



 the  
markewicz  
redman  
partnership  
urban planners and designers



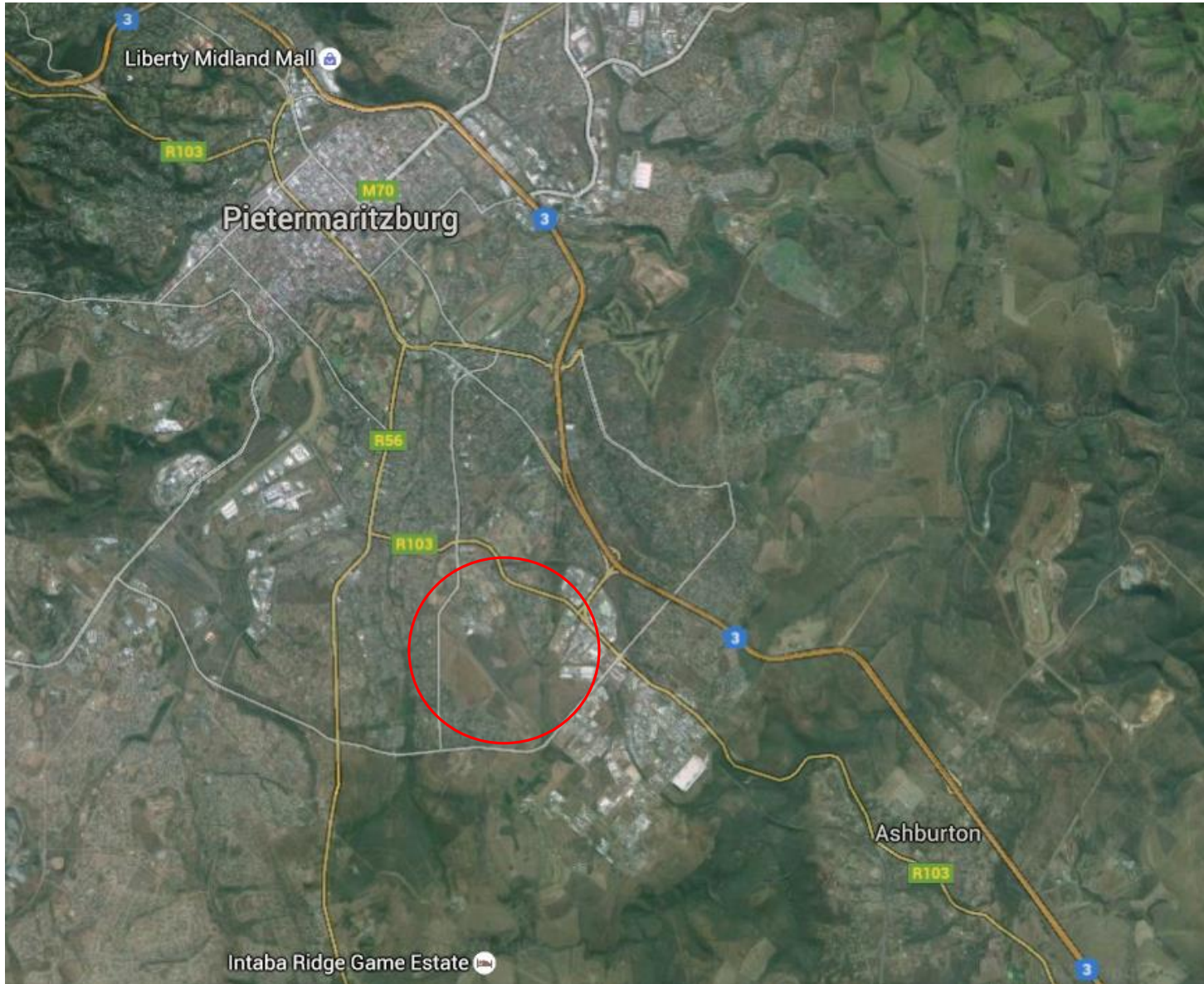
# PIETERMARITZBURG AIRPORT PRECINCT PLAN

PRESENTATION TO IDP FORUM

30 SEPTEMBER 2016

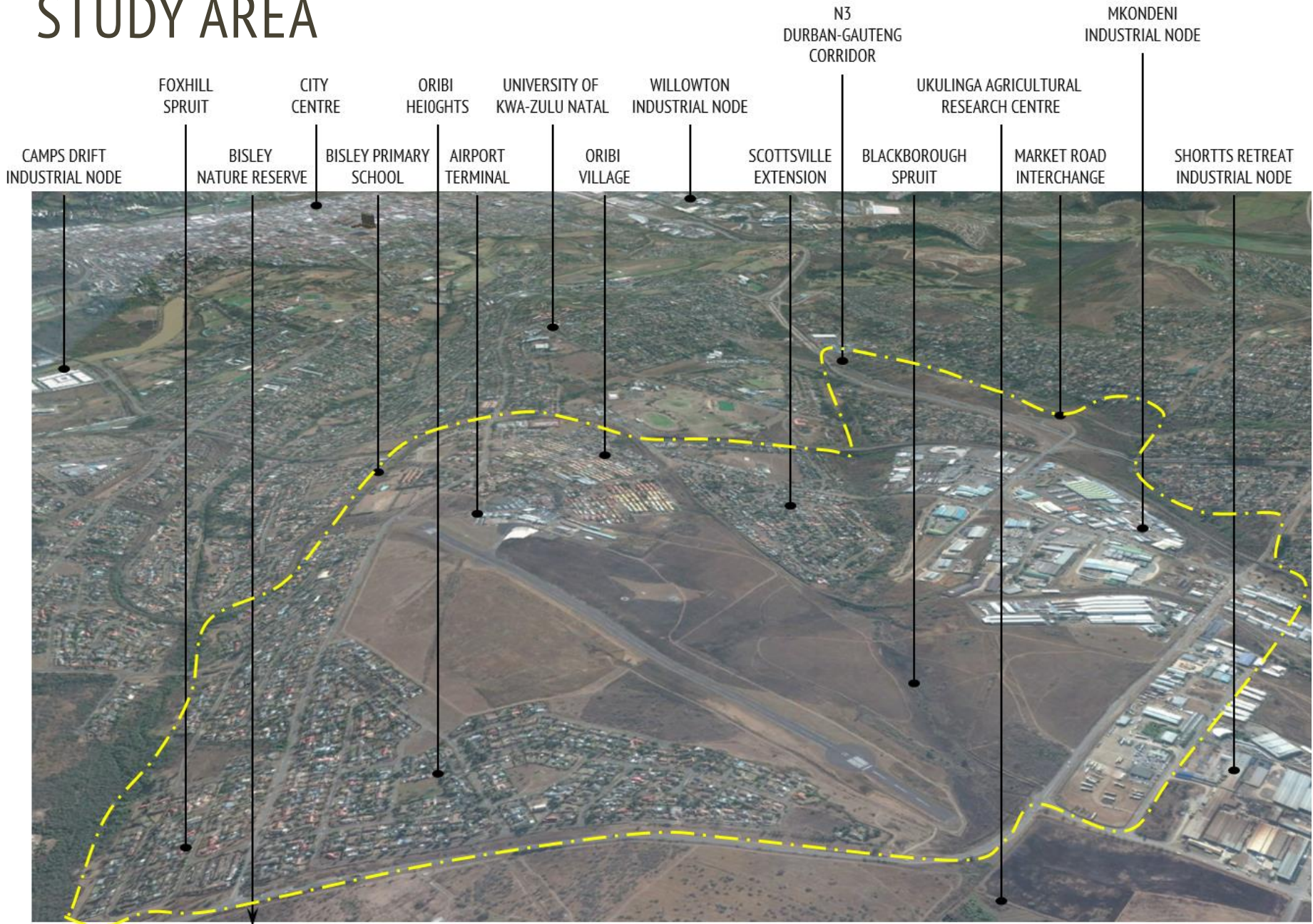


# LOCALITY PLAN





# STUDY AREA







Oblique Aerials



Pietermaritzburg Airport



Housing Typologies



Roads



Environment and Open Space



Economic Typologies



# ROLE OF THE AIRPORT

Irrespective of the economic climate at any point in time, the growth of the Airport will be driven by the growth of the local, regional and national economies and the associated demand for connectivity between Pietermaritzburg (and the region it serves) and other national (domestic) business centres.

