

SECTION 5: CONSTRUCTION & LANDSCAPING



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What is Sense of Place?

Like people, every place has its own character, which can be called its 'sense of place'.

Sense of place can be described as the combined characteristics that make up that space – including the climate, landscape, indigenous wildlife and vegetation as well as the colours and tonal values that emanate from the surroundings.

In today's overcrowded, rapidly developing world, wild areas are disappearing fast. Destinations that offer natural beauty, solitude and a wildlife experi-

ence are thus becoming increasingly popular.

Consequently, Namibia's wide-open spaces and sparsely populated wilderness areas have become sought after commodities that must be regarded as valuable national assets.

Preserving these assets – or maintaining the sense of place - is essential to developing sustainable tourism in Namibia.



The tourism industry must ensure minimal alteration to the natural setting so that visitors sense the 'spirit' and uniqueness of that space and how it has existed since time immemorial © N.Maritz

When has good Sense of Place been achieved?

Existing structures:

If your establishment is in a historical or landmark building, it is important that renovations you make are historically accurate.

The National Monuments Council can help you with this. There is also ample information at the National Archives of Namibia and a good historian can advise as well.

Remember that any structure older than 50 years can be considered 'historical' and that as time passes, more and more structures will fall into this category.

What if your building was erected quite

a while ago and affected the landscape negatively?

Study your location carefully and try to decide what its important characteristics are.

Draw up a programme to improve this over time. You can initially do this with regular maintenance – paint in more appropriate colours, remove alien plants that were planted, re-establish indigenous vegetation, introduce trees that occur there naturally.

A longer term master plan can be drawn up by a good landscaper and/or architect.

Recent History:

Worldwide, and in Namibia, people are becoming increasingly interested in recent history, which includes the different cultures of the local population. Remnants from the late 1950s or early 1960s can be part of the character of the place. Old graveyards may hold special interest, and old signs, rusted machinery etc. are not necessarily things to be destroyed or thrown away.

Prehistory:

Archaeological remains such as rock paintings or remnants of Stone Age shelters are all protected under the National Heritage Act and advice of an expert archaeologist must be obtained before even considering expansion or development near these sites.

These remains might not always be obvious to a non-specialist. If you are in doubt, don't take a chance.

The goal:

To safeguard the visual and cultural environment from the physical impacts of construction and landscaping and to protect "Sense of Place".

When has sense of place been achieved cont..

New construction:

New construction must not damage or destroy important buildings or places.

If you have a beautiful site, don't locate your development right in the middle of it, thereby destroying its sense of place or character.

Maintaining a good 'sense of place' on freehold or communal land demands that adverse effects on the natural environment are minimised and that the cultural integrity of the local people is not threatened.

This has been achieved when:-

- Impacts are minimized during the construction phase;
- A careful inventory of sensitive species, ecosystems and areas of important cultural heritage (e.g. rock art) are

made and these are protected during construction. This can be done as part of an Environmental Impact Assessment (EIA);

- Campsites, lodges and other infrastructure are unobtrusive, and designed in a way that does not reduce the natural beauty of the setting;
- Building materials are obtained sustainably from appropriate sources and have not caused the destruction of natural habitats. Building materials enhance the design;
- Décor and furnishings are simple and do not detract from the natural beauty of the setting;
- The use of local artifacts is done in a sensitive way—without being disrespectful towards local culture and avoiding a "Disney-like" Africa scene;

- Generators and other noisy equipment are accommodated in an unobtrusive manner so as to minimise noise pollution;
- Only native (indigenous) plants are used in the creation of gardens, and
- Noisy and distracting television, radios and other modern conveniences are minimised so that visitors are able to enjoy the natural sounds of the bush and fully appreciate the natural beauty of the setting.

Appropriate design

Appropriate design demands attention to detail pertaining to:- the site; style; shape; visibility; lighting; colour of the buildings; and décor.

The site: Choose an appropriate site – one that is not too close to a village or areas of special environmental or cultural value.

Structures should not be prominent and, if built on an elevated area, should be set well back so as not to break the skyline.

The designer: Choose an architect or designer that has a strong respect for the environment and will support the idea of reducing negative visual impacts.

Contact the Namibia Institute of Architects for a list of registered architects.

