

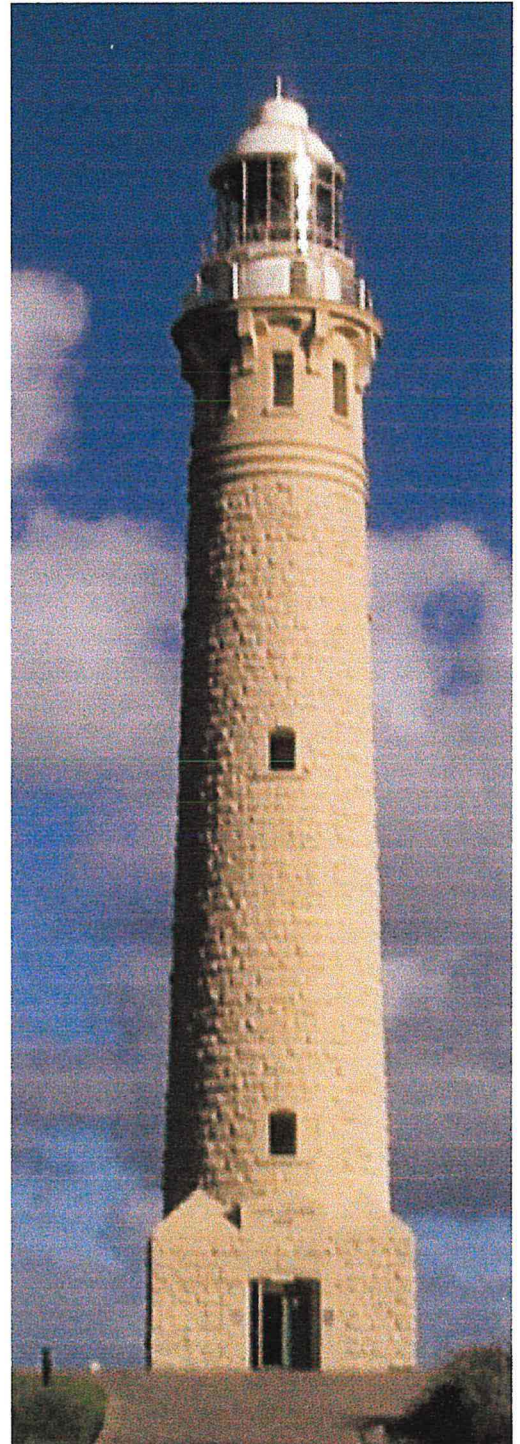
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Leeuwin-Naturaliste National Park  
**Cape Leeuwin Lighthouse &  
Water-wheel Precinct**

**Concept  
Plan**



070100



**Cape Leeuwin Lightstation & Water-wheel Precinct**

**CONCEPT PLAN**

**Department of Conservation & Land Management**  
Recreation & Landscape Planning & Design Section  
Blackwood District

**15 October 2001**

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## **Introduction**

In 2000, the Cape Leeuwin Lightstation reserve was transferred from the Australian Maritime Safety Authority (AMSA) to the Department of Conservation and Land Management and is now vested in the Conservation Commission as part of Leeuwin-Naturaliste National Park (LNNP).

A study precinct has been defined that encompasses the Lightstation, water-wheel and Quarry Bay to ensure a coherent and coordinated approach to visitor management in this area.

This document intends to provide conceptual ideas to help achieve a balance between tourism and conservation within a well-conceived business plan. The Department of Conservation and Land Management recognises that tourism is a very important component of this precinct, however architectural and landscape cultural significance as well as nature conservation values are also very important. The Department's intention is to return any revenue obtained from operation of tourism and visitor services by commercial operators to the management of the facilities. .

### ***Scope of Report***

The long-term intention is to prepare a Master Development Plan for the study precinct, which will provide a framework for the redevelopment and management. The plan will also provide a statement of the Department of Conservation and Land Management's intent and will be incorporated into the review of the Leeuwin-Naturaliste National Park Management Plan.

This Concept Plan is the first phase of this process. Initial site analysis has been undertaken and conceptual ideas prepared to provide a framework for discussion and as a basis for calling Expressions of Interest. Feedback from consultation with stakeholders has been incorporated into this planning phase to ensure that there is support and understanding from the local community and associated organisations.

This plan will be used as part of determining the business and commercial opportunities for this site. Once these have been established, the Master Development Plan can then be completed, knowing the site development requirements needed to accommodate an appropriate business venture. The plan will outline, in some detail, the extent of development, management structure, site planning requirements and tourism activities.

### ***Objectives for Site Redevelopment***

The objectives for redevelopment of this site are to:

- 8 Ensure that heritage, landscape, recreation and nature conservation values are protected and enhanced where appropriate;



- ⌘ Work with community organisations, established user groups and other stakeholders in the planning and management of the site;
- ⌘ Develop the site as a focal point for interpretation of maritime history and associated stories, along with an information node for other attractions within Leeuwin-Naturaliste National Park;
- ⌘ Redevelop existing visitor facilities to a high quality that meets the Department of Conservation and Land Management standards for recreation, tourism and visitor risk management;
- ⌘ Seek revenue for management and explore business opportunities for visitor services and facilities that respect and work with the site's values;
- ⌘ Provide universal access for visitors to as many facilities as possible, acknowledging that access for people with ambulant related disabilities may not reach the top of the lighthouse but should be able to gain a valuable experience from the site.

### ***Key Stakeholders***

The following list reflects the range of interests in the Cape Leeuwin site.

#### ***Government***

1. Australian Maritime Safety Authority (AMSA)
2. Heritage Council of WA
3. Shire of Augusta – Margaret River

#### ***Community***

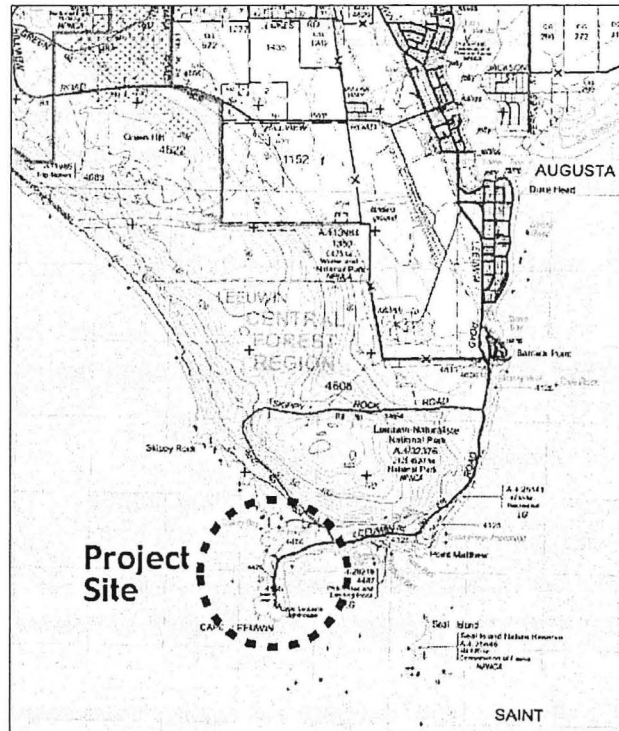
1. Augusta Margaret River Tourism Association (AMRTA)
2. Augusta Community Development Authority (ACDA).

## Site Analysis

The study precinct is located on Cape Leeuwin at the southern most tip of Leeuwin-Naturaliste National Park approximately 5 kilometres from Augusta. It encompasses three reserves – Leeuwin-Naturaliste National Park, a Shire Recreation Reserve south and east of the entry road and a Water Reserve in the north. Refer to Analysis Plan.

The Water Reserve in the northern part of the study precinct is vested with the WA Water Corporation for use as domestic water supply.

Zones have been defined to better explain site conditions, visitor use and management.



### ***Lightstation Precinct***

The most southern part of the study precinct is an exposed and spectacular peninsula housing an intact historic lightstation. A service road dissects the peninsula with buildings scattered along the narrow landform terminating at the lighthouse, which presents a strong vertical element in an otherwise low landscape. Three lighthouse keeper's cottages are situated east of the main service road and are an integral part of the station settlement. Service buildings run parallel between the main service road and driveway to the cottages.

The public parking area is situated outside a fence and brick entry gate. This area is not an attractive entry experience for visitors due to the large expanse of asphalt, numerous uncoordinated signs and no defined parking bays. Also, the fence and gate do not contribute to an attractive entry.

The main historical precinct has not been greatly disturbed with new buildings or structures, at least not obtrusive or unacceptable, and remains remarkably intact. The Conservation Plan<sup>1</sup> documents historical aspects of the site and buildings, provides a Statement of Significance and makes policy recommendations for the fabric of the lightstation and its components.

The lightstation precinct is fenced along the land boundary and gates are locked at night. The Augusta-Margaret River Tourism Association (AMRTA) is operating tours of the lighthouse under arrangements with the Department of Conservation and Land Management. An entry fee is charged from a commercial outlet housed in one of the service buildings, which is staffed by an employee of the AMRTA. Souvenirs and other merchandise are also sold.

<sup>1</sup> Danvers Architects, *Conservation Plan Cape Leeuwin Lightstation Western Australia*, Australian Maritime Safety Authority, Sept 1992.

## ***Water-wheel***

This zone encompasses the main entry road, an ill-defined parking area and toilet for the beach, developed by the Shire on Shire Reserve, and the water-wheel day use area in the National Park (refer Analysis Plan). Most of these facilities are in need of attention and redevelopment.

Better interpretation and a better physical context for the historic waterwheel structure is needed. The parking area is unattractive, ill-defined and impinges on the water-wheel. An information shelter is located on the opposite side of the parking, with very poor pedestrian circulation. There is strong community support for the retention of parking at the water-wheel, as close to the ocean as possible. There is a large aged community in Augusta that enjoy being close to the ocean in their cars.

The Leeuwin-Naturaliste National Park Management Plan 1989 – 1999 recommended for the waterwheel –

*“Site Development Plan required.*

*Walk trail loop to be developed to Quarry Bay.*

*Carpark needs relocation.*

*Waterwheel structure requires stabilisation.*

*Consult with local groups, WA Museum and WAWA” (p. 39).*

Initial site planning ideas were prepared in 1989, however there has been no action to redevelop the site pending the transfer of the lightstation. Remedial works to preserve timber flumes of the waterwheel were undertaken in the mid-1990's brought about by a reduction in water flow from the spring.

The Shire-managed parking area and toilets do not contribute to an attractive entry to the lightstation. The parking area is a large, undefined area of gravel with the toilet building in a prominent position, detracting from the beautiful views of ocean and the lighthouse. A serious visitor hazard exists at this site due to the road's curved alignment, the intersection to the water-wheel and gravel surface from the parking area.