Furthermore, since its primary air links are to locations also served by King Shaka International Airport or by road, its growth and competitiveness, in both the passenger and cargo movement markets, will also depend on its regional and local accessibility and its operational efficiency.

# STRATEGY

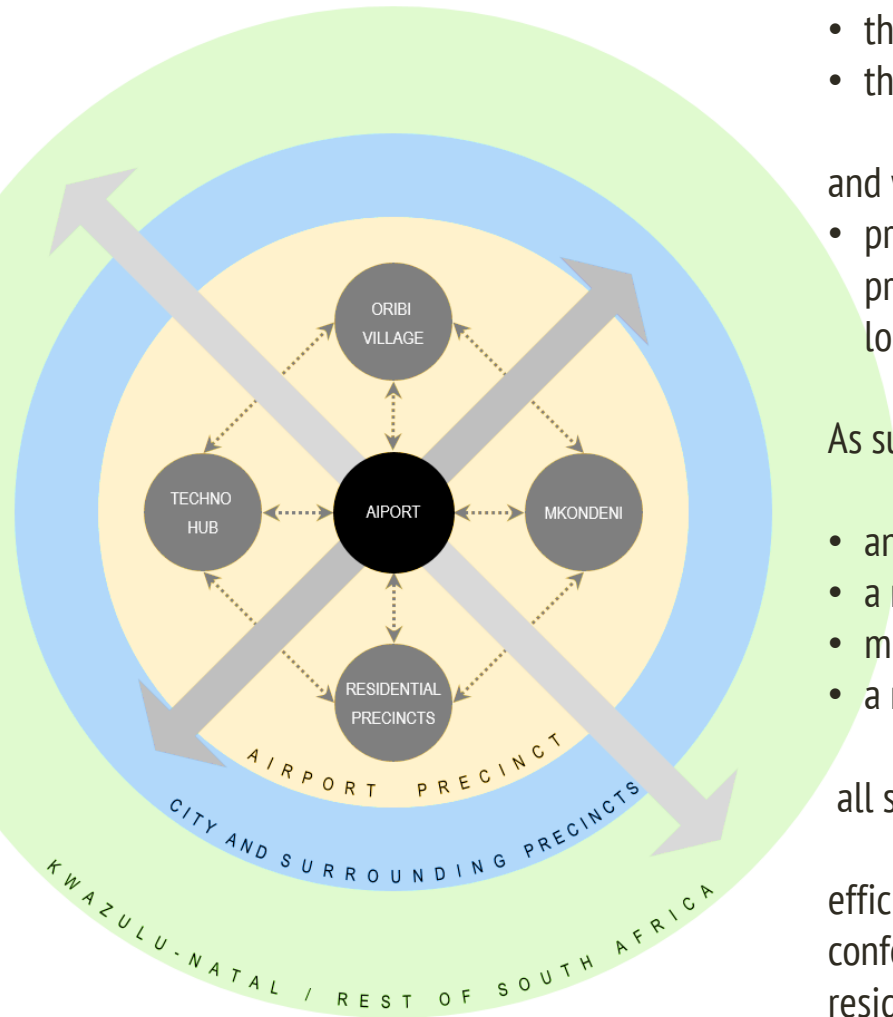
Firstly,

“Fix” current infrastructure, maintenance and operational deficits relating directly to the Airport and to the wider precinct so that optimum performance and economic outputs can be achieved under current economic conditions.

Secondly,

It is imperative that a more positive and expansive vision for the precinct is formulated which prepares the precinct for longer term investment into both ***local economic development imperatives*** (i.e. education, training and knowledge development) and ***national growth strategies*** (i.e. land assembly and development, infrastructure expansion and logistics support (e.g. respond to the N3 corridor initiative)).

# VISION



The creation of a knowledge, logistics and manufacturing precinct which is linked into:

- the national aviation network,
- the logistics platform of the N3 development corridor,
- the surrounding region

and which:

- provides a “smart” and sustainable learning, training, and production hub for the City, centred around aviation services, logistics, production and research.

As such the Precinct will feature

- an accessible and efficient regional airport,
- a mixed use technology park,
- mixed use manufacturing districts and
- a mixed use business precinct

all supported by:

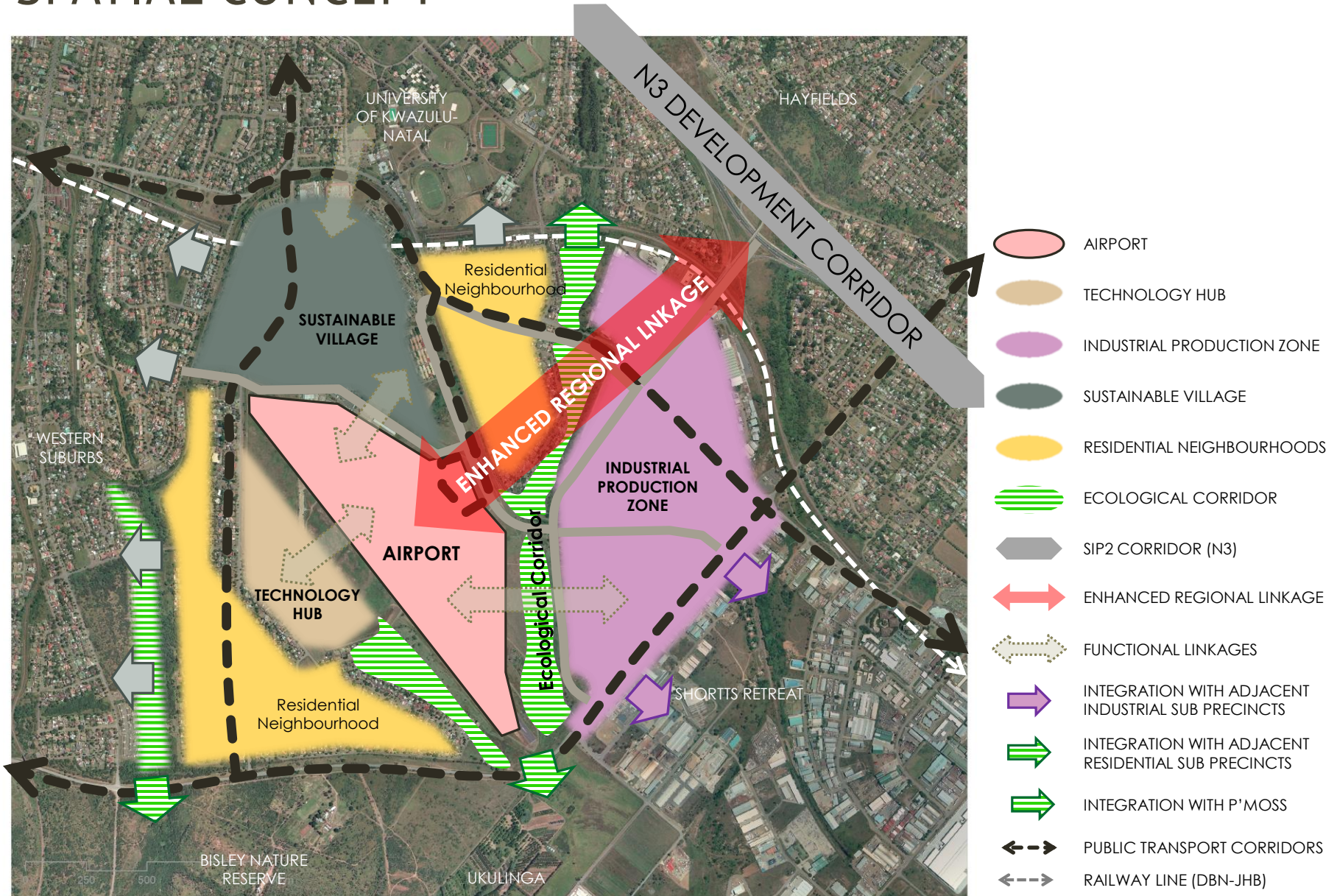
efficient infrastructure and transportation services, retail, offices, and conferencing facilities, and a variety of permanent and temporary residential accommodation options

















