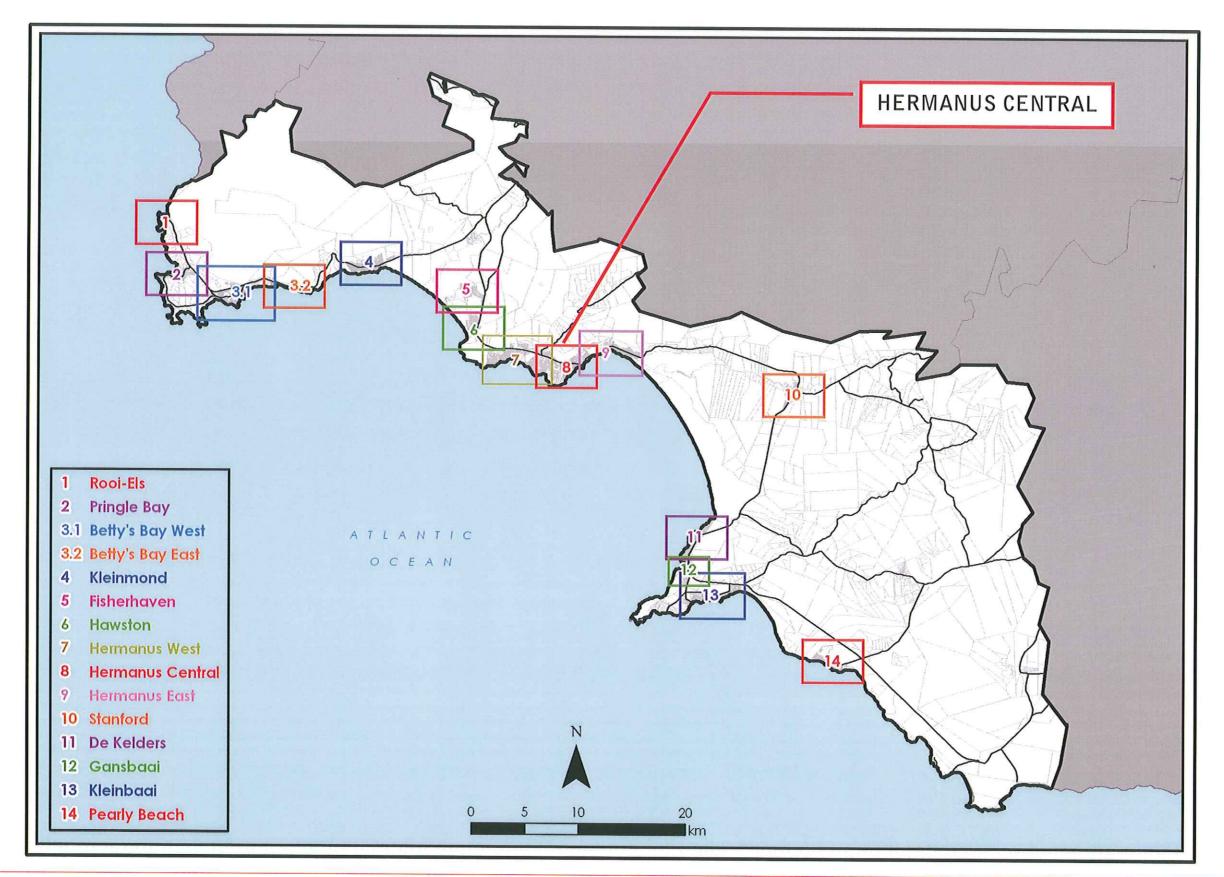
HERMANUS CENTRAL





7.4.8 HERMANUS CENTRAL

- A: Contextual Overview
- (i) Location and function (refer to Locality Plan: Sheet A)



Figure 51: Locality

Hermanus Central is located 24km east of Kleinmond and 33km west of Gansbaai. The prominent suburbs located within the Hermanus Central area are Zwelihle, Mount Pleasant, Westdene, Hermanus Central and Northcliff. The Hermanus Central area functions as the primary civic, administrative and tourism centre within subregional and municipal context.

(ii) Current Urban Structure and Form (refer to Current Urban Structure and Form Plan: Sheet A)

The current urban structuring features of the Hermanus Central area are Hoyt's Koppie, the old harbour, the central business area and the R43 Provincial Road running through the core of the Hermanus business area.

(iii) Population Composition: Age Distribution (Source: Statistics South Africa, 2001)

The following table indicates the age distribution in the different age cohorts of the areas within Hermanus Central. The Zwelihle and Mount Pleasant suburbs indicate a standard statistical profile in terms of age distribution, whilst the remainder of the Hermanus Central area reflects, as with several other towns and suburbs within the Overstrand Municipal area, an increase in the percentage of people within the age cohort of 60 years and older.

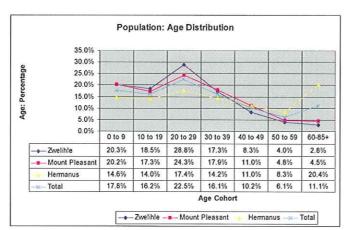


Figure 52: Age Analysis for Hermanus Central

(iv) Historical Growth Pattern (refer to Historical Township Establishment Pattern Plan: Sheet A)

Hermanus Central consisted of 28 erven prior to 1900, where after a relatively large area consisting of 16% of the area (748 erven) was established for township purposes during the 1900 to 1939 period. This consisted primarily of the Hermanus CBD, a portion of Northcliff and a large portion of Westcliff.

In the following period (1940 to 1969) more development (378 erven) took place north-east of the Hermanus CBD, being a further extension of primarily the Northcliff area.

The largest percentage growth (41%, 1948 erven) of the demarcated Hermanus Central area took place during the 1970 to 1999 period, consisting mostly of the Mount Pleasant and Zwelihle areas to accommodate extensions of the increasing urbanisation trend.

After 1999, development continued with a further 1580 erven (34%) being provided, consisting mostly of infill development in Zwelihle as well as an extension of the Westcliff area.

(v) Landscape Setting

The landscape setting of Hermanus Central is a function of its location being perched on the coastal plateau between the Onrus Mountains and the rocky and sandy coastline.



Figure 53: Landscape setting

The natural elements which contain the area and which contribute to its form and structure include the following:

- The coastal plateau between the 100m contour line and the coastline.
- The Hemel-en-Aarde Valley which frames the western portion of the town.
- The mountain ridgeline at the point of entry to Rotary Mountain Way which forms a green threshold at the western entrance to Hermanus.
- The extensive and historic milkwood forest to the south of Zwelihle.
- The distinctive series of rocky inlets along the coastline which contribute substantially to the scenic quality of the area.
- The riverine system associated with the Mossel River which forms the boundary between Eastcliff and Voëlklip.

- The Fernkloof Nature Reserve which has high botanical, scientific and aesthetic significance.
- (vi) Land Ownership (refer to Land Ownership Pattern Plan: Sheet A)

The majority of the town is private owned with a number of vacant portions of municipal land concentrated throughout along the R43 Provincial Road, Swartdam Road and Schulphoek / Oos End Road.

A salient feature of the Hermanus Central demarcated area is the continuous sections of vacant municipal owned land stretching along Swartdam Road. This planning area is characterised by a wide variety of zonings which includes authority zone, business, educational, residential, government, institutional and industrial zonings. This intensive mix of zoning reflects the intensity of economic activity and positive effect of spatial agglomeration in and around the Hermanus Central District.

- B: Local Area Character and Density Analysis:
- (i) Land use pattern (refer to Land Use Plan: Sheet B)

The Hermanus Central area is characterised by a diverse range of land uses consisting of the Zwelihle subsidised economical housing area on the western side of the planning area, retail / industrial areas and the marine aqua culture factory, as well as Zwelihle suburb, a middle income residential area are located directly south-east of Zwelihle.

