LORD HOWE ISLAND BOARD

BOARD MEETING AGENDA

MEETING DATE:	MEETING LOCATION:	MEETING TIME:
Mon 12 Sep 2016	By teleconference	Planning Session 9:30 am to 11:00 am
Mon 12 Sep 2016	By teleconference	Closed Session: 11:00 am to 4:30 pm
Tue 13 Sep 2015	By teleconference	Open Session: 9:00 am to 12:30 pm

	ITEM		OPEN (O)	CLOSED (C)	ACTION Note / Decide / Recommend
ВР	1	MINUTES OF PREVIOUS MEETING – NOTICE OF ADOPTION	0		Note
ВР	2	OUT OF SESSION MATTERS STATUS REPORT	0		Note
ВМ	3	ACTIONS FROM PREVIOUS MEETING – STATUS REPORT	0		Note
ALL	4	CHIEF EXECUTIVE OFFICER'S REPORT	0	С	Note
ВР	5	MOTOR VEHICLE IMPORTATION OR TRANSFER – STATUS REPORT	0		Note
	6	FINANCIAL IMPACT REPORT FOR PROPOSALS ON AGENDA		С	
	7	DEVELOPMENT APPLICATIONS			
DK	(i)	OC2016-26 A & D Young - Extension to Garage	0		Decide
DK	(ii)	OC2016-30 Wade – Renovation of garage	0		Decide
DK	(iii)	OC2017-04 Pandanus Redevelopment	0		Decide
DK	(iv)	DA2016-31 LHIB Construction of a vessel launching & retrieval facility	0		Decide
DK	(v)	OC2016-12 RMS Navigation Leads	0		Decide
BP	(vi)	Owner Consent approved under Delegated Authority	0		Note
BP	(vii)	DAs Determined Under Delegated Authority	0		Note
DK	(viii)	DA2016-29 Skeggs – Boundary Realignment	0		Decide
	8	POLICY & STRATEGY			
PH	(i)	Draft 2016/17 Operations Plan	0		Decide
вм	(ii)	Cruise Ship Policy	0		Decide
ВМ	(iii)	Protected Disclosures Policy	0		Decide
DK	(iv)	Geotechnical Report – Mutton Bird Point Walking Track	0		Note

	ITEM		OPEN (O)	CLOSED (C)	ACTION Note / Decide / Recommend
	(v)	No Paper			
DK	(vi)	Draft Scientific Research Policy	0		Decide
DK	(vii)	Biosecurity procedures for imported vehicles	0		Decide
	9	FINANCE AND BUSINESS MANAGEMENT		С	
	10	LEASING & LAND ADMINISTRATION			
DK	(i)	Estate of the Late Joyce Petherick	0		Decide
DK	(ii)	Transfer of part of lease – Fitzgerald to Van Gelderen	0		Decide
DK	(iii)	Transfer of part of lease – B. Thompson to L. Thompson	0		Decide
DK	(iv)	Suspension of Residency – M. Shick	0		Decide
	11	GOVERNANCE			
BM	(i)	Attestation Letter for Financial Year Ending 30 June 2016	0		Decide
	12	OPERATIONS & SERVICES			
AW	(i)	Rodent Eradication Program Update	0		Note
AL	(ii)	Renewable Energy Program	0		Note
DK	(iii)	Environmental Grants Progress Report	0		Note
DK	(iv)	Communication & Community Engagement Survey Results	0		Note / Decide
AL	(v)	Airport Terminal Upgrade Project Update	0		Note
	13	WH&S and PUBLIC RISK MANAGEMENT			
ВМ	(i)	WH&S and Public Risk Management Update	0		Note
	14	INTERVIEWS		С	
	15	GENERAL BUSINESS AND QUESTIONS ON NOTICE	0		

Board Meeting: September 2016 Agenda Number: 1 File Ref: AD0072

LORD HOWE ISLAND BOARD

Business Paper

OPEN SESSION

ITEM

Adoption of Minutes of Previous Meeting

RECOMMENDATION

Submitted for the Board's information.

BACKGROUND

The adopted process for distributing Board minutes from the previous meeting is:

- Draft minutes will be produced within five working days of a Board meeting, and
 posted to Board members on the sixth working day, unless delayed for a valid reason
 agreed to between the Chief Executive Officer and the Chairperson.
- Board members are to return their endorsement, or otherwise, of minutes on a pro forma document provided by the Administration no later than seven working days after date of posting.
- Seven working days after date of posting, the Board will deem the minutes of the
 meeting to be endorsed, subject to any amendments which were received prior to
 that date, and agreed for inclusion by the Chairperson.

