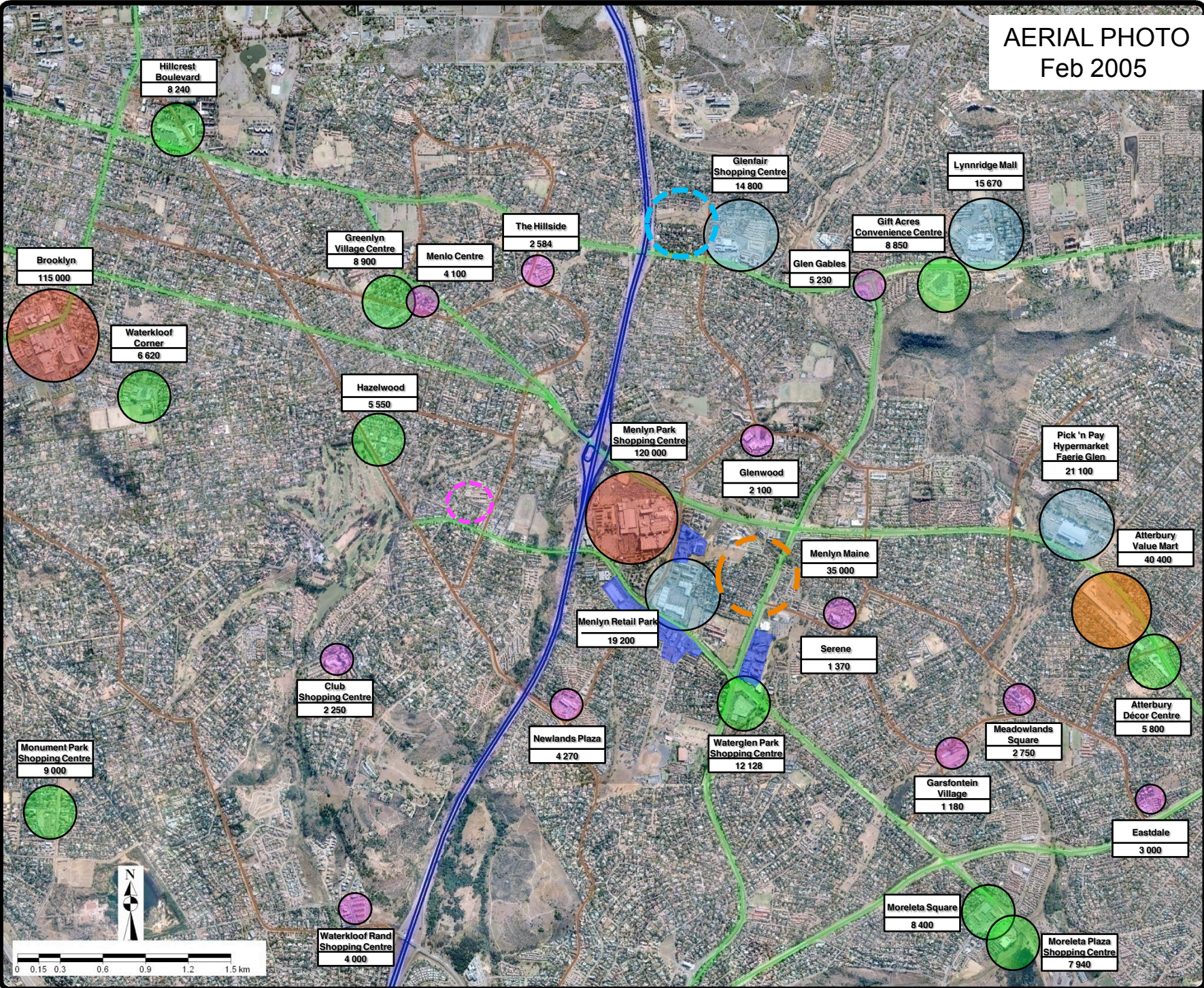
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Feb 2005

# MENLYN NODE

## URBAN DEVELOPMENT FRAMEWORK

### EXISTING AND PROPOSED SHOPPING CENTRES

-  Super Regional  
>100 000m<sup>2</sup>
-  Small Regional  
25 000 – 50 000m<sup>2</sup>
-  Small Regional  
35 000m<sup>2</sup>
-  Community Centre  
12 000 – 25 000m<sup>2</sup>
-  Proposed Community  
12 000 – 25 000m<sup>2</sup>
-  Neighbourhood  
5 000 – 12 000m<sup>2</sup>
-  Local Convenience  
5 000 – 12 000m<sup>2</sup>
-  Proposed  
Local Convenience  
5 000 – 12 000m<sup>2</sup>
-  Motor Trade and  
Dealerships





Essentially it will thus fill a spatial gap between the Menlyn Centre, Hazelwood Centre, and the Club Shopping Centre.

**Business 4** mainly represents office development and the spatial distribution of the proposed predominant office development throughout the study area is reflected on Figure 29.

The bulk of new office development is intended to be located in the area between Selati Street, Garstfontein Road, the N1 freeway and Atterbury Road to the west of the N1 freeway. From the situational analysis it was evident that this is a new growth area with the primary theme being office development. This plan thus confirms that Council can and should promote office development in this precinct which will form a mirror image to the Menlyn shopping centre on the eastern side of the freeway. By implication the core area of the Menlyn Node as defined in the 2005 Development Framework (refer to Figure 8) is thus expanded across the N1 freeway to include this precinct which is more or less of similar size as the Menlyn Shopping Centre precinct.

It is furthermore proposed that, apart from this precinct, office development should be allowed at the following areas, or along the following routes in and around the Menlyn Node (The detailed development guidelines/requirements for each of these areas are included in **Annexure B3** of this document):

- Along Garstfontein Road from the N1 freeway up to Dely Road;
- Along both sides of Selati Street/Twenty Sixth Street extending from Garstfontein Road in the south up to Charles Street in the north in Menlo Park;
- The section of Dely Road from the Garstfontein intersection up to Hazelwood Road in line with the previous proposals contained in the IDF for this precinct;
- Along Ingersol Road and extending in an easterly direction along Glenwood Road up to Faerie Glen Street in the eastern part of the study area;
- The area between Kelvin Street and Atterbury Road in Lynnwood Glen which, in line with the previous Menlyn Framework, will only be granted office rights if these properties can gain access from the south (Atterbury Road);
- Along Oberon Street/Jacqueline Drive southwards up to Serene Street in the vicinity of the Garsfontein police station on the eastern boundary of the study area;
- The small portion of office development adjacent to the Waterglen Park Shopping Centre along Garstfontein Road in the south-eastern part of the study area;
- The small section in the north-eastern quadrant of Genl Louis Botha Drive and Serene Street intersection;
- The section of Lois Avenue from Garstfontein Road up to the Newlands Plaza further towards the south at Dely Road;



- The section adjacent to the north of Atterbury Road between Genl Louis Botha Drive and the Hillside Street to the west. It should be noted that development pressure will increase in the north-western quadrant of the N1-Atterbury intersection around Acorn Street. Although it falls outside the Menlyn Study Area, it is suggested that Council should consider office development in this precinct in future. Office rights should, however, only be approved if access arrangements to Atterbury Road can be resolved to the satisfaction of the City of Tshwane. Given the strategic location of this site and the prevailing land use development trends in surrounding areas, Council may consider various alternatives to ensure a well-structured and long term solution to the problems experienced in this precinct.

From the situational analysis it was indicated that all of the areas highlighted above already experience significant development pressure - mostly associated with higher traffic volumes and intrusion of non-residential uses into these areas. These routes also coincide with major public transport routes and in that sense the redevelopment and intensification of land uses along these routes would thus support the objective of promoting and enhancing the utilisation of public transport throughout the study area.

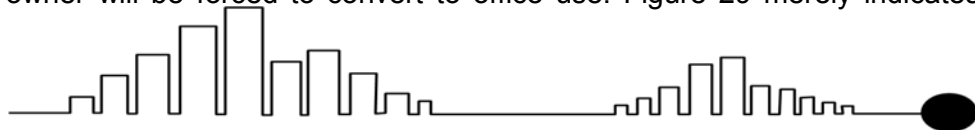
It should also be noted that existing residential uses in areas earmarked for Business 4 use retain their rights for residential use, and no property owner will be forced to convert to office use. Figure 29 merely indicates

that Council will favourably consider applications for Business 4 rights on these properties, should it receive such applications, but still subject to its standard conditions pertaining to access, parking, building lines, height etc.

## Mixed Use

The last category in this section is mixed use which mostly applies to the current developments to the south of Garstfontein Road and north-eastern quadrant of the Genl Louis Botha-Garstfontein Road intersection where there is a significant number of car dealerships and motor trade related activities (see Figure 29). There is a recent trend for the conversion of the motor trade to alternative uses. In principle the City of Tshwane do not wish to allow any of these motor trade related facilities to be converted to retail uses, and for this reason these sites cannot be earmarked for **Business 1** uses. It was thus decided to propose that these sites be earmarked as mixed use with the intended range of land uses as illustrated in Table 4. Should the landowners wish to convert these facilities to alternative uses, the City of Tshwane would prefer office related and commercial uses to retail related uses.

It is also important to note that the property located in the south-eastern quadrant of the N1-Garstfontein Drive intersection must get access via Garstfontein Road in order to develop. No access should be allowed via Bali Street to the south as this will lead to the intrusion of non-residential uses into the adjacent Newlands residential area. The latest development



proposal for this site does comply with this requirement and was forwarded to the project team during the comment period (refer to Annexure A).

### 3.2.4. Residential Development

As far as residential development is concerned, it is suggested that all the remaining precincts to the north, east, south and west of the Menlyn Node be earmarked for residential purposes.

In terms of the Urban Development Framework and in line with the RSDF for the area, these areas are currently classified as Suburban Densification Zones, which imply that these areas could redevelop into Medium Density Residential Areas with densities higher than 25 units per hectare.

