

# **REPORT TOWARDS THE IMPLEMENTATION AND ENFORCEMENT OF THE MPENJATI/SOUTHBROOM TOWN PLAN FOR ECOLOGICALLY SENSITIVE AND SUSTAINABLE COASTAL DEVELOPMENT**

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**REPORT TO SOUTHBROOM CONSERVANCY AND SOUTHBROOM  
RATEPAYERS ASSOCIATION**

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## **LIST OF ACRONYMS**

**EIA – Environmental impact assessment**

**ICM – Integrated coastal management**

**KZN – KwaZulu-Natal**

**MPS – Mpenjati-Southbroom Town Planning Scheme March 2007**

**PSEDS – Provincial Spatial Economic Development Strategy**

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## **1. Background and Objectives**

The purpose of this report is to provide a basis for discussion within the Southbroom community and with interested public officials with regard to future planning of sustainable development within Southbroom in accordance with the existing MPS provisions and the enforcement thereof. More specifically, the report outlines an approach towards ensuring that over the next three years, strategies and plans are set in place by the Southbroom residents – in conjunction with the relevant tiers of both Local and Provincial government, to ensure that this area achieves its best possible contribution to the overall developmental needs of the wider region, given its distinctive comparative advantages – specifically that of a “green bead” on an attractive south coast string of settlements with various characteristics and features.

It is envisaged that this document could serve as a basis for formal interactions between Southbroom residents and owners and then with local, provincial and

national government with regard to specific statutory measures to be adopted to ensure sustainable development, within the parameters of the MPS, in this ecologically important coastal area. Suggestions on the nature of such interactions are made in sections 3 and 4 of this report.

At the outset it must be said that – in coastal planning terms - the Southbroom area is relatively unique in a number of respects. For example, the three significant coastal estuaries, one of the most remarkably preserved coastal dune ecological systems in an ‘urban’ KZN context and the Bush Buck Trail.

Large lot sizes provided in the original Southbroom Town Plan recognized the need both:

- to protect the very special character of Southbroom’s attractive, extensive and rich variety of indigenous Fauna and Flora and
- to accommodate an effective and non polluting application of the septic tank sewer system.

These original and far sighted planning concepts of yesterday are even more important in today’s environment than when they were conceived a century ago.

These unique aspects are being threatened by uncontrolled development densification by the relaxation of MPS rules relating to sub-division and FAR coverage. With the MPS rules applied, +750 new homes could still be built. If the present relaxation precedents continue, over and above the 750 new homes referred to, there would be an additional 300 to 600 new homes erected in Southbroom. Further restraints are imposed by the infrastructure within Southbroom: roads, storm water and the use of septic tank and conservancy sewage systems. Given emerging development pressures and past precedents, it becomes urgent in this relatively unique environment, that Southbroom residents and the relevant authorities act quickly to avert possible serious damage to the integrity of the area.

The purpose of what follows in the form of proposals is not to limit social and economic development and its associated benefits for the wider public; but rather to shape a specific component of coastal development in such a way as to ensure a

sustainable flow of such benefits in the longer term. The emphasis Southbroom wishes to retain is that of a very high level of ecological quality, high levels of biodiversity and low levels of environmental impact from future development. Together with just a few such remaining places on the entire KZN coast, Southbroom will hopefully thereby contribute to not only the environmental preferences of most of its own residents, but also to the attractive sub-tropical character of the wider region, which will serve as a basis for the Lower South Coast's wider tourism attractions for decades to come.

In the KwaZulu-Natal coastal context the approach being recommended is relatively innovative, and attuned to forthcoming public policy developments, as elaborated especially in section 4 of this point. However, the more general principles of participatory planning are hardly unique to the Southbroom area. Elsewhere in South Africa and the world it has become standard practice to integrate area based community participation into effective town planning. It is generally agreed within the planning profession that the form of such participation is usually more effective when it is "bottom-up" in character, rather than "top-down", or that of co-optation. However, it is also more likely that such planning will be successful where local initiative corresponds to the principles of national and regional policy in particular domains, and thus it is the recommendation of this report that such an approach also be adopted.