The Cape to Cape Walk Trail runs through the water-wheel site, terminating at the lighthouse.

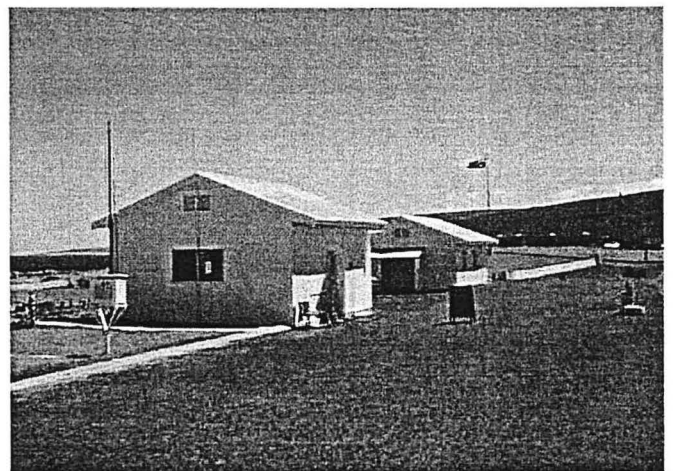
There is scope for redeveloping this area to provide central visitor facilities for both beach and waterwheel. It could function as the entry to the lightstation if vehicle and pedestrian circulation was reconsidered.



*View north from lighthouse overlooking Lightkeepers' Cottages*



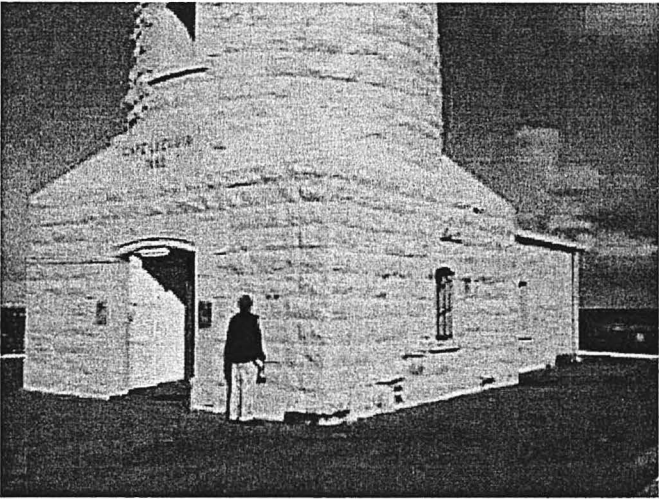
*Existing entry gates to lightstation*



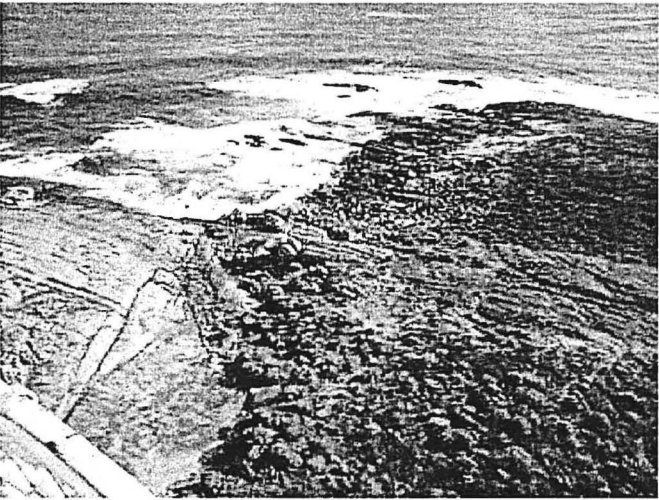
*Outbuildings – foreground building current ticket sales and souvenir shop*



*Lighthouse Keeper's Cottage*



*Base of Cape Leeuwin Lighthouse*

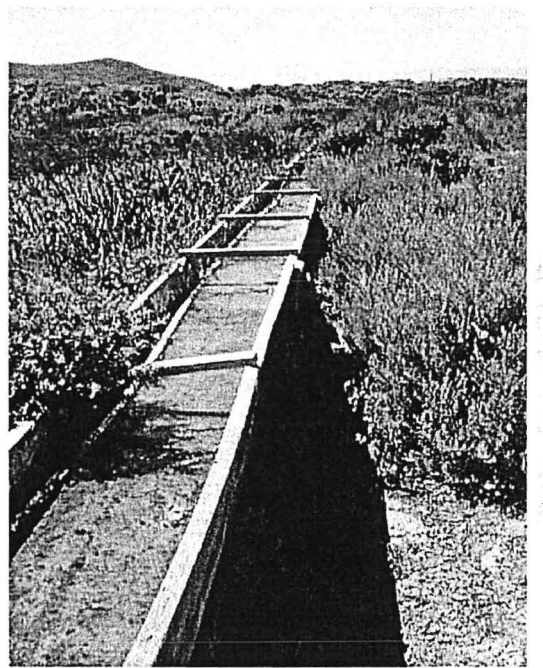


*Shoreline view from lighthouse looking Southwest*





*Water-wheel*



*View along Water-wheel trough*

### ***Wetland and Leeuwin Spring***

This zone comprises the Leeuwin Spring and a large wetland swamp, which supplied fresh water to the historic lightkeepers' cottages and now supplies the township of Augusta. The spring is located north east of the waterwheel within a reserve vested with the WA Water Corporation. The Department of Conservation and Land Management's intention is to acquire this reserve and incorporate the area into the National Park when it is not required for domestic water supply<sup>2</sup>.

The wetland, which is habitat for a rare snail – *Austroassiminea lethra*<sup>3</sup>, provides an interesting vista on arrival at the water-wheel and lightstation precinct. The supply of water from the spring, through the wetland, is the source for the waterwheel. Water once flowed from the wetland over the wheel, which pumped water to the lightstation area. In recent times, pipes have been installed through the wetland to the waterwheel to ensure a constant flow of fresh water over the structure.

### ***Quarry Bay & Coastline***

The most northern part of the study precinct comprises the day use area at Quarry Bay and the coastline, extending around to the water-wheel. The day use area is in serious need of redevelopment. The parking area is ill-defined and unattractive, the timber boardwalk access to the beach is past its "use-by-date" and the area has no visitor interpretation. The Leeuwin-Naturaliste National Park Management Plan 1989 – 1999 recommended that the "carpark location (at Quarry Bay) needs to be reviewed" (page 39).

An area just south of the car park has been quarried, and it is said that this material was used at the Lightstation<sup>4</sup>. This would be an interesting part of the lightstation development story that could be interpreted along with the spring and wetland.

There is no information at Quarry Bay to indicate the water-wheel's proximity or importance of the connection between Quarry Bay, the water-wheel and the lightstation.

The Cape to Cape Walk Trail runs through Quarry Bay terminating at the lighthouse.

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<sup>2</sup> CALM, *Leeuwin-Naturaliste National Park Management Plan 1989 – 1999*, Action 3.2, p. 10 and Appendix 1, p.64.

<sup>3</sup> E M Mattiske and Associates & Ninnox Wildlife Consulting, *Augusta – Leeuwin Spring Environmental Impact Study*, for Water Authority of Western Australia, June 1994.

<sup>4</sup> pers. comm. Neil Taylor, August 1999.

## Heritage Aspects

The following section outlines the importance of heritage values of the site. The most significant heritage value is the development of the lightstation at the turn of the century.

### *Aboriginal Heritage Status*

There are no registered Aboriginal sites in the study area. A brief search of Battye Library reveals very little concerning Aboriginal use or occupation of the area. There is a document entitled "A report on the aboriginal ethnohistory of the Scott River Region, Southwest Western Australia" by Martin Gibbs<sup>5</sup>. A cursory review did not reveal any reference to Aboriginal use of Cape Leeuwin. It did identify use around Augusta, especially at the mouth of the river.

### *Cape Leeuwin Lightstation*

The lightstation is registered on a number of heritage lists.

- ⊘ The Register of the National Estate - The Australian Heritage Commission (Commonwealth Government). There are two entries – one being for the Cape Leeuwin Lighthouse and the other, the Lighthouse Keepers Cottages<sup>6</sup>. Their legal status is *registered*.
- ⊘ The Register of Heritage Places – The Heritage Council of WA (State Government). The Cape Leeuwin Lighthouse and Cottages are listed as one entry and is noted as *Interim*.
- ⊘ National Trust of WA – a 'c' classification.

Being registered on these lists recognises the heritage importance on a number of levels - National, State and local. The statements accompanying registration provide information and assessment on what has been considered significant. These provide guidance in planning for future use and management.

AMSA commissioned a Conservation Plan<sup>7</sup> that outlines the site's significance and makes recommendations for future use and management. It also provides documentary evidence of the area's exploration and settlement, establishment of the light, its design, construction and later developments. The plan states that the Cape Leeuwin Lightstation development, completed in 1896, is a significant cultural site. The Statement of Cultural Significance from the Conservation Plan<sup>8</sup> says:

*Historically, the Cape Leeuwin Lightstation ... is significant because it was built on the first landfall on mainland Australia for ships on the main shipping route from Europe to Australia.*

*Physically, the Cape Leeuwin Lightstation is significant as the tallest lighthouse in Western Australia and the third tallest in Australia. ... in that all major elements from its earliest period (1896) remain intact, namely the lighthouse and oil store ...*

<sup>5</sup> Gibbs, Martin, *A report on the aboriginal ethnohistory of the Scott River Region, Southwest Western Australia*, 1989.

<sup>6</sup> refer to Appendix for Register of National Estate listing.

<sup>7</sup> Danvers Architects, 1992.

<sup>8</sup> *ibid.*

*three Keepers residences ... and outbuildings ... for retaining its original lens array and rotation mechanism, including the earliest example of the use of the mercury bath system in Australia. The retention of the small annexed oil store is also significant because of its size and purpose.*

*Environmentally, the Cape Leeuwin Lightstation is important for its location at the first landfall for shipping on the main route to Australia from Europe and England on the most south west point of Australia and for its apparent isolation, particularly in earlier times.<sup>9</sup>*

Areas were identified for further research that may have an impact on the Statement of Cultural Significance. One area was the water-wheel and associated spring. It was seen as “*significant to the development and history of the lightstation as it provided the pumping power for the water supply to the lightstation and its construction formed part of the early contract works at the lightstation. Its significance should be investigated by further research into early pumping technologies.*”<sup>10</sup>

The Conservation Plan is an important management tool and will be used by the Department of Conservation and Land Management and the Heritage Council to determine the level of acceptable changes to the site.