Following from the inputs received on the draft Menlyn UDF during the comment period, it was decided to further refine the proposals pertaining to residential densities in the study area. The following represents a brief summary of the approach followed in this regard:

The study area is served by various metropolitan public transport routes which include bus and taxi services, Gautrain feeder systems and BRT routes. In principle, the City of Tshwane supports higher density development along the public transport routes/corridors and within the Core Areas of the city. **Figure 31a** graphically depicts the functional areas around the proposed BRT stations in the Menlyn Node, as well as the

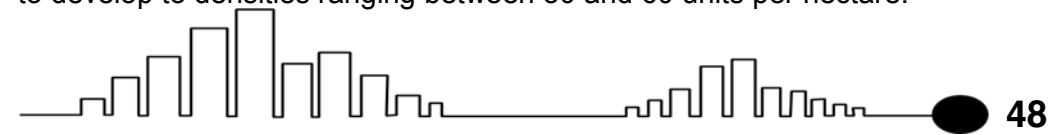
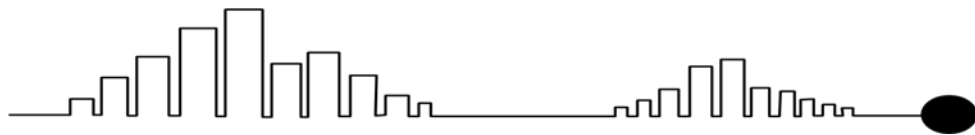
functional strips of land about 400 metres on both sides of the other major public transport routes (in this case Garstfontein Drive and Genl. Louis Botha Avenue). In terms of current Council policy all the areas located within these functional areas should be earmarked for higher density development.

**Figure 31b** provides a consolidated view on all the public transport functional areas included. From this it is evident that the majority of the study area is located within the public transport densification area which comprises a collective of public transport functional areas and the Menlyn Core area.

With this as background and basic point of departure, the more detailed density proposals as contained in **Figure 31c** were formulated.

In the Menlyn Core Area which represents the area of highest density and intensity of land uses (and which also overlaps with the functional areas of Atterbury Road, Garstfontein Road and Genl Louis Botha Drive) it is suggested that residential densities generally higher than 60 units per hectare be allowed.

All the surrounding residential areas which fall within the functional areas of the public transport routes/facilities are classified under the Linear/Corridor/BRT Zone, and it is proposed that these areas be allowed to develop to densities ranging between 30 and 60 units per hectare.



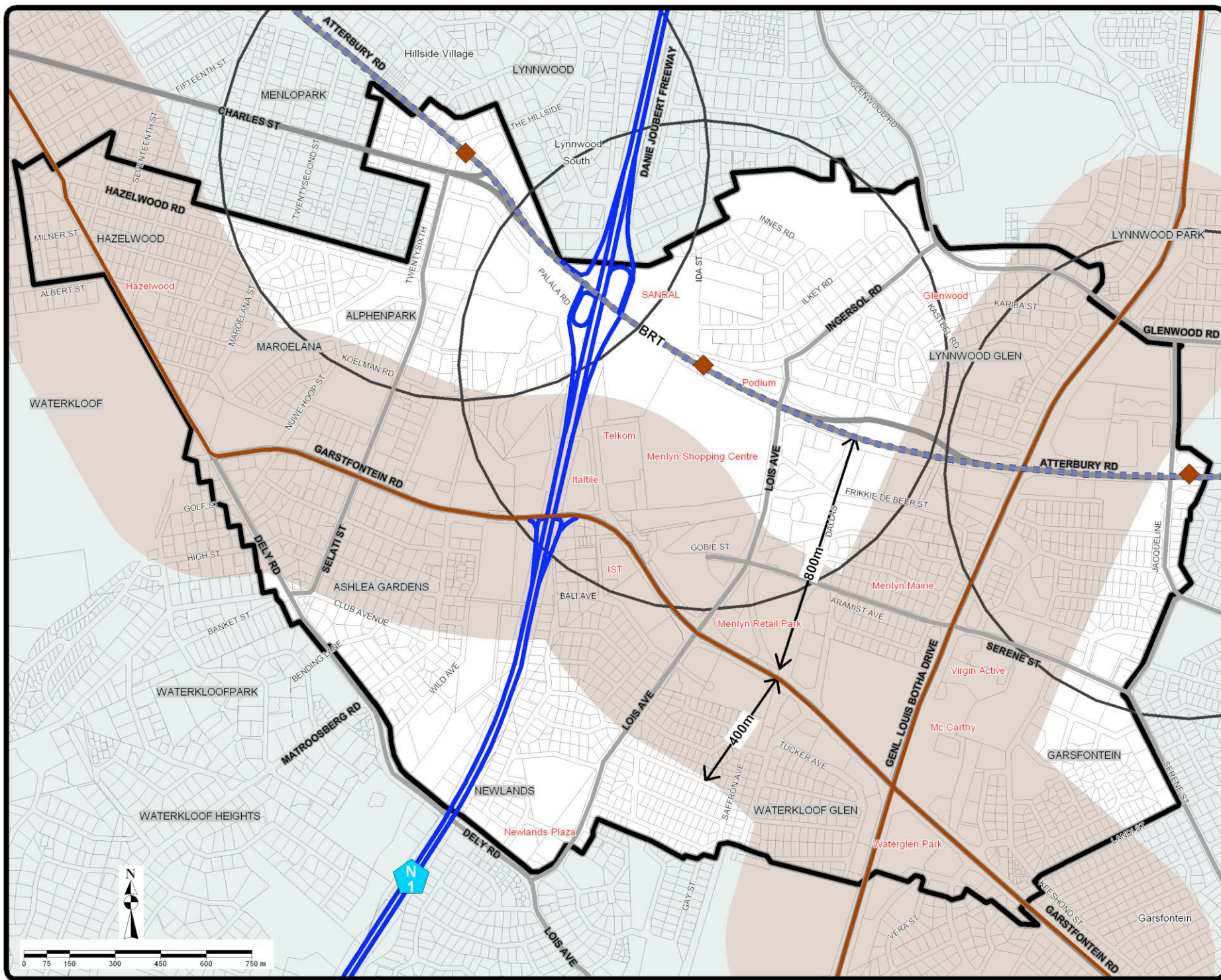


# MENLYN NODE

## URBAN DEVELOPMENT FRAMEWORK

## PUBLIC TRANSPORT FUNCTIONAL AREAS

-  BRT
-  BRT Stations
-  800m Radius Around BRT Stations
-  Public Transport Route
-  400m along Public Transport Route