# SPATIAL CONCEPT & FRAMEWORKS



# SPATIAL CONCEPT



-  AIRPORT
-  TECHNOLOGY HUB
-  INDUSTRIAL PRODUCTION ZONE
-  SUSTAINABLE VILLAGE
-  RESIDENTIAL NEIGHBOURHOODS
-  ECOLOGICAL CORRIDOR
-  SIP2 CORRIDOR (N3)
-  ENHANCED REGIONAL LINKAGE
-  FUNCTIONAL LINKAGES
-  INTEGRATION WITH ADJACENT INDUSTRIAL SUB PRECINCTS
-  INTEGRATION WITH ADJACENT RESIDENTIAL SUB PRECINCTS
-  INTEGRATION WITH P'MOSS
-  PUBLIC TRANSPORT CORRIDORS
-  RAILWAY LINE (DBN-JHB)



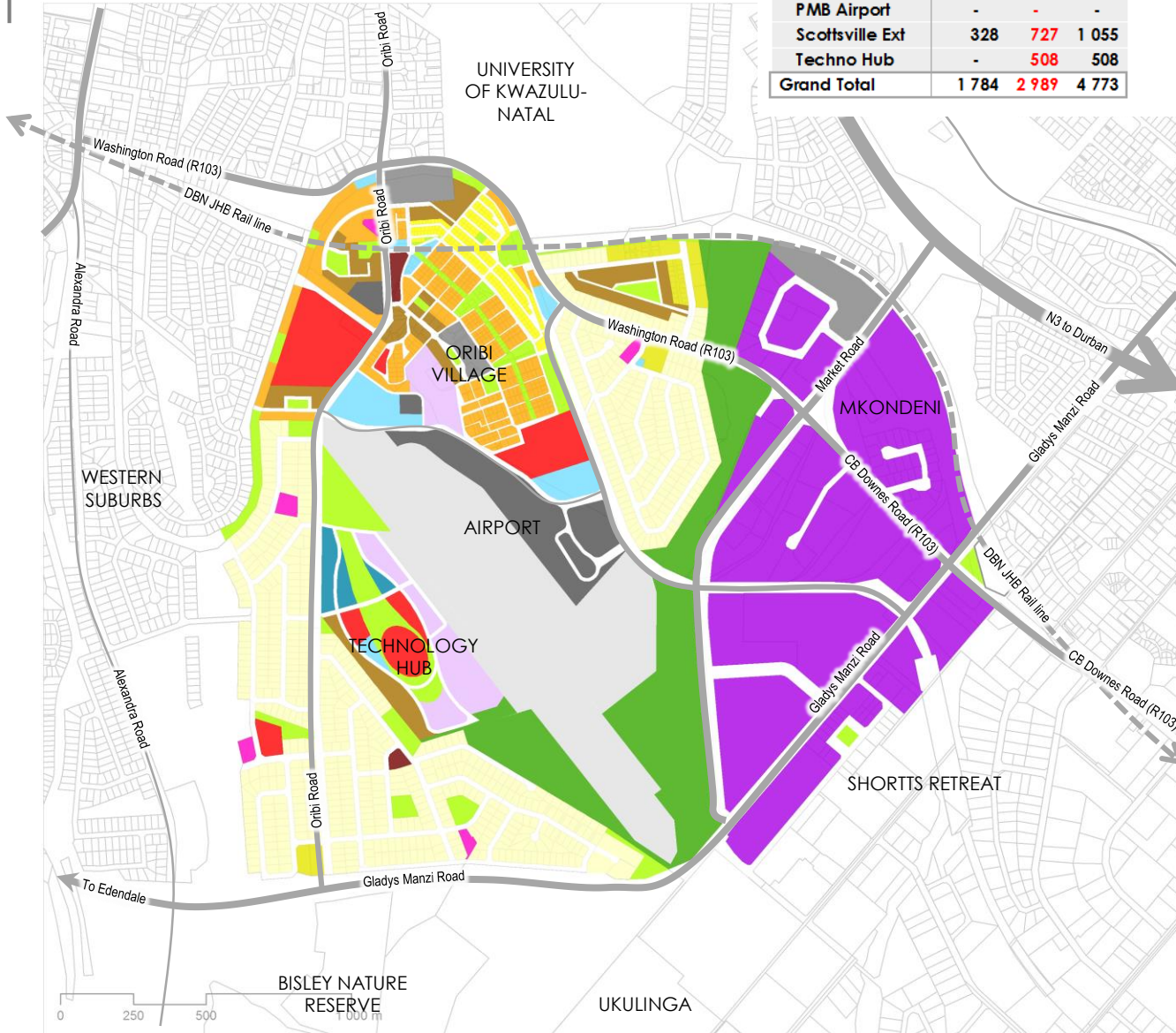
# LAND USE FRAMEWORK

RESIDENTIAL UNITS

	Existing Units	New Units	Total Units
Blackborough	-	-	-
Mkondeni	-	-	-
Oribi Heights	536	99	635
Oribi Village	920	1 655	2 575
PMB Airport	-	-	-
Scottsville Ext	328	727	1 055
Techno Hub	-	508	508
<b>Grand Total</b>	<b>1 784</b>	<b>2 989</b>	<b>4 773</b>

FLOOR AREA (COMMERCIAL AND O

	Existing Floor Area	New Floor Area	Total Floor Area
Blackborough	-	-	-
Mkondeni	804 771	204 570	1 009 341
Oribi Heights	12 226	6 822	19 048
Oribi Village	76 026	84 355	160 381
PMB Airport	13 739	23 174	36 913
Scottsville Ext	4 048	518	4 566
Techno Hub	-	114 008	114 008
<b>Grand Total</b>	<b>910 810</b>	<b>433 447</b>	<b>1 344 257</b>