The document is structured as follows:

- SECTION TWO provides an assessment of the positioning of Southbroom in the Hibiscus Coast context as a "green bead" within a complex string of coastal settlements, each with varying functional roles.
- SECTION THREE then advances draft proposals for the extension of Environmental Priority Areas and Controlled Areas as defined in the currently approved MPS Town Planning Scheme Map. This will comprise the first stage of intended formal interaction between Southbroom residents and the relevant municipal officials.

- SECTION FOUR further advances draft Proposals for conformance with the White Paper on Sustainable Coastal Development and Draft Coastal Regulations as contemplated in the Integrated Coastal Management Bill as discussed in Parliament in late November 2007 (and due to become legislation in 2008). Initiatives with respect to provincial government officials already responsible for coastal policy matters, and the subsequent implementation of the provisions of this draft legislation, are therefore advised as a second stage of formal interaction between Southbroom residents and relevant municipal and provincial government officials.
- SECTION FIVE proposes further measures for Southbroom. Because the proposed initiative is relatively innovative in KZN context, and yet like the White Paper derives its guidance from both the best and worst (the latter to be avoided) of international coastal development experience, the report concludes by selecting some international best practice that are relevant for sub-tropical coastal residential, tourism and recreational contexts. Specifically, it offers up for discussion and further local adaptation, Preliminary Proposals for Conformance with International Best Practice in respect of architecture and urban design to ensure that in future Southbroom's development is in sympathy with its natural surroundings.
- SECTION SIX briefly outlines a proposed way forward.

## **2. Southbroom in National, KZN and Hibiscus contexts**

As the White Paper on Sustainable Coastal Development pointed out, the Hibiscus coast area when viewed in a national context has both opportunities and threats:

“The economy is based largely on seasonal leisure-based tourism and recreation. The Hibiscus Coast is well positioned to develop nature-based tourism with community participation, because of its proximity to Durban, warm coastal waters, reefs with high bio-diversity and dense coastal thicket with a variety of unique animals and plants. Although tourism infrastructure

is well developed there is concern that development has not always occurred in a socially and environmentally sustainable manner” (p22).

Within the Hibiscus Municipal area at present there are however some localities that lend themselves more to high-impact urban use than others; and conversely, there are some localities where the remaining natural environment potentially enables nature-based tourism and recreation referred to above in the White Paper. Specifically, with regard to the former, Port Shepstone is for example identified within central government’s National Spatial Development Framework as one of just four “tertiary nodes” for KZN (i.e. tertiary in the national sense that they are regional supports outside the “primary” Durban/Pietermaritzburg node). Independent research also shows that Port Shepstone’s current cluster of commercial, industrial and both business and public services is such that it emerges as the deserving leader of specifically urban development investment for this region for the foreseeable future. Margate, likewise, has a distinctively urban character, although in this case more specifically orientated to traditional, beach-holiday tourism.

Indeed, the KZN Cabinet-approved 2007 Provincial Spatial Economic Development Strategy (PSEDS) identifies both Margate and Hibberdene as tertiary provincial nodes (the term tertiary is now used in the provincial sense as third level), with Port Shepstone once again identified as one of just a few “secondary provincial nodes” (i.e. second in the provincial tier or hierarchy) The nodal (or concentrated) character of development is however somewhat blurring; and in between Margate and Port Shepstone there is now a virtually unending pattern of “strip” development that has been the subject of criticism of several provincial planning investigations (and indeed also in the Green Paper on Sustainable Coastal Development).

It is important to note that, in this context, nowhere is Southbroom identified as an actual or potential economic node. Below the third tier nodes identified in the KZN PSEDS are a final fourth tier list of some 34 “quaternary” nodes. Neither Southbroom nor any small town nearby is listed (the nearest is Port Edward); and for good reason, since the functional significance of these places (southwards of Ramsgate on the coast towards Port Edward) lies outside of the domain of conventional urban and economic development as “nodes”. They make an economic

contribution primarily through what the KZN PSEDS identifies as the second most important economic sector of the Province – viz. tourism. Whilst aspects of such tourism are oriented towards more urban contexts, the global trend is for beach tourism to become mixed with ecological concerns and interests. Separate recent research reports for Tourism KZN and Mauritian government respectively have demonstrated this. Simply lying in the sun next to the sea with a book and near a restaurant (traditional beach tourism) are increasingly being replaced as forms of relaxation, especially amongst higher spend tourists, with the desire - at least as a supplement - to be able to walk along stretches of un-spoilt, natural coastline, to view bird and sea life, etc.