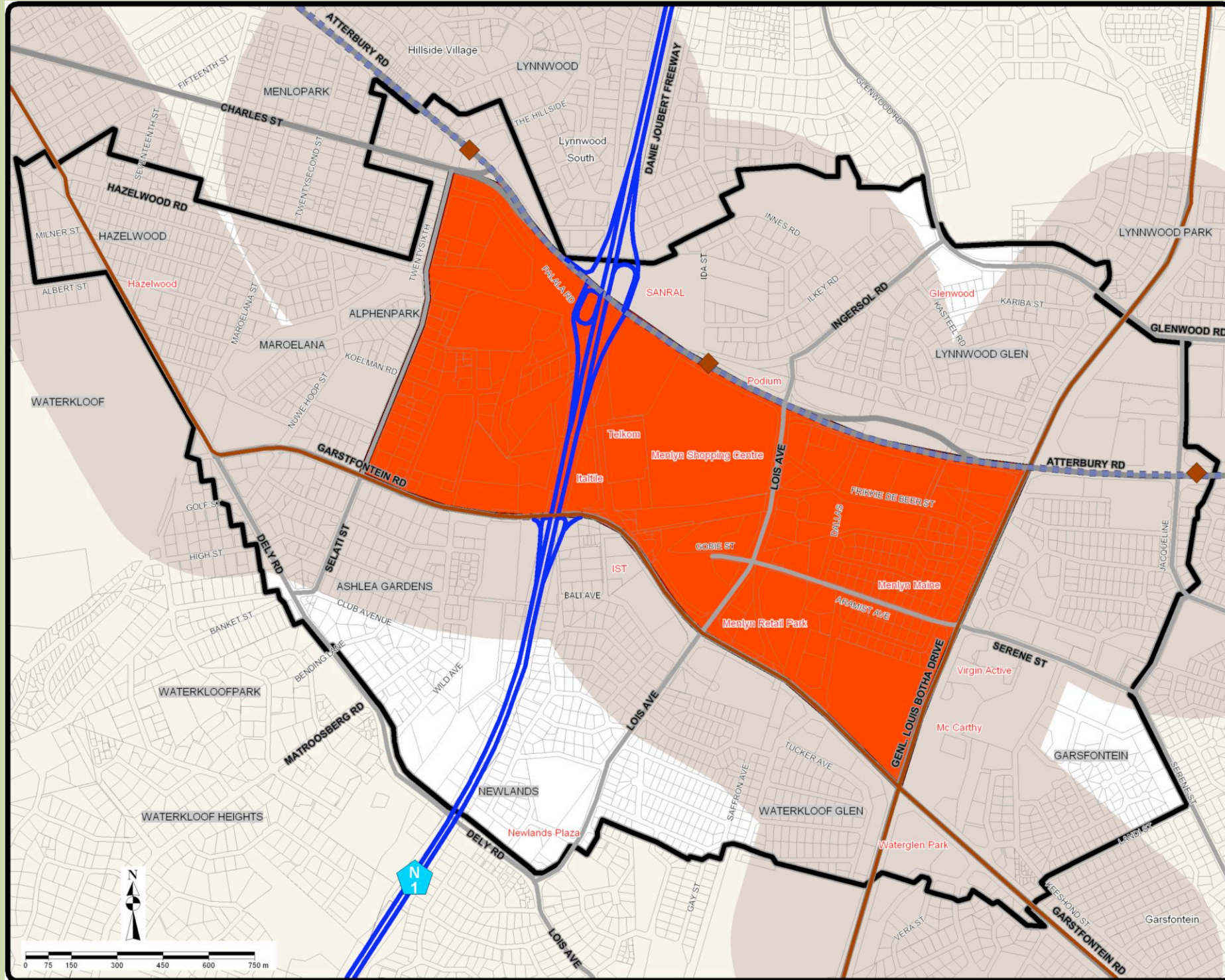


# MENLYN NODE

## URBAN DEVELOPMENT FRAMEWORK

### CONSOLIDATED PUBLIC TRANSPORT DENSIFICATION AREAS

- Core Area
- Public Transport Functional Area







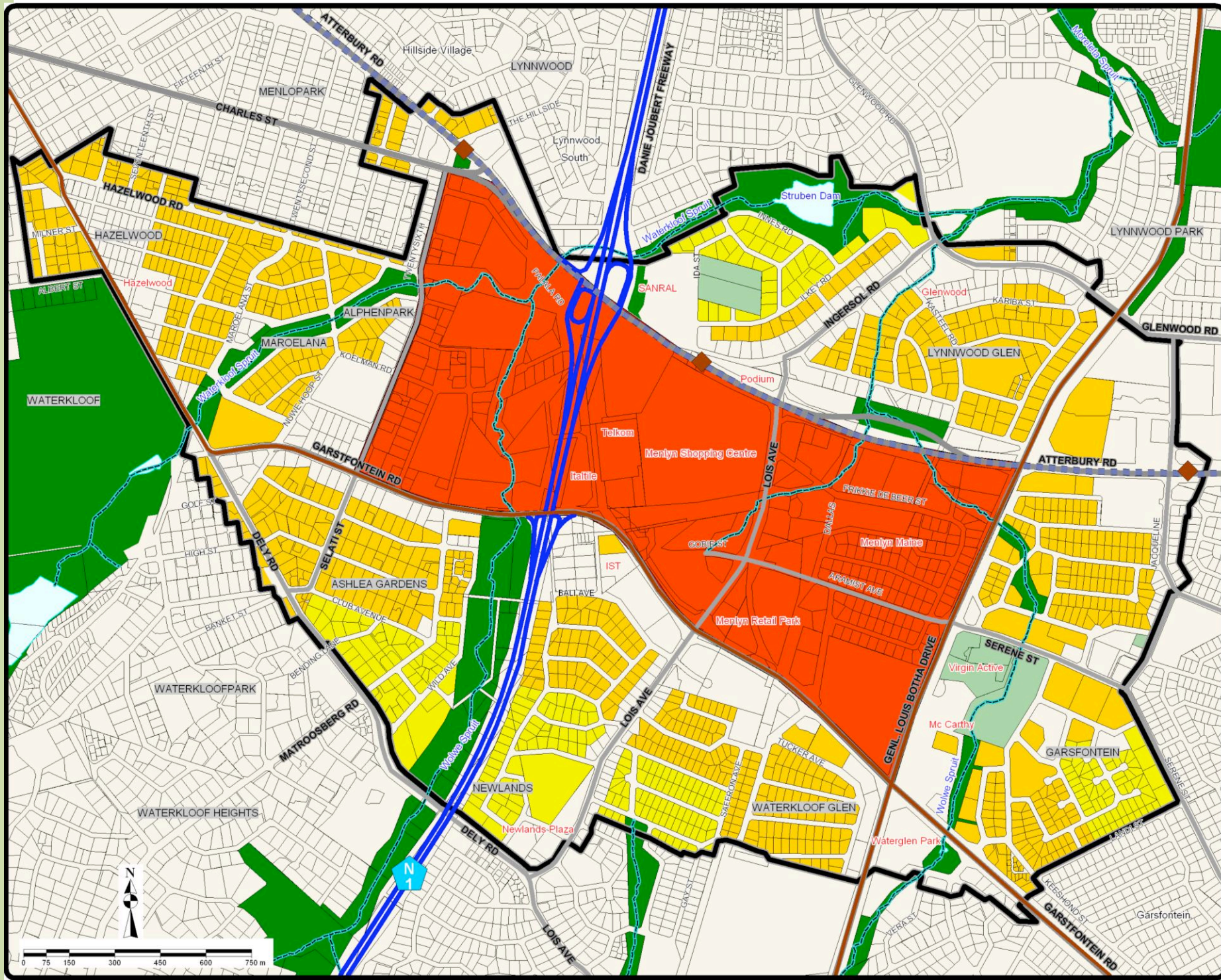


# MENLYN NODE

## URBAN DEVELOPMENT FRAMEWORK

### RESIDENTIAL DENSITY PROPOSALS

-  Study Area
-  Core Area (60+/ha)
-  Linear / Corridor / BRT (30 - 60/ha)
-  Suburban Densification Minimum 25/ha





One exception in this regard is the Lynnwood Glen area to the west of Ingersol Drive which also borders onto the Waterkloof Spruit and Struben Dam. This is a high quality residential area which functions as an extension to the adjacent regional open space system, and which has no direct access to Atterbury Road or the central and southern sections of Ingersol Road. It is thus functionally fairly far removed from Atterbury Road and the proposed BRT System. This could change if direct access is provided by means of pedestrian access through right-of-way servitudes.

It is proposed that the row of erven fronting onto Ilkey Road be earmarked for densities between 30-60 units per hectare in order to create an interface with the office uses to the south; and that the remainder part of the area be earmarked as Suburban Densification Zone with densities up to a minimum of 25 units/hectare (in line with the RSDF proposals).

The three remaining parts of the study area (the south-eastern section of Garsfontein and the southern parts of Newlands and Ashlea Gardens) which fall outside the Core Area and the public transport functional area, are then classified as being part of the Suburban Densification Zone where minimum densities of 25 units per hectare will be applicable for redevelopment purposes.

On **Figure 31d** the existing medium and higher density residential developments in the study area are superimposed over the various proposed density zones. From this it is evident that a fair number of

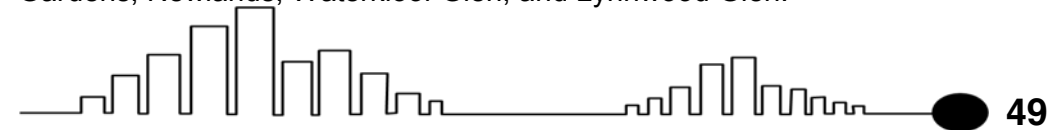
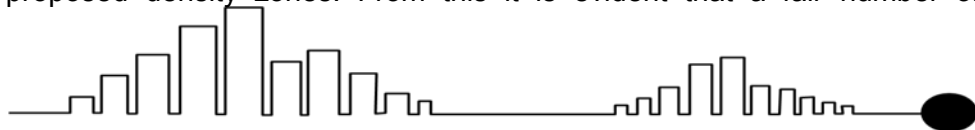
properties located in the Linear/Corridor Zone have already been developed at medium to high densities.

It is important to note that Figure 31c should be read together with Figure 29 (the Menlyn Urban Development Framework) as it provides the detailed density proposals for the residential use indicated on Figure 29.

It is however important that densification not be promoted purely for the sake of densification. The overall objective should still be to create a wide variety of housing typologies at varying densities ranging from low density, single residential precincts, to high density bachelor apartments in the Menlyn Core Area.

All applications for residential densification should thus be dealt with on merit, and with due consideration to aspects such as the proposed size of the development, the height, availability of parking, the privacy of adjoining owners, unit sizes, the size of the property itself, adjoining uses, the proximity to public transport facilities, and the overall quality of the development.

As part of this process the project team analysed the average size of various medium to high density dwelling complexes in the surrounding areas of Lynnwood, Menlo Park, Moreleta Park, Faerie Glen, and Garsfontein, as well as areas within the Study Area like Maroelana, Ashley Gardens, Newlands, Waterkloof Glen, and Lynnwood Glen.



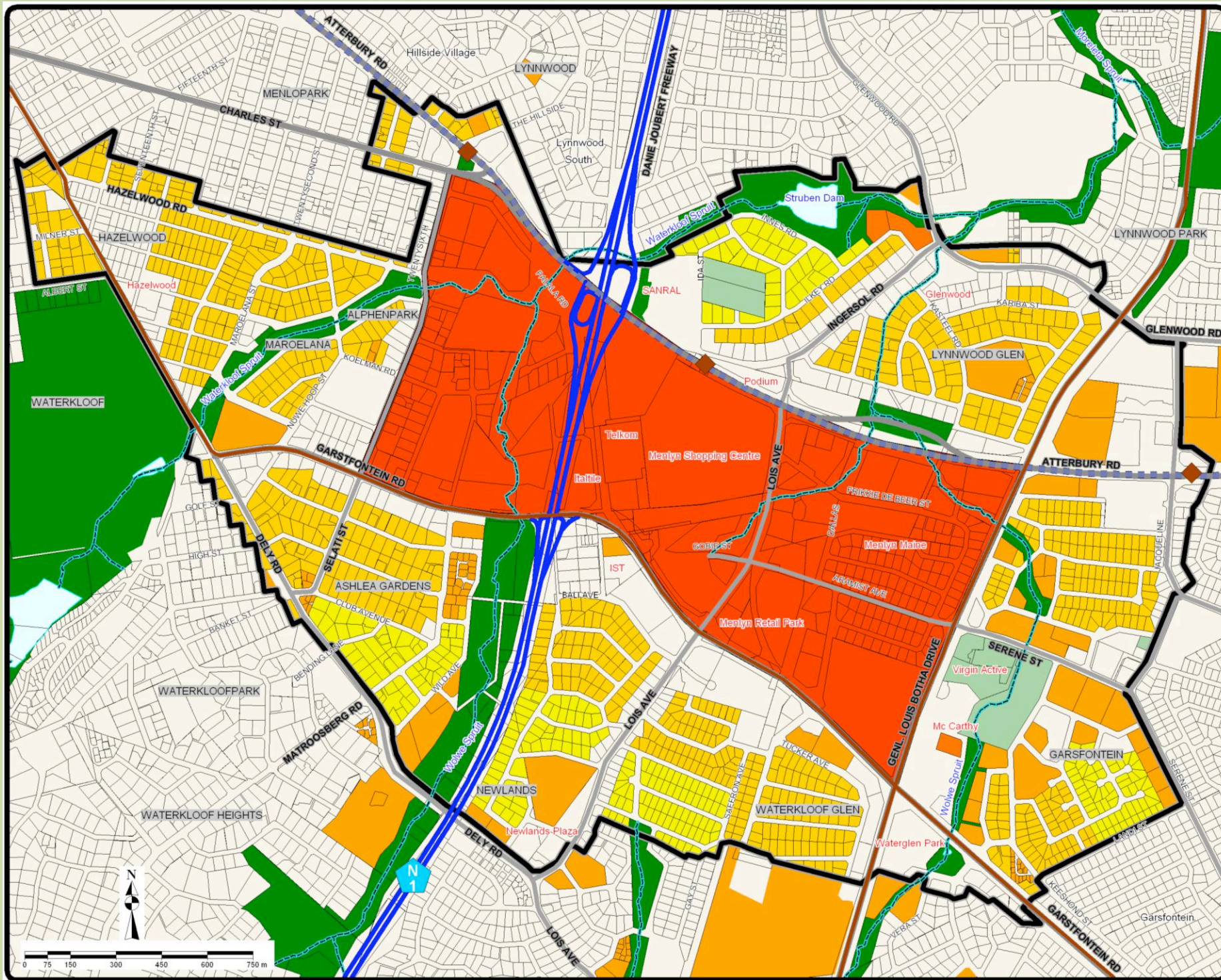


# MENLYN NODE

## URBAN DEVELOPMENT FRAMEWORK

### RESIDENTIAL DENSITY PROPOSALS (Including Existing Residential)

- Study Area
- EXISTING MEDIUM DENSITY**
- High Density (40+ du/ha)
- Medium Density (20 - 40 du/ha)
- Home for the Aged/Church
- PROPOSED RESIDENTIAL DENSITIES**
- Core Area (60+/ha)
- Linear / Corridor (30 - 60/ha)
- Suburban Densification Minimum 25/ha
- Public Open Space
- Sport and Recreation Clubs/Sports Grounds
- BRT
- Public Transport Route
- 3rd Order Route
- BRT Stations





The average size of such developments (townhouses) in all these areas is about 1,9 hectares per development; which translates to about 12 residential erven based on the average erf sizes in the respective areas.