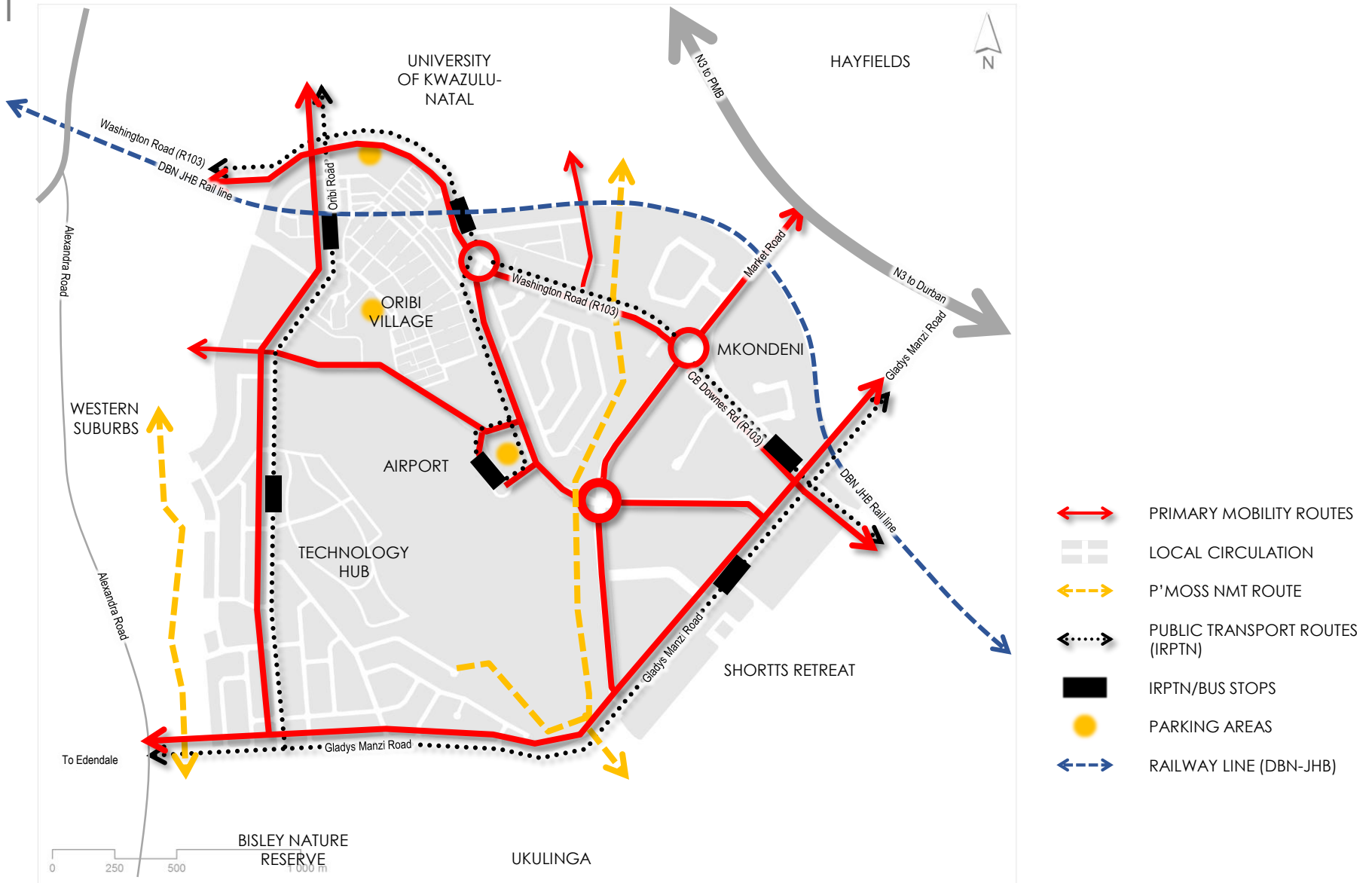
LAND USE (PROPOSED)

- SPECIAL RESIDENTIAL (10)
- SPECIAL RESIDENTIAL (50)
- INTERMEDIATE RESIDENTIAL (20)
- INTERMEDIATE RESIDENTIAL (50)
- GENERAL RESIDENTIAL (200)
- LIMITED BUSINESS
- MIXED USE
- LIGHT INDUSTRIAL
- GENERAL INDUSTRIAL
- EDUCATION
- INSTITUTIONAL
- WORSHIP
- GOVERNMENT
- MUNICIPAL
- AIRPORT
- ACTIVE PUBLIC OPEN SPACE
- PASSIVE OPEN SPACE
- ROAD
- RAILWAY PURPOSES