### ***Water-wheel & Leeuwin Spring***

The water-wheel is a significant tourist attraction within the Leeuwin-Naturaliste National Park and attracts a large number of visitors. Its historical association with the lightstation is not well interpreted on site (no walking trail connection or management coordination). There is reference to the water-wheel in the Cape Leeuwin Lightstation Conservation Plan, however the structure and its use have not been documented.

A Conservation Plan is needed to provide a Statement of Significance and guidelines on the maintenance and conservation of the structure.

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<sup>9</sup> *ibid.*, p. 128.

<sup>10</sup> *ibid.*, p. 129.

## Opportunities

This section outlines the opportunities that influence the site's redevelopment. They are not exclusive of each other and indicate the conditions and potential that the Department of Conservation and Land Management needs to consider. The opportunities for redevelopment and management of the Cape Leeuwin Lightstation and Waterwheel are numerous, however they mostly hinge on European historical significance.

These ideas are independent of each other, meaning one or more can be developed without relying on the others. However, the need for income generation is a key component to the site's future management. The opportunities are -

### ***History***

Create an innovative and exciting interpretation of the lightstation's history, its development and the lives of lighthouse keepers and their families. Build on the theme of maritime history and the foundation of Australia. Create the Lightstation as a "gateway" for information and orientation for the Leeuwin-Naturaliste National Park.

### ***Community Consultation and Involvement***

Ensure the Augusta community support and contribute to the future development and management of the site by creating consultative processes that include local community and business organisations.

### ***Income Generation***

Explore new business enterprises to provide appropriate visitor facilities and services as well as provide revenue for management and maintenance. New enterprises may include-

- ⊘ Tearooms or café or restaurant
- ⊘ Souvenir outlet
- ⊘ Activities and guided tours of historical site
- ⊘ Theme days, ie. special events
- ⊘ Overnight stays in lightkeepers' cottages

An Expression of Interest (EOI) procedure will be undertaken to determine the level of commercial interest in the redevelopment of the site.

### ***Recreation Infrastructure & Visitor Services***

Improve quality of infrastructure and visitor services provided to the visitor. The preceding analysis outlines existing problems associated with accessing, circulating through and experiencing the lightstation and water-wheel.

**Experience of the site** - Improve current visitor experience of the lightstation through better arrival, orientation, visitor service and interpretation of the site.



**Parking, entry & visitor centre** - Redesign the entry experience, parking and visitor facilities (such as toilets, contact with staff and visitor comfort), providing a high quality experience.

**Walking** - Develop a walk trail network that links key features and provides the framework for interpretation of the site's history and natural values. Promote the Cape to Cape Walk Trail with a designated terminus, similar to the Bibbulmun Track, at or near the lighthouse.

### ***External Funding***

Access heritage grants and funding due to listing on Register of the National Estate and State Register of Heritage Places and other external funding sources. Work with community groups to identify and apply for funding, grants or sponsorships.

### ***Management Structure***

Investigate the best management structure for the site and its new facilities. Four options might be:

- ⌘ Private operator (through an EOI process)
- ⌘ Leased to community-based organisation (through an EOI process?)
- ⌘ Management by Department of Conservation and Land Management
- ⌘ Management by Department of Conservation and Land Management with an Advisory Committee.

The benefits and constraints of these models need to be considered and discussed within the Department of Conservation and Land Management and with the community.

## Constraints

The following constraints impact on the redevelopment, management and maintenance of the site.

### ***Site Capacity & Access***

There is limited capacity for additional development, such as buildings, roads and parking areas, without seriously impacting on heritage, landscape and nature conservation values.

Vehicle access to the site is along a narrow road that has a limited capacity for increasing tourist traffic without capital investment and impact on landscape.

Suitable sites for parking are located at a distance from the lighthouse, which has implications on pedestrian access. Distance and weather play a part in the need to provide good pedestrian access to the main features.

### ***Heritage Values***

Heritage values will influence:

- ⊘ Extent of tourism development
- ⊘ Cost of redevelopment due to protection of heritage values
- ⊘ Ability to remove existing or install new buildings and structures
- ⊘ Approach to redevelopment, ie. Design of new facilities and furniture.

### ***Funding & Income Generation***

At present, there are no allocated funds for capital works in 2001/2002 financial year. However, the site would be eligible for funding in future years.

Consideration needs to be given to fees and charges to ensure value-for-money and ease of collection. A precinct fee, and other means of revenue sources, should be considered.

### ***Land Tenure***

At present, there are three types of land tenure in the study precinct (refer to Analysis Plan) -

- ⊘ Leeuwin-Naturaliste National Park – Conservation Commission
- ⊘ Recreation Reserve - Shire of Augusta
- ⊘ Water Reserve - Water Corporation.

This poses extra constraints in terms of management coordination, regulation enforcement, public perception, funding and income generation.

### ***Condition of Structures***

Building condition and materials such as asbestos in cottages and rust, seepage and mildew in lighthouse have serious implications on resource requirements. Maintenance and repairs need to be adequately funded so that heritage values are protected.

The existing public toilets (Shire of Augusta-Margaret River) are serviceable with current visitor levels but the ability to handle increasing usage is unknown.

### ***Weather Conditions***

Weather conditions will mean constraints for both visitors and building structures.

- ⌘ The need to ensure visitor comfort, whilst not taking away from the “exposed lighthouse experience”, means that additional infrastructure may be needed. Outside activity for visitors is likely to be for short periods of time unless other means of transport and visitor amenity is provided.
- ⌘ The extreme coastal environment places great pressure on facilities wear and tear, as well as up-front installation costs (due to extra quality materials, etc.). Maintenance programs need to be strictly followed so those assets do not deteriorate.

### ***Visitor Risk Management***

There are a number of risks that need to be considered in visitor management, the main ones being

- ⌘ coastline – rocks, waves, etc.
- ⌘ lighthouse – steps, height, etc.
- ⌘ snakes – especially in and near wetland.

Appropriate risk management strategies need to be put in place to ensure our legal and moral obligations are met.

## Concept Ideas

The preceding sections provide the basis for exploring ideas for redevelopment of the site which are outlined in this section. This stage of the planning process explores the benefits and disadvantages of various redevelopment options. In this way, we ensure that as wide a range of ideas are considered prior to a final solution being determined. It also intertwines the site planning issues with the management requirements, ensuring all components work together.

### *Visitor Facilities & Services*

The issues identified in the preceding analysis section need to be addressed. These are covered in broad categories below.

#### *Entry Road and Parking*

Existing parking needs to be upgraded, however, siting new parking areas relies on the location of features and visitor facilities. There is a narrow strip of suitable area for parking along the current road alignment, from the toilet block to the lightstation gate.

There is a direct relationship between the extent of recreation and tourist development and capacity for parking. New development or improvement of facilities is likely to increase visitor numbers and therefore increase parking area required. The other major factor in relation to parking needs is the number of buses/coaches visiting the site. Coach access and parking demands large turning and parking areas, also influencing the capacity of parking and extent of development. The site's physical nature does not allow large areas of parking and so will limit development and scale of facilities.

In principle, a maximum of around 60 cars and 10 coaches is considered the maximum capacity, which may be constructed in stages as demand dictates and as funds are available.

There are two main options for parking:

- ⊘ one central parking area for all features
- ⊘ separate parking nodes for the water-wheel/beach area and the lightstation.

The first option is preferable as providing parking at the water-wheel and beach requires the main road through to the lightstation be either down the middle or on either side of the parking – creating extra pedestrian safety hazards. Also, by splitting the parking into separate nodes will encourage visitors to drive to each feature rather than parking and walking or taking the proposed shuttle service. The Heritage Council of WA supported the notion of removing parking away from the water-wheel. However, there was strong community opposition to removing parking and vehicle access to the waterwheel. The Department of Conservation and Land Management conceded that parking would be retained close to the water-wheel for the time though the parking area was to be relocated a short distance to allow for safe vehicular and pedestrian use as well as for protection of the historic feature.

## **Visitor centre**

There are basic levels of visitor services that are necessary at the site. Some of these are being met at present with a shop, ticket sales and guide to the lighthouse. In the redevelopment, it is the Department's aim to improve visitor services and experience of the lightstation and surrounding features. A new visitor centre would provide a recognisable and approachable focus for visitors to seek information, ask questions and solve difficulties<sup>11</sup>.

The range of visitor services that need to be provided at a visitor centre include:

- ⌘ information, orientation, and staffed counter
- ⌘ interpretation displays specially designed to present stories significant to the site
- ⌘ toilets

Possible services may include:

- ⌘ souvenir sales and/or food service (ranging from pre-packaged to café/restaurant)
- ⌘ entry fee collection and/or sale of shuttle bus and guided access service.

Various options for providing a visitor centre and interpretation have been explored and the location of the centre is bound by desired line of access, location of parking area and relationship with main features. Options for location of a visitor centre are:

- ⌘ overlooking the Indian Ocean between the Waterwheel and the lightstation to better service both features and help "tie" the two together;
- ⌘ between the parking area and the lightstation, acknowledging the major visitor flow pattern; and
- ⌘ converting one of the Lightkeepers' Cottages as it uses an existing building and provides unique accommodation for a visitor centre.

## **Revenue Collection Issues**

Management issues such as fee collection, access times, visitor control and contact are integral components of planning. There are two main avenues for collecting revenue from the site:

- ⌘ Precinct entry fee (collected at an fee station or at visitor centre); and / or
- ⌘ Returns from leased and/or sub-licenced commercial ventures.

Earlier this year, the Government announced the removal of the requirement to pay National Park visitor entry fees from the beaches within the Leeuwin-Naturaliste National Park. This decision did not, however, mean that the fee was removed from the terrestrial part of the Park. In the future, a "Capes Pass" will be developed which will cover the entry to a range of proposed new parks in the Region, including to areas within the Leeuwin-Naturaliste National Park

Any future application of park visitor fees to the Cape Leeuwin and Cape Naturaliste lighthouse precincts is a matter for further discussion between the Department and the potential proponents.

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<sup>11</sup> CALM, *Visitor Interpretation Manual*, p. 5.15.



## ***Business Opportunities***

There are a number of business opportunities that may be appropriate. By assessing current management and site conditions, a number of limitations have become evident, for instance major-scale tourism development is not suitable and weather and distance issues require certain levels of infrastructure for visitor experience.

An Expression of Interest process is required for any commercial development in the National Park. Commercial activities will be run within a lease and/or sub-licence according to the Department of Conservation and Land Management's policies.