The smaller townhouse developments averaged about 0,4 hectares per development and comprised about 3 to 4 residential erven based on the average erf size of the surrounding areas.

In order to prevent a large number of small and fragmented, high density developments scattered throughout the Menlyn Node area, it is thus suggested that Council should encourage the consolidation of erven to a minimum of about 0,4 hectares per such development in order to allow for sufficient parking, open space, access management, and privacy in medium to high density residential developments. This is, however, only a broad guideline.

In addition to the above, it is suggested that all applications for medium to high density residential developments in the study area be in compliance with the Design Considerations for Higher Density Housing as contained in the Tshwane Compaction and Densification Strategy (May 2005). These guidelines are included in **Annexure B1** of this document, and deal with aspects such as Urban Context, Building Envelope, Building Layout and Design, Streetscape, and Open Space and Landscape Design.

## 3.2.5. Summary of Development Proposals per Functional Area

The development proposals reflected on Figure 29 and Figure 31d and discussed in sections 3.2.1 to 3.2.4 above are briefly summarised as follows:

### a) Menlyn Core Area

The Menlyn Core Area is broadly defined as the area between Atterbury Road to the north; Genl Louis Botha Avenue to the east; Garstfontein Road to the south; and Selati Street to the west.

It does, however, also include the strip of proposed office development fronting to the north of Atterbury Road; the mixed uses, retail and office uses to the east of Genl Louis Botha Avenue; the mixed uses and office use fronting onto Garstfontein Road to the south; and the office and retail uses proposed adjacent to the west of Selati-Twenty Sixth Street.

In general, the intension is that the land located within the Menlyn Core be optimally utilised and be developed to the maximum density (60+ units per hectare) and intensity of activity in order to alleviate the pressure on horizontal expansion of the node, and thus to protect the surrounding residential areas from intrusion of non-residential activity.



# MENLYN NODE & SURROUNDING AREAS UDF



In support to this approach, the City of Tshwane needs to ensure that the infrastructure (roads, water, sanitation, electricity, and stormwater) is upgraded and maintained to the standard required to sustain development to the scale intended in the Core.

In the long term it will be more cost efficient for the City to absorb the development pressure and to consolidate its infrastructure investment in the Core area, than to continuously do ad-hoc upgrading and expansion of its infrastructure wherever development pressure expands horizontally into surrounding residential areas.

The central section of the Core between the N1 freeway and Lois Avenue is well-established with some limited capacity for infill development on small pockets of land, and/or redevelopment and intensification of specific uses e.g. office uses to the south of the Menlyn Shopping Centre.

The eastern section of the Menlyn Core between Lois Avenue and Genl Louis Botha Drive is in the process of redevelopment with the Menlyn Maine development being the major initiative in the area.

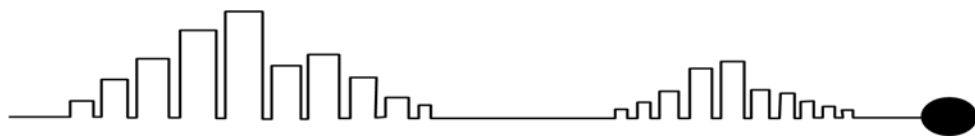
Of critical importance to the future sustainability of this area is the finalisation of the internal road network, and linkages to the surrounding Lois Avenue, Genl Louis Botha Drive, and Atterbury Road.

Development in the western section of the Menlyn Core between the N1 freeway and Selati Street is not as far advanced as the areas to the east of the freeway. Where retail makes up a large component of the land use composition in the central and eastern sections of the Core, the focus in the western section is more on office development.

Similar to the eastern section of the Menlyn Core, the road network in the western section needs to be designed and finalised as a matter of urgency in order to obtain the additional road reserves required while the area is in a process of redevelopment.

It is furthermore important that the community facilities clustered in the northern section of this precinct between Atterbury Road and Twenty Sixth Street be retained. In order to enhance the financial viability and sustainability of these facilities it is proposed that the City of Tshwane allows the redevelopment of these facilities with office uses being incorporated with the community facilities.

The same principle should apply to all the clubs and facilities located in this area, but the most important condition is that the community facility/service should be retained and/or be incorporated into the new developments.





## b) Hazelwood, Maroelana and Alphen Park

The Menlyn UDF suggests that the residential character of this precinct be retained, but that residential redevelopment and densification to 30-60 units per hectare be supported by Council.

As far as business uses are concerned, it is proposed that the areas adjacent to the east of Dely Road be earmarked for Business 1 and Business 4 uses which is in line with what the 2001 IDF document proposed for the area. The Hazelwood Centre will act as Neighbourhood Centre to the surrounding residential communities, while the proposed Local Convenience Centre proposed to the south of the Pro Arte School will be primarily aimed at serving the surrounding office uses in the western section of the Menlyn Core.

The existing fire brigade service located in Hazelwood should be maintained while the importance of the Waterkloof Spruit as a regional open space system will be amplified with the increased number of residential units resulting from the envisaged residential densification in the area.

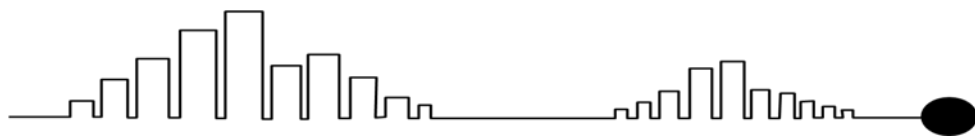
## c) Menlo Park and Lynnwood around Atterbury and Charles Streets

This precinct comprises a small residential component around Twenty Fourth Street in Menlo Park, and along Atterbury Drive and the southern end of The Hillside Street in Lynnwood. There is a proposed future BRT station located in the centre of the precinct, and as a result all these residential erven may redevelop to densities ranging between 30 and 60 units per hectare.

The remainder part of the precinct is earmarked for Business 4 and Mixed Use purposes, with the main focus being office development.

There are serious road network related problems around the Atterbury-Charles-Twenty Sixth and The Hillside intersections which need to be resolved as a matter of urgency due to the mounting development pressure in this precinct.

Care will also have to be taken that access arrangements to new office developments in the precinct do not compromise the residential character of the surrounding Menlo Park and Lynnwood areas.

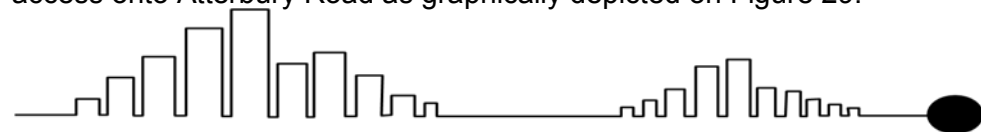


## d) Lynnwood Glen

The portion of Lynnwood Glen to the west of Ingersol Road is earmarked for a combination of medium (30-60 units per hectare) and lower densities (minimum of 25 units per hectare) in line with the Suburban Densification Zone category, and current densities as approved in the RSDF for the area.

It is furthermore proposed that the office uses around the southern end of Ingersol Road be extended along the central and northern parts of Ingersol Road up to the Glenwood Local Convenience Centre. This will only apply to the first row of erven on both sides of Ingersol Road, and with a 2 storey height limitation. The office developments will front onto Ingersol Road, and care will have to be taken that the rear side of the offices facing towards the adjacent residential areas do not impede on the privacy of the residents, and that these be of highest aesthetic quality. The aesthetic standards and qualities achieved along Ida Street on the southern border of Lynnwood Glen should thus be maintained and extended all along Ingersol Drive.

The eastern section of Lynnwood Glen is earmarked for densification ranging between 30 and 60 units per hectare, while the approval of non-residential uses (Business 4) along the southern boundary of this area adjacent to Atterbury Road will be subject to these properties having direct access onto Atterbury Road as graphically depicted on Figure 29.



## e) Faerie Glen and Garsfontein east of Genl Louis Botha Avenue

This area includes the following range of land uses – most of which already exist:

- The office developments along Glenwood Drive and Oberon Street up to Atterbury Road;
- The Faerie Glen Hospital and the local convenience store and filling station to the west thereof;
- A linear strip of office uses (Business 4) along Jacqueline Drive and southwards along Winifred Street towards the Garsfontein Post Office and Police Station and the local convenience centre at Serene Street;
- The Virgin Active Centre and surrounding sports and recreation facilities;
- The motor showrooms and service areas along Genl Louis Botha Avenue and up to Garsfontein Road;
- The Waterglen Park Neighbourhood Shopping Centre and the office uses (Business 4) directly adjacent to the east thereof;
- A residential core area comprising a number of existing medium- to higher density townhouse and retirement village complexes (refer to Figure 31d).