West of the Hermanus CBD, a mix of land uses consisting of a large gated residential development, the Magnetic Observatory, a private and provincial hospital and old age home, effectively separate the Industrial and the Zwelihle residential area from the higher income Westcliff residential area. North of the Hermanus CBD is Hoyt's Koppie, a natural open space area, several educational facilities, a cemetery and a number of Worship facilities.

Another land characteristic of this Planning area is the mix land use pattern developing along the R43 Provincial Route which is aligned through the area.





(ii) Zoning (refer to Zoning Plan: Sheet B)

In general the zoning of Hermanus Central is consistent with the land use. Characteristics of the zoning of this Planning Area is however the large portions of Municipal zoned land abutting Zwelihle which provides integration opportunities for with the surrounding higher income residential areas.

(iii) Community Facilities (refer to Community Facilities Plan: Sheet B)

Based on standards for the provision of community facilities as set out in *Annexure B*, the Hermanus Central area is represented with well distributed community facilities.

(iv) Civil Services Capacity (refer to Civil Services Plan: Sheet C)

The existing collector road system of the Hermanus Central area is currently operating below the accepted level of service; however measures are presently being taken to relieve the traffic congestion through the CBD by virtue of a bypass route presently being constructed. The existing local network serves the area and is operating at acceptable levels of service.

Although the bulk water source for the Hermanus Central area is sufficient, the potable water treatment works is at capacity, requiring a costly upgrade to sufficiently provide for the existing as well as the future need. Furthermore, the waterpipe network in the older areas is old and requires replacement. An additional water storage reservoir is also required to meet the growing demands of this area.

Large areas within Hermanus Central operate on a small bore sanitation system which restricts new development in this area. Presently operational and capacity problems are experienced at the waste water treatment works serving this area. An upgrade is required to increase its capacity.

In terms of electricity, the existing demand meets the consumption needs and sufficient capacity is presently available to serve the needs of the Hermanus Central area. The demand trend is however increasing and should specifically be noted (refer to Civil Services Plan) and acted on timeously.

Sufficient solid waste capacity exists to service the town, even during peak holiday periods.

C: Synthesis: Status Quo Density and Character Assessment (refer to Density and Character Plan: Sheet D, Contextual Overview Plan: Sheet E, and the Opportunities and Constraints Plan: Sheet F)

The growing surrounding towns and suburbs within the Overstrand Municipal area increase the pressure on the Hermanus Central area to fulfil its function as primary civic, administration and tourism centre. In addition to this, the demand for additional housing is clear from the high density and over-utilisation of the residential erven in especially Zwelihle. Opportunity for extension of the Zwelihle area is available by virtue of infill planning. However, several restrictions for further development and expansion is relevant to the Hermanus Central area, being inter alia heritage areas, the lack of certain civil services, sensitive areas and conservation areas.

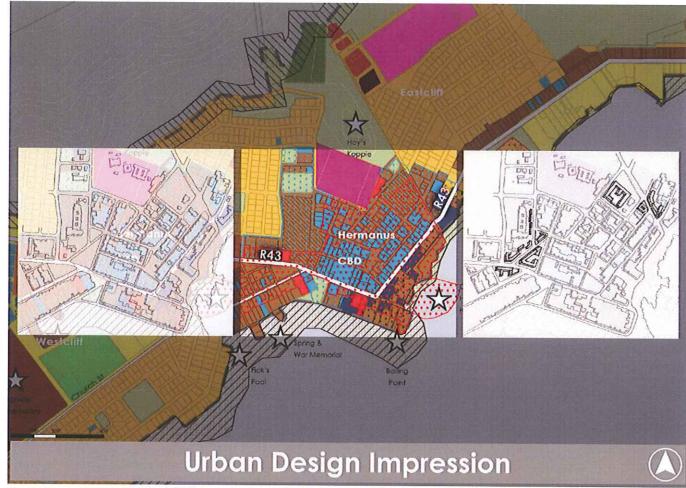


Figure 54: Hermanus CBD

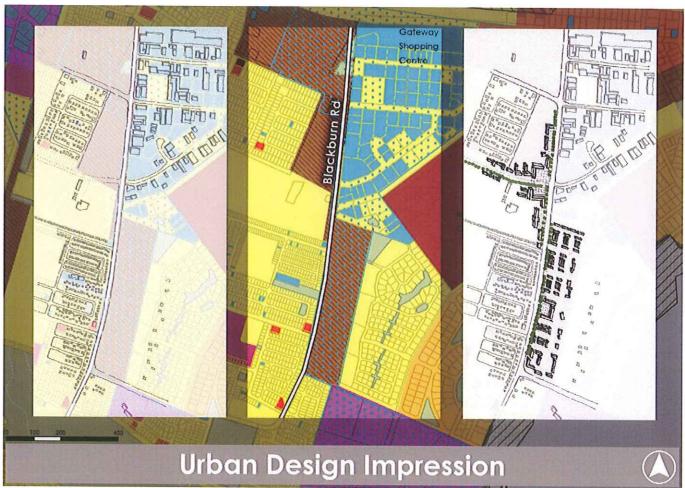


Figure 55: Swartdam Road Integration Area





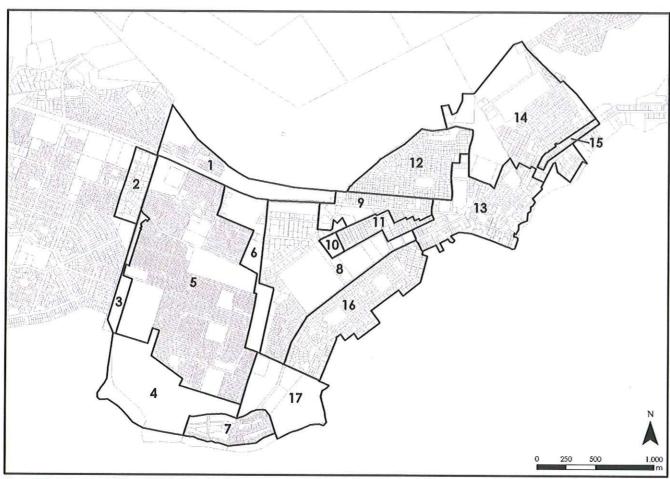


Figure 56: Hermanus Central's Planning Units

Emphasis also needs to be placed on the following urban development features in order to ensure a well balanced town. These features include the integration of the Zwelihle area with the surrounding higher property value residential suburbs, the creation of green corridor connectivity between the mountain zone and the coastal zone via Zwelihle, integration through development enhancement along Swartdam Road, the exploitation of opportunities created by the proposed bypass routes and more.

Densification constraints are related to the need to respect the sensitive interfaces with the mountainside, particularly adjacent to the Fernkloof Nature Reserve, the R43 scenic route and the coastline. Proposed conservation areas have been identified in the Hermanus Central area as well as a special heritage overlay zone along the coastal strip between the New Harbour and the Mossel River mouth, which limits densification opportunities.

Opportunities for densification occur along Swartdam Road between Zwelihle and Westcliff and at selected nodes related to the proposed bypass route around the

D: Proposed Densification Interventions

(i) Densification Strategy

The following general densification strategy principles are proposed for the Hermanus West area:

- To promote spatial integration, particularly between Zwelihle and Westcliff, in accordance with PSDF principles.
- To increase thresholds for a greater choice and variety of urban opportunities, including employment opportunities, particularly for previously disadvantaged communities.

