2014

Foreshore Management Plan Lot 304 Sunday Island Bay Short Stay Units



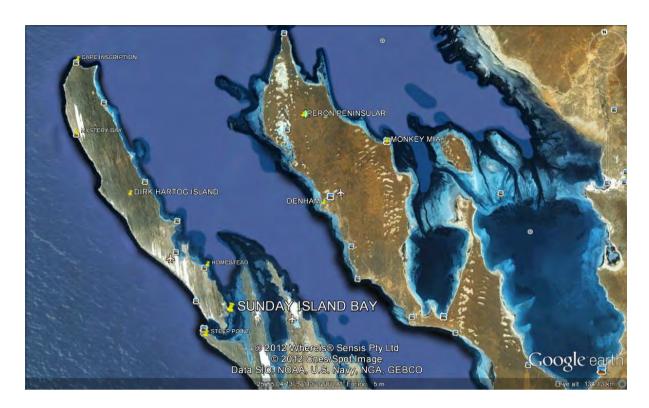
Hypermarket Pty Ltd

FORESHORE MANAGEMENT PLAN LOT 304 SUNDAY ISLAND BAY -DIRK HARTOG ISLAND

CONTENTS

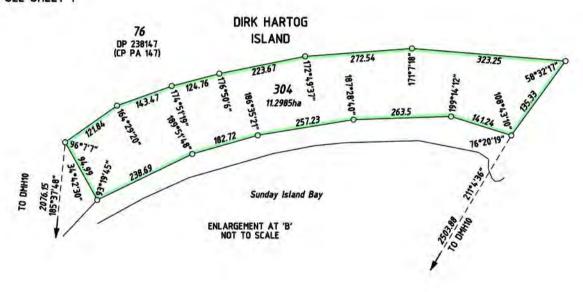
1	Introduction			
2	Development Overview			
3	The Site		8	
4	Potential Risks		9	
4a	Access		9	
	(i)	Vehicles	9	
	(ii)	Pedestrians	10	
	DPaW	Advice	10	
4b	Trampling		10	
4c	Rubbish		11	
4d	Human Safety		11	
4e	Souvenirs		12	
5	Management of Foreshore		12	
6	Use of Nearshore		13	
7	Key Performance Indicators		13	
	(i)	Erosion	13	
	(ii)	Vegetation Damage	13	
	(iii)	Sand Movement	13	
<u>List of Maps and Photos</u>				
Α	Google Location Sunday Island Bay		3	
В	Survey Drawing Lot 304		3	
С	Sunday Island Bay Location			
D	Lot 304 Location			

E	View looking east at Sunday Island Bay	5
F	View looking south at Sunday Island Bay	5
G	Panorama Sunday Island Bay	5
н	Contour Drawing Lot 304	6
I	Enlarged Contour Drawing Lot 304	7
J	Land Proposal Dirk Hartog Island	15
K	DPaW agreed access routes	16
L	Vegetation Map Dirk Hartog Island	15



A Sunday Island Bay Location Shark Bay

SEE SHEET 1



B Survey Drawing Lot 304 Sunday Island Bay



C Sunday Island Bay Location



D Lot 304 location



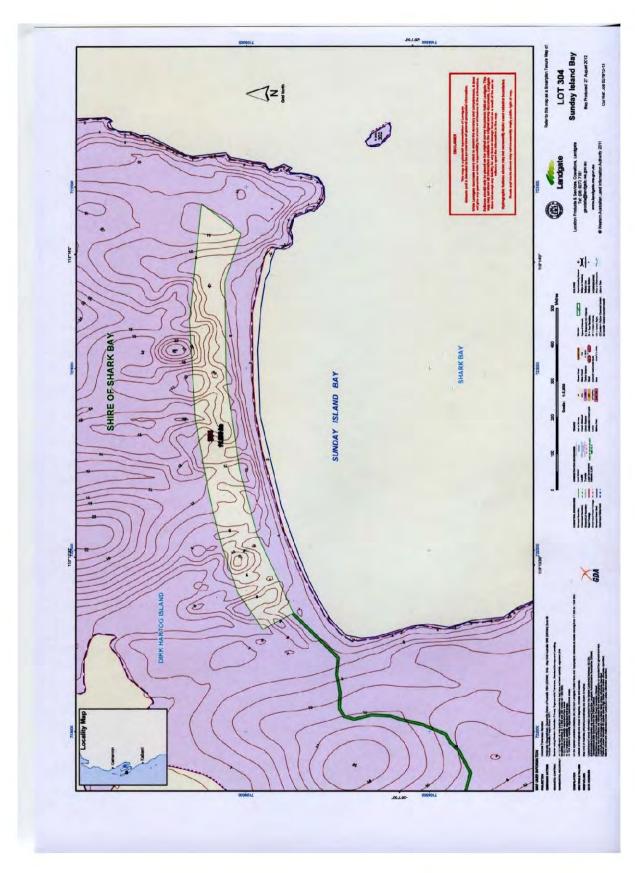
E View looking east over Sunday Island Bay