Achieving sense of place does not necessarily require lots of money—with good taste, you can combine shapes, colours and natural objects into a stunning image © N.Maritz



Visibility of buildings: Buildings or structures should blend into the landscape and not be easily visible from any angle. They should give visitors a sense of being close to nature.

This does not mean they have to be boring – some of the most beautiful lodges in Namibia have been built by exploiting this very principle.

Shape and theme of buildings: The shapes of the buildings should fit in with the character of the place, for

example: if adding onto a German colonial farmstead, don't add an ethnic African lapa.

In the forests of the Kunene, don't build a false German castle. In the Namib Desert, don't build a Moroccan fort (this is Namibia, after all).

Breaking down the structures into smaller components will make it fit better into the landscape.

Appropriate design cont....

Almost everywhere, high and bulky structures do not work well. Incorporate natural features like large trees and rocks as part of the infrastructure.

Try to build around the natural setting, rather than bulldozing through it. Large open air spaces that 'let the outside in' must be included in the design.

Colours: The external and internal colours should be natural and earthy. A close look at the natural geological setting will give clues regarding appropriate colour schemes.

All paint companies have colour charts that you can take to site to check against the local surroundings. Just remember that natural materials are never one solid mass of colour, but a range of subtle shading patterns.

You can't hide a large surface by painting it a single colour, and paint effects never seem to do the trick.

Lighting: Take special care when considering lighting of paths and the outside of buildings.

In order to reduce light pollution, use the minimal number of lights. You can give guests torches to get to and from their accommodation, or line paths with simple small lights (either photo-voltaic, or candles, or paraffin lamps).

Choose light fittings that blend in with the colour scheme and are not obtrusive during the day.

Décor: Décor should be simple and not in any way detract from the natural beauty of the setting. Be consistent in your theme and relate it to the local context.

Supporting local craft industries in your area and focussing on the area's sense of place will create a unique and appropriate style for your establishment.

Climatic design: To be environmentally appropriate, it is not just important what the building looks like, but also how it performs.

To use less energy and be comfortable, a well-designed building will be:

- correctly orientated so that it gets sun in winter and shade in summer;
- will have a well-insulated roof and thick walls to keep the heat out;
- will have doors and windows opposite each other for cross-ventilation so that breezes keep it cool;
- will have enough windows for daylight so that lights need not be switched on in the day, and
- will have shaded openings to keep the sun out.

The use of building materials

The use of local materials

In rural areas, local natural materials, such as thatching grass, wood or stone, are ideal to use as building materials.

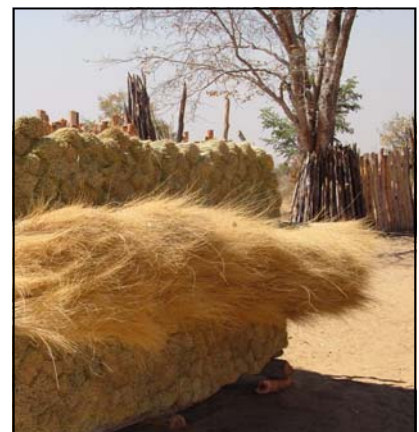
These should be sourced from close by as it helps structures to blend in with the environment and creates employment in the area.

However, take care to cause minimal impact when sourcing these materials. Try to get sand, gravel and rocks, from existing borrow pits or areas that are already disturbed as the removal from other places can

create an eyesore and cause erosion.

Do not encourage the over harvesting of renewable resources like grass as this could become unsustainable. If you are collecting rocks from the veldt, pick them from over a large area so that their removal seems less visible than if all were collected from one spot.

Embodied energy is the energy used by building materials from their origin until construction, and using local materials will save energy.



Natural materials like thatch can be harvested sustainably. Indigenous hardwoods are a different matter—be careful not to be responsible for unsustainable tree harvesting © P.Tarr

Use of building materials cont...

Recycled materials

Ideally, you should use recycled and / or renewable materials.

The use of cement should be limited, as the manufacturing process is extremely poisonous and contributes to air pollution. Cement structures are also very difficult to recycle.

Ideas for alternative materials can be viewed at the *Habitat Research and Development Centre in Windhoek*.

For example, beautiful clay lodges have been built in Namibia.

Avoid the use of hardwoods

Avoid using indigenous and imported hardwoods, since the harvesting of these slow growing woods is usually unsustainable and contributes to de-

forestation and global warming.

Rather use commercially grown eucalyptus or pine – wood that is grown in managed, established plantations. Ask for the Forestry Stewardship Council's certification (FSC) when buying wood.