The Menlyn UDF proposes that the area be allowed to densify in future to densities ranging between 30 and 60 units per hectare as virtually the entire area falls within the influence sphere of three prominent public transport routes: Atterbury Road, Garstfontein Road and Genl Louis Botha Drive (see Figure 31c). The average erf size in the area is however relatively small ( $\pm 600\text{m}^2$ ), and erven will thus have to be consolidated (about 6 to 10 at a time) to provide for viable group housing developments. The existing residential character of the area (catering for both young and older people) should thus be further enhanced.

The Serene Street-Genl Louis Botha Drive intersection is earmarked for Business 4 purposes, but this will be subject to meeting the access requirements of the City of Tshwane. (Refer to Annexure A for development proposal submitted).

## f) Waterkloof Glen and Newlands

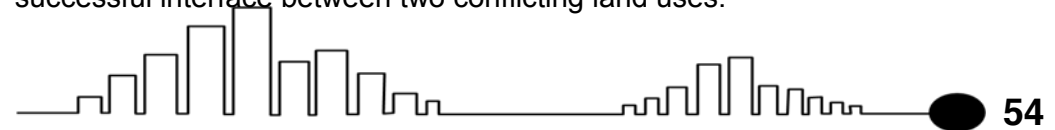
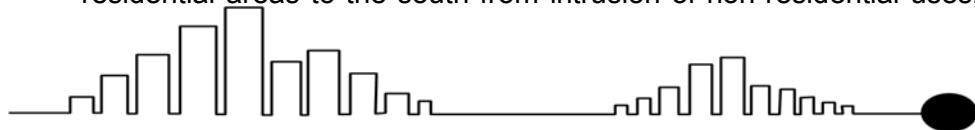
This precinct comprises the following four significant features:

- The Mixed Use strip-like development adjacent to the south of Garstfontein Road which is almost fully developed. All these properties gain access directly from Garstfontein Road and this principle will also apply to the property located between the IST offices and N1 freeway. Several measures are in place to protect the residential areas to the south from intrusion of non-residential uses,

and these should be maintained at all cost. (Refer to Annexure A for development proposal submitted).

- There is, however, an opportunity to allow low intensity office uses (2 storeys) on both sides of Lois Avenue southwards up to Newlands Plaza.
- The Newlands Plaza which is located at the intersection between Dely Road and Lois Avenue performs the function of a Local Convenience Centre.
- The residential core of the area of which the northern and eastern sections closest to Garstfontein Road and Genl Louis Botha Avenue are earmarked to cater for densification ranging between 30 and 60 units per hectare; and the southern sections where densification to a minimum of 25 units per hectare will apply (refer to Figure 31c). Several pockets of land in and around this node already comprise medium density residential development (see Figure 31d).

The eastern section of Waterkloof Glen adjacent to Tucker Avenue represents one of the finest examples of how the interface between business uses and a residential area should be managed. Apart from the detailed attention given to the architectural design of the back-side of the business buildings facing towards the residential areas; the height and scale of the buildings, distance removed from the erf boundary, the quality of the fencing walls, lighting, and sidewalk landscaping (grass, shrubs and trees) all contribute towards an aesthetic pleasing environment and successful interface between two conflicting land uses.





These principles should be extended and applied not only towards the western parts of Waterkloof Glen (around the substation) and towards Bali Street in Newlands, but to all areas in the Menlyn Node where business uses border onto residential areas.

If the residential quality and ambience of an area cannot be maintained, then it is inevitable that land use change will take place and non-residential uses will intrude into the area. The careful design and management of these interface areas, which effectively represent the nodal boundaries, are thus a critically important component to containing the horizontal expansion of the Menlyn Node.

## **g) Ashley Gardens**

The Ashley Gardens precinct comprises medium to higher density residential development proposed for the area located within the functional area of Garstfontein Road (north of Club Avenue), and the southern residential portion between Club Avenue and Deli Road where densification to a minimum of 25 units per hectare will be supported.

Business 4 uses are proposed along Garstfontein Road up to Dely Road, and it also includes the entire triangular area between Dely Road, Garstfontein Road and Nuwe Hoop Street. The supplementary land uses provided at this location could be beneficial to the development of offices, and it is thus suggested that the small scale restaurant and galleries

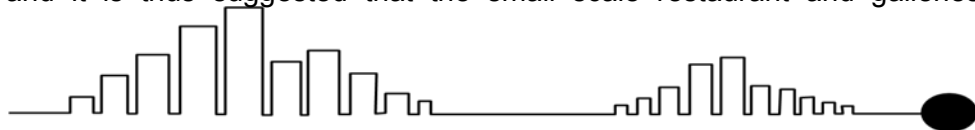
currently located in this area be retained when the site is redeveloped. The redevelopment of this site will also be subject to meeting the access requirements as stipulated by the City of Tshwane.

No non-residential uses are to be allowed along Selati Street between Garstfontein and Dely Road.

### **3.2.6. Development Guidelines and Controls**

As far as development guidelines and controls are concerned it is suggested that the Menlyn Urban Development Framework only deal with height restrictions for the various land use categories in the various parts of the Study Area.

The current Town Planning Scheme of the City of Tshwane allows for a range of FSR and coverage categories to be applied for, based on the specific characteristics of the site and its surrounds. The intention is thus to leave these variables open for developers to determine what can best be achieved on each individual site, subject to the height and zoning restrictions imposed on the area in terms of the Menlyn Urban Development Framework, and subject to the availability of engineering services, parking and a variety of related factors.



The rationale for the height restrictions in the various parts of the study area as reflected on **Figure 32** can be summarised as follows:

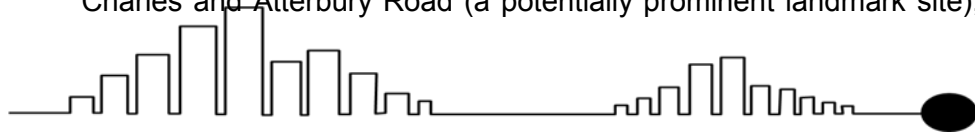
- The height/intensity of development should be highest in the central core area of the Menlyn Node (on both sides of the freeway), from where it should gradually taper down in all directions before merging into the surrounding residential areas, and with due consideration to precedents created by current approved rights and/or existing buildings.
- The central core area which is earmarked for Business 1 uses thus has a limit of 24 storeys (based on certain rights already approved in the area).
- The second category limits development at 16 storeys and is allocated to the eastern part of the office precinct to the west of the N1 freeway, closest to the freeway.
- The next category is set at a maximum of 10 storeys in order to accommodate the existing blocks of flats in the area between Frikkie de Beer and Atterbury Road, but it also applies to the central part of the western section of the Menlyn Core, and the two southern quadrants of the N1-Garstfontein Road intersection, and the northern quadrant of the N1-Atterbury Road intersection.
- The 6 storey category is applied to the office developments to the east along Selati Street; the Hazelwood retail component (existing rights); the proposed office precinct at the intersection between Charles and Atterbury Road (a potentially prominent landmark site);

as well as the linear strip of development along Atterbury Road; and at the Glenwood Offices and Shopping Centre.

- From here the height restrictions gradually taper off to 4 storeys along the major arterials in the areas abutting residential areas; and in the areas along Ingersol Road, Glenwood Road, Jacqueline Drive, Lois Avenue South, and Garstfontein East and surrounds, the height restrictions are reduced to 2 storeys maximum in order to blend in with the surrounding residential character (see Figure 32).
- The linear/corridor densification zones as reflected on Figure 31c could comprise 3 storey residential development as 40 units per hectare and more normally require a 3 storey development and higher.

### 3.3. Development Scenarios Quantified

It is important to quantify the development potential as contained in the proposed Urban Development Framework for the Menlyn Node in order to determine the impact it will have in terms of increased demand for water, sanitation, electricity, as well as the increased traffic impact on the area. The proposed land uses contained in the development framework were thus quantified according to two scenarios, and the results of this exercise are reflected in **Table 5** below.