The following parameters have been established:

- ⊘ No major tourism accommodation will be allowed;
- ⊘ A food service, ie. Tearooms, café or restaurant and souvenir/book sales may be appropriate, probably in conjunction with a visitor centre;
- ⊘ A shuttle bus service, along the lines of the Perth Zoo train, that transport visitors between main features may be appropriate;
- ⊘ Continuation of guided access, as well as proposed self-guided access, in and up the lighthouse within a "value-added" service, possibly in conjunction with shuttle bus service;
- ⊘ Provision of low-key, overnight stays in appropriately renovated lightkeepers' cottages; and
- ⊘ Collection of revenue would be through either a precinct entry fee or a guided access/entry fee along with possible commercial rent under a lease agreement.

## ***Interpretive Themes***

### ***Cultural & Historical***

- ⊘ Shipping – wrecks, discovery, mapping, development of area (timber)
- ⊘ Lighthouse – navigation's – history of light
- ⊘ Lighthouse keepers cottages – lives of keepers and families
- ⊘ Water supply to lightstation – waterwheel, spring,

### ***Natural Environment***

- ⊘ Wetlands – habitat, birds, rare snail, etc.
- ⊘ Marine life – rock pools, seals, wildlife, whales
- ⊘ Meeting of the Southern and Indian Oceans
- ⊘ Weather – met. station, climate

## ***Management Structure***

In the previous opportunities section, a number of management options were proposed. These being

- ⌘ Private operator (through an EOI process)
- ⌘ Leased to community-based organisation (through an EOI process?)
- ⌘ Management by Department of Conservation and Land Management
- ⌘ Management by Department of Conservation and Land Management with an Advisory Committee.

The site planning options put forward in this report could run with any of these management structures.

## Site Planning Options

Through a process of site investigation and community consultation, two site planning options are presented in the Concept Plan. Four options were presented in community consultation where unacceptable ideas were discarded and good ideas amalgamated into the following options.

These two options are conceptual only and will require detailed planning and design before they are implemented. Once a preferred direction is chosen for commercial management and development of the site, detailed planning can progress in the Master Development Plan.

The main difference between Option 1 and 2 is the location of a new Visitor Centre. Option 1 shows the visitor centre in a cottage, renovated for the purpose and Option 2 shows a building envelope for a new visitor centre.

## Option 1

<p><i>Vehicle Access &amp; Parking</i></p>	<p>The existing road layout would be retained with major improvements in parking capacity and definition.</p> <p><b>Water-wheel</b> - The spur road to the water-wheel would be retained with a new turning loop to facilitate buses and defined parking bays located approximately 25 metres away from the historical structure. Bays for up to 7 cars and 5 coaches would be provided.</p> <p><b>Lightstation</b> - A new parking loop would be developed on the existing area, expanding the current capacity to cater for increased tourist traffic and provide safer traffic management. The area could cater for up to 40 cars and 10 coaches allowing buffer areas between nodes to break up visual impact.</p>
<p><i>Visitor Services &amp; Fee Collection</i></p>	<p><b>New visitor centre</b> – a central focus would be developed in the first cottage to provide visitor services such as information, interpretation, toilets and possible shop/café.. Fees could be collected at this centre.</p> <p><b>Water-wheel</b> – the area would be repaired and redeveloped as an appropriate forecourt/viewing area around the structure. Paving, seats and interpretation would be provided for visitors.</p> <p><b>Beach Day Use Area</b> – the plan suggests that the existing parking area for the beach be upgraded with better defined parking, traffic management and new toilet facilities. This is the Shire of Augusta-Margaret River’s responsibility.</p>
<p><i>Access to Features</i></p>	<p><b>Access</b> - a new path network would be constructed in the precinct to facilitate better pedestrian movement. A new path from the lightkeepers' cottages to the waterwheel would be constructed, as well as walks connecting Quarry Bay and the lighthouse.</p> <p><b>Shuttle &amp; Walk</b> - a new shuttle bus service could be provided as part of the fee to provide transport and an added interpretive experience. A guide would be responsible for driving a shuttle bus, as part of the entry fee, from the visitor centre to the lightstation and escorting visitors to the top of the lighthouse. The shuttle would also run to the waterwheel. The new path would be constructed to cater for the shuttle vehicle.</p>
<p><i>Interpretation</i></p>	<p>A new interpretation plan would be developed that defines new signs, activities and displays. Key interpretation nodes are the new visitor centre, the water-wheel and lighthouse.</p>



### Quarry Bay Day Use Area

Upgrade day use site with new parking, access to beach and interpretation

Quarry for Lightstation construction

Beach

Skippy Rock Road

Leeuwin Spring

Wetland

Approx. location of rare & threatened communities

### Water-wheel

- prepare conservation plan
- new interpretation displays
- safe hardened surfaces
- seating & viewing platform

### Water-wheel Parking

Relocate parking to create bus turnaround and parking with view of ocean

INDIAN OCEAN

Shuttle & Walk  
Possible commercial venture

Beach Day Use Area  
Shire reserve & facilities, suggested redevelopment with new facilities

SOUTHERN OCEAN

### Main Parking Area

Approximate extent of parking & suggested layout - may need redesigning to suit development

Redesign existing fence & gate

### Cape Leeuwin Visitor Centre

- Renovated cottage to provide
- entry fee payment
  - shop/cafe
  - toilets
  - interpretation displays
- Other cottages developed with suitable, commercial uses such as overnight accommodation

Shuttle & Walk  
Possible commercial venture

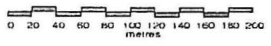
Whale watching platform at suitable location

### Lighthouse

Continue tours for visitors as a commercial venture

## Concept Plan 1 For Discussion Purposes

Bussellton District  
Recreation & Landscape Planning & Design Section  
Scale 1:1,000 (A1)  
February 2001



Leeuwin Lighthouse & Water-wheel



## Option 2

<p><i>Vehicle Access &amp; Parking</i></p>	<p>The existing road layout would be retained with major improvements in parking capacity and definition.</p> <p><b>Water-wheel</b> - The spur road to the water-wheel would be retained with a new turning loop to facilitate buses and defined parking bays located approximately 25 metres away from the historical structure. Bays for up to 7 cars and 5 coaches would be provided.</p> <p><b>Lightstation</b> - A new parking loop would be developed on the existing area, expanding the current capacity to cater for increased tourist traffic and provide safer traffic management. The area could cater for up to 40 cars and 10 coaches allowing buffer areas between nodes to break up visual impact.</p>
<p><i>Visitor Services &amp; Fee Collection</i></p>	<p><b>New visitor centre</b> – a new visitor centre would be developed in an area (building envelope) to provide visitor services such as information, interpretation, toilets and possible shop/café.. Fees could be collected at this centre. Siting and architectural design would ensure the heritage values of the lightstation precinct were not compromised. A new building(s) would ensure that visitor needs were met without undue modifications of existing heritage buildings.</p> <p><b>Lightkeepers' Cottages</b> – the cottages would be renovated and made available for suitable commercial uses such as overnight accommodation.</p> <p><b>Water-wheel</b> – the area would be repaired and redeveloped as an appropriate forecourt/viewing area around the structure. Paving, seats and interpretation would be provided for visitors.</p> <p><b>Beach Day Use Area</b> – the plan suggests that the existing parking area for the beach be upgraded with better defined parking, traffic management and new toilet facilities. This is the Shire of Augusta-Margaret River's responsibility.</p>
<p><i>Access to Features</i></p>	<p><b>Access</b> - a new path network would be constructed in the precinct to facilitate better pedestrian movement. A new path from the lightkeepers' cottages to the waterwheel would be constructed, as well as walks connecting Quarry Bay and the lighthouse.</p> <p><b>Shuttle &amp; Walk</b> - a new shuttle bus service could be provided as part of the fee to provide transport and an added interpretive experience. A guide would be responsible for driving a shuttle bus, as part of the entry fee, from the visitor centre to the lightstation and escorting visitors to the top of the lighthouse. The shuttle would also run to the waterwheel. The new path would be constructed to cater for the shuttle vehicle.</p>
<p><i>Interpretation</i></p>	<p>A new interpretation plan would be developed that defines new signs, activities and displays. Key interpretation nodes are the new visitor centre, the water-wheel and lighthouse.</p>



### Quarry Bay Day Use Area

Upgrade day use site with new parking, access to beach and interpretation

Quarry for Lighthouse construction

Beach

Stippy Rock Road

Leeuwin Spring

Wetland

Approx. location of rare & threatened communities

### Water-wheel

- prepare conservation plan
- new interpretation displays
- safe hardened surfaces
- seating & viewing platform

### Water-wheel Parking

Relocate parking to create bus turnaround and parking with view of ocean

INDIAN OCEAN

Shuttle & Walk  
Possible commercial venture

### Beach Day Use Area

Shire reserve & facilities, suggested redevelopment with new facilities

SOUTHERN OCEAN

### Cape Leeuwin Visitor Centre

- Building envelope for
- entry fee payment
  - shop/cafe
  - toilets
  - interpretation displays

### Main Parking Area

Approximate extent of parking & suggested layout - may need redesigning to suit development

Redesign existing fence & gate

### Cottages

Renovated for appropriate, commercial uses such as overnight accommodation

Shuttle & Walk  
Possible commercial venture

Whale watching platform at suitable location

### Lighthouse

Continue tours for visitors as a commercial venture

## Concept Plan 2 For Discussion Purposes

Busselton District  
Recreation & Landscape Planning & Design Section  
Scale 1:1,000 (A1) February 2001



Leeuwin Lighthouse & Water-wheel

## ***Conclusion***

The concept proposals outlined in this plan have been prepared to address the future development of the lightstation. The ideas presented here are respectful of the site's heritage values and take into consideration the need for alternative use without compromising the key attraction.

The decision whether to construct a new visitor centre or convert one of the cottages needs to be tested in the commercial market. Any renovations to the cottages will need to be consistent with the Conservation Plans and Heritage Council requirements.

## **Appendix One**

### *Information on the Register of the National Estate Listing & Register of Heritage Places*

# Register of the National Estate Database

## Cape Leeuwin Lighthouse, Augusta WA

**Class:** Historic

**Legal Status:** Registered

**Database Number:** 009399

**File Number:** 51021040/0002

**Statement of Significance:** Cape Leeuwin Lighthouse, completed in 1896, is significant for retaining its original lens array and rotation mechanism and for the earliest example of the use of the mercury bath system in Australia (Criterion B.2). The lighthouse, situated on a narrow, sparsely vegetated strip of land and surrounded by sea on three sides, is significant as a prominent landmark feature on the coast of Western Australia (WA). The height of the lighthouse also makes it an outstanding landmark from the land and in particular from the approach road from Augusta (Criterion E1).