- To increase thresholds to enable the viability of a public transport system, possibly along the main road and along the proposed bypass route to the south.
- To provide a clear structural framework to channel growth away from sensitive environmental interfaces such as the mountainside, particularly in the Fernkloof area and the coastline towards areas which indicate a degree of absorptive capacity for future growth.
- To provide a greater range of housing opportunities, including inclusionary housing.

(ii) Proposed Interventions (refer to Strategic Growth Management Interventions Plan: Sheet G)

The following interventions are proposed (refer to the Contextual Overview Plan). They respond to areas of natural environmental sensitivity, the need to protect a natural environment adjacent to the scenic route and existing land use patterns in the form of economic opportunities at local level.

Areas and guidelines of specific mention within the Hermanus Central area are the following:

- The establishment of a mixed used high density urban activity corridor along the Swartdam Road.
- Medium density housing in the Schulphoek area to the south of Zwelihle with due consideration for the retention of the milkwood forest.
- Medium to high density housing at selected nodal points associated with the proposed bypass route in the central area.
- Incremental densification within the existing residential fabric where appropriate.

iii) Urban Design Guidelines

Two specific areas within the Hermanus Central Planning Area have been identified for urban design guidelines being:

- The Hermanus CBD and
- The integration area on the eastern side of Zwelihle along Swartdam Road.

(iv) Densification proposals per identified Planning Unit

Seventeen Planning Units have been identified for the Hermanus Central area. The proposals made for the Hermanus Central area can potentially contribute to an increase of approximately 3800 additional dwelling units, increasing the current gross density for the area from 10 to approximately 16 dwelling units per hectare.

It should however be noted that prior to substantial densification the upgrading of the water treatment work plant, the water network, the sewerage network and treatment plant will have to take place. Local investigations will also be required in terms of the other civil services in order to determine the feasibility of accommodating the proposed densification proposals.

This substantial increase will subsequently require that sufficient community facility be secured within easy threshold distances of the allocated residents for these respective community facilities.

Planning Unit 1

Planning Unit 1 is located north of the Zwelihle residential area and the prominent Gateway Shopping Centre and includes the Mount Pleasant residential suburb as well as large areas of public open space zoned land and is also subject to the mountain interface. Specific control measures are required for these mountain interface zones.

Residential Densification

The nature and character of the area results thereto that no densification is proposed for this Planning Unit.

Community Facilities

Apart from existing public/private open space, no additional community facilities are required in terms of the standards for the provision of community facilities as set out in *Annexure B*.





Civil Services

In order to facilitate the proposed additional community facilities in this Planning Unit, the following civil services will be required and / or need to be investigated for capacity:

- The provision of a water network system,
- The upgrade of the potable water treatment works,
- The provision of a sewerage network system,
- The upgrade of the waste water treatment works (sewerage),
- An investigation to determine if the storm water runoff can satisfactorily be dealt with following the proposed densification.

Planning Unit 2

Planning Unit 2 consists of an area of approximately 12.5ha on the western side of Zwelihle. This Planning Unit is proposed for local economic development which provides the opportunity for mixed use development which includes retaining the existing sportsfields.

Residential Densification

No residential densification is proposed for this Planning Unit.

Community Facilities

No additional community facilities are proposed for this Planning Unit.

Civil Services

Although no residential densification is proposed, the following civil services provision and/or upgrades will be required:

- The investigation of the water network system,
- The upgrade of the potable water treatment works,
- The provision of a sewerage network system,
- The upgrade of the waste water treatment works (sewerage),
- An investigation to determine if the storm water runoff can satisfactorily be dealt with following the proposed densification,

- A local investigation to determine if the existing local electrical network can be extended to this Planning Unit,
- In investigation to determine if the existing collector road system be would able to accommodate the additional traffic resulting from this proposal,
- An investigation to determine whether the local collector road system will be able to accommodate the additional traffic generated by the increased densities.

Planning Unit 3

The area of this Planning Unit is located between Planning Unit 2 and the existing Zwelihle residential suburb and forms part of the existing waste water treatment works land.

Residential Densification

Block development with two storey walk up simplex-row housing (housing typology D6) is proposed for this Planning Unit. This proposal will potentially contribute to approximately 230 additional dwelling units at a density of 33.6 dwelling units per hectare.

Community Facilities

Given the nature, shape and location in relation to surrounding community facilities, only the following community facilities are proposed for this Planning Unit:

- 1 Worship facility.
- Civil Services

As per Planning Unit 1

Planning Unit 4

Planning Unit 4 forms part of the recently approved Schulphoek development located on the southern side of the Zwelihle residential suburb.

Residential Densification

No specific densification proposals are made for this area as the area has already been approved for development.

- Community Facilities
- No additional community facilities are proposed for this Planning Unit.

Civil Services

In order to facilitate the proposed additional community facilities in this Planning Unit, the following civil services will be required and / or need to be investigated for capacity:

- The provision of a water network system,
- The upgrade of the potable water treatment works,
- The provision of a sewerage network system,
- The upgrade of the waste water treatment works (sewerage),
- An investigation to determine if the storm water runoff can satisfactorily be dealt with following the proposed densification,
- A local investigation to determine if the existing local electrical network can be extended to this Planning Unit,
- An investigation to determine if the existing collector road system would be able to accommodate the additional traffic resulting from this proposal.

Planning Unit 5

The area of this Planning Unit predominantly consists of the over developed Zwelihle area.

Residential Densification

Given the existing character and nature of this Planning Unit, no densification proposals are made.

Community Facilities

However, in addition to the existing community facilities and sites in Zwelihle the following additional community facilities are proposed:

- 1 Primary School, and
- 2 Secondary Schools.

Civil Services

As per Planning Unit 1

Planning Unit 6

This Planning Unit is located between the existing Gateway Shopping Centre and Zwelihle and forms part of the Swartdam Development Corridor Intervention proposal. A portion of this Planning Unit is also proposed for local economic development which will allow for a mixed use area development.

Residential Densification

The type of development proposed for this Planning Unit consists of site consolidation in three storey walk up simplex-row type housing (housing typology D6). This will potentially allow for 1174 additional dwelling units at a density of approximately 50 dwelling units per hectare.

Community Facilities

The following additional community facilities are proposed for this Planning Unit:

- 2 Pre-Primary Schools,
- 1 Primary School,
- 1 Secondary School,
- 4 Worship facilities,
- 1 Taxi Rank/Bus stop, and
- 3.5ha Public/Private Open Space.

Civil Services

In order to facilitate any densification in this Planning Unit, the following civil services provision and/or upgrades will be required:

- The provision of a water network system,
- The upgrade of the potable water treatment works,
- The provision of a sewerage network system,
- The upgrade of the waste water treatment works (sewerage),
- An investigation to determine if the storm water runoff can satisfactorily be dealt with following the proposed densification,





- A local investigation to determine if the existing local electrical network can be extended to this Planning Unit,
- An upgrade and provision of collector and local road systems respectively.

Planning Unit 7

Planning Unit 7 is an already approved and partly developed high density residential area located south of the Zwelihle residential suburb

Residential Densification

No further densification is proposed for this Planning Unit.

Community Facilities

Although no densification is proposed for this Planning Unit, it is however proposed that provision be made for the following community facility:

- 1 Pre-Primary School.
- Civil Services

As per Planning Unit 3.

Planning Unit 8

This Planning Unit consists of a wide variety nonresidential as well as residential land uses. Limited opportunities exist for densification.

Residential Densification

No densification proposals are made for this Planning Unit.

Community Facilities

Despite no densification proposals being made for this Planning Unit, the following additional community facilities are proposed to serve the surrounding residential area:

- 1 Pre-Primary School,
- 1 Worship facility, and

- 2.5ha Public/Private Open Space.
- Civil Services
- As per Planning Unit 3.
- Planning Unit 9

The area of this Planning Unit consists of a linear development section along the R43 Provincial Road.