CURRENT POSITION

Minutes of the June 2016 and August 2016 meeting were distributed to each Board member and have been endorsed through the above process with amendments.

A copy of the endorsed Minutes is attached.

RECOMMENDATION

Submitted for the Board's information.

Prepared	Belinda Panckhurs	t Administration Officer
	5	01: (5 % 0#)
Endorsed	Penny Holloway	Chief Executive Officer

Board Meeting: September 2016 Agenda Number: 2 File Ref: AD0103

LORD HOWE ISLAND BOARD

Business Paper

OPEN SESSION

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Out of Session Papers - Results.

RECOMMENDATION

Submitted for the Board's information.

BACKGROUND

Since the last Board Meeting in June 2016, three matters were considered at an out of session meeting. Of the three matters, one was in open session and two were in closed session.

CURRENT POSITION

Results of 'Out of Session' papers since the last Board meeting are shown on the attached tracking sheet.

RECOMMENDATION

Submitted for the Board's information.

Prepared	_ Belinda Panckhurs	st Administration Officer
Endorsed	_ Penny Holloway	Chief Executive Officer

	OPEN SESSION						
No. Date Application Vote Comment							
June	2016						
	Nil						
July	2016						
1	7/07/2016	James Lonergan OC2016-27 Installation of wastewater management system.	Approved: LM, BN, RP, JR, SS, CW. No Response: JK.	Result: Approved			
Augu	August 2016						
	Nil						

Board Meeting: September 2016 Agenda Number: 3 File Ref: AD0096

LORD HOWE SLAND BOARD Business Paper

OPEN SESSION

<u>ITEM</u>

Actions from Previous Meetings – Status Report.

RECOMMENDATION

Submitted for the Board's information.

BACKGROUND

As a matter of process and procedure, a list of actions is prepared after each Board meeting to ensure that the Board's resolutions are systematically carried out by staff.

CURRENT POSITION

A list of actions from decisions of the August 2016 Extraordinary Board meeting, and previous meetings, is attached for the Board's information.

RECOMMENDATION

Submitted for the Board's information.

Prepared	Bill Monks	Manager Business & Corporate Services
Endorsed	Penny Holloway	Chief Executive Officer

LORD HOWE ISLAND BOARD

Action Sheet from August 2016 Extraordinary Board Meeting and Previous Meetings

Agenda Item No.	Item	Actions (refer to full minutes for detail)	Estimated Completion Date	By Whom	Progress	Actual Completion Date
9(v) September 2014	Long term Funding Arrangements for the PPP	Chair to pursue recurrent funding for the PPP.	December 2016	CEO	Briefing Note provided for Chair	
10(iv) September 2015	Review of the LEP 2010	 Review the Vegetation Rehabilitation Plan, and Seek funding from government programs to support the LEP review process. 	November 2016	MECS	In progress. No funding available from DPE to support review of LEP	
8(v) March 2016	LHI Weed Management Strategy	Amended draft Weed Management Strategy be placed on public display for 28 days	November 2016	CEO	In progress	
12(v) March 2016	LHI PPP Five Year Audit	Amended PPP POM – 5 year self audit be used for basis for revision of the plan.	July 2017	MECS	In progress	
12(vi) March 2016	LHI PPP Advisory Committee	 Establish LHI PPP CAC Prepare CAC Terms of Reference Prepare paper on relationship and functions of stakeholders 	November 2016	MECS	In progress. First meeting scheduled for Nov 2016	
12(viii) March 2016	WW Strategy Update	 Extend deadline for High Risk Systems for one year to 30/04/2017 Implement Licence to Operate fees for High Risk Systems from 01/06/2017 	May 2016 June 2017	MIES	In progress	