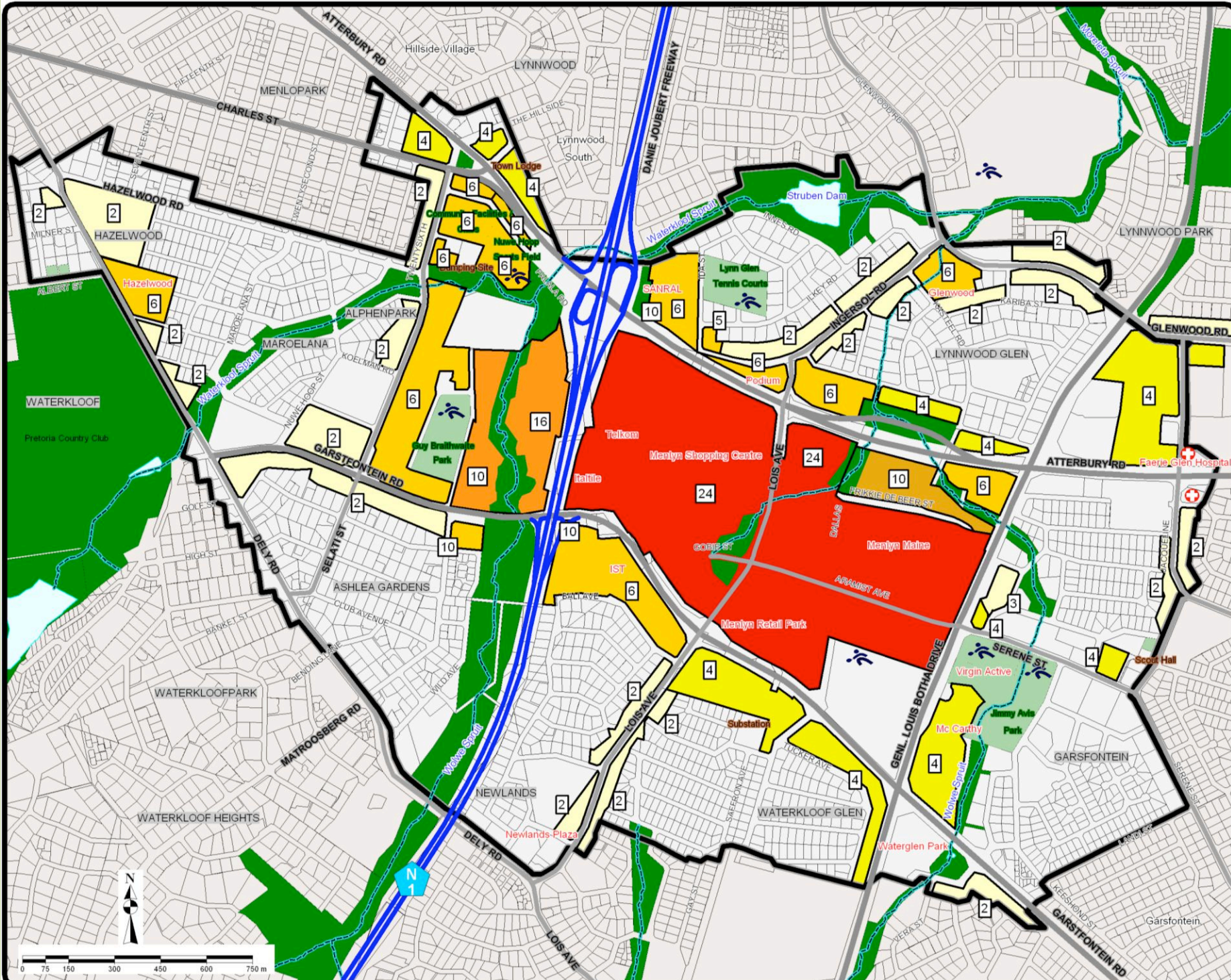


# MENLYN NODE

## URBAN DEVELOPMENT FRAMEWORK

### HEIGHT CONTROL ZONES

- Study Area
- Height of Buildings
- Up to 24 Storeys
- Up to 16 Storeys
- Up to 10 Storeys
- Up to 6 Storeys
- Up to 4 Storeys
- Up to 2 Storeys
- Sport and Recreation Clubs / Sports Grounds
- Public Open Space
- Height of Buildings
- Freeway
- Main Roads





# MENLYN NODE & SURROUNDING AREAS UDF



**Table 5: Menlyn Area: Approved Rights, Current Applications, Scenarios 1 and 2**

ZONES	SCENARIO 1						SCENARIO 2					APPROVED, CURRENT APPLICATIONS, SCENARIO 1&2				
	RETAIL	OFFICE	HOTEL	OTHER	TOTAL		RETAIL	OFFICE	HOTEL	OTHER	TOTAL	RETAIL	OFFICE	HOTEL	OTHER	TOTAL
	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	%	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>
TOTAL WEST	26,288	285,319	0	0	311,607	75%	0	53,939	0	0	53,939	43,873	526,198	6,200	0	576,272
%																
TOTAL EAST	3,683	98,608	0	0	102,291	25%	47,280	227,430	0	0	274,711	467,888	824,164	33,800	7,952	1,333,805
%																
TOTAL	29,971	383,927	0	0	413,898	100%	47,280	281,369	0	0	328,650	511,761	1,350,363	40,000	7,952	1,910,076

The points of departure to the two development scenarios are as follows:

- Scenario 1**

In this scenario all sites earmarked for Business 1, 3, 4 and Mixed Use as depicted on Figure 29, and which are currently vacant or utilised for single residential purposes, are developed to full potential in accordance with the development parameters set in the Development Framework. In terms of this scenario the existing offices, retail and mixed uses are thus not redeveloped in order to utilise the full potential of those sites as defined in the Development Framework.

This is thus a relatively conservative approach which mainly focuses on the development of the vacant sites and properties currently used for single residential purposes in the Menlyn Node, and can be considered to be a very realistic scenario.

- Scenario 2**

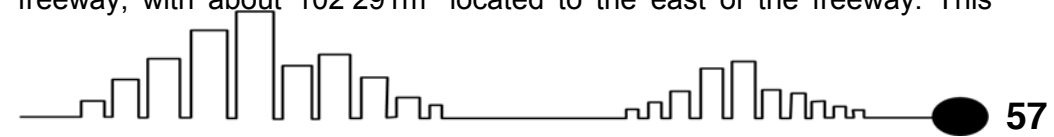
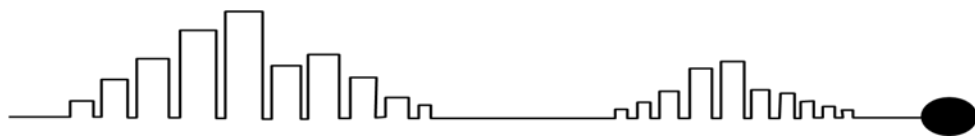
Scenario 2 includes all the developments included in Scenario 1, but in addition to this it assumes that the office, retail and mixed use market is so vibrant in the study area that it becomes financially viable to redevelop some of the existing office and retail developments in order to fully utilise the development potential of these sites as defined in the Menlyn Urban Development Framework.

In terms of this scenario several of the existing offices, retail facilities and motor showrooms (especially those around strategic intersections) are being redeveloped, and this floor space yield is then added to the yield of Scenario 1. Scenario 2 thus equals the yield of Scenario 1 plus the yield of Scenarios 2 and can be considered to be ambitious, although not unrealistic.

The following assumptions were made in the calculation of the scenarios:

- 20% coverage multiplied by the number of storeys allocated to all categories of Business and Mixed Uses.

If the Development Framework develops in accordance with Scenario 1, it is anticipated that it could add an estimated 29 971m<sup>2</sup> of retail space, and about 383 927m<sup>2</sup> of office space to the Menlyn Node (see Table 6). The bulk of this space (311 607m<sup>2</sup>) will be located to the west of the N1 freeway, with about 102 291m<sup>2</sup> located to the east of the freeway. This





# MENLYN NODE & SURROUNDING AREAS UDF



would bring the total incremental floor space for retail and office in the Menlyn Node to about 413 898m<sup>2</sup>.

If Scenario 2 materialises, it would add an additional 328 650m<sup>2</sup> of floor space to the Menlyn Node which would comprise about 47 280m<sup>2</sup> of retail space (all located to the east of the N1), and about 281 369m<sup>2</sup> of office space (the bulk of which will also be located to the east of the N1 freeway).

This would increase the total gross leasable floor area of the Menlyn Node to about 1 910 076m<sup>2</sup> as compared to the current 934 063m<sup>2</sup>.

**Table 6** provides a summary of exercised, latent, current applications, Scenario 1, and Scenario 2 related floor space in the Menlyn Node.

**Table 6: Menlyn Area: Existing and Potential Future Floor Space (Scenario 1 and 2)**

LAND USE RIGHTS	RETAIL	%	OFFICE	%	HOTEL	%	OTHER	%	TOTAL	%	CUM TOTAL	% CUM
Exercised	267,560	52%	240,217	18%	3,251	8%	0	0%	511,027	27%	511,027	27%
Latent	112,056	22%	296,687	22%	28,249	71%	6,700	84%	443,692	23%	954,719	50%
Current Applications	54,894	11%	148,163	11%	8,500	21%	1,252	16%	212,810	11%	1,167,529	61%
Scenario 1	29,971	6%	383,927	28%	0	0%	0	0%	413,898	22%	1,581,427	83%
Scenario 2	47,280	9%	281,369	21%	0	0%	0	0%	328,650	17%	1,910,076	100%
<b>TOTAL</b>	<b>511,761</b>	<b>100%</b>	<b>1,350,363</b>	<b>100%</b>	<b>40,000</b>	<b>100%</b>	<b>7,952</b>	<b>100%</b>	<b>1,910,076</b>	<b>100%</b>		
%	27%		71%		2%		0%		100%			

The currently exercised floor space totals about 511 027m<sup>2</sup>, with an additional 443 692m<sup>2</sup> as latent floor (undeveloped, approved rights) space, and about 212 810m<sup>2</sup> of floor space in terms of current applications which bring the total cumulative floor space to about 1 167 529m<sup>2</sup>.

Scenario 1 increases the floor space by an additional 413 898m<sup>2</sup> to bring the cumulative total to 1 581 427m<sup>2</sup>, while Scenario 2 adds another 328 650m<sup>2</sup> of floor space to the Menlyn Node to bring the cumulative total in terms of the Urban Development Framework reflected on Figure 29 to 1 910 076m<sup>2</sup>.

In terms of composition about 27% of the floor space will be retail related, 71% will be for office purposes, and about 2% for hotels.

If the current latent office space (296 687m<sup>2</sup>), as well as the office space included in the current applications (148 163m<sup>2</sup>), and the office space included in Scenario 1 are all developed in the next 20 years, this would result in an additional 828 777m<sup>2</sup> of office space which translates to about 41 439m<sup>2</sup> per annum. This is very close to the current estimated annual incremental demand (37 000m<sup>2</sup>) for office space in the area as determined by Demacon in a recent Menlyn/Lynnwood Office Market Study (February 2008).



# MENLYN NODE & SURROUNDING AREAS UDF



This confirms that it is highly likely that the Development Framework as reflected on Figure 29 could be fully developed (up to Scenario 1) within the next 20 years.

The key challenge would, however, be to ensure that the upgrading and expansion of engineering infrastructure takes place in tandem with the economic development in the Node.

As far as residential development is concerned, it is estimated that Scenario 1 could result in about 3132 additional residential units, accommodating about 9300 more residents in the Menlyn Node area.

Scenario 2 increases the incremental number of residential units to about 4066, with an estimated population of about 12 100 people.

The percentage of current single residential erven (Res 1) densified in terms of the two scenarios in the various residential neighbourhoods is reflected below. It should be noted that these are pure assumptions based on current trends, erf sizes and the existing character of these neighbourhoods. (**Annexure D** comprises a summary of the residential calculations conducted in the various zones which the study area was divided into).

NEIGHBOURHOOD	SCENARIO 1 Assumption: % of Res. 1 erven to be densified	SCENARIO 2 Assumption: % of Res. 1 erven to be densified
Hazelwood/Maroelana	60%	80%
Alphen Park	60%	80%
Ashlea Gardens	60%	80%
Waterkloof Glen	20%	40%
Newlands	30%	50%
Lynnwood Glen	20%	40%
Garsfontein (between Atterbury and Serene)	20%	40%
Garsfontein (between Serene and Garsfontein)	10%	20%

The above percentages were multiplied with the proposed residential densities shown on Figure 31c.

**Table 7** below summarises this information and also indicates the additional community facilities that would be required to serve the social needs of the incremental population.