**Description :** Cape Leeuwin Lightstation is a mainland station located on the extremity of Cape Leeuwin, in a lightstation reserve approximately 15.5ha in size. Access to Cape Leeuwin is by sealed road from Augusta, some 9.6km away. Cape Leeuwin is a low lying point of land forming the south-west corner of Western Australia. The ground level rises towards the south to a low bluff on which the lighthouse stands. To the north the view is dominated by a low lying range of hills (rising from 60m to 100m) which run north up the coast and eastwards towards Augusta. A steep and rocky coastline continues from the lightstation northwards towards Cape Hamelin. To the south and south-east can be seen several groups of small rocky islands, including St Alouarn, South East Rocks and South West Breaker. The exposed location of the Cape to the full force of south-westerly winds has restricted the growth of substantial vegetation and thus the landscape is dominated by low shrubs and ground covers. The areas around the buildings are lawned or paved. Because of these factors, the height of the lighthouse is emphasised and it forms the dominant landmark in the area. Cape Leeuwin was named by Matthew Hinders on 7 December 1801, taking the name of the adjoining area which had been called Leeuwin's Land by Dutch navigators when the Leeuwin (the Lioness) rounded the cape in March 1622. An initial proposal to erect a light on the rugged granite promontory was made in 1881. At the time the light was intended to serve two purposes. Firstly, to act as a landfall light for vessels traversing the Indian Ocean en route to ports on the east coast of Australia and secondly, to mark the route via Albany which was then the main port for Perth bound cargo. The refusal of the eastern colonies to contribute funds delayed the project for fifteen years until 1895 when, through the persistence of the Premier, Sir John Forrest, the WA colonial government agreed to build the light using its own resources. The lighthouse, designed by British consultant engineer W T Douglass, was constructed by Messers M C Davies and John Wishart. It was commissioned on 10 December 1896. Three cottages were also built by Davies and Wishart at this time. For further information regarding the cottages, refer to File No 5/2/40/4, RR 009401. In the Australian Heritage Commission Register of the National Estate Database. The 35m

grey masonry tower is constructed from locally quarried ironstone. It is surmounted by a 12ft diameter lantern manufactured by Chance Brothers of Birmingham, England. The original lantern and lens are still in service, although the clockwork drive mechanism has been superseded by an electric motor. The illuminant, however, has undergone several changes. The original Trinity House six wick oil burner was replaced at the turn of the century by an 85mm kerosene lamp with a subsequent three fold increase in the lights intensity. In 1925 the 85mm mantle was removed and a cluster of three 55mm mantles installed. The light was converted to electric operation in June 1982. The present optical apparatus consists of the original Chance Brothers 920mm focal radius revolving lens mounted on a mercury float pedestal driven by an electric motor. The light source is a 120volt 1,000watt tungsten halogen lamp. The apparatus gives a character of flashing every 7.5 seconds with an intensity of 1000,000 candelas resulting in a nominal visible range of 26 nautical miles. A radio beacon was commissioned in 1955 and in 1975 an auto alarm system, which reacts automatically to radio frequency distress signals, was installed. The lighthouse is relatively isolated from the other buildings on the site and is located on the highest point of the Cape, some 200m from the residences. The lighthouse has been sited strategically both at the highest and most southern point of the station to enable the maximum possible range and visibility of the light. The two people who had the most significant association with the Cape Leeuwin Lighthouse were M C Davies and W T Douglass as the builder and designer of the lighthouse respectively. Maurice Coleman Davies had established a name for himself as a building materials supplier in Adelaide from the 1850s and by the 1890s Davies' success was reflected in the formation of his company, M C Davies Karri and Jarrah Company Ltd (Hamling). At this peak in his career Davies became the successful tenderer of the construction of the Cape Leeuwin lighthouse in April 1895. No doubt Davies' local knowledge, combined with his proven engineering skills, produced the workmanship that is evident in the structure today. Although by the 1890s Australia had a number of colonial architects and engineers capable of the design and construction of lighthouses, the WA government requested the British engineer William Tregathen Douglass to act as consultant engineer and architect for the lighthouse at Cape Leeuwin. William left Trinity House in 1887, after working with his father on the Fddystone and Bishop Rock lighthouses in England, to practice as a consulting engineer. Cape Leeuwin is the only lighthouse with which Douglass was directly involved, although the lantern he designed for the lower light at Leeuwin was used on the second Rottneest Light.

**Condition and Integrity** The integrity of the lighthouse is good in terms of the basic structure of the building. No major architectural elements have been added to or removed from the building externally or internally. However, the replacement of original windows with glass blocks, the removal of the original oil tanks in the oil store and the aluminium mesh fencing placed around the balcony railing can be seen to diminish the integrity of the fabric of the building. The lighthouse was originally unpainted, having a natural stone colour. Apart from the changes to the lamps with improvements in technology and the electrification of the rotation mechanisms, the lens and associated apparatus are all as originally installed in the building. (1992)

**Location** Leeuwin Road, southern end of Cape Leeuwin, 7km south-south-west of Augusta.

The Register of the National Estate has been compiled since 1976. The Commission is in the process of developing *and/or* upgrading official statements of significance for places listed prior to 1991.

Report produced: 29/3/2000

<http://www.environment.gov.au/iberitage/register/easydatabase/database.html>



# Register of the National Estate Database

## Cape Leeuwin Light Keepers Cottages (former), Augusta WA

**Class:** Historic

**Legal Status:** Registered

**Database Number:** 009401

**File Number:** 5/02/040/0004

**Statement of Significance :** The three lightkeepers cottages at Cape Leeuwin, built in 1895, are significant for their association with the establishment and operation of the Cape Leeuwin Lighthouse, which has played an important part in the shipping industry of Western Australia (WA) (Criterion A.4). The cottages are an integral part of the lightstation and demonstrate the way of life of lightkeepers which is rarely shown today (Criterion D.2). The cottages, situated on a narrow, sparsely vegetated strip of land and surrounded by sea on three sides, are significant as a prominent landmark feature on the coast of WA. The elongated nature of the site at Cape Leeuwin serves to emphasise the lineal relationship of the buildings at the lightstation (Criterion E. 1).

**Description :** Cape Leeuwin Lightstation is a mainland station located on the extremity of Cape Leeuwin, in a lightstation reserve approximately 15.Sha in size. Access to Cape Leeuwin is by sealed road from Augusta, some 9.6km away. Cape Leeuwin is a low lying point of land forming the south-west corner of Western Australia. The ground level rises towards the south to a low bluff on which the lighthouse stands. To the north the view is dominated by a low lying range of hills (rising from 60m to 100m) which run north up the coast and eastwards towards Augusta. A steep and rocky coastline continues from the lightstation northwards towards Cape Hamelin. To the south and south-east can be seen several groups of small rocky islands, including St Alouarn, South East Rocks and South West Breaker. The exposed location of the Cape to the full force of south-westerly winds has restricted the growth of substantial vegetation and thus the landscape is dominated by low shrubs and ground covers. The areas around the buildings are lawned or paved. Cape Leeuwin was named by Matthew Flinders on 7 December 1801, taking the name of the adjoining area which had been called Leeuwins Land by Dutch navigators when the Leeuwin (the Lioness) rounded the cape in March 1622. The lighthouse, designed by British consultant engineer W T Douglass, was constructed by Messrs M C Davies and John Wishart. It was commissioned on 10 December 1896. For further information regarding the Cape Leeuwin Lighthouse, refer to RR 009399 in the Australian Heritage Commission Register of the National Estate Database. The residential area is located to the north of the lighthouse and is sited on the eastern side of the survey area and contains three residences, three laundries and toilets. The houses are built in a neatly aligned row, all equally spaced apart. Each house is identical to the others in terms of colour, hipped roof lines and scale. The two southern houses are built of the local limestone and the northern house of local granite. A fourth weatherboard house was built to the south of the

existing three houses but has been removed. The alignment and the lack of vegetation around the buildings gives the precinct a spartan quality. The three laundry buildings were built at the same time as the houses (1896) and are of similar materials with hipped roofs. Two are identical while the central building has had its roof line altered to a skillion roof. The three cottages were built with the lighthouse by MC Davies and Wishart in 1895-96 using stone from Quarry Bay. The design appears to be a standard form and may also be seen at the Bathurst Point Light. Maurice Coleman Davies had established a name for himself as a building materials supplier in Adelaide from the 1850s and by the 1890s Davies' success was reflected in the formation of his company, M C Davies Karri and Jarrah Company Ltd (Hamling). At this peak in his career Davies became the successful tenderer of the construction of the Cape Leeuwin lighthouse and cottages in April 1895.

**Condition and Integrity :** Internally the integrity of the residences is high, with the basic floor plan and finishes remaining relatively unaltered. There has been some removal of internal fittings such as a window, doors and fireplaces and internal paint schemes and floor coverings have been replaced. A window has been extended to form a doorway in each of the bathrooms. The building-in of the verandahs has altered the appearance of each of the buildings both internally and externally. In all cases the original timber verandah flooring remains as does the verandah posts and brackets. Some timber framed partitioning has been constructed within the built-in verandah spaces. (1992)

**Location** Leeuwin Road, southern end of Cape Leeuwin, 7km south-south-west of Augusta.

The Register of the National Estate has been compiled since 1976. The Commission is in the process of developing and/or upgrading official statements of significance for places listed prior to 1991.

Report produced: 29/3/2000

<http://www.environment.gov.au/heritage/register/easydatabase/databasettmi>

# REGISTER OF HERITAGE PLACES

## Interim Entry

1. NUMBER 0104
2. NAME *Cape Leeuwin Lighthouse and Cottages*
3. DESCRIPTION OF ELEMENTS INCLUDED IN THE ENTRY (GENERAL)

Cylindrical tower 135ft. Base-vane with plane of light 185ft from water level. Stone quarried within 0.5 mile of building. Handsome white volitic ironstone rock. On ground floor is oil room with 10 cylinders of 300 gallons of heavy mineral oil. In centre is hollow iron column holding chain and weights of clockwork revolving lantern. On 5th floor are telephones to the three cottages. Lightning conductor down wall on inside was first of its kind. Foundation stone laid December 1895.

Three cottages built with the lighthouse by M C Davies and Wishart in 1895/96 using stone from Quarry Bay. The design appears to be a standard form and may also be seen at the Bathurst Point Light. The three cottages form a closely integral group with the lighthouse (Campbell).