Agenda Item No.	Item	Actions (refer to full minutes for detail)	Estimated Completion Date	By Whom	Progress	Actual Completion Date
12(ix) March 2016	Shipping Contract Tender Process	 Commence tendering for new contract before middle of 2016 LHIB staff to manage procurement 	September 2016	MIES	In progress	
1(i) April 2016	Budget 2016/17	Provide report in regard to community support options for Board consideration.	November 2016	CEO/MECD	Not yet commenced	
2(i) April 2016	Transfer of PL (Krick to Wade)	Investigate options available to the LHIB to moderate house prices on the Island	June 2016	MECS	Complete	
7(vi) June 2016	DA Krick	Prepare a paper for the next Board meeting identifying issues and potential solutions in relation to property identification.	September 2016	MECS	In progress. Working closely with NSW Spatial Services (formerly LPI) in the development of a definitive addressing data base for Lord Howe Island	
9(i) June 2016	Finance and Business Management	Review the proposed Utility Vehicle Fee for reasonableness as it was considered high.	September 2016	MBCS	In progress	
2(i) August 2016	Estate of the late Patricia Dignam	Prepare a paper for the next Board meeting on the heritage listing of the property and how the matter could be advanced in consultation with Mr and Mrs Jeremy.	September 2016	MECS	In progress. Discussion currently taking place with executor of the Estate	
3(i) August 2016	OC Young (convert existing garage)	Consult the applicants in regard to possible conditions that may be imposed and possible changes to the design that may be more acceptable to the Board.	September 2016	MECS	In progress. Board paper under consideration	

Board Meeting: September 2016 Agenda Number: 4 File Ref: AD0100

LORD HOWE ISLAND BOARD

Business Paper

OPEN SESSION

Chief Executive Officer's Report to September 2016 Meeting of the Board

The following briefing provides an overview of key issues managed by the Board during the reporting period, and their status. It is intended that this document be available to the public as part of the minutes of the meeting. Matters which are subject to confidentiality, business in confidence or legal action are shaded and are not included in the public copy of the report.

Number of items excluded from this public edition:

Business & Corporate Service Report Reason: Business in Confidence

MATTER	STATUS	ACTION REQUIRED BY BOARD AT THIS MEETING
Visit of Minister for the Environment	The Minister, the Hon Mark Speakman MP, visited the Island from 6 to 8 August 2016. The visit was very successful, with the Minister having the opportunity to gain a good understanding of the Island's issues and concerns.	For noting
Draft Financial Statements 2015/2016	The draft Financial Statements for 2015/2016 have been prepared and are before the Board for consideration	See agenda item 9 (i)
Operations Plan 2016/2017	As the Corporate Plan 2016/2019 and the Budget 2016/2017 have been adopted by the Board, the draft Operations Plan 2016/2017 has now been prepared for Board consideration.	See agenda item 8 (i)
Community Engagement and Communication Survey	An Island-wide survey was undertaken earlier this year. The analysis of the survey feedback provides the basis for development of a Community Engagement and Communication Strategy	See agenda item 12 (iv)
Muttonbird Track Geotechnical Report	The geotechnical assessment of the Muttonbird Track landslip area has been completed and recommendations made, for Board consideration.	See agenda item 8 (iv)
Rodent Eradication Program	Under Stage 2: Planning and Approvals, the Federal Department of Environment has determined the REP is a controlled action and asked for a Public Environment Report to be prepared under the EPBC Act.	See agenda item 12 (i)

Airport	STEA architects have been engaged and have developed a	See agenda
Terminal	design for the airport terminal building redevelopment. With	item 12 (v)
Upgrade	the recommended course being a demolition and rebuild,	
Strategy	an application has been submitted for additional funding.	
Renewable	The tenders for delivery of the solar panel component of the	See agenda
Energy	program are being evaluated. The development application	item 12 (ii)
Program	for the wind turbine component of the project is close to	
	being finalised and submitted.	

Prepared	Penny Holloway	Chief Executive Officer

ENVIRONMENT & COMMUNITY SERVICES UNIT

25 May – 9 September 2016

General Policy and Planning

- Contribute to Corporate Plan, Operations Plan and Annual Report
- Draft Scientific Research Policy placed on public exhibition.
- Development of biosecurity procedures for the cleaning of second hand vehicles, plant and equipment.
- Nine community members have been selected to participate on LHI Permanent Park
 Preserve Plan of Management Advisory Committee. Staff from the Board's Environment
 and Community Services Unit will represent the Board at Committee meetings; liaise
 day-to-day between the Committee and the Board and provide administrative and
 general secretarial support to facilitate Committee business. The community
 membership of the committee is:

Dean Hiscox Lani Thompson-Tabuavou Ian Hutton
Darcelle Nobbs Margaret Murray Dave Gardiner
Kayla Hiscox Caitlin Woods Scott Wilson