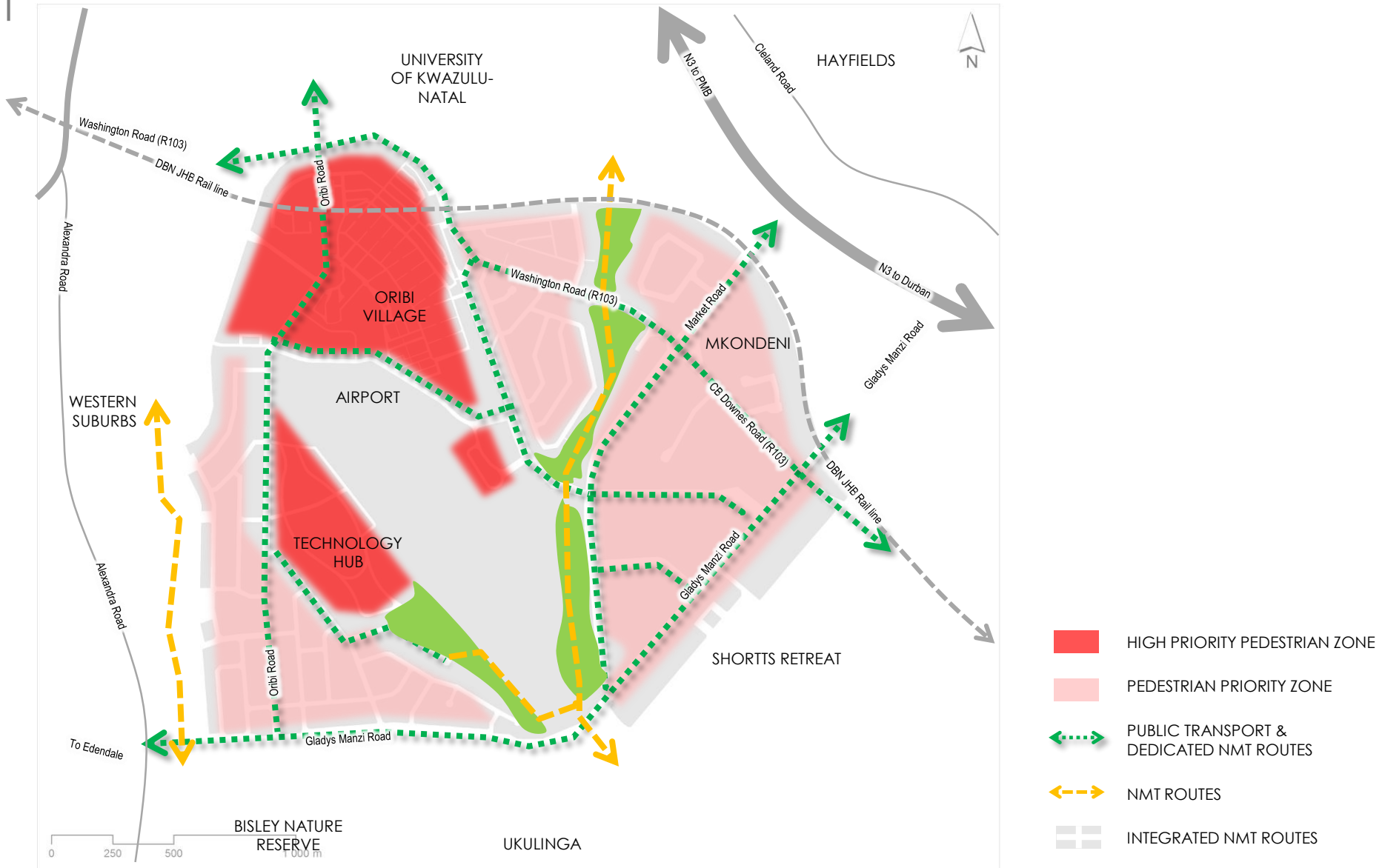
LAND USE FRAMEWORK



# ACCESS & CIRCULATION FRAMEWORK

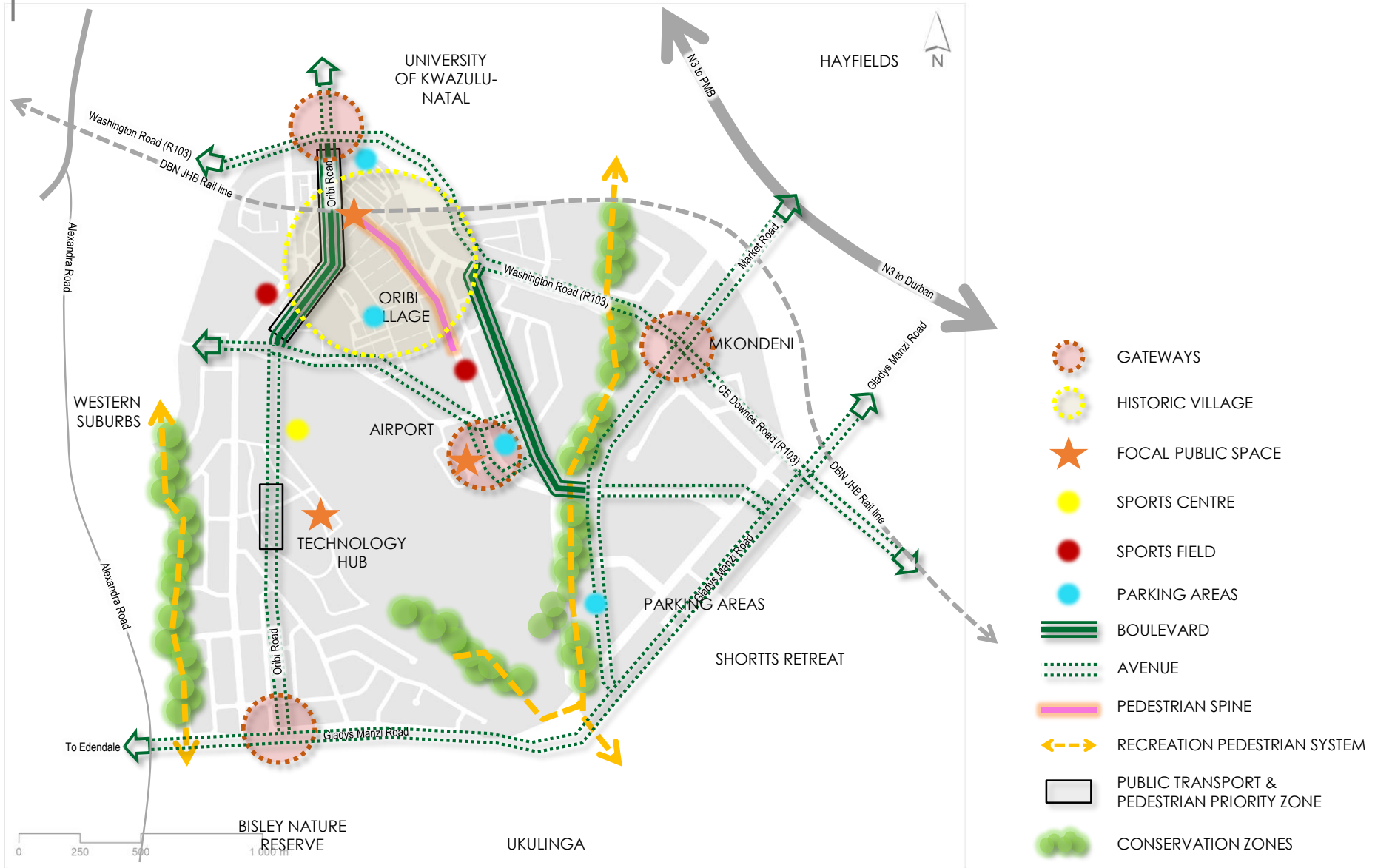


# NMT FRAMEWORK





# PUBLIC SPACE & LANDSCAPE FRAMEWORK



# ENVIRONMENTAL FRAMEWORK



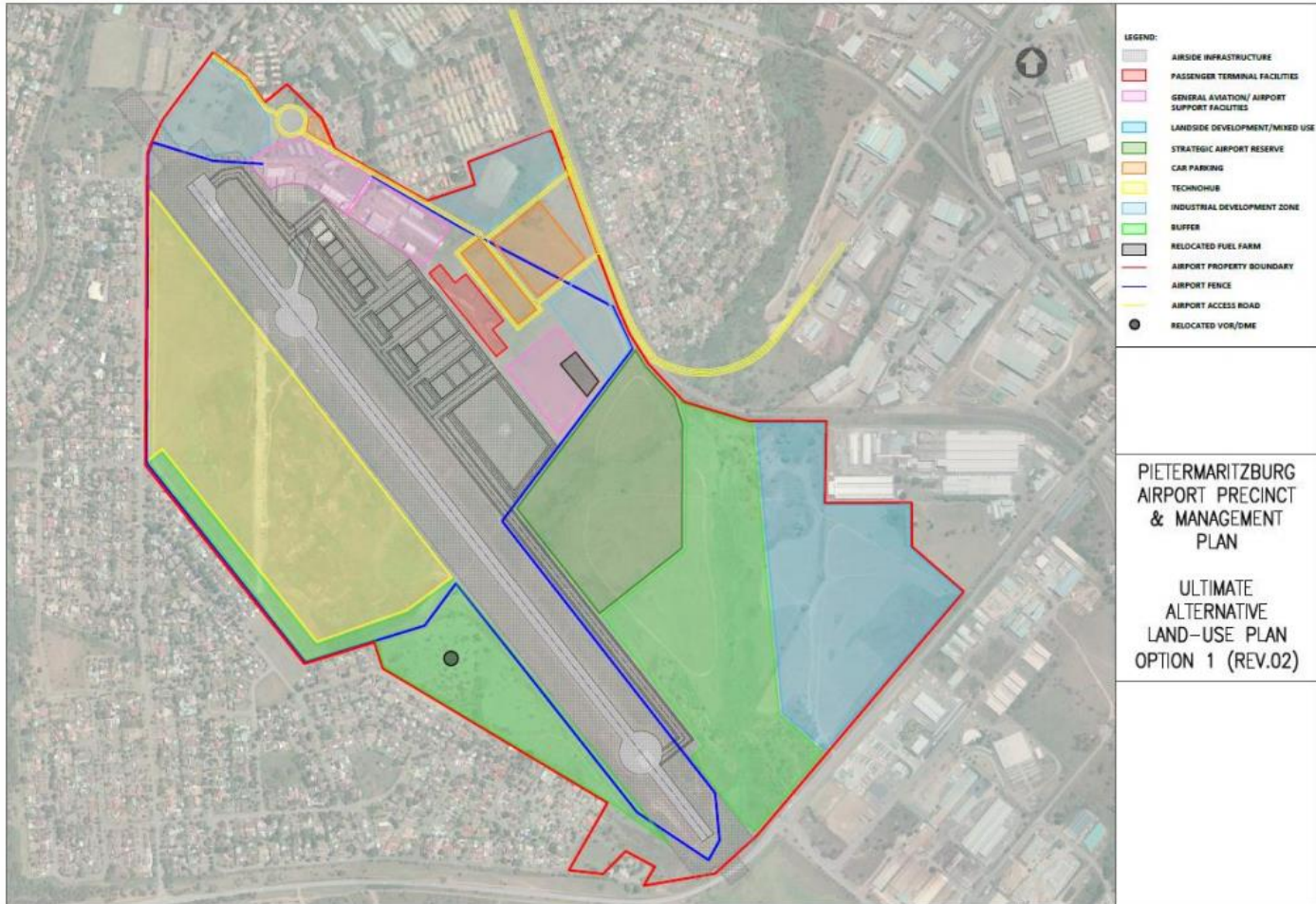
- P'MOSS (ENVIRONMENTAL PROTECTION)
- ACTIVE OPEN SPACE