Southbroom has amongst other important attributes:

- The Frederika Coastal Preserve (an important dune forest)
- The Bushbuck Trail
- Three coastal estuaries surrounded largely by indigenous vegetation
- An attractive golf course situated immediately adjacent and inland to the Frederika Coastal Preserve, and which – in the context of the local septic tank sewage systems - now functions as an important component of the groundwater and surface hydrological coherence of the Southbroom area
- An emergent walking trail through vegetation around the Southbroom town area.

Nowhere in the world does good town and regional planning suggest that all places should be the same in functional character. Camps Bay or Umhlanga, for example, are highly urban ‘unique’ coastal places with hardly an indigenous plant in sight, but it is not their urbanism *per se* that is alleged to be the source of their uniqueness but the apparent lack of environmental concern which is not the case in Southbroom.

More locally, within Hibiscus Coast, very expensive real estate is likely to be found in many places outside of Southbroom, much of it in more urban contexts like Margate and Ramsgate. Thus Southbroom’s emphasis upon high standards of natural environmental quality is supportive of the national and provincial policies on the environment. All of this also enhances the local Rates base, and opposition to good

quality coastal development is hardly the objective of those who seek local tax resources to enable them to assist poorer residents generally.

To reiterate: the purpose of what follows in the form of proposals is not aimed at limiting social and economic development and its associated benefits for the wider public; but rather to shape a specific component of coastal development in such a way as to ensure a sustainable flow of described benefits in the longer term. This follows from its contribution to the attractive sub-tropical character of the wider region, and should serve as a basis for the Lower South Coast's wider tourism attractions for decades to come.

### **3. The Mpenjati-Southbroom Town Plan in Outline and Proposals for Amendments**

The current Town Planning Scheme includes provision for an Amenity Reserve at the beach; a significant element of Active Open Space (the golf course); and coastal Conservancy Areas limited to portions of the dunes and portions of river-courses (including the Bushbuck Trail) and estuaries. Otherwise most of the remainder is zoned for various levels and densities of Residential use and (appropriately) small residuals of mixed use, provision for public buildings and miscellaneous other uses.

Not reflected on the Map however are provisions in the MPS Rules for Environmental Priority Areas and Controlled Areas. Both are defined at some length in the MPS, the latter in particular being defined at some length in MPS documents and require greater levels of development control and oversight than is customary; and which therefore could be used to give effect to some of the proposals that we make in sections 4 and 5 to follow.

(According to the MPS Planning Scheme Clauses (1.8.12) a Controlled Area:

“ Means any area demarcated upon the Scheme Map by the overprinting of a black cross-hatch pattern, where, by reason of the topography, the unsuitability or instability of the soil, the presence of natural vegetation or other like reasons, development or building or the execution of any other activity may be prohibited, restricted, or permitted upon such conditions as may be specified having regard to the nature of the said area (see Clause 6.3)”. (For an elaboration see Appendix 1)

(According to the MPS Planning Scheme Clauses (1.8.21) a Environmental Priority Area:

“ Means sites which have been identified as being of special environmental significance and which are subject to the additional scheme controls specified in Clause 6.2” )

It is suggested here Southbroom should endeavour to ensure that, beyond the existing Amenity Reserve, Conservancy Areas and Active Open Space zones, the entire area of Southbroom from the high water mark should be designated as a Controlled Area, and the full extent of the river valleys, estuaries, beach and dune zones as Environmental Priority Areas.. The guidance in respect of the municipal oversight of future development in these areas should in turn follow from the Integrated Coastal Management Bill, which is discussed in the section to follow; as well as the International Best Practice development principles as set out in the final section of this discussion document.

However, it can already be noted that an important consideration here will be that of estuarine water quality. Dating back to at least the time of Dr George Begg’s internationally-cited doctoral thesis (in the 1970s) it has been known that aspects of water quality have been literally “killing” KZN estuaries. Sewerage from septic tanks has been a major contributor to this, and recent readings taken by independent experts in the Southbroom estuaries and environs show such pollution to be unacceptably high in some cases. Any further proposed developments in the Southbroom area must be assessed against the prospect of their likely negative impact on pollution levels, and ongoing monitoring of pollution is advised.