Biodiversity Management

- Partnership Agreement between the Lord Howe Island Board and North Coast Local Land Services was developed which identifies opportunities for collaboration, and using the strength of the partnership to leverage resources and multiply biodiversity and biosecurity outcomes
- Development of service level agreement with OEH for operational support
- Develop Saving Our Species (SOS) draft funding agreement and project brief
- Erected bunting on Blinky Dune as part of animal hazard management for aerodrome.
 Commenced spraying grass for Sooty Tern compensatory nesting areas as part of license to disturb Sooty Terns from Blinky Dune.
- Delivered presentation to Australian Association of Bush Regenerators National Standards Forum on best practise ecological restoration for Oceanic Islands and protection of World Heritage values.
- Development of ant identification brochure
- CSIRO release of Crofton rust at monitoring sites.
- The Board has been invited to prepare Draft paper on the recovery of LHI Phasmid for the National Environment Science Program Threatened Species Hub, which is preparing a book on successes in threatened species conservation. The book aims to present a wide range of case studies from across Australia demonstrating that investment in threatened species recovery can yield positive results and is worth continuing. The LHI Phasmid was chosen to represent invertebrate recovery. This work is being undertaken collaboratively with Melbourne Zoo, OEH (Nicholas Carlile) and Dean Hiscox.
- Assistance with preparation of funding submission to National Geographic to undertake
 a population survey and genetic analysis of LHI Phasmids from Balls Pyramid. This work
 is being undertaken collaboratively with Zoos Victoria, Australian Museum, OEH and the
 Board.
- Editing and publication of Systematic Flora Survey, Floristic Classification and High-Resolution Vegetation Map of Lord Howe Island

Research & Volunteers

 The Board has prepared a research application in collaboration with Pinetrees Lodge, Australian Geographic and CSIRO on a citizen science invertebrate survey to be conducted in October 2016.

The following persons were approved to stay in the Research Station during the reporting period.

Name	No. People	No. Nights	Project	Address
Michael Kosh	1	22	Town planning student placement	C/o Sunshine Coast Uni
Louise Morin	1	7	Crofton Rust release	CSIRO Canberra
Robert McDougal	1	25	Weed eradication volunteer	Lavender Bay Sydney
Dean Portelli, Terry O'Dwyer, Nicholas Carlile	3	4-30	Biodiversity Benefits – Rodent eradication	C/o OEH
Bushland Restoration Services	4	23	Weed eradication	Murwillumbah NSW
Australian Museum	3	7	Rodent eradication	Sydney

Pest Management

- Revised shoot plan for targeted duck control. Implementation scheduled August December 2016.
- LHIB Firearms Annual service completed in June by a gunsmith in Sydney.
- Firearms licence re-applications lodged with NSW Firearms Registry.

Rodent Eradication

• See Agenda Item 12 (i) - Rodent Eradication progress report.

Quarantine

- The draft LHI Biosecurity Strategy 2015 was adopted at March 2016 meeting and minor amendments incorporated into final strategy. It is now on the Board website and available at the administration offices.
- Post border interception of 2 species of ant (native to the mainland) on imported turpentine jetty timbers. Prior to importation the timbers were treated twice with fungicide and insecticide over a week apart on the mainland. The ants were treated with insecticide and collected for identification by Dr Ben Hoffman CSIRO and the site monitored with no further detection. A procedure for future importation of jetty timbers is required.
- Applications to import plant, mulch/potting medium, dog, livestock and chicken have been assessed as required and inspections carried out of imports upon arrival.
- Maintenance of boot cleaning stations.
- Perimeter of phytophthora site flagged and boot scrub bays installed. Site treated with Medley fungicide quarterly as per Royal Botanical Gardens recommendations.

Liaison with NSW Department of Primary Industries to make LHI a Biosecurity Zone
under the NSW Biosecurity Act 2015. The Board have provided species lists of pest
plant, animal and pathogens currently listed as pests and targeted for eradication or
control on Lord Howe Island or species not on island but considered a risk.

Weed Management

- See Agenda Item 12 (iii) Environmental Grants progress report.
- The Board is hosting a Green Army program through Skillset. This is the first of three (six months programs). The team are focusing on training and weed eradication outputs.
- Crofton Rust has been released by CSIRO on the 7 July 2016.
- Helicopter lance spray program completed for this year.
- Teams funded by LHIB recurrent, NCLLS and NSW Environmental Trust are
 progressing weed search currently with a focus on Bridal Creeper locations in the
 northern hills and proximity to seabird breeding grounds.