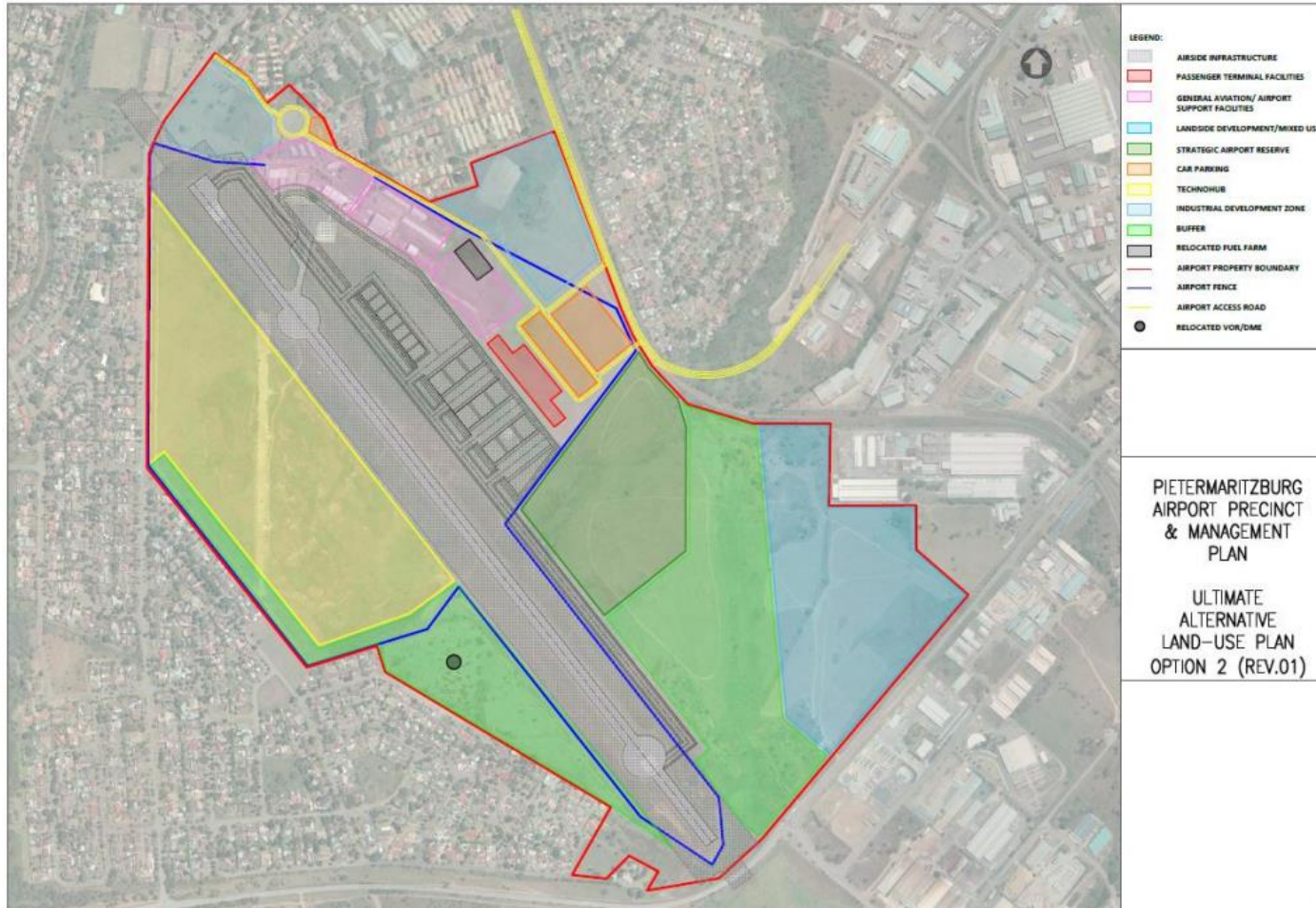
# PRECINCT GUIDELINES

# AIRPORT OPTION 1

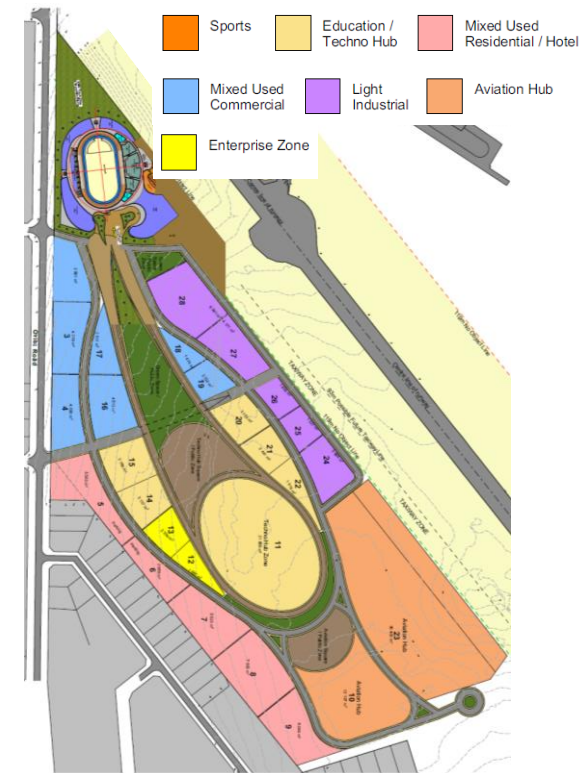




# AIRPORT OPTION 2



# TECHNOLOGY HUB



CURRENT LAYOUT PROPOSAL

- GATEWAY ENTRANCES
- MIXED USE
- RESIDENTIAL BUFFER
- PUBLIC TRANSPORT ROUTE
- LOCAL ACCESS
- LINK TO ORIBI VILLAGE
- INTERFACE LANDSCAPING
- LANDSCAPED SQUARE
- PARK