**Table 7: Menlyn: Calculated need regarding Community Facilities**

LAND USE	SCENARIO 1		SCENARIO 2	
	no	ha	no	ha
<b>BASE DATA</b>				
Dwelling Units	3,132		4,066	
Population	9,299		12,103	
<b>Education</b>				
Primary	1.3	3.6	1.7	4.6
Secondary	0.5	2.2	0.6	2.8
<b>Community Facilities</b>				
Religious places	2.6	0.4	3.4	0.5
Clinic	0.9	0.1	1.2	0.1
Post Office	0.8	0.1	1.1	0.1
Police	0.4	0.0	0.5	0.0
Community Centre / Library	0.2	0.1	0.2	0.1
Municipal Office	0.2	0.1	0.2	0.1
Fire Station	0.2	0.1	0.2	0.1
<b>Open Space</b>				
Active		4.3		5.6
Passive		7.3		9.6

Note: Only difference between Scenario 1 & 2 is the rate of densification  
 Scenario 1: between 10% - 60% of residential 1 erven redeveloped  
 Scenario 2: between 20% - 80% of residential 1 erven redeveloped

From Table 7 it is evident that the impact is not that significant, and that it would at most require between 1 and 2 additional primary schools; about 3 religious places; 1 more clinic; and 1 more post office.

### 3.4. Site Development and Urban Design Guidelines

For the sake of consistency, and to avoid duplication, the development and design guidelines formulated for the Menlyn Node have been selectively extracted from, and are based on the guidelines presented by the following policy documents compiled by the City of Tshwane:

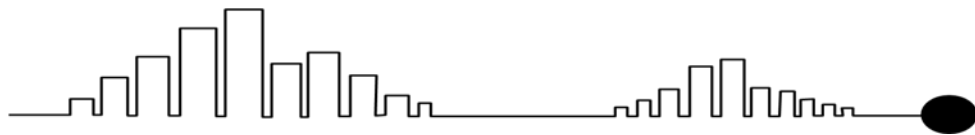
- The Tshwane Open Space Framework, 2005.
- Policy on the Design Quality of Hard Urban Spaces and Streetscape Elements, 2005.
- Guidelines for the Streetscape and Public Interface along Atterbury, Garstfontein, Lois Avenue, Dallas and Aramist, 2007.
- The Menlyn Node Spatial Development Framework, 2002

The Menlyn Node and surrounding residential areas play an important role in defining what the City is all about. In terms of the MSDF, the Menlyn Precinct is classified as a Metropolitan Core, which embeds and confirms its functional role and importance. Provided the symbolic and functional importance of the Node, it becomes important that the design of the built- and natural environment comprising this node ultimately displays this role and the intended vision for the Node. Unfortunately some recent developments and the general lack of attention to urban design measures have had a negative impact on the desired character for the Node, and as a result the success of the Node is not reflected in the quality of the existing public and private realms. Issues of great concern include:



- The general unfriendly environment for pedestrians and cyclists and the lack of public transport facilities.
- The general cluttering of signs, lamp poles and other service infrastructure.
- The vast array of advertisements, structures, billboards and other street furniture that exist – all individually designed and most incompatible with one another – has to a large degree compromised the character of the Node.
- Buildings and structures that do not contribute to the quality and spatial definition of the public environment and secondly, that are mostly poor in terms of architectural expression.
- A road network that is not legible, catering almost exclusively for motor vehicles. Critically, the two most important mobility routes, namely Atterbury and Garsfontein, are un-designed with no distinguishing features or elements that allude to their importance from a city structuring point of view.

The problems described above relate to the fact that hard urban spaces, such as streets, are merely regarded as road reserves, i.e. motor vehicle and service conduits. Consequently, they are frequently designed in a way that other activities, such as strolling, sightseeing, enjoying refreshments, people watching, window shopping and trading become unpleasant or, in extreme cases, even impossible.



In order to overcome these problems and to create a quality urban environment, several Urban Design Guidelines are proposed, as summarised in **Annexure B1 and B2** of this document. Importantly, these are not comprehensive in nature, but merely represent selected guidelines from existing policy documents to ensure that the urban environment comprising the Menlyn Node and surrounding residential areas meet at least the minimum requirements in terms of aesthetics, quality private and public spaces, and safe motorised and pedestrian environments.

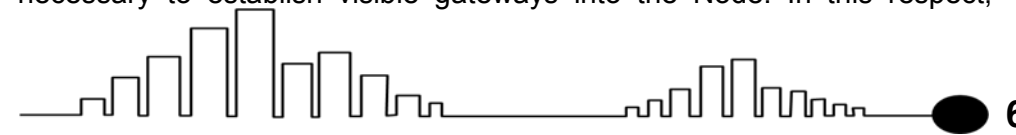
In addition to the abovementioned Urban Design Guidelines, it is suggested that the City of Tshwane also apply the Site Development Guidelines as reflected in **Annexure C** of this document to the various land use precincts as reflected in the Menlyn Urban Development Framework.

However, the following objectives/projects are proposed as short term priorities to be initiated by the City of Tshwane to improve the image, legibility and equitability of the Menlyn Node, in accordance with the proposed Urban Design Guidelines for the area as summarised in Annexure B (see **Figure 33**):

## Design Objective 1: Define the Menlyn Nodal Core

### Rationale:

To define the Menlyn Nodal Core and Enhance its sense of place, it is necessary to establish visible gateways into the Node. In this respect,



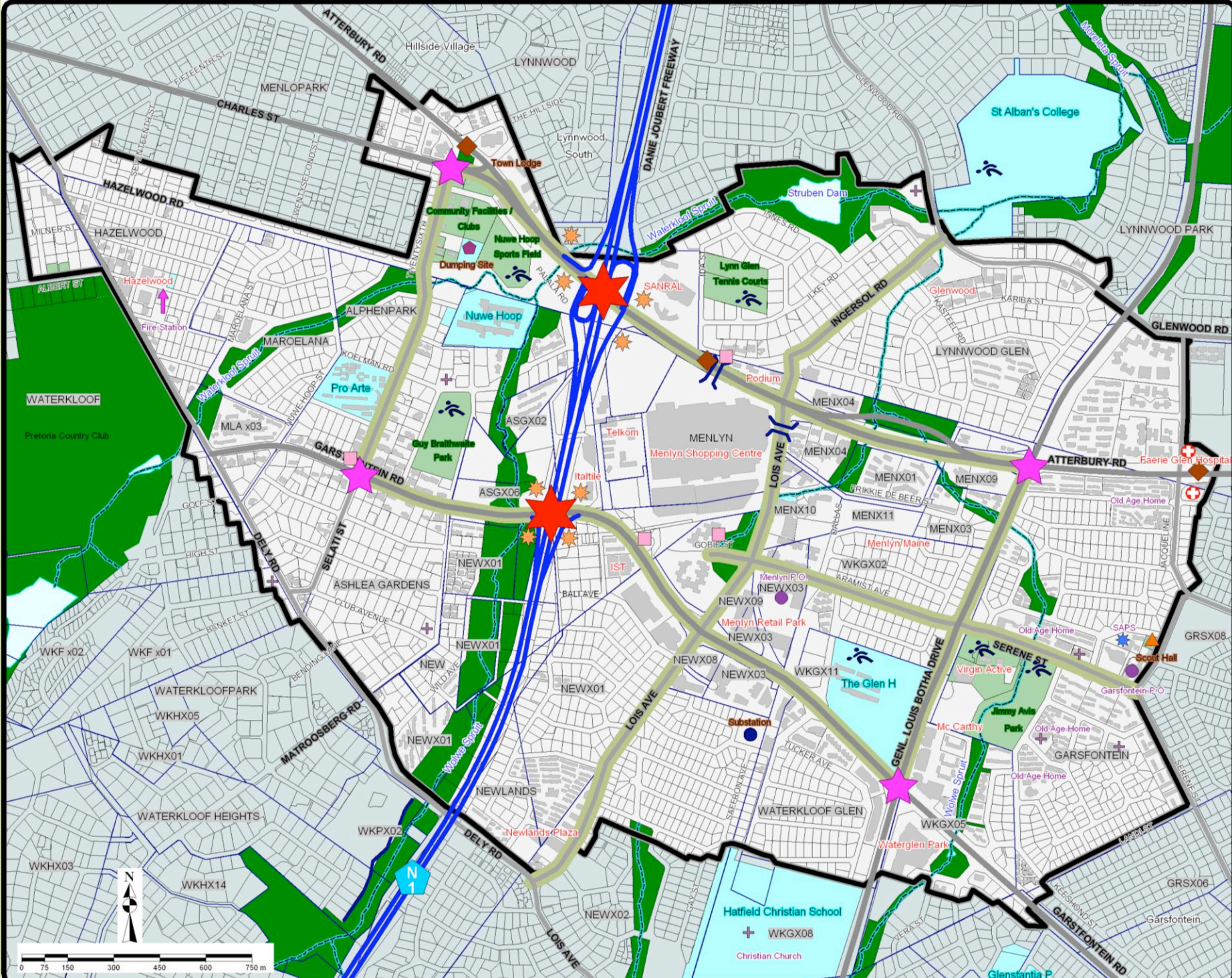


# MENLYN NODE

## URBAN DEVELOPMENT FRAMEWORK

### DESIGN GUIDELINES

-  Study Area
-  Educational
-  Sport and Recreation Clubs/Sports Grounds
-  Public Open Space
-  Footprint of Buildings
-  Hospital/Clinic
-  Church
-  Post Office
-  Police Station
-  Fire Station
-  Scout Hall
-  Dumping Site
-  Substation
-  Tennis Court
-  1st Order Route
-  Priority Pedestrian Route
-  Pedestrian Bridge
-  BRT Stations
-  Bus/Taxi Holding Facilities
-  Regional Gateways
-  Local Gateways
-  Landmark Buildings





Gateways are important in that they define a sense of place, give rise to legibility, define identity, and provide status to the urban environment of a node. Gateways can be defined in many ways, including the development of arches, fountains, boulevards, towers, parks, etc. There are many options and variations on the theme, but what remains important is that a uniform message is sent out about the identity of the Node when entering it.