Residential Densification

The densification proposal for this area consists of Block development through two gallery access simplex-row housing (housing typology E4) for over 30% of the Planning Unit area and which potentially will accommodate almost 338 additional dwelling units at a density of 26 dwelling units per hectare.

Community Facilities

The following additional community facilities are proposed for this Planning Unit:

- 1 Pre-Primary School, and
- 1 Primary School.
- Civil Services

In order to facilitate any densification in this Planning Unit, the following civil services provision and/or upgrades will be required:

- The provision of a water network system,
- The upgrade of the potable water treatment works,
- The provision of a sewerage network system,
- The upgrade of the waste water treatment works (sewerage)
- An investigation to determine if the storm water runoff can satisfactorily be dealt with following the proposed densification,
- A local investigation order to determine if the existing local electrical network can be extended to this Planning Unit,
- An upgrade of existing collector road system.

Planning Unit 10

Planning Unit 10 is a relatively small site of 2.6ha, north of the existing private hospital in Hermanus.

Residential Densification

Block development with three storey gallery access type simplex-row housing (housing typology E4) is proposed for approximately 40% of this Planning Unit. This proposal can potentially contribute to 87 additional dwelling units at a density of 52 dwelling units per hectare.

Community Facilities

No additional community facilities are proposed for this Planning Unit.

Civil Services

As per Planning Unit 3.

Planning Unit 11

Planning Unit 11 consists of an existing mature residential area and is wedged in between the development corridor along the R43 Provincial Road and the existing Old Age home and the medical land uses adjacent to the Old Age home.

Residential Densification

Block development with two storey gallery access type simplex-row housing (housing typology E4) is proposed for approximately 40% of this Planning Unit This proposal can potentially contribute to 258 additional dwelling units at a density of 31.1 dwelling units per hectare.

- Community Facilities
- No additional community facilities are proposed for this Planning Unit.
- Civil Services

As per Planning Unit 3.

Planning Unit 12

Planning Unit 12 is located north of the R43 Provincial Road and west of the Hermanus CBD and consists primarily of an existing residential area.

Residential Densification

Incremental development through subdivision to allow for a second and third dwelling unit respectively (housing typologies B1 and B2) is proposed for approximately 20% of the area/dwellings in this Planning Unit. This proposal can potentially contribute to 89 additional dwelling units

Community Facilities

Given the restricted space and existing developed area the provision of the following additional community facilities are proposed for this Planning Unit:

- 1 Pre-Primary School,
- 1 Worship facility, and
- Civil Services

As per Planning Unit 3.

Planning Unit 13

This Planning Unit consists of the Hermanus CBD which is a heritage area and is mostly used for business purposes with limited number of permanent residential units.

Residential Densification

Site consolidation development in three storey gallery access simplex-row housing (housing typology D4) for 30% of the area is proposed for this Planning Unit. Given that this area is an economic area it will subsequently form part of mixed use developments being residential developments on top of the business buildings. This proposal can thus potentially contribute to 1242 additional dwelling units at a gross density of 30.5 dwelling units per hectare.





Community Facilities

Given the nature of the area the provision of the following additional community facilities are proposed for this Planning Unit:

- 1 Pre-Primary School,
- 1 Library, and
- 2.4ha Public/Private Open Space.
- Civil Services

As per Planning Unit 9

Planning Unit 14

This Planning Unit is located on the eastern side of the Hermanus CBD and includes the Eastcliff high income residential area.

Residential Densification

Incremental development through subdivision to allow for a second and third dwelling unit respectively (housing typologies B1 and B2) is proposed for approximately 20% of the area/dwellings in this Planning Unit. This proposal can potentially contribute 128 additional dwelling units increasing the gross density from 4.9 to 6.4 dwelling units per hectare.

Community Facilities

The following additional community facility is proposed for this Planning Unit:

- 1 Pre-Primary School,
- Civil Services

As per Planning Unit 3

Planning Unit 15

Planning Unit 15 is located along a section of the R43 Provincial Road south of the Eastcliff residential area.

Residential Densification

Site consolidation development in three storey gallery access simplex-row housing (housing typology D4) for 30% of the area is proposed for this Planning Unit. This proposal can thus potentially contribute to 98 additional dwelling units at a gross density of 31.6 dwelling units per hectare.

Community Facilities

No additional community facilities are proposed for this Planning Unit.

Civil Services

In order to facilitate any densification in this Planning Unit, the following civil services provision and/or upgrades will be required:

- The provision of a water network system,
- The upgrade of the potable water treatment works,
- The provision of a sewerage network system,
- The upgrade of the waste water treatment works (sewerage),
- An investigation to determine if the storm water runoff can satisfactorily be dealt with following the proposed densification,
- A local investigation to determine if the existing local electrical network can be extended to this Planning Unit,

Planning Unit 16

Planning Unit 16 predominantly consists of the existing mature Westcliff residential area.

Residential Densification

Incremental development through subdivision to allow for a second and third dwelling unit respectively (housing typologies B1 and B2) is proposed for approximately 20% of the area/dwellings in this Planning Unit. This proposal can potentially contribute to 104 additional dwelling units, increasing the gross density from 6.9 to 8.9 dwelling units per hectare.

Community Facilities

Given the nature and character of this area only the provision of the following additional community facilities are proposed for this Planning Unit:

- 1 Pre-Primary School, and
- 1 Worship facility.
- Civil Services

As per Planning Unit 6.

Planning Unit 17

Planning Unit 17 covers the area south-east of Zwelihle within the developing aquaculture farming and commercial area.

Residential Densification

This Planning Unit is proposed for local business area and no residential densification is proposed for this area.

Community Facilities

The following community facility is however proposed for this Planning Unit:

- 1 Primary School.
- Civil Services

In order to facilitate any densification in this Planning Unit, the following civil services provision and/or upgrades will be required:

- The upgrading of the water network system,
- The upgrade of the potable water treatment works,
- The provision of a sewerage network system,
- The upgrade of the waste water treatment works (sewerage),
- An investigation to determine if the storm water runoff can satisfactorily be dealt with following the proposed densification,
- A local investigation to determine if the existing local electrical network can be extended to this Planning Unit,