4. LOCAL GOVERNMENT AREA Augusta/Margaret River
5. LOCATION Leeuwin Road, Cape Leeuwin  
Loc Sussex 4195 P66271 C/I 1832/432
6. OWNER

7. STATEMENT OF SIGNIFICANCE OF PLACE (ASSESSMENT IN DETAIL)

The place has been assessed by the National Trust of Australia (WA) and has been entered in the Register held by that body as a classified building with the following statement of significance:

A typical example of the style of lighthouse and quarters built in this period and significant for its architectural/technical accomplishment (Campbell).

8. REGISTER OF HERITAGE PLACES (DATE OF GAZETTAL)  
Interim Entry 3/7/1992
9. CONSERVATION ORDER
10. HERITAGE AGREEMENT
11. REFERENCES  
National Trust Assessment Exposition

## Appendix Two

### *Library Search Results*

Australian Maritime Safety Authority, ***Lighthouses on the Western Australian coast and off-shore islands. Working file #1 and #2***, Fremantle WA 1996?

Ayris, Cecil, ***Leeuwin Lighthouse : a brief history*** Cyril Ayris Freelance, West Perth WA, 1996

Connelly, Marion, ***Interview with Marion Connelly***, sound recording, interviewed by Ronda Jamieson, 1980 – 81. Her youth in Fremantle, married life on lighthouse stations from 1923- Cape Leeuwin, Geraldton, Point Charles, North West Cape, Eclipse Island

Cumming, D. A., ***Lighthouses on the Western Australian coast and off-shore islands***, Western Australian Maritime Museum, 1995

Gibbs, Martin, ***A report in the aboriginal ethnohistory of the Scott River, Southwest Western Australia***, 1989

Watson, Rose, ***Cape Leeuwin lighthouse***, paper read at a meeting of the Augusta Historical Society, Perth, 18 May 1978

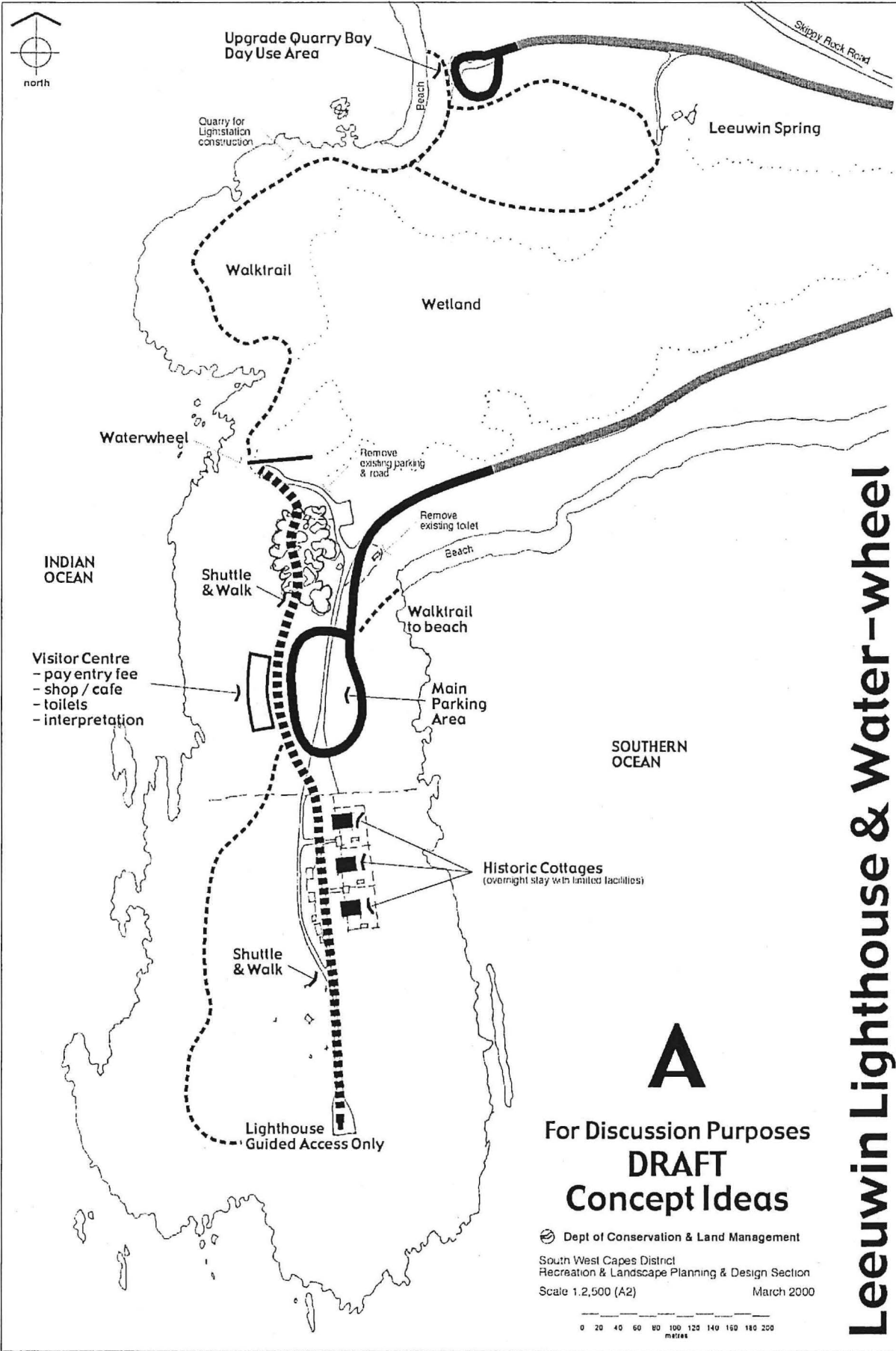
Western Australian, 14 Dec, 1895, p.3 ***The Cape Leeuwin Lighthouse***, Statistics about the lighthouse and text of speech by Sir John Forrest, account of the festivities on the opening of the lighthouse (newspaper on microfilm)

Western Australian, 14 Dec, 1895, p.4 ***Editorial on the building of the lighthouse and who should pay for lighthouses in the colony***, (newspaper on microfilm)

## Appendix Three

### *Contributors*

Roger Banks	District Manager	South West Capes
Mark Pittavino	Recreation & Tourism	South West Capes
Neil Taylor	Recreation & Tourism	South West Capes
Glenn Willmott	Ranger	Leeuwin-Naturaliste National Park
Rory Neal	Ranger	Leeuwin-Naturaliste National Park
Gil Field	Senior Interpretation Officer	Planning & Visitor Services Branch
Rod Quartermain	Tourism Development Officer	Park Policy & Tourism Branch
Tracy Churchill	Landscape Architect	Planning & Visitor Services Branch

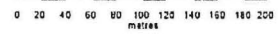


**Leeuwin Lighthouse & Water-wheel**

**A**

For Discussion Purposes  
**DRAFT**  
 Concept Ideas

Dept of Conservation & Land Management  
 South West Capes District  
 Recreation & Landscape Planning & Design Section  
 Scale 1:2,500 (A2) March 2000





## Appendix Four

The following Options were presented to the community for comment. Acceptable ideas were retained and unacceptable ones discarded in a process to arrive at the two Options presented in this report.

### Option A

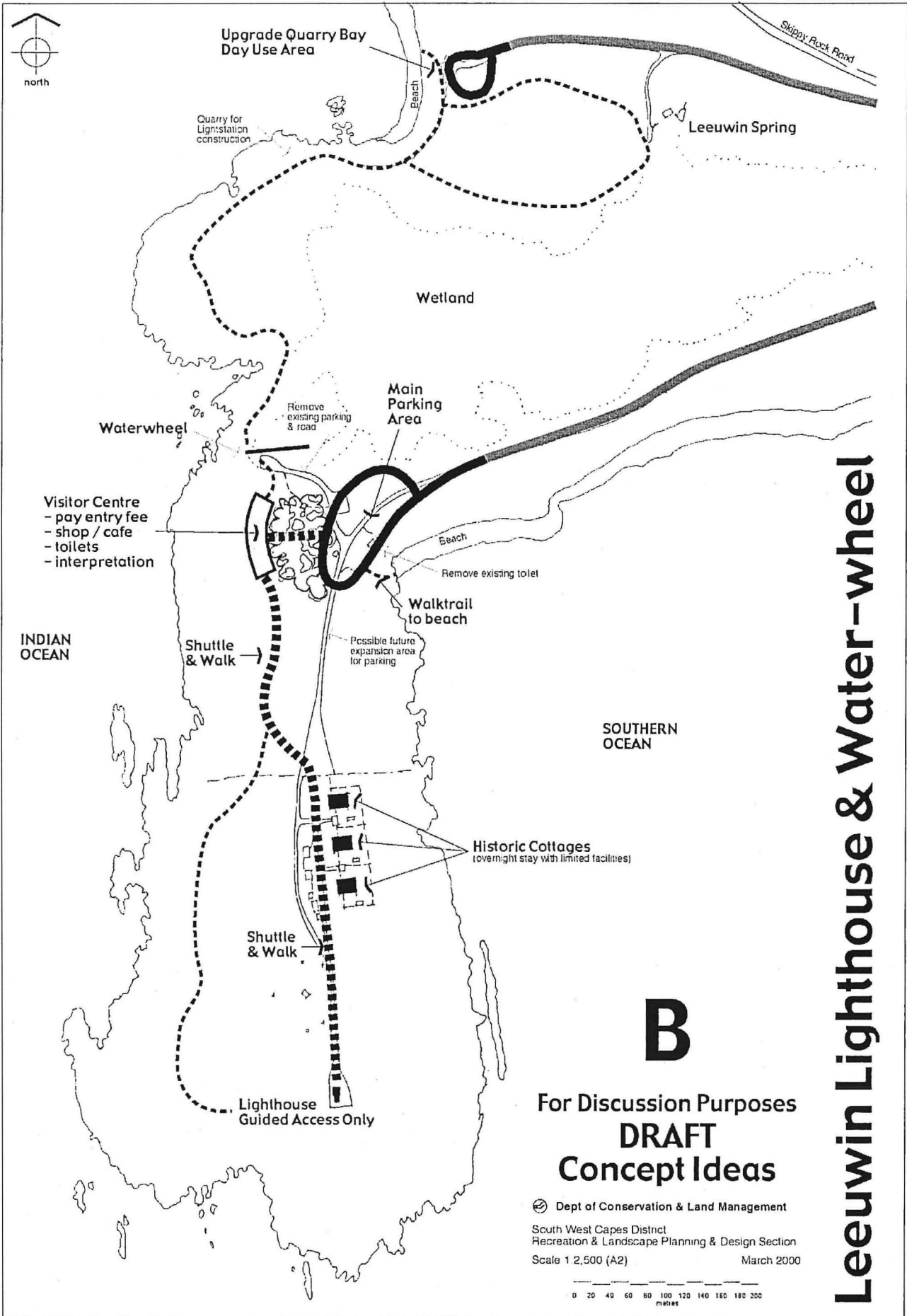
<i>Vehicle Access &amp; Parking</i>	The existing vehicle access would terminate in a loop parking area to service both lightstation and waterwheel.
<i>Visitor Services &amp; Fee Collection</i>	A new visitor centre – contact point – would be constructed next to the parking area to provide facilities and services, as well as collect an entry fee to both waterwheel and lightstation.
<i>Interpretation &amp; Access to Features</i>	A new path would be constructed from the lightkeepers' cottages to the waterwheel. A new shuttle bus service would be provided as part of the fee to provide transport and an added interpretive experience. A guide would be responsible for driving a shuttle bus, as part of the entry fee, from the visitor centre to the lightstation and escorting visitors to the top of the lighthouse. The shuttle would also run to the waterwheel.