It is recommended that the Southbroom Conservancy and Ratepayers Association should: immediately take their existing results of water quality assessments to the Hibiscus Coast Municipality’s town planning officials, together with this report; recommend the immediate practical implementation of a proposed ‘Controlled Area’ zoning status for Southbroom; recommend that any further developments in this area require an EIA with specific reference to the likely impacts on the groundwater, surface water and possible effluent/pollution of estuaries.

Water pollution should not be the only factor considered in such EIAs, but also impacts upon natural vegetation and bio-diversity, as well as the layout and design principles suggested in section 5 of this report. As is customary, there should be severe penalties imposed upon those developers and property owners who do not comply. In addition the Southbroom community should participate and be more proactive in the strict application of the MPS rules.

#### **4. The ICM Bill and its Likely Implications**

The ICM Bill envisages a number of key concepts, measures and strategies which – it is proposed - Southbroom should be pro-active about. Specifically, it is proposed that both the Southbroom Conservancy and Ratepayers Association should take note of that Bill's references to

- Coastal Protection Zones
- Special Management Areas
- Coastal Set-back Line/s and
- Estuarine Management Plan/s.

They should then become proactive about involving themselves in locally specific definitions of these within the forthcoming municipal and provincial Coastal Management Programmes; and, most specifically they should take the initiative together with the town planner/s in the Hibiscus Coast and Ugu Councils regarding the establishment and operation of a Municipal Coastal Committee.

This should happen in tandem with a parallel effort to define and expand Controlled Areas and Environmental Priority Areas in terms of the MPS rules, as discussed in section 4 above.

To reiterate the conclusion to the previous section: an important point of departure for such involvement will be the need to measure current levels of pollution in the water of all estuaries within or astride Southbroom (especially ecoli, given septic tanks here); and to advocate urban design principles in harmony with nature for all future development in Southbroom.

Before the ICM Bill becomes law, it is advised that the Southbroom Conservancy and Ratepayers Association establish formal contact with the provincial officer responsible for 'COASTCARE', who liaises with national government in respect of coastal environmental management (this is likely to be Mrs Tandy Breedzke of KZN Dept of Local Government; but if not her she could advise). The purpose of such communication would be for her to review the present report, and to make proposals on how the Southbroom Conservancy and Ratepayers Association could become involved in the Provincial Coastal Management Programme. This will open the relevant informal channels of communication for subsequent formal incorporation into government approved structures later in 2008.

It is further suggested that the Southbroom Conservancy and Ratepayers Association promote within the planning structures and processes referred to above, what are described below as International Best Practice Norms for Sustainable Coastal Development.

#### **5. International Best Practice Norms for Sustainable Coastal Development – and Derived Proposals for Southbroom**

The White Paper on Sustainable Coastal Development amongst other SA government policy documents refers to the need to follow international best practice in respect of development strategies and procedures.

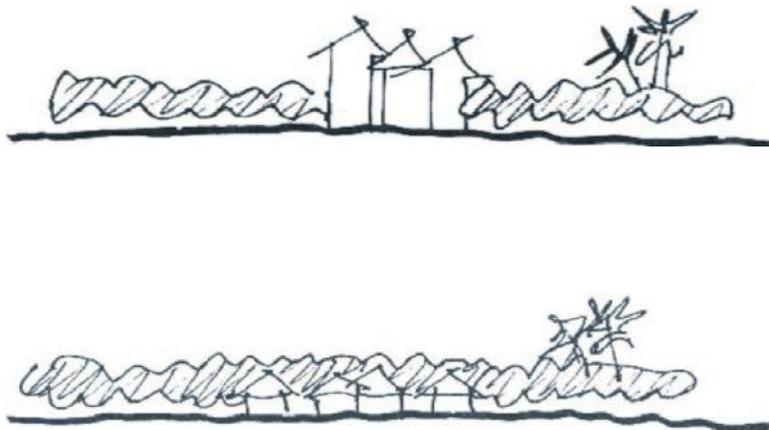
It is suggested here that one model which could lend content to this concept in the MPS coastal development context could be the design guidelines recently adopted by the government of Mauritius following recommendations made to them by the international planning firm Halcrow. (An extract from the Mauritian government's new principles is provided in Appendix 2 as an illustration).