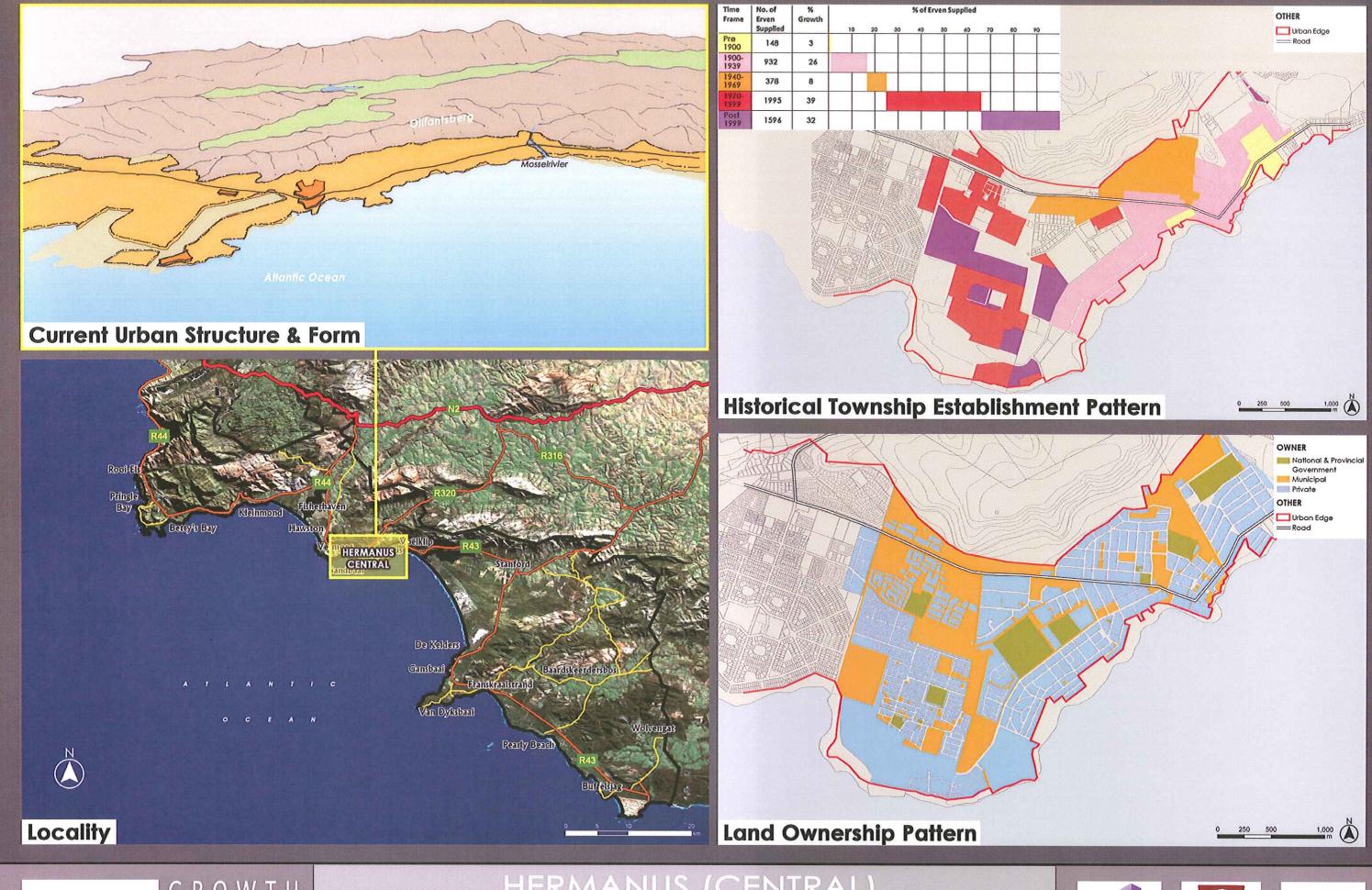
 An investigation of the existing collector road system is required to determine whether the additional traffic generated by this development could be accommodated by the existing collector road system.

Conclusion

The densification proposals could potentially contribute to a substantial number of additional dwelling units being provided. These proposals can however not be executed if the civil services capacity and level of service is insufficient, similarly, community facilities provision will have to be addressed. This will ensure the continued growth of the Hermanus Central area as the administrative, civic and tourism of the region.









A. GROWTH & OWNERSHIP PATTERNS

(MAY 2010)







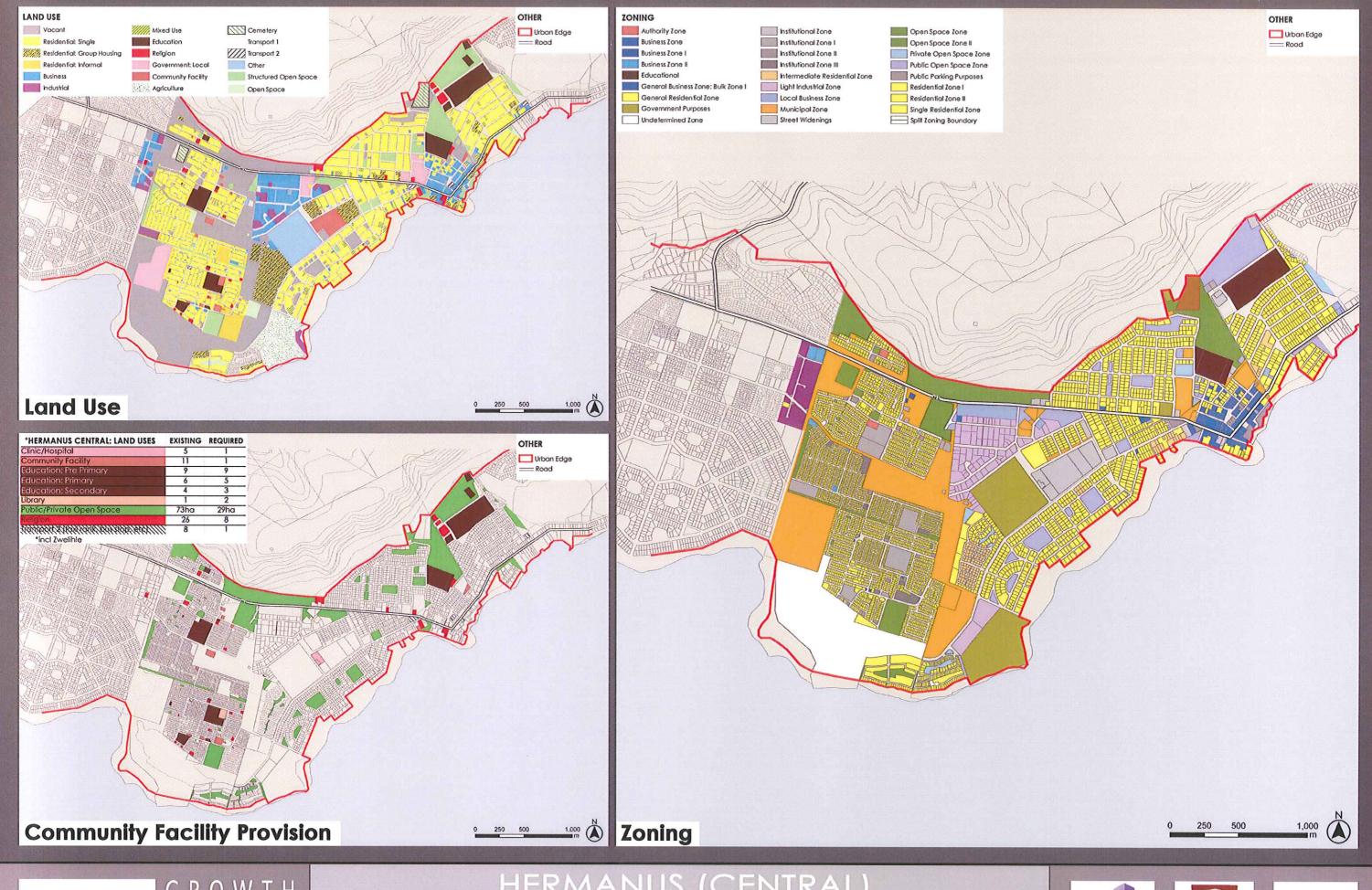


HERMANUS (CENTRAL

AI. AERIAL VIEW OF PLANNING AREA (MAY 2010)