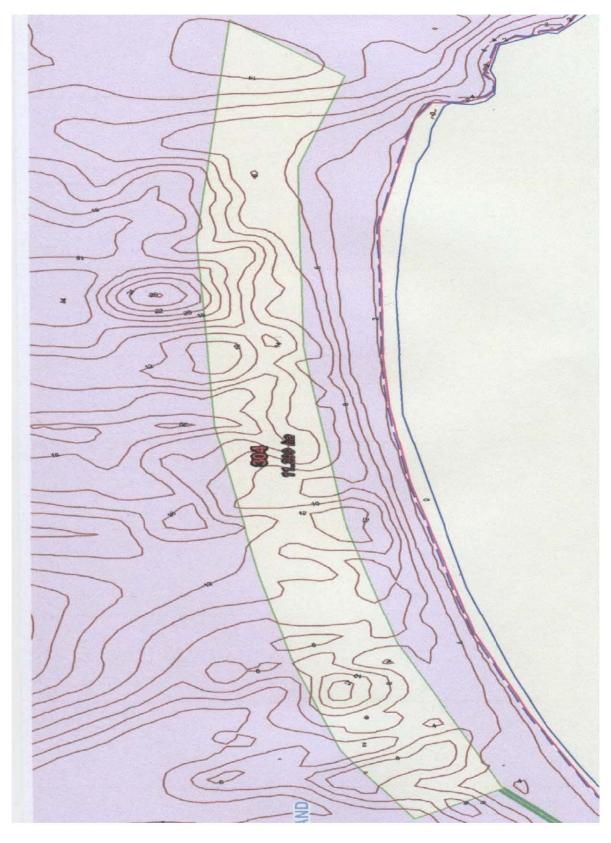
F View looking south west including foreshore at Sunday Island Bay



G Panorama Sunday Island Bay showing National Park Access Track



H Contour Drawing Lot 304 Sunday Island Bay



Enlarged Contour Map Lot 304 Sunday Island Bay

FORESHORE MANAGEMENT PLAN

1 INTRODUCTION

This foreshore management Plan has been established to put in place management procedures to address access and usage of the foreshore area of the Dirk Hartog Island National Park located between Lot 304 and the Shark Bay Marine Park

The overall objective of this plan is to provide clear guidelines for visitors accessing Lot 304 and the Marine Park(nearshore) when crossing the strip of National Park land(foreshore) located between Lot 304 and the Shark Bay Marine Park. Additionally to consider the risks posed in regard to this access and to propose a achievable solutions to any risks directly attributable to the access of visitors to the lot and the nearshore and foreshore areas.

The overarching management for Dirk Hartog Island National Park, including the foreshore area, is guided by the Shark Bay Terrestrial Reserves and Proposed Reserve Additions Management Plan, 2012.

This foreshore management plan has been developed to compliment the Terrestrial Reserves Management Plan by addressing anticipated additional visitor/staff accessing the foreshore and nearshore areas following the development of the lot for short stay accommodation.

2 DEVELOPMENT OVERVIEW

In line with the "Agreement in Relation to Dirk Hartog Island Etc"-2005 entered into between the State of Western Australia and Hypermarket Pty Ltd it is proposed to initially develop seven short stay accommodation units. A complementary central lodge and additional support facilities may be considered at a later date.

It is anticipated that upon completion of the proposed 7 short stay accommodation units and with a sixty five percent occupancy there could be up to fifty six guests staying within the lot.

The only vehicles proposed to operate within the lot are Polaris style vehicles of 2,4 or 6 seat capacity. DPaW has supported approval for the operation of these low impact vehicles within the National Park subject to DoT approval.

3 THE SITE

Sunday Island Bay is located towards the south eastern corner of Dirk Hartog Island near longitude 113"13"30 and latitude 26"7"30 and close to Australia's most westerly mainland location – Steep Point.

Lot 304 is located on the northern shore of Sunday Island Bay and has a total area of approx. 28 acres.(11.2985 ha) It has ocean frontage of more than one kilometer and a width of up to 135 meters at certain points on the lot.

Lot 304 is set back from the nearshore(Marine Park) and separated by a strip of natural foreshore(National Park) part of the Dirk Hartog Island National Park.