The key principle here is that existing and future development should occur in sympathy with nature, and wherever possible should be partially obscured from adjacent sites by sub-tropical vegetation.

In more specific urban design terms, it is suggested that in future Southbroom, adopts principals drawn from the Mauritian Governments design guidelines to:

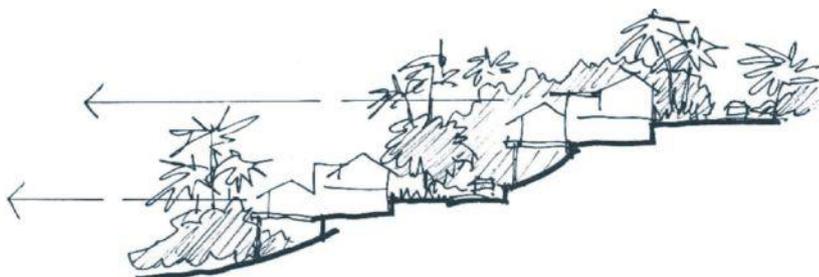
- Keep development under the sight lines of topography and vegetation, as shown in the second of the two sketches shown in figure 1.
- Stagger development to integrate it with the landscape and maximise views, as illustrated in figure 2.

**Figure 1: How design should not (top) and should (bottom) fit in with subtropical coastal contexts (after Government of Mauritius 2005)**



**Figure 2: How architecture and topography should fit in with landscape and vegetation in coastal subtropical contexts (after Government of Mauritius 2005)**

- (a) Slope and sight – lower vegetation screens buildings; views through taller stemmed plants



**(b) Perspective on a single, two storey dwelling**



In summary, what these guidelines collectively emphasise is careful management of *both* the types of buildings permitted and their site positioning related to the protection and clearance of vegetation.

It should be reiterated that the existing MPS is to be supported, and what is being proposed here are additional measures for its support and enhancement. Moreover, it must be noted that the additional guidelines referred to here are of course not entirely unique to new developments in Mauritius, and have in fact been implemented in some of the highest valued private developments in South Africa.

In the specifics of the MPS context, the current guidelines for NEW developments are :

1. Throughout the controlled area, building footprints should occupy no more than 25% of the entire site, and buildings to be no more than two storeys ( each of 3M in height) and the basement rules in the MPS must be strictly

applied. Overall, Floor Area Ratios or FARs of a maximum of 0,25 should apply)

2. No indigenous plants above 1 m in height are to be removed in an area 2m from the footprint of the approved building plan of a new building area, without the express written approval of the relevant authority.
3. In all new development in a controlled area, roofs should be constructed of natural materials including tile, wood, thatch, slate with the possible exception of non-natural materials which give off a natural appearance.

In addition for the purposes of discussion within the Southbroom community for NEW developments, the following are proposed :

1. Within 250m of high water mark no development should be allowed in which the height of the roof exceeds the height of the highest indigenous plants currently on site (over 6 meters in height), and which will not be removed during construction; and throughout the 1 km Controlled Area this same rule shall apply in the case of the highest of all trees/plants on site (over 6m in height), unless without the express approval of the relevant authority under exceptional circumstances.
2. On the seawards/landwards side of any slope, any development which has an existing building upslope of it may not blatantly obscure the views from the highest floor of that existing building;

Appropriate penalties should be imposed by the municipality on any property owner and/or developer who violates these provisions.

For all EXISTING development, the following rules shall be applicable:

1. Throughout the Controlled Area existing indigenous plants of more than 1 m in height shall not be destroyed or removed without the express consent of the relevant authority;
2. Any intended building extensions should be subject to the same rules as those recommended above for new development

3. Any re-roofing should be in accordance with the rules recommended for new development above.

Again, relevant penalties must be imposed upon those who fail to comply.

Finally, the Municipality should be approached to investigate possible methods of encouraging and possibly incentivising landowners to allocate for conservancy use undeveloped portions of their land which abut existing conservancy areas. This would expand indigenous areas and promote wildlife movement throughout Southbroom .