Modern combination materials, like chipboard or supawood, contain formaldehyde, which give off hazardous pollutants. You should always ask for formaldehyde free boards.

Paints and Varnishes

Paint and varnish can also be very poisonous.

Choose to use water rather than solvent-based paints. Natural environmentally friendly paints are now made by Envirotouch in South Africa.

Wood treatments like CCA (or tanalith) contain arsenic which leaches out into the soil and the air.

Creosote treatment also damages the environment. Borax-based coatings are a safer alternative.

Insecticides

Be careful of the kind of insecticide you use - some organochlorides are indestructible and leach into the soil, contaminating groundwater, affecting human health and the environment for centuries.

Chlordane and Aldrin are examples—they are banned by the Stockholm Convention but are still available in Namibia. Rather use Bayer's "Premise-SC", which is less dangerous but still effective.



Damage to vegetation can be reduced by defining the impact area with hazard tape. The area outside the tape must be no-go for the builders. © P.Tarr

Traditional, African designs using natural materials work well, look good and appeal to tourists

© Wilderness Safaris



Limiting impacts during construction

To ensure minimal damage to the environment, foremen and builders must be informed at the beginning of the project about certain 'dos' and 'don'ts'. Thereafter the construction phase must be regularly monitored for:-

Waste control: Regular collection of litter and rubble is essential. The contractors must dispose of all accumulated waste in an appropriate landfill site – even if this means travelling some distance to do so.

Make sure that cement and paint-contaminated water is not poured onto the ground, as it is highly polluting and can enter underground water

sources.

Vegetation protection: Areas of natural vegetation near to the building site must be protected from destruction by the builders. Only the barest minimum of vegetation should be cleared to allow the builders to complete their job.

Protect all large trees. Replacing large indigenous trees will take many decades. A penalty system for unnecessary damage done to trees and plants can be included in your agreement with the builder.

Toilet maintenance: Builders must be provided with adequate toilet facilities that will not pollute the surround-

ings in any way. Portable chemical toilets are available for rent from construction supply companies. This can be made a condition of the building contract.

Protection of wildlife: Builders must be provided with suitable rations and cooking fuel so that there is no excuse for setting traps and /or hunting wild animals or collecting firewood.

Damage to vegetation can be reduced by defining the impact area with hazard tape. The area outside the tape must be no-go for the builders. However, supervision is essential.

Landscaping and keeping an indigenous garden

Local vegetation is well suited to the area in which it is found. Many Namibian plants are drought resistant, frost resistant and tolerant of local insects, birds and mammals that may utilise their leaves, flowers, fruits and seeds.

Consequently, a purely indigenous garden is essential to reduce water consumption, to attract wildlife to the area and to maintain a sense of place.

Developers should inform themselves and their staff on the types of indigenous species that occur in their area and which of these are suitable to plant in a garden.

Any gardens that are developed should focus purely on these plants. The National Botanical Research Institute (NBRI) is very helpful. You can also join the Botanical Society of Namibia. There are several excellent books available on indigenous vegetation in Namibia and Southern Africa.

No alien invasive plants must ever be planted. The NBRI can provide information and posters on Namibia's Nasty Nine Alien Invasive



Indigenous plants add value to a lodge's surroundings—they attract insects and birds, provide interest to tourists, require less water and care. Many native plants are just as attractive and colourful as exotics. © P.Tarr

species that can spread rapidly and threaten local species.

Despite popular belief, cacti are not indigenous to Africa and some, like the prickly pear, can become highly invasive. Eradicate any alien invasive plants that are present in the area. Non invasive alien plants can be used in established gardens provided they do not detract from the sense of place and utilise unnecessary quantities of water.

As a rule lawns in rural areas should be avoided or kept as small as possible. Grass demands fairly large amounts of water and periodic mowing and the noise of a lawn mower is

not conducive to maintaining 'sense of place'.

If lawns are present, investigate ways in which to use "grey" water from your kitchen and bathrooms or water from your septic tanks to water them.

Raked gravel, attractive paving or drought-tolerant groundcovers are water-saving and need less maintenance.



A well-intended "natural" rockery at a lodge: On closer inspection, it is evident that most of the succulents are in fact aliens!

© P.Tarr



Indigenous veld outside Windhoek—its hard to beat Nature's Garden!

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