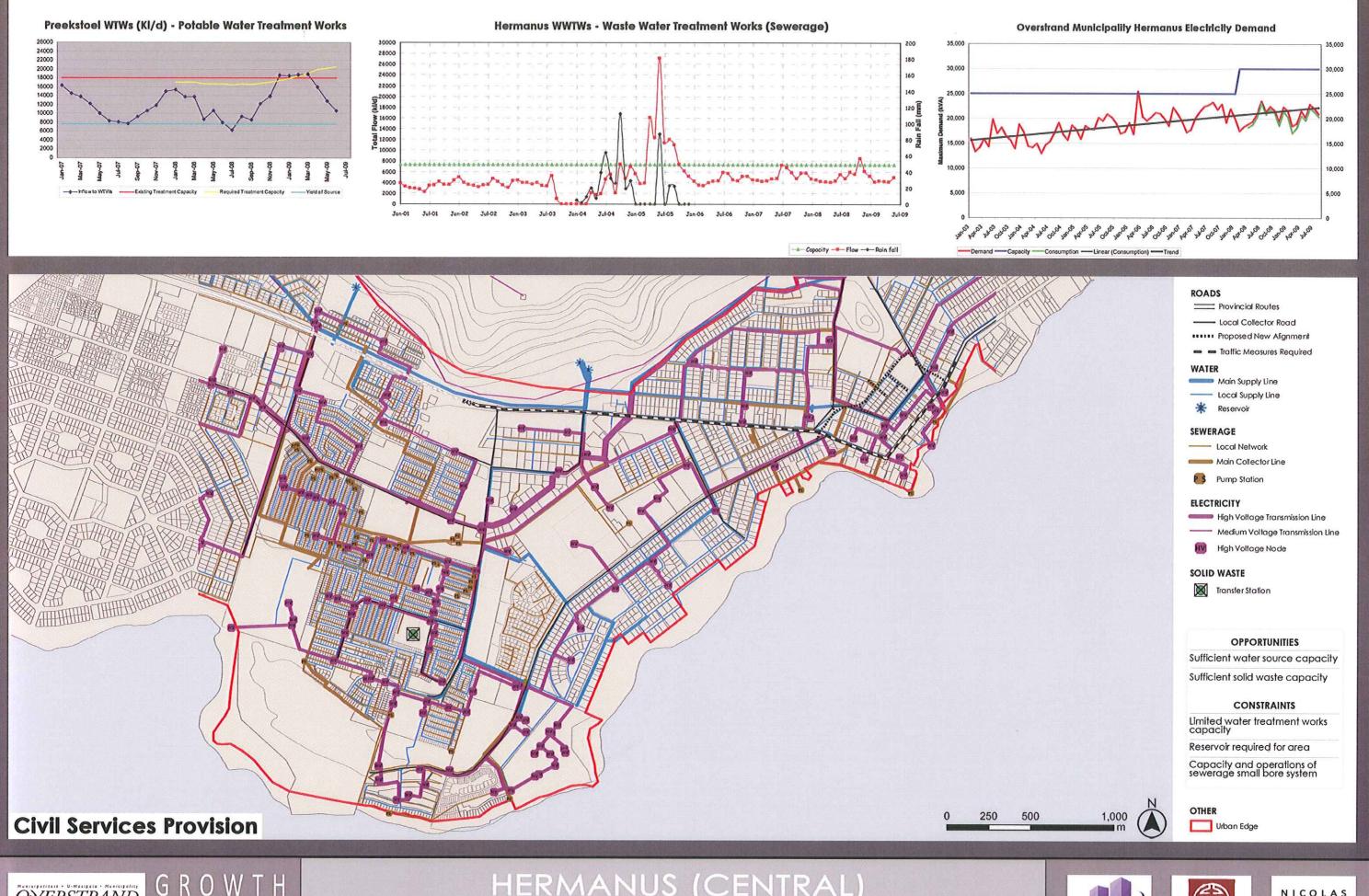


HERMANUS (CENTRAL)

B. CURRENT LAND USE, ZONING & COMMUNITY FACILITIES (MAY 2010)







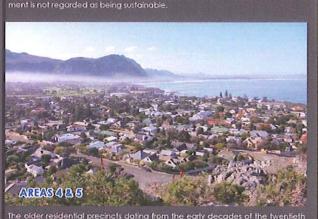


HERMANUS (CENTRAL)

C. SERVICES PROVISION (MAY 2010)



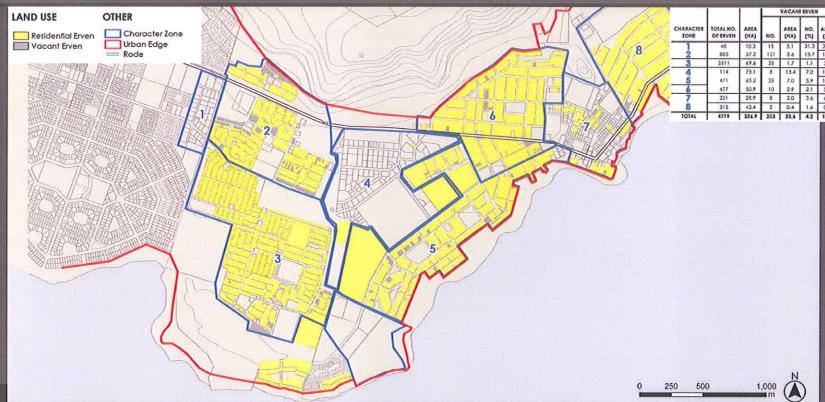




AREAS 1 & 2

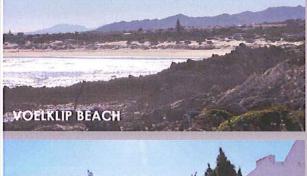
century which flank the central area to the east and west display positive urban qualities appropriate to a coastal holiday village in terms of permeable boundary treatments and a relatively subdued fine grained urban fabric. Some aportment blocks have developed in the later decades of the twentieth century but have generally occurred along major movement routes thus leaving the residential fabric intact. United densification could be considered but should respect the street block layout and positive house-street relationships in these areas.

Density & Area Character





The interface between Hermanus west and Zweihle lacks coherence and connectivity. The large gated security village emphasizes the lack of integration between the residential precincts.







Place Making Qualities



The Hermanus landscape is distinctive, comprising a number of landscape units of particular environmental and heritage quality, which have evolved over time in response to specific environmental attributes related to the rocky and sandy shoreline, the mountainside and the built form response over the last one hundred years.

Distinct precincts which have been identified include: West Hermanus: Vermont, Onrust, Sandbaai

Central Hermanus: Zwelihle, Westcliff, Northcliff, Eastcliff.

East Hermanus: Hermanus Heights, Fernkloof, Voëlklip.

Environmental and urban qualities related to the precincts are:

Vermont:

A relatively new sub-urban precinct of uniform character which is relieved by a number of wooded ravines and a hilly topography.

Onrus:

A residential coastal resort with a built form response which has responded appropriately to the beach and estuary in terms of house street relationships, height, massing and form.

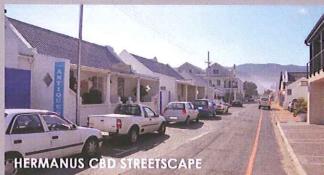
The camping site set in a milkwood forest and in close proximity to the estuary is a primary place-making element.

Hermanus Central:

A high quality built form response to the original harbour and coastal edge with a large number of conservation worthy buildings, proposed for inclusion in an urban conservation area. The coastal walkway linking the old and new harbours, contribute substantially to the public space structure.