Revegetation

- Draft Revegetation Strategy being revised. Draft Strategy to be reported to the November 2016 Board meeting
- Undertake maintenance of revegetation sites in accordance with Revegetation Work Schedule. Plantings at top of Pinetrees paddock Transit Hill, northern end Old Settlement,
- School planting for National Tree day on foreshore
- Funding provided by North Coast Local Land Services for restoration of Sallywood Swamp Forest EEC at the Golf Club. Site planted, maintenance ongoing.

Incident Management

 Assist SES with search and rescue of lost tourist on Goat House Walk / Mutton Bird Pt Walk – July 2016

Community Programs & Education

- MEWH delivered presentation of LHI Ecological Restoration program planning, progress and results at the Australian Association of Bush Regenerators (AABR) Society for Ecological Restoration Australia (SERA) Symposium in Sydney in July 2016. Each presentation was video recorded for AABR's 'RegenTV' (see http://www.aabr.org.au/regentv/), an educational video platform that will be disseminated nationally as an educational tool providing examples of best practise ecological restoration programs that best portray the Australian Society for Ecological Restoration National Standards. The presentation provided an overview of the restoration projects the Board is implementing to protect and restore the islands World Heritage values.
- Contribution to Book chapter State of Australia' islands.
- Contribute to Signal and Community Information Bulletin
- Poster presentation for National NRM Conference, at Coffs Harbour

Visitor Infrastructure

- General maintenance of walking tracks, in particular Mt Eliza track, construction of boardwalk at creek crossing at Boat Harbour boulder beach completed and maintenance of the North Bay picnic facilities;
- Geotechnical report submitted for Muttonbird Point Track land slip (see report in Agenda Item 8 (iv)).

Assist with Island wide clean up including the Lagoon Foreshore

Walking Track Strategy Update

- Walking Track Strategy is progressing with the following completed or near completion:
 - A targeted survey of LHI track users has obtained 84 responses to date. The survey asks for demographic data and feedback on each track's condition, alignment, interpretation, directional signage and infrastructure. The survey will remain open until the end of the 2016/17 peak tourist season.
 - Analysis of current and projected tourist numbers and expectations for "product" and experiences on island.
 - Comparison of the facilities, infrastructure and signage on LHI tracks with the minimum recommended by Australian Standards 2156.1 & 2 Walking Tracks and the Australian Walking Track Grading System 2010.
 - Capture of the current network including infrastructure spatially in the Board GIS.
 - Costing of the track network including infrastructure, in 2016 dollars is partially complete. This will enable improved maintenance and replacement planning and budgeting in the Board TAM PLAN.
 - 2016 track audit planned for early November.
 - Five-yearly elevated structural engineer assessment planned for October/November.
- Draft of the Walking Track Strategy is now scheduled for December 2016/January 2017.
- Commercial Tour Operator Licensing System, in development for operators in the LHI Permanent Park Preserve

Marine Management / Moorings

- LHIB monthly mooring inspections were completed for May (19) & August (10 & 11), no yachts visited the Island for the month of July.
- The port navigation marker used for the barge operation during the aerodrome/airstrip reseal program was removed from the lagoon on 2 June.

Human Resource Management

- Expression of Interest for Field Officer role in ECS Unit awarded to Damien Ball.
- Approval has been given to a further 12 month extension of part-time arrangements for Christo Haselden working part time (2.5 days per week, Wed – Fri) job share with Megan Bennett (Mon – Wed) for the Ranger role.
- James Lonergan seconded to backfill Manager Environment & Community Services for 6 weeks while David Kelly was on leave

Training

First Aid

Work Health & Safety

 Annual review of Job Safety Analysis and Risk Treatment Plans has been completed in order to comply with WHS legislation

Environmental Assessment

- Ecological assessments for all OC / DAs
- Tree risk assessments completed.
- Review part 5 assessment for installation of electric BBQ

Prepare draft REF for erosion control works at Windy Point

Land Administration

Agreement with Spatial Services (formerly Land and Property Information (LPI)) to develop a definitive addressing data base for Lord Howe Island

Progress applications for lease administration:

- Transfer of Perpetual Lease 1996.01 (Krick to Wade)
- Transfer of Perpetual Lease 1985.02 (Krick to CBA)
- Transfer of Perpetual Lease 1985.02 (Rathgeber to Krick)
- Transfer PL1985.01 J Lonergan to J and K Lonergan
- Transfer of Perpetual Lease (Makiiti to Deacon Kuilman)
- Transfer of Perpetual Lease 1967.01 (Matassoni Nobbs to WBC)
- Transfer of part of Perpetual Lease (Fitzgerald to Van Gelderen)
- Transfer of part of Perpetual Lease (B Thompson to L Thompson)
- Estate of the Late Ysobel Allen Heffernan
- Estate of the Late Joyce Petherick
- Estate of the Late Patricia Dignam