The lot has AHD levels ranging from 4 meters to 20 meters at varying locations on the land as shown upon the site contour map included herein.

4 POTENTIAL RISKS

a) Access

Uncontrolled access to the foreshore area of land directly between Lot 304 and the beachfront nearshore of Sunday Island Bay has the potential for degredation of vegetation and potential blow outs.

By agreement with DPaW access to the nearshore beach front beyond the foreshore in front of lot 304 will be via agreed access routes. An initial agreement for access to the foreshore has been documented by map for initially the movement of any building materials, machinery and workers to and from the site. (page 14)

All agreed access routes for construction are to be bridged by appropriate raised infrastructure so that no ground cover and vegetation is disturbed.

DPaW have agreed that long term pedestrian access to the beach front(nearshore) over the fore shore will be negotiated with DPaW prior to human occupation following or during the completion of any proposed development.

It is proposed, that subject to DPaW agreement, the pedestrian access ways will be formalized and constructed as raised boardwalks, of some form, or as tracked paths for pedestrian access to the beach. These would be located at appropriate locations, convenient for human movement to and from the beach area to each of the proposed accommodation units. The avoidance of trampling will assist to maximize foreshore protection by redirecting pedestrian traffic to protected formal crossing routes.

(i) Vehicles

It is proposed that only vehicles of the Polaris style will be located and used within the lot and that they will be either battery or diesel operated with access limited suitably constructed raised boardwalks and any unmade National Park tracks to access the foreshore and nearshore areas.

(ii) Pedestrians

It is proposed that pedestrians will access the lot and the nearshore/ foreshore area by a combination of raised licensed boardwalks or agreed single tracks between the lot, the foreshore and the nearshore depending upon the level of pedestrian access anticipated at each location

DPaW ADVICE

In response to a draft copy of this plan submitted to DPaW - amendments were made to this document to include recommendations included in the DPaW letter dated 29 August, 2013.

DPaW have confirmed that boardwalks and other structures within the National Park will be considered and if approved an appropriate license/lease would be developed. Unmade pedestrian tracks over the foreshore to the nearshore would be as agreed on site with DPaW.

DPaW confirm that following any further subdivision the license/lease would be amended to reflect any changed ownership of land.

Any considerations by DPaW in regard to structures and tracks requires the submission of a detailed site development plan showing locations of all structures with their construction specifications, maintenance schedules and any necessary temporary access routes. These submissions will be made following the receipt of development approval.

A foreshore monitoring program including remediation actions if required will be included with such applications.

b) **Trampling**

Uncontrolled or directed pedestrian and or vehicle access over the foreshore and near shore area of land has the potential to cause degradation of this land through trampling

Agreed regular formalised access routes are essential to eliminate the possible impact of trampling by vehicles and or pedestrians(DPaW advice above)

It is proposed to provide raised crossings over the foreshore land and to provide barriers to prevent access to parts other than designaterd routes for access.

All visitors to the site will be inducted on their arrival and instructed on the necessity to follow only authorised and signed access routes over the foreshore to the nearshore beachfront.

Additionally literature will be provided within each accommodation unit providing clear details and maps showing access routes from the accommodation units over the pre shore to the foreshore.

c) Rubbish

The unregulated disposal and or dropping of rubbish within the foreshore area and on the nearshore areas of land immediately to the front of Lot 304 has the potential to impact on the amenity of the site

It is proposaed that each accommodation unit will be provided with full literature in regard to rubbish disposal protocols including;-

- a. All rubbish (cans, bottles, paper and other types) to be returned to each accommodation unit for disposal. Manual can crushers will be provided for each accommodation unit with the crushed product returned to lot 62 for further disposal in bulk form back to Denham. Glass will be placed into disposal sacks provided and returned to Lot 62 for crushing and further disposal. Paper and other burnable waste will be burned on site using cyclo burn technology.
- b. No rubbish is to be dumped or left on the foreshore or preshore areas.
- c. Each accommodation unit will provide a suitable eco friendly disposal container close to their boardwalk crossing.

Appropriate signage will be placed at the end of each crossover access way informing all visitors of the protocol in regard to rubbish disposal

All visitors will be inducted on their first day in regard to safety measures and protocols in regard to rubbish

d) Human Safety

Potentially there are hazards associated with crossing the area of foreshore to gain access to the nearshore. This may be caused by lack of attention, skylarking or unknown hazards created during the day

It is proposed that all visitors will be inducted and briefed on their first day at each accommodation unit in regard to safety matters whilst crossing the foreshore area and accessing the nearshore and or lot 304.