One such example within the CoT is the Fountain Circle in conjunction with Freedom Park at the southern entrance to the City. The gateway is highly visible and its scale expresses a clear sense of arrival. Though the Fountain Circle is a successful gateway, it does not suggest that all other entrances be developed as fountains. Gateways can also be defined by way of landmark buildings which become important beacons in the mental maps of people e.g. the Ponti Building in Johannesburg, the Johnson and Johnson Building or Vodaworld buildings along the Ben Schoeman freeway, or the Union Buildings and Telkom tower in the City of Tshwane. However, whilst applying different design styles and architecture to the different gateways, one thing must be retained: the sense of identity that is to be established. The establishment of landmarks and gateways should continually reinforce this message.

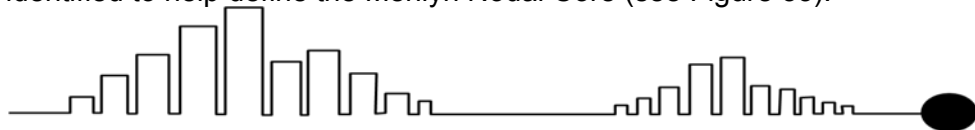
## Focus Areas:

Two Regional and four Local Gateways to the Menlyn Node have been identified to help define the Menlyn Nodal Core (see Figure 33).

The two Regional Gateways are located at the Atterbury and Garstfontein access interchanges onto the N1 freeway respectively, which is also in line with the Red Node status assigned to these two precincts in the Tshwane Open Space Plan. The four Local Gateways define the four corners of the Menlyn Core Area and are located at Garstfontein, Selati, Atterbury and Genl Louis Botha Drive as reflected on Figure 33.

## Guidelines:

- The Gateways should contribute towards the creation of monumental, unique, symbolic spaces that project a quality public environment with enhanced legibility through good design and visible signage.
- The Gateways should be legible as powerful visual and/or perceptual landmarks which could be in the form of landmark buildings, park landscapes and/or functional or monumental structures like towers, reservoirs or monuments. In the case of the Menlyn Node it is envisaged that landmark buildings could define the two Regional Gateways along the N1 freeway as illustrated on Figure 33. This could thus comprise eight prominent buildings (one in each of the eight quadrants defined by the two access interchanges onto the N1 freeway).
- The design of the Gateways and the construction material used should be appropriate to the South African context, and conform to the proposed Streetscape Urban Design Guidelines for the Node.





- The design of landscaping surrounding the Gateways and choice of vegetation to be used (if applicable), should conform to the proposed Streetscape Urban Design Guidelines for the Node.
- Whilst each of the Gateways should be unique and dealt with individually, they should reinforce a common sense of identity via the usage of a common theme, architectural style, construction materials and vegetation.
- Views towards the Gateways should be protected.

## Priority Projects:

- To implement the Gateways as defined above, with the Regional Gateways receiving priority.

## Design Objective 2: Create a Quality Public Environment

### A: High Priority Streetscape Zones

#### Rationale:

To further reinforce the Menlyn Nodal Core and its sense of place, it is necessary to create strong “image-building” spatial structuring elements. The golden threads to be used in this regard are the existing prominent movement lines, most of which serve to link the identified Gateways to one another.

As with Gateways, these movement lines and their associated streetscapes are important in that they define a sense of place, give rise to legibility, define identity, and provide status to the urban environment of a node or area. They also form visual and physical links between other higher-order city structuring elements, such as important functional nodes, buildings and other landmarks.

To ensure their image-building function, the alignment, road geometry and streetscape environment of such movement lines need to be of the highest quality. Essentially their designs need to contribute to the urbanity and monumentality of a node. Importantly, the design of such movement lines need to reinforce the specific sense of identity that is to be established for a node or area.

#### Focus Areas:

Figure 33 illustrates the prominent movement lines identified as High Priority Streetscape Zones within the study area, and comprise predominantly the second and third order road network in the Menlyn Urban Development Framework as defined in Figure 29 and includes Atterbury, Garstfontein and Genl Louis Botha Avenues; as well as Selati Street to the west of the N1, and Louis Ingersol which run through between the central and eastern sections of the Menlyn Core.



## Guidelines:

- The High Priority Streetscape Zones should contribute towards the creation of monumental, unique, symbolic spaces and vistas that project a quality public environment.
- The High Priority Streetscape Zones should be legible as powerful visual and/or perceptual vistas.
- The design of the High Priority Streetscape Zones should be appropriate to the South African context, and conform to the proposed Streetscape Urban Design Guidelines for the Node.
- The design of the landscaping for the High Priority Streetscape Zones and the choice of vegetation to be used (if applicable), should conform to the proposed Streetscape Urban Design Guidelines for the Node.
- The High Priority Streetscape Zones should reinforce a common sense of identity via the usage of a common theme, design style, construction materials and vegetation.

## Priority Projects:

- Detailed planning, design and redevelopment of the movement lines and their associated adjoining land uses comprising the identified High Priority Streetscape Zones, based on the proposed Streetscape and Private-Public Interface Design Guidelines for the Menlyn Node and the indicated order of priority.
- Formulate Road Access Management Guidelines / Standards for business and commercial development along the High Priority Streetscape Zones.

## *B: Open Space Network Priority Zones*

### Rationale:

Urban liveability is of primary importance in the development of any city. Urban liveability is influenced by several factors such as mix of land uses, density, building envelopes, coverage and floor area ratios, but also critically by the network of hard and soft open spaces. Hence, in an urban development context where increasing pressure is being placed on the need for densification and intensification to use our urban areas more functionally and optimally, it is essential to create healthy and sustainable urban areas. To do so, much emphasis needs to be placed on the design, development and usage of hard and soft open spaces. Urban areas that are attractive, clean, and pleasant, are honoured throughout the world, and there is no reason why the Menlyn Node should not become one these urban areas. As a follow on, improved urban liveability is a clear sign of investment security, which should advance private sector investment in the Node.

### Focus Areas:

Whilst the entire study area should be made subject to the proposed Site Development and Urban Design Guidelines for the Menlyn Node, immediate attention in respect of the enforcement of the proposed guidelines and the implementation of initiatives/projects aimed at enhancing the image, legibility and functional quality of the civic environment should be focused within two Priority Zones.



## Hard and Soft Open Space Priority Zone

The focus within this zone should be to create high quality hard and soft open spaces and areas in and amongst the urban fabric, and includes all areas earmarked for Business 1-4 and Commercial purposes in the Menlyn Node. Provided that these areas will feature both business and residential activity, enforcement of the proposed Site Development Guidelines for Higher Density Residential Development, Open Space, as well as the proposed Urban Design Guidelines for the Node is critical in ensuring a liveable and sustainable urban environment.

## Natural Open Space Priority Zone

The focus within this zone should be to create high quality natural open spaces and areas for recreational and ecological conservation purposes, using the existing natural open space system as foundation. Considering the proposed higher densities and other non-residential uses for the study area, it is imperative to establish and protect the existing natural open spaces for ecological and recreational purposes. Hence, the natural open space system traversing the Menlyn Node should become a focal point, and fulfil its rightful function in providing relief from the hard urban environment via the provision of appropriate public infrastructure and ensuring that the spaces created by the Wolwe, Waterkloof and Moreleta Spruits are functionally linked to one another.

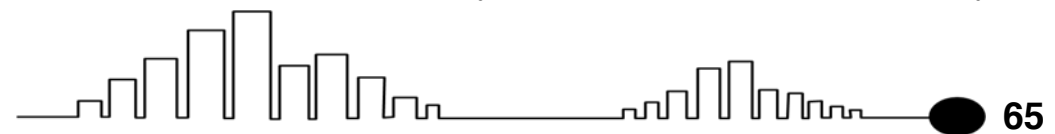
## **Priority Projects:**

- Implementation of the Site Development Guidelines for Higher Density Residential Development, Open Space, as well as the proposed Urban Design Guidelines for the Menlyn Node.
- Compilation of a Master Plan to establish Struben Dam (inclusive of the Waterkloof Spruit) as a formal bird sanctuary and teagarden – e.g. the Austin Roberts Bird Sanctuary.
- Compilation of Master Plans for the Waterkloof and Wolwe Spruits. Given the topography and extent of the Wolwe Spruit, the focus within this area should be on the provision of hiking and mountain bike trails.
- Ensure the functional linkage of all open spaces created by the Wolwe, Waterkloof and Moreleta Spruits.

## **Design Objectives 3: Public Transport Facilities and Pedestrian Linkages and Crossings**

### **Rationale:**

Provided the high residential densities being proposed for the Node it will be imperative to establish a well designed network of pedestrian linkages and public transport facilities. Critically, the establishment of such a network and facilities will not only serve to increase the functional quality of the urban environment, but will further enhance the image and legibility of the Node as one of Tshwane's Capital Cores. The goal should be to create a high quality circular pedestrian and cycle movement system, linking the public transport facilities, community facilities, prominent economic activity





areas and the high-density residential components of the Node to one another.

## Focus Areas:

In line with the discussion contained in section 3.2 of this document, the priority routes for the establishment of public transport facilities and pedestrian walkways are the second and third order road network as reflected in the Urban Development Framework (see Figure 29), and also highlighted on Figure 33 (Design Guidelines).

## Guidelines:

### Pedestrian Linkages and Crossings

- As per the proposed Streetscape Urban Design Guidelines for the Menlyn Node.

### Public Transport Facilities

- As per the proposed Streetscape Urban Design Guidelines for the Menlyn Node.

Furthermore, specific attention should be paid to the following additional guidelines/recommendations:

- Stops should be located at points of greatest accessibility and should promote the use of integrated inter-modal transport changeovers.

- Stops should be provided at shorter intervals in higher-density and mixed-use areas.
- Stops must be appropriately linked to the pedestrian network.
- Provide sufficient parking to facilitate park-and-ride options.
- Ensure safety and security for the passengers from criminals and from accidents.
- Support and include different aspects of land use integration, ensuring that land uses support public transport and vice versa.

## Priority Projects:

### Pedestrian Linkages and Crossings

Detailed planning, design and construction of pedestrian linkages and crossings along the priority pedestrian network as illustrated on Figure 32, with specific emphasis also on the possible construction of two pedestrian bridges at the busiest pedestrian crossings in the study area as reflected on Figure 33.

### Public Transport Facilities

- Detailed planning, design and construction of adequate public transport facilities within the Node to meet current and future needs based on a Public Transport Plan to be developed, and as proposed by the Development Framework.
- Implementation of the proposed Streetscape Urban Design Guidelines for the Menlyn Node.