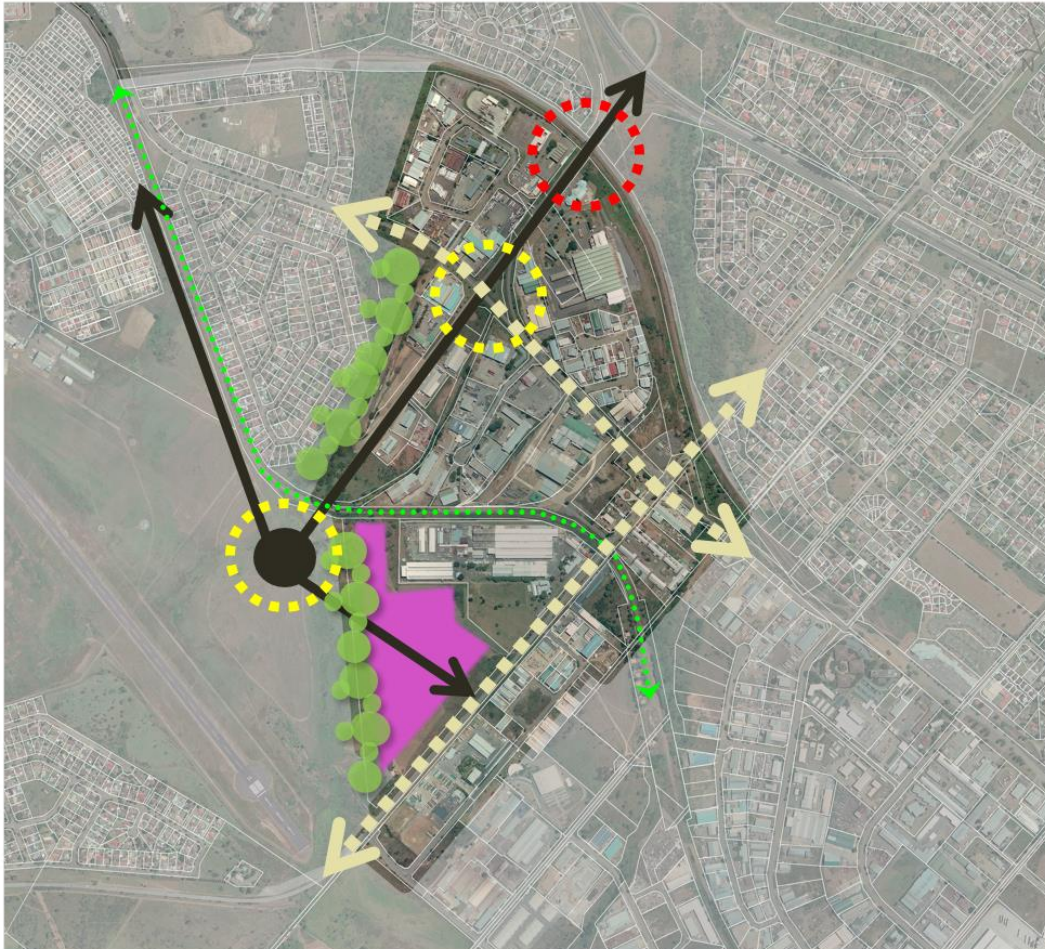









# ORIBI VILLAGE



-  GATEWAY TREATMENT
-  MIXED USE
-  PUBLIC SQUARE AND PUBLIC TRANSPORT NODE
-  RESIDENTIAL INFILL
-  SCHOOL
-  PUBLIC TRANSPORT ROUTE
-  NEW LINK ROADS
-  LOCAL ACCESS
-  INTERFACE LANDSCAPING
-  LANDSCAPED SQUARE
-  CONNECT RAIL RESERVE TO PUBLIC SPACE CORRIDOR
-  PARK

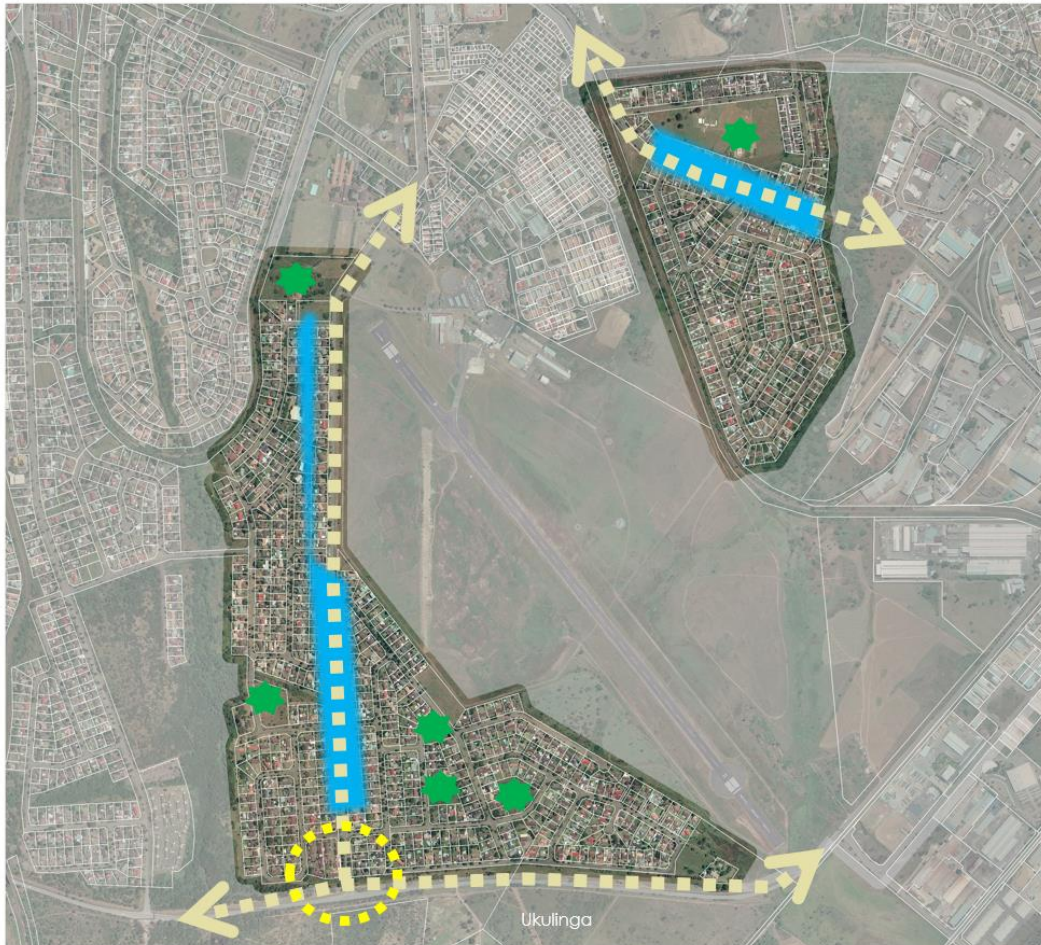
# MKONDENI



-  GATEWAY TO PRECINCT
-  GATEWAY TREATMENT
-  NEW INDUSTRIAL/LOGISTICS
-  PUBLIC TRANSPORT ROUTE
-  NEW LINK ROADS
-  UPGRADE & REHABILITATE OPEN SPACE SYSTEM
-  CONNECT RAIL RESERVE TO PUBLIC SPACE CORRIDOR