Additionally literature will be prominently displayed in each accommodation unit in regard to the necessity of following all directions in regard to safety and access over the fore shore and on the neareshore

Signage will be displayed at each nearshore/foreshore crossing point to confirm the protocols that are essential in regard to safety including fire safe points whilst crossing that area of the National Park.

e) Souvenirs

There is a potential for unregulated collection of plants, insects, small animals (frogs, lizards) shells, corals and rocks from the beach, ocean and other areas to result in impacts from such often perceived unimportant activities

It is proposed that on arrival all visitors will be clearly informed during initial verbal induction of the regulations in regard to the prohibition, movement or removal of any souvenir style of local product including plants(seeds, seedlings, flowers) shells, corals, rocks and small animals(frogs, lizards and insects).

Secondly by reference to literature provided to each accommodation unit and finally by direct signage located at suitable positions within the freehold lots.

5 MANAGEMENT OF FORESHORE

- It is not proposed to undertake any clearing or works programs on the foreshore or nearshore locations including the beach apart from the erection, following agreement and approval from DPaW ,of covered beach shelters of the 'ecostructure' style for visitor protection and enjoyment as part of the proposed eco experience.
- There will be no fences or obstructions constructed on the southern boundary of lot 304 or between the lot and the nearshore without first undertaking consultation and obtaining agreement and approval from DPaW.
- 3 Signage will be installed at the front boundary of the lot providing information in regard to access and accessibility to the foreshore/nearshore from the site which will be supported by information brochures and on site instructions by the ecolocation operators. This will include information on access, rubbish management and biosecurity control.
- 4 Boardwalks to standards approved by DPaW

There will be no permanent structures established on the foreshore or upon the land located between the lot and the nearshore without first undertaking consultation and negotiating approval with DEC

6 USE OF NEARSHORE

- 1 It is proposed that the nearshore will be accessed from the site for a range of uses
 - a) Walking
 - b) Swimming
 - c) Boating
 - d) Fishing
 - e) Recreation in general
 - f) Vehicle barge access
- Pedestrian access to the beach over the vegetated foreshore will be along designated access tracks/decks that are agreed upon and approved by DPaW. Access over the vegetated land between the site and nearshore will be along DPaW approved tracks and/or raised boardwalks constructed to specifications agreed between DPaW and Hypermarket Pty Ltd.

Apart from access over the foreshore via agreed and approved pedestrian accesses there will be no permanent access over the foreshore area for pedestrian traffic apart from the agreed registered National Park access track to the west of the lot

Apart from agreed access over the fore shore via agreed and approved vehicle access routes there will be no permanent access over the vegetated foreshore area for vehicles apart from the agreed access track to the west of the lot.

7 KEY PERFORMANCE INDICATORS (KPIs)

It is proposed that KPIs will be established in regard to the foreshore area including

- (i) Erosion
- (a) AIM- no erosion on the National Park land area between the lot and the foreshore
- (b) REMEDIAL-Fencing put in place to stop erosion, change access route, in consultation with DPaW re vegetation of any eroded areas.
- (c) REVIEW-Assess annually

(ii) Vegetation damage

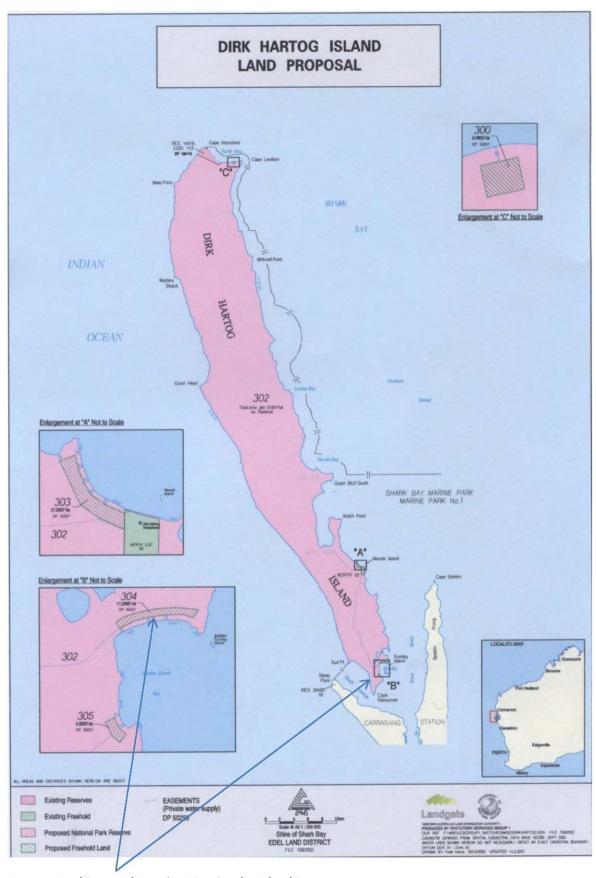
(a) AIM-no damage to any vegetation on the National Park land area between the lot and the foreshore