#### **Advantages**

- ⌘ Simple access and layout, one parking area for both features, with room for expansion.
- ⌘ Superb views of Indian Ocean from visitor centre.
- ⌘ Removes all new structures and vehicles from the “heritage zone”.
- ⌘ All weather access via shuttle service.

#### **Disadvantages**

- ⌘ Distance from parking area to lightstation relies heavily on shuttle service (which could be an advantage for the viability of the service).
- ⌘ Need to construct new building on granite outcrop with implications for building construction and plumbing design (not insurmountable).
- ⌘ Difficult to control traffic on main road from stopping and accessing waterwheel – creating traffic hazard on dangerous corner.
- ⌘ Will require fencing to direct pedestrians into visitor centre before entering lightstation.

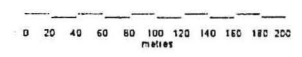


# Leeuwin Lighthouse & Water-wheel

## B

For Discussion Purposes  
**DRAFT**  
 Concept Ideas

Dept of Conservation & Land Management  
 South West Capes District  
 Recreation & Landscape Planning & Design Section  
 Scale 1:2,500 (A2) March 2000



### **Option B**

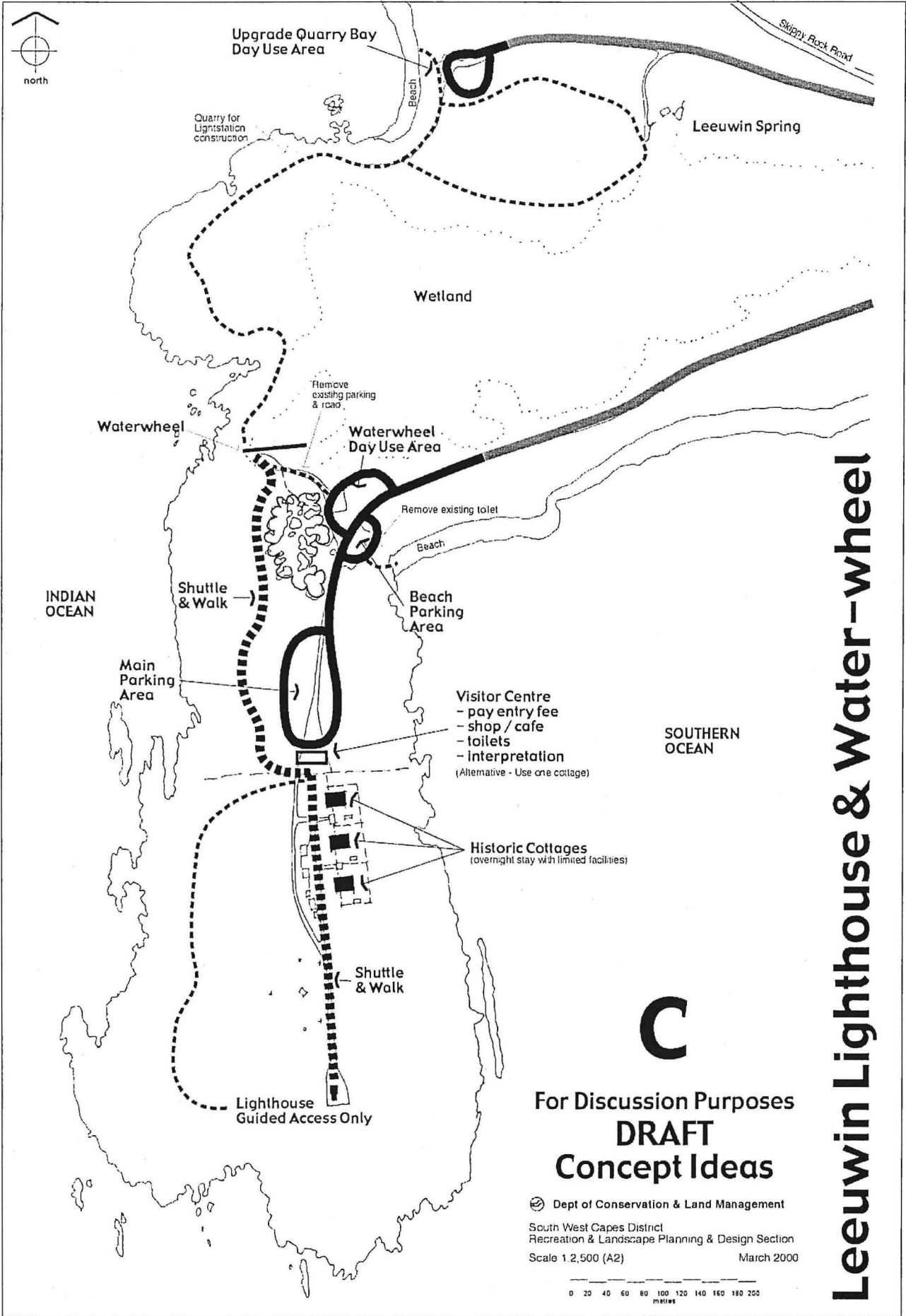
<i>Vehicle Access &amp; Parking</i>	The existing vehicle access would terminate in a loop parking area to service both lightstation and waterwheel.
<i>Visitor Services &amp; Fee Collection</i>	A new visitor centre – contact point – would be constructed next to the parking area to provide facilities and services, as well as collect an entry fee to both waterwheel and lightstation.
<i>Interpretation &amp; Access to Features</i>	A new path would be constructed from the visitor centre to the lightkeepers' cottages. A new shuttle bus service would be provided as part of the fee to provide transport and an added interpretive experience. A guide would be responsible for driving a shuttle bus, part of the entry fee, from the visitor centre to the lightstation and escorting visitors to the top of the lighthouse.

#### **Advantages**

- ⌘ Simple access and layout, one parking area for both features.
- ⌘ Superb views over Indian Ocean with possible view to both waterwheel and lighthouse from same vantage point.
- ⌘ Attractive setting and entry to building through existing Melaleuca grove.
- ⌘ Removes all new structures and vehicles from the “heritage zone”.
- ⌘ All weather access via shuttle service.
- ⌘ Tourist cottages are separate from vehicular tourist activity providing a more secluded and remote experience.

#### **Disadvantages**

- ⌘ Area chosen for parking is more difficult to design than Option A due to narrow site and topography.
- ⌘ Distance from parking area to lightstation relies heavily on shuttle service (which could be an advantage for the viability of the service).
- ⌘ Need to construct new building on granite outcrop with implications for building construction and plumbing design (not insurmountable).

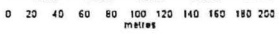


# Leeuwin Lighthouse & Water-wheel

## C

For Discussion Purposes  
**DRAFT**  
 Concept Ideas

Dept of Conservation & Land Management  
 South West Capes District  
 Recreation & Landscape Planning & Design Section  
 Scale 1:2,500 (A2) March 2000



### **Option C**

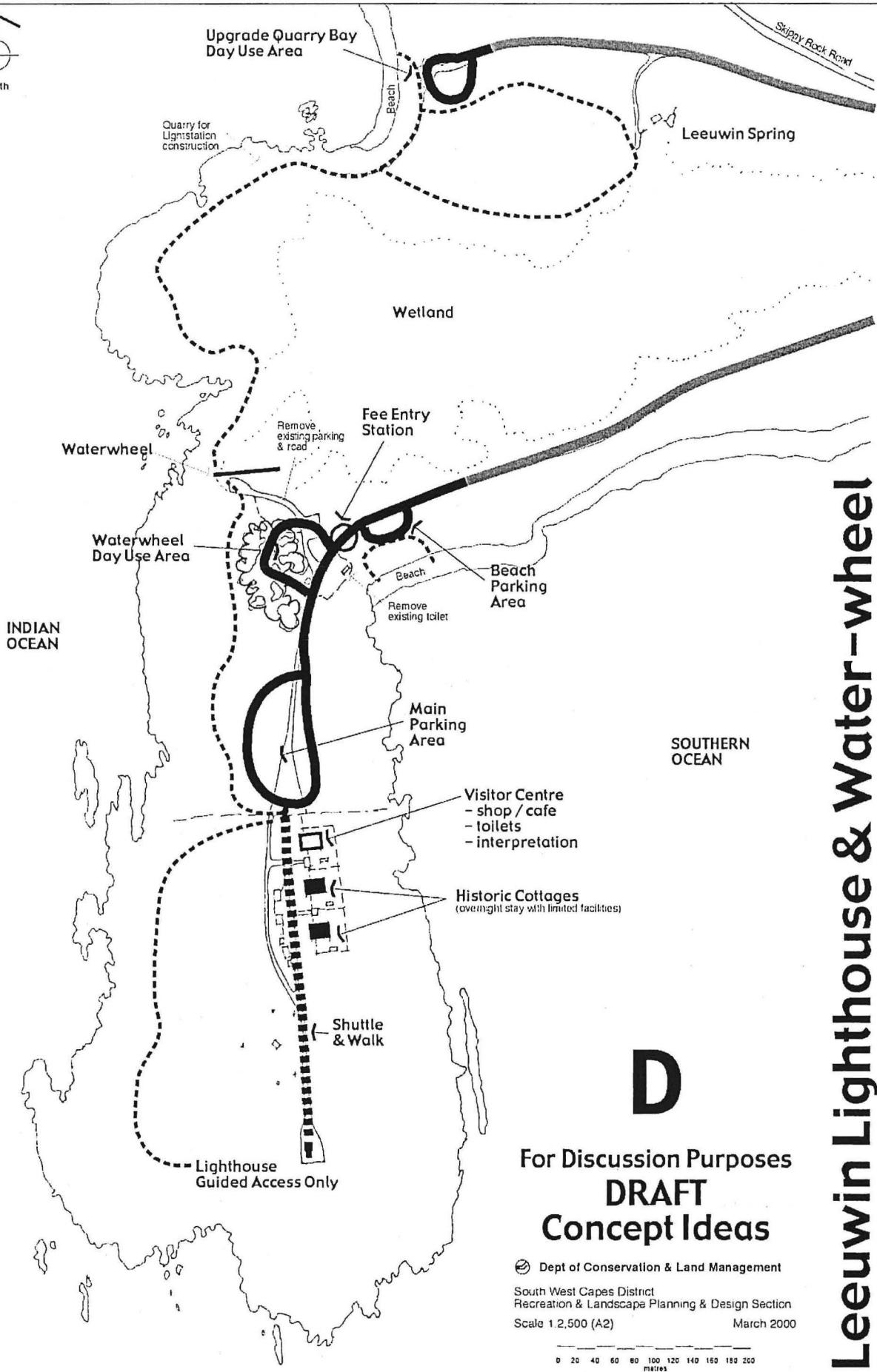
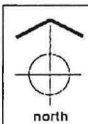
<i>Vehicle Access &amp; Parking</i>	Retention of existing access road with three new parking areas for the beach, waterwheel and lightstation.
<i>Visitor Services &amp; Fee Collection</i>	A new visitor centre – contact point – would be constructed as a gateway between the main parking area and the lightstation. It would provide facilities and services, as well as collect an entry fee to the lightstation.
<i>Interpretation &amp; Access to Features</i>	A new shuttle bus service would be provided as part of the fee to provide transport and an added interpretive experience. A guide would be responsible for driving a shuttle bus, part of the entry fee, from the visitor centre to the lightstation and escorting visitors to the top of the lighthouse. The shuttle bus could also be extended to the waterwheel to better integrate the historical features.