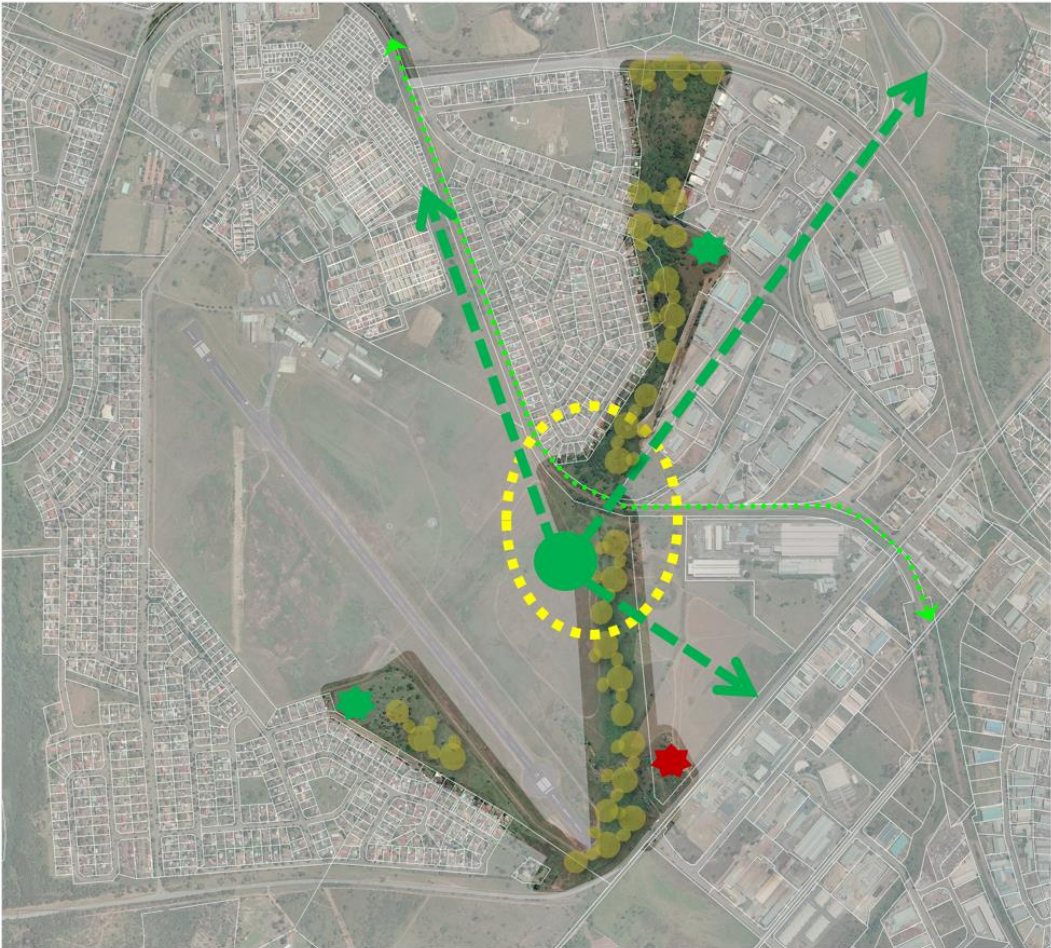
# RESIDENTIAL PRECINCTS



-  GATEWAY TREATMENT
-  MIXED USE
-  PUBLIC TRANSPORT ROUTE
-  PARK



# BLACKBOROUGH



-  GATEWAY TREATMENT
-  UPGRADE & REHABILITATE OPEN SPACE SYSTEM
-  LANDSCAPED ROADS
-  CONNECT RAIL RESERVE TO PUBLIC SPACE CORRIDOR
-  PARK
-  ENVIRONMENTAL EDUCATION CENTRE



ARTISTIC IMPRESSION



# ARTISTIC IMPRESSIONS





# ARTISTIC IMPRESSIONS





# IMPLEMENTATION FRAMEWORK



# IMPLEMENTATION FRAMEWORK

## Establishing the “Platform” for Development

### Implementation (Investment) Principles

- Consolidation of Investment: Build on current development initiatives and investment that is connecting the precinct to the City and its regional surroundings.
- Attend to Infrastructure and Services Deficits i.e. backlogs in capacity and/or maintenance.
- Invest in new infrastructure that will unblock or catalyse new investment by private sector, the community and or other spheres of the public sector.
- Upgrade Environmental Quality – this is a fundamental feature of each and every capital investment project – functionality, comfort, convenience, safety, security and identity and imageability.
- Attempt to ensure that each phase of new investment contributes to a sense of completion or wholeness i.e. environment or infrastructure should not appear incomplete.
- Integration: Focus on Integrated Projects i.e. projects that achieve multiple objectives and that establish a level of completeness to each phase of development.

# IMPLEMENTATION PLAN

CAPITAL WEB INTERVENTIONS					
PROJECT No.	PROJECT NAME	Phase One	Phase Two	Phase Three	Total
		0-5 yrs (2017-2022)	5-10 yrs (2023-2028)	10+ yrs (2029+)	
<b>AIRPORT INFRASTRUCTURE</b>					
TOTAL		15 000 000	42 000 000	0	57 000 000
<b>REGIONAL ROAD INFRASTRUCTURE</b>					
TOTAL		0	521 000 000	630 000 000	1 151 000 000
<b>CITY TRANSPORTATION INFRASTRUCTURE</b>					
TOTAL		22 200 000	27 000 000	0	49 200 000
<b>LOCAL INFRASTRUCTURE</b>					
TOTAL		20 000 000	6 300 000	20 000 000	46 300 000
<b>WATER / SANITATION / STORMWATER / ENERGY / ICT INFRASTRUCTURE</b>					
TOTAL		3 000 000	9 000 000	27 250 000	39 250 000
<b>ENVIRONMENTAL UPGRADE</b>					
TOTAL		9 500 000	13 000 000	1 000 000	23 500 000
<b>REGULATORY ENHANCEMENTS</b>					
TOTAL		4 000 000	500 000	500 000	5 000 000
<b>OPERATION AND MANAGEMENT</b>					
TOTAL		3 000 000	3 000 000	3 000 000	9 000 000
<b>TOTAL CAPITAL WEB COSTS</b>		76 700 000	621 800 000	681 750 000	1 380 250 000



# IMPLEMENTATION PLAN

LEVERAGED INVESTMENT					
NO	NAME	Phase One	Phase Two	Phase Three	TOTAL
		0-5 yrs (2017-2022)	5-10yrs (20123-2028)	10+yrs (2029+)	
<b>HOUSING</b>					
TOTAL		200 000 000	315 000 000	195 000 000	710 000 000
<b>TECHNO HUB</b>					
TOTAL		0	100 000 000	100 000 000	200 000 000
<b>INDUSTRIAL DEVELOPMENT</b>					
TOTAL		0	0	150 050 000	150 050 000
<b>AIRPORT DEVELOPMENT</b>					
TOTAL		20 000 000	40 000 000	110 000 000	170 000 000
<b>TOTAL LEVERAGED INVESTMENT</b>		220 000 000	455 000 000	555 050 000	1 230 050 000