- (b) REMEDIAL-fencing or barriers put in place for protection of vegetation, in consultation with DPaW undertake replanting, change access route
- (c) REVIEW-assess annually

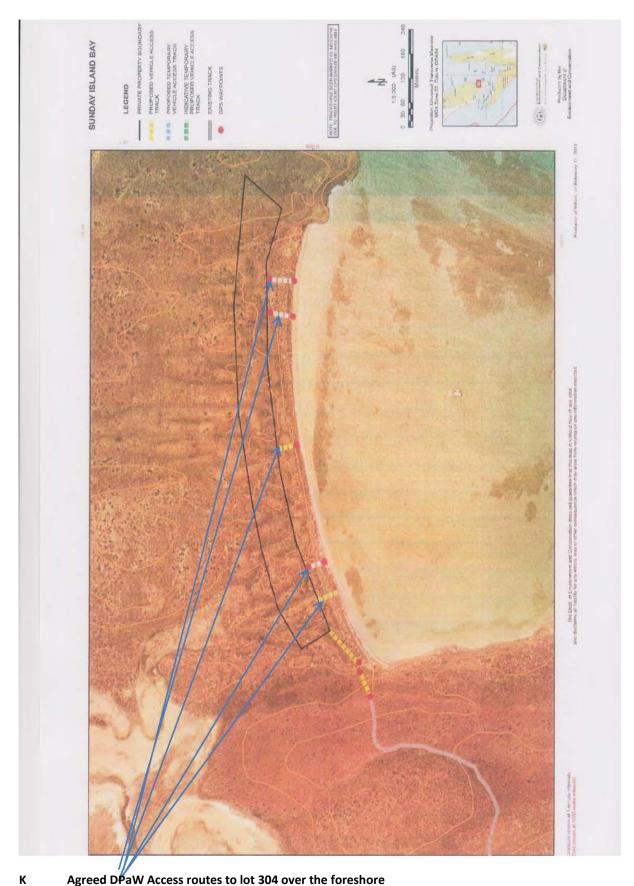
(iii) Sand movement

- (a) AIM-no sand movement on the National Park land area between the lot and the foreshore
- (b) REMEDIAL-fencing or barriers put in place to stop sand movement, change access route, in consultation with DPaW introduce vegetation
- (c) REVIEW-assess annually

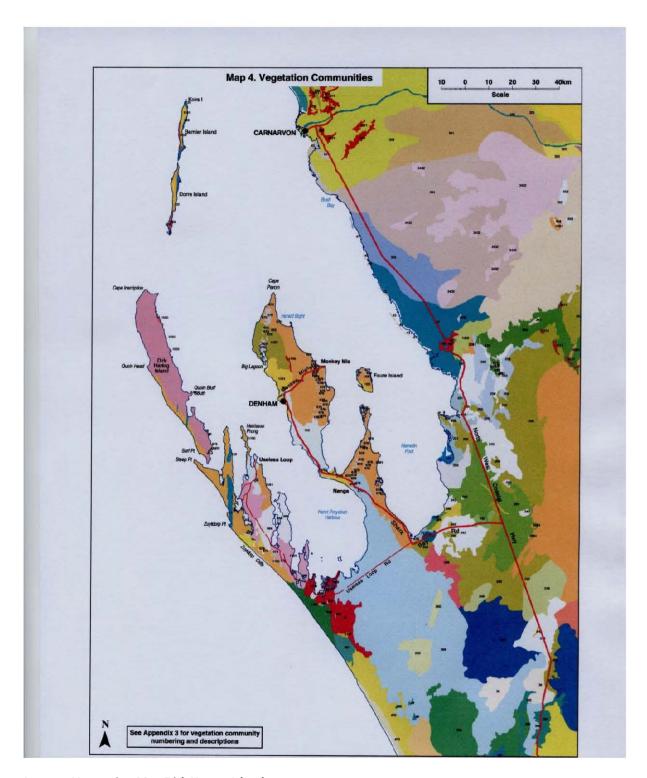
and that mitigation techniques will be put in place to deal with any environmental degradation thus observed in relation to the level of access provided.



J Land Proposal Location Map Sunday Island Bay



Agreed DPaW Access routes to lot 304 over the foreshore



L Vegetation Map Dirk Hartog Island