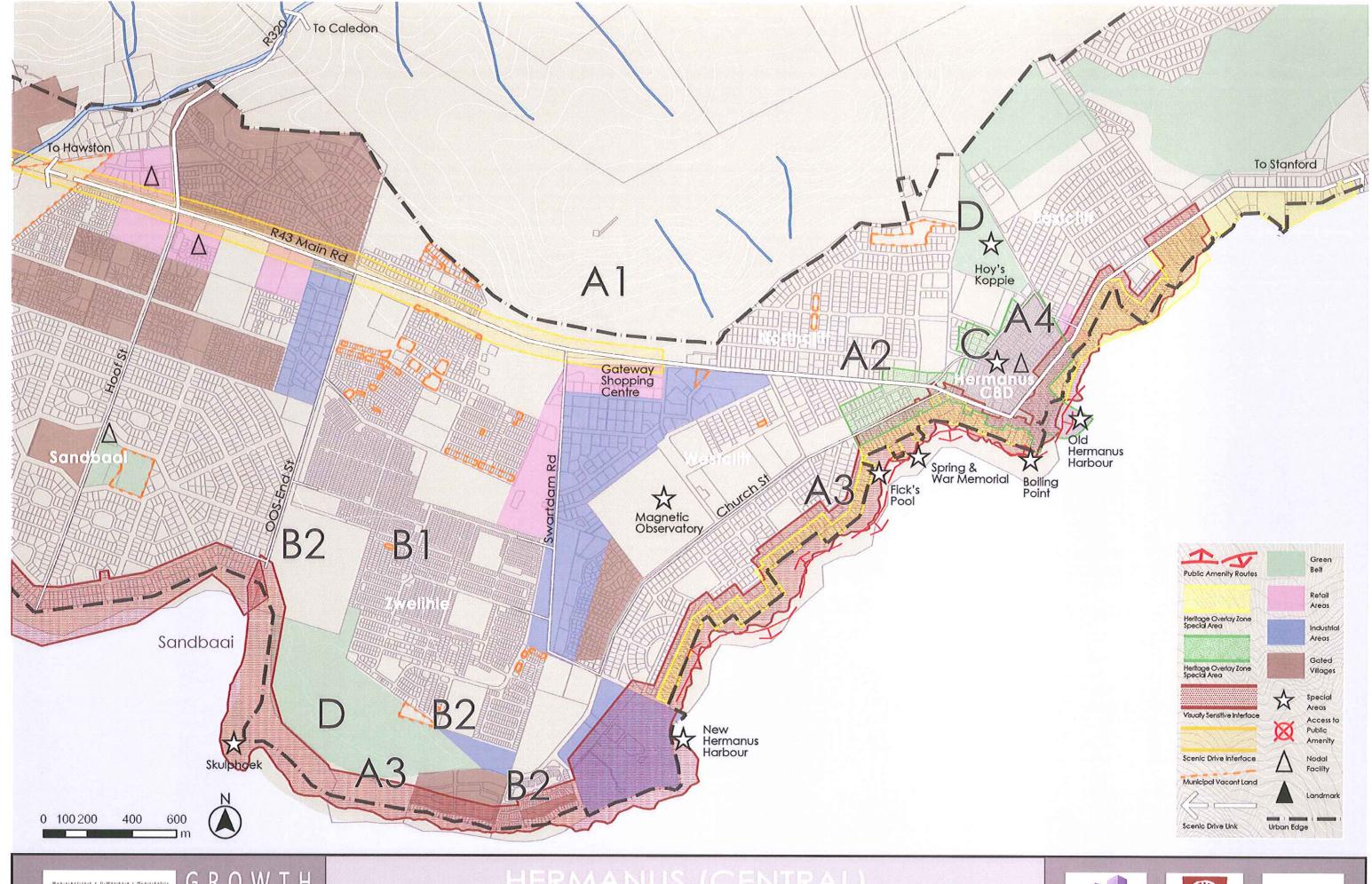


GROWTH MANAGEMENT STRATEGY HERMANUS (CENTRAL)