## **6. Way Forward**

We are not suggesting one course of action for the Southbroom Conservancy and Ratepayers Association. The implications of the ICM Bill and consequent need to interact early with responsible Provincial officials, is only one avenue of relevance, and this mainly for the medium term. The short term priority lies in the direction of proposing extended Amenity Reserves, implementing ongoing monitoring of estuarine water quality and monitoring bio-diversity; reinforcing Environmental Priority Areas and proposing a Controlled Area (or Areas) in terms of the town planning provisions, with associated agreed Rules. But above all, the existing MPS Town Planning Rules must be strictly enforced and implemented in relation to site density (FAR) , EIAs and height restrictions.

There will of course be views within the Southbroom Conservancy and Ratepayers Association which may lead to amendment of these proposals in detail before they are incorporated into the provisions for the extended Controlled Areas; but if these views are harmonised and blended with good, scientific principles of ecology then one will have the basis for scripting the detailed content of how the proposed Controlled Areas should effectively be managed in the future.

Indeed, an important objective of the present report is to stimulate a process of additions, alterations and amendments to the initial short-lists of regulations above; and it is important to see this paper as the foundation or beginning point for a process that builds, what has become affectionately known in the South

African context as “sufficient consensus”, locally around rules for the Controlled Area.

Taking local initiative in town planning affairs was something that was specifically encouraged in the White Paper on Developmental Local government; and world-wide participatory planning has become the norm.

It is therefore proposed that this draft is circulated by the Southbroom Conservancy and Ratepayers Association to locally interested and affected parties and municipal officials for comment as soon as possible. Written comments should be requested by 2<sup>nd</sup> March 2008, after which the author will collate and synthesise these, and incorporate them into a draft which will become the basis for public presentation at the Launch on a Programme of Action provisionally scheduled for the 26th March 2008.

JJM

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APPENDIX 1: EXTRACT FROM MPENJATI-SOUTHBROOM TOWN  
PLANNING SCHEME CLAUSES

**6.3 CONTROLLED AREAS**

Controlled areas shall be shown on the scheme map by way of a black cross hatch, and within controlled areas:

- (i) No person shall develop any land, or excavate or level any site, or remove any natural vegetation or ground cover from, or erect any structure of any nature whatsoever or carry out any work upon such site without having obtained the prior approval of the Council in terms of this sub-clause.
- (ii) No such approval shall be given unless the Council, after due examination, and subject to such conditions as it may specify, is satisfied that any such development, erection or other work referred to in paragraph (i) hereof can be carried out without danger to the site, or any adjoining site or any buildings thereon. On Lots 17-36 Oslo Beach no development shall be allowed unless access to the satisfaction of the Council and the Executive Director of Roads can be provided.
- (iii) For the purposes of any examination referred to in paragraph (ii), the applicant shall, where required by the Council, submit such plans and reports as the Council may require. Without affecting the generality of the foregoing the Council may call for:
  - (a) Engineering drawings to a suitable scale showing how the driveway and proposed buildings should be constructed on the lot including earthworks, foundations and retaining walls;
  - (b) Detailed soils and drainage (stormwater and sewer) plans;
  - (c) A plan identifying areas on the lot that are unstable or unsuitable for building purposes that are to remain undisturbed.
  - (d) The proposed revegetation of the disturbed portions of the site following completion of earthworks so as to stabilise the site as soon as possible.
- (iv) The implementation of the abovementioned plans shall be carried out under the supervision of a suitably qualified person who would be required to approve (by signature) such plans.
- (v) The conditions referred to in paragraph (ii) hereof may be such as to:

- (a) restrict the form or nature of the building or structure;
- (b) limit the size and / or shape of the building or structure;
- (c) prescribe the form of foundations for the building or structure;
- (d) prescribe or restrict the materials of which the building or structure is to be constructed;
- (e) determine the siting of any building or structure and of any soak pits or other drainage works;
- (f) prohibit or control any excavation on the site, the construction of any roadways, paths and other garden features;
- (g) prohibit or control the removal of any natural vegetation;
- (h) control any other aspects which the Council considers necessary.
- (vi) Notwithstanding anything contained in this sub-clause the Council shall not be liable for any loss or damage which may occur to any building, structure of any property whether within a controlled area or otherwise arising out of any action by the Council in terms of this sub-clause.