#### **Advantages**

- ⊘ Breaks parking areas into smaller lots and targets the facilities providing closer vehicle access.
- ⊘ Visitor centre would act as an excellent gateway to provide information, collect entry fees and coordinate the guided tours and shuttle service.
- ⊘ Visitor centre on direct line of pedestrian access from parking area to lighthouse.
- ⊘ All weather access via shuttle service.
- ⊘ Management of tourist cottages would be in close proximity.

#### **Disadvantages**

- ⊘ Complicated road and parking network, requiring multiple signs and intersections – doesn't resolve the dangerous corner risks.
- ⊘ Visitor centre not providing central facility for all visitors to precinct (missing visitors to waterwheel) – not successfully integrating historical features.
- ⊘ Fee collection doesn't include all visitors to precinct, especially this could those to the water-wheel. This could be resolved by installing an entry fee station on main road and relocating parking to beach as per Option B.

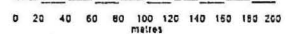


# Leeuwin Lighthouse & Water-wheel

## D

For Discussion Purposes  
**DRAFT**  
 Concept Ideas

Dept of Conservation & Land Management  
 South West Capes District  
 Recreation & Landscape Planning & Design Section  
 Scale 1:2,500 (A2) March 2000





## Option D

<i>Vehicle Access &amp; Parking</i>	Retention of existing access road with three new parking areas for the beach, waterwheel and lightstation.
<i>Visitor Services &amp; Fee Collection</i>	Entry fees would be collected from an entry station on the main access road, after the beach parking area. A new visitor centre – contact point – would be housed in the northern most cottage.
<i>Interpretation &amp; Access to Features</i>	A new shuttle bus service would be provided as part of the fee to provide transport and an added interpretive experience. A guide would be responsible for driving a shuttle bus, part of the entry fee, from the visitor centre to the lightstation and escorting visitors to the top of the lighthouse. A new path would be constructed from the visitor centre to the waterwheel (which could also be built to serve the shuttle bus).

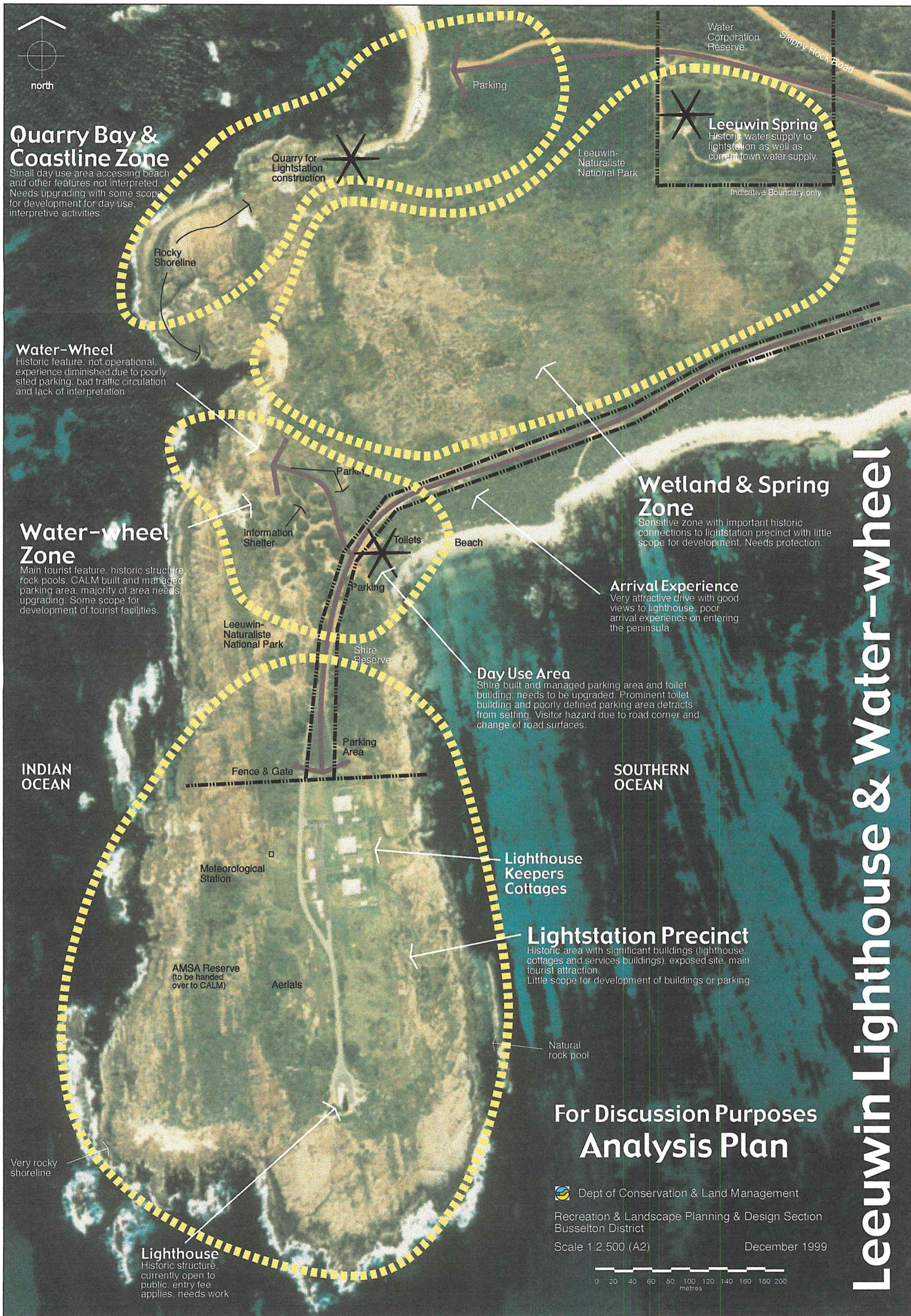
### **Advantages**

- ⌘ Breaks parking areas into smaller lots and targets the facilities providing closer vehicle access.
- ⌘ Fees can be effectively collected for the precinct with entry station located on main access road.
- ⌘ Visitor centre on direct line of pedestrian access to lighthouse.
- ⌘ All weather access via shuttle service.

### **Disadvantages**

- ⌘ Complicated road and parking network, requiring multiple signs and intersections – doesn't resolve the dangerous corner risks.
- ⌘ Requires an extra person for the entry station – separate from the main visitor centre – issues of staff amenity and security.
- ⌘ Cottage for visitor centre would require renovation for alternative use that may not be acceptable from heritage viewpoint.
- ⌘ Visitor centre not providing central facility for all visitors to precinct (missing visitors to waterwheel) – not successfully integrating historical features.
- ⌘ Takes up one cottage that could be used more effectively for accommodation.





### Quarry Bay & Coastline Zone

Small day use area accessing beach and other features not interpreted. Needs upgrading with some scope for development for day use, interpretive activities.

Rocky Shoreline

Quarry for Lightstation construction

**Leeuwin Spring**  
Historic water supply to lightstation as well as current town water supply.

Indicative Boundary only

### Water-Wheel

Historic feature, not operational, experience diminished due to poorly sited parking, bad traffic circulation and lack of interpretation

### Water-wheel Zone

Main tourist feature, historic structure, rock pools, CALM built and managed parking area, majority of area needs upgrading. Some scope for development of tourist facilities.

Information Shelter

Toilets

Beach

### Wetland & Spring Zone

Sensitive zone with important historic connections to lightstation precinct with little scope for development. Needs protection.

### Arrival Experience

Very attractive drive with good views to lighthouse, poor arrival experience on entering the peninsula.

### Day Use Area

Shire built and managed parking area and toilet building, needs to be upgraded. Prominent toilet building and poorly defined parking area detracts from setting. Visitor hazard due to road corner and change of road surfaces.

Leeuwin-Naturaliste National Park

Shire Reserve

Parking Area

Fence & Gate

INDIAN OCEAN

SOUTHERN OCEAN

Meteorological Station

Lighthouse Keepers Cottages

### Lightstation Precinct

Historic area with significant buildings (lighthouse, cottages and services buildings), exposed site, main tourist attraction. Little scope for development of buildings or parking

AMSA Reserve (to be handed over to CALM)

Aerials

Natural rock pool

Very rocky shoreline

**Lighthouse**  
Historic structure, currently open to public, entry fee applies, needs work

## For Discussion Purposes Analysis Plan

Dept of Conservation & Land Management

Recreation & Landscape Planning & Design Section  
Busselton District

Scale 1:2 500 (A2)

December 1999



# Leeuwin Lighthouse & Water-wheel