D. DENSITY & AREA CHARACTER (NOV 2009)





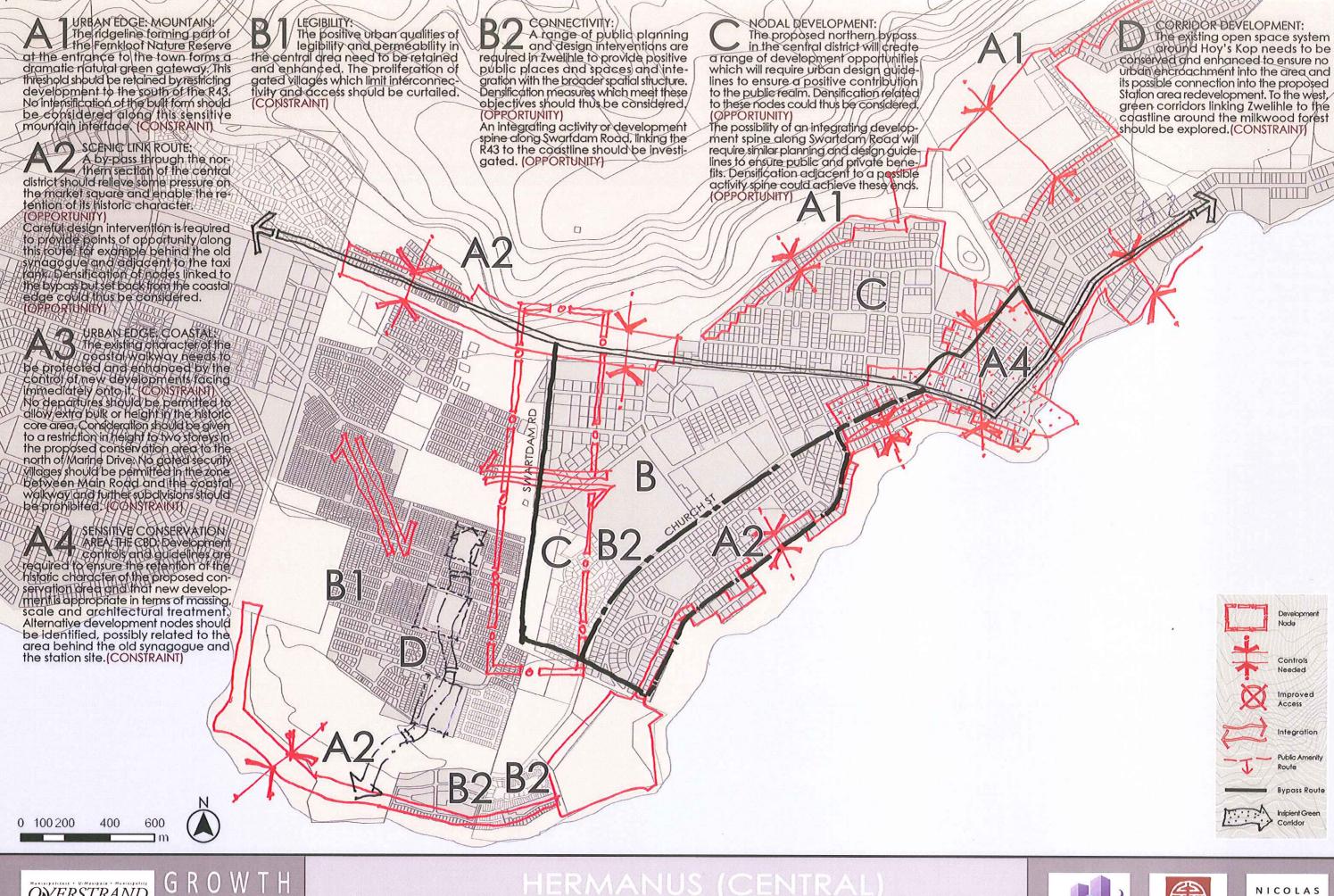




E. CONTEXTUAL OVERVIEW (MAY 2010)





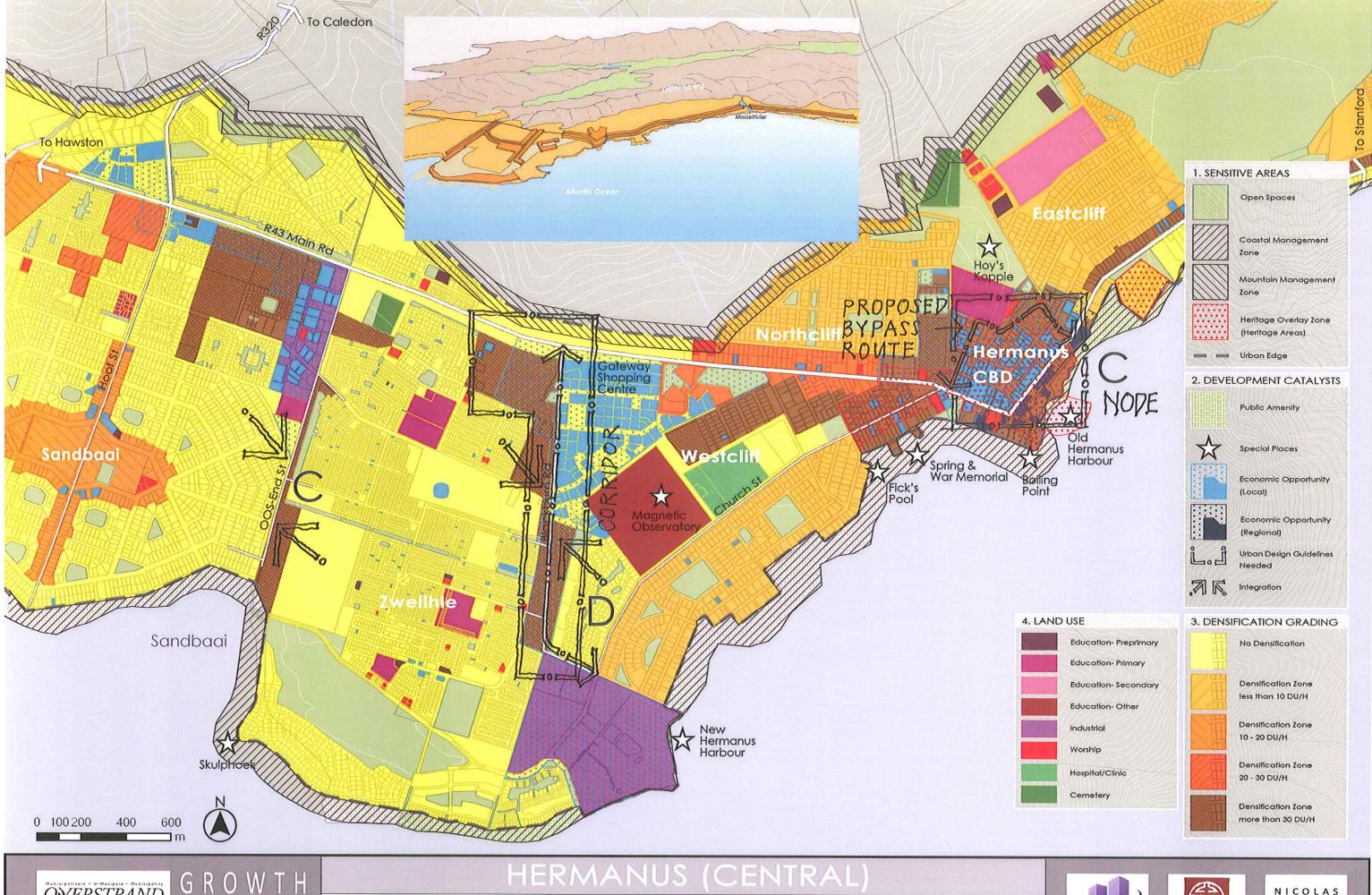










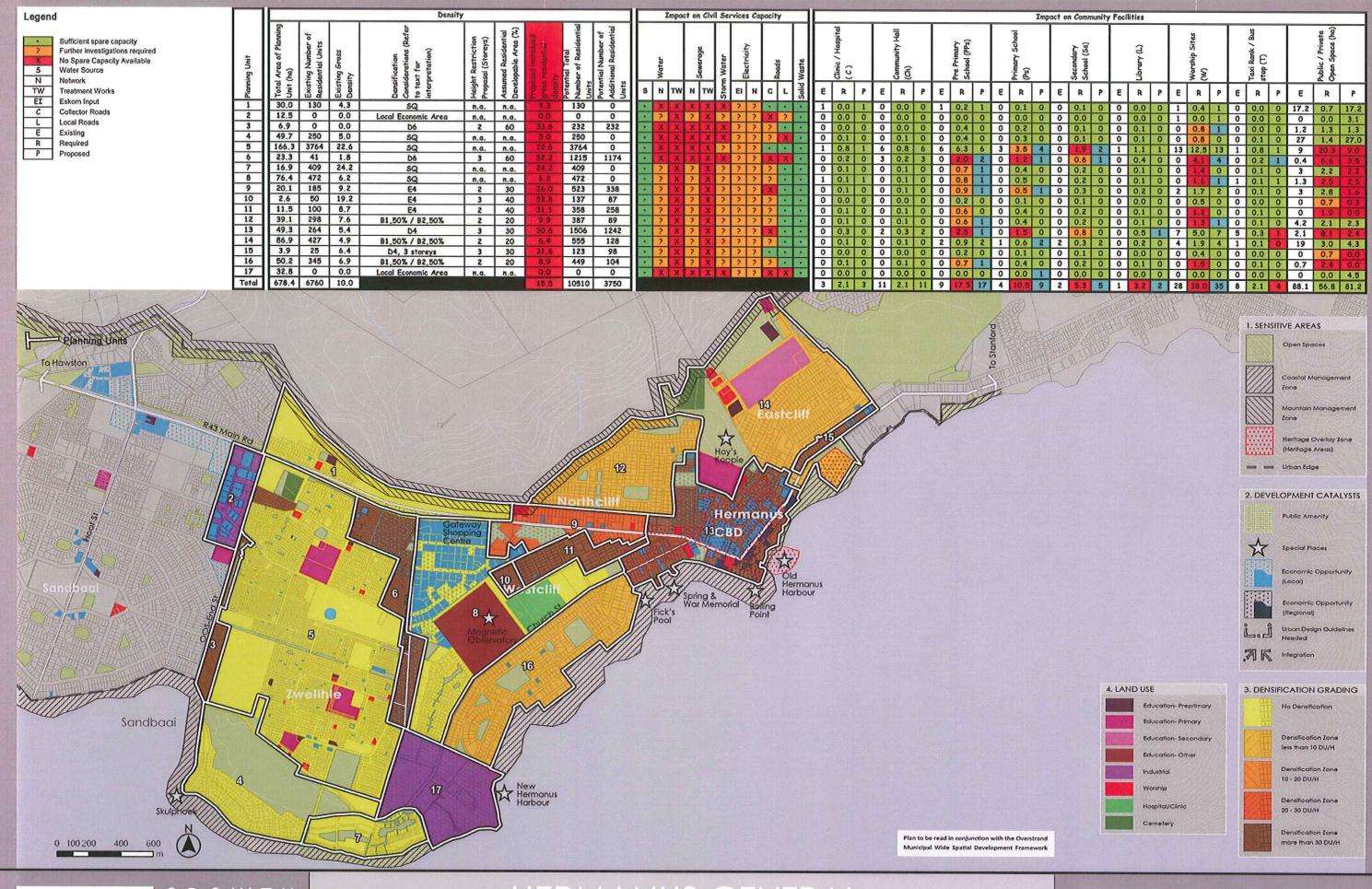




G. STRATEGIC GROWTH MANAGEMENT INTERVENTIONS (MAY 2010)









HERMANUS CENTRAL

H. PROPOSAL PLAN (MAY 2010)