APPENDIX 2: EXTRACT FROM NEW MAURITIAN GOVERNMENT  
COASTAL URBAN DESIGN GUIDELINES

**“Many destinations are recognising the importance of promoting a quality environment and capitalising on the growing market for ecotourism.**

**Ecotourism will always remain a niche form of travel, relevant only in the relatively few areas of the world that still possess valuable natural attractions. So it should be viewed as just one possible solution in a range of strategies for more sustainable development. Thus in order not to focus on a very narrow and idealised market segment, these guidelines will not be confining its discussions to the purest form of ecotourism. Rather, it will seek to identify how to make more sustainable the many forms of tourism in Mauritius which are related to ecotourism. It is the application of the principles of ecotourism (harmonizing social, economic, environmental and educational goals) which is the objective. It also embraces specific principles which distinguish it from the wider concept of the traditional resort development (see following table).**

**The key principles should involve:**

- **Environmentally sound development, actively contributing to the conservation and enhancement of natural and cultural heritage.**
  - **Benefits to local communities, through such means as participation in decision making, employment, management, ownership, education, self-reliance and fulfilment, or strengthening culture.**
  - **Economic benefits to tourism industry participants.**
  - **Education and interpretation, to provide participatory and respectful experiences for the visitor.**

**Ecotourism Activities**

**.....Ecotourism experiences are characterized by a respect for the integrity of the resource, which also instil a sense of appreciation for the visitor. Within this context, certain site**

**development principles are important to note. These are applicable to any site and are regarded as essential to maintain the integrity of the resource and offer a quality experiences to the visitor.**

**Key ecotourism development principles are:**

- **develop ecotourism sites to offer an ‘experience’ for the visitor. It is not just a matter of developing a tourism product or attraction. The most important design consideration is the quality of the experience offered;**
  - **The experience offered must not compromise the integrity of the resource and must impart a sense of respect for the resource through site treatment and interpretation activities;**
  - **The experience must also consider the needs of the visitor for ancillary services, again without compromising the integrity of the resource; and**
  - **Interventions on the site to create the experience must follow internationally accepted practices and/or standards for resource management and protection as appropriate and must clearly demonstrate resource sustainability.**

**Increased ecological knowledge is the key therefore to ecotourism design. Instead of human functional needs driving the site design, site components need to respond to the special character, climate, topography, soils and vegetation as well as be compatible with the existing cultural context**

<b>DESIGN SHEET – ECO TOURISM DEVELOPMENT</b>		
<b>Indicator</b>	<b>Ecotourism</b>	<b>Traditional Resort</b>
Objective	Focus on the preservation and interpretation of indigenous natural and cultural resources. Basic objective is to help visitors appreciate the natural and cultural uniqueness of a site by bringing them physically closer to it	To make visitors comfortable in familiar surroundings and manipulated environments. Typically, much of the site is totally reconfigured with pools, terraces and imported vegetation
Scale	Small to middle scale, slow growth. Development at a human scale and the sensory features of the native landscape, such as sights, smells and sounds are appreciated and preserved.	All scales, fast progression to large scale.
Investment Strategy	Moderate/low investment, balancing supporting infrastructure, needs of access and environmental impacts.	High investment, extensive supporting infrastructure. Priority to allow for fast, easy and comfortable access.
Development Goals	Promote conservation objectives. Provide funding for protected area. Earning potential for local communities.	Promote national development objectives. Distribute funds to central government. Leakage of revenues.
Planning	Unique location. Stays within carrying capacity of the area	High guest capacity.
Activities	Research. Wildlife watching with interpretation facilities and services. Nature photography. Voluntary environmental programmes (inventories and monitoring). Low impact/low intensity adventure/sports activities.	High impact/high intensity adventure/sports activities. Non individual, high comfort nature tours (e.g. air conditioned bus).
Key Attraction Focus	Natural surroundings first. Facilities second. Education/activity focus.	Natural surroundings and facilities equal. Recreational/relaxation focus.

(Source: Halcrow and Ministry of Housing and Lands, Mauritius, *Integrated Resorts and Hotels: Design Guidance Eco Tourism Development*, Port Louis)