Development Assessment

- Provide preliminary planning advice on Lord Howe Island rodent eradication assessment and approvals pathway and renewable energy program.
- Provide advice regarding satellite dishes and the roll-out of NBN

Assess the following Owner Consent Applications:

- OC2016-12 RMS (navigation leads)
- OC2016-26 Young (extension to garage)
- OC2016-29 Turk (change of use)
- OC2016-30 Wade (change of use Loft to Bedroom)
- OC2017-01 Lorhiti (waste water)
- OC2017-02 Murray (waste water)
- OC2017-03 Crombie (waste water)
- OC2017-04 Pandanus Rebuild

Assess the following Development Applications:

- DA2016-19 Gardiner Boatshed Open
- DA2016-26 Owens Infrastructure Building
- DA2016-30 Wilson Alterations and Additions to Existing Dwelling
- DA2016-31 LHIB Construction of a vessel launching & retrieval facility
- MDC2017-01 Owens Cyclone Alley

Strategic Planning

 Discussion with Department of Planning & Environment regarding Planning Proposal for Amendments to the LHI LEP 2010, prior to gateway determination. Formatting and further information required.

Community Health & Wellbeing

- Expressions of Interest for 2016-17 round of community grants
- Communications and Community Engagement Survey Report prepared
- Acquittal of Computer Skills Training and Education Program project supported under the FRRR ANZ Seeds of Renewal program

INFRASTRUCTURE AND ENGINEERING SERVICES June 2016 to August 2016

Airport

- The Annual Aerodrome Technical Inspection (ATI) was conducted on 1, 2, & 3 August by Graham Oehlerich of Aerodrome Operational Support P/L. During the survey works it became apparent that the removal of the Windy Point Norfolk Island (NI) Pine Trees has exposed several other obstacles in the Obstacle Limitation Surface (OLS), including the NI pines in the old quarry. At the time of writing the ATI Report had not been received by the Board.
- The LHI Aerodrome Manual and the LHI Aerodrome Bird and Animal Hazard Management Plan were reviewed and reissued, in full, as at 31 July 2016.
- The Blinky Dune Bunting for Sooty Tern deterrence was deployed on 4 August 2016.
- For the year to date (Friday 26 August) there has been two (2) bird strikes recorded. One species of bird was unknown as it was struck on approach over the lagoon and the carcass was unable to be recovered. In this instance the aircraft was grounded until the following day when an engineer could inspect the aircraft. No damage was recorded. The second strike involved a pee wee with no disruption to the flight. This equates to approximately 1.8 bird strikes per 1,000 aircraft movements.

For the corresponding period in 2015 there was two (2) strikes recorded – a Ruddy Turnstone and a sooty tern. This was equivalent to approximately 2.05 bird strikes per 1,000 aircraft movements.

- Work continues to return the aerodrome to CASA compliant operational status after the runway reseal works in 2015. Work to reinstate the rock revetment wall was interrupted to accommodate maintenance on the excavator. It is anticipated to be completed by the end of August. Fence repair and replacement is ongoing. Maintenance work on the emergency lighting has also been undertaken.
- Work is progressing with the Airport Terminal Upgrade Project. The successful Consultant for the design and project management is STEA astute architects, a preeminent regional airport design consultant. During August, Principal architect Steve Turner has presented the concept plans for a new terminal which were well received by the stakeholder group.

Building Construction Maintenance and Management

 The major building maintenance program recently has been the replacement of the wall sheeting on the Marine Adventures \ Island Cruisers \ Howea Divers boatshed.

Roads, Parks and Visitor Facilities

- Road and pot hole repairs were carried out throughout July and August utilising the EZ Street cold mix product.
- A new 80 metre section of sealed roadway has been completed between Palm Haven and the powerhouse. The roadway was prepared over 1 week and sealed in one day.

- An enormous amount of hours have been spent by LHIB staff collecting, processing, packing and shipping of waste generated by the Island Clean Up. This has caused delays in the completion of some winter projects.
- Several dangerous trees were removed from locations on the island within the road reserve and commercial/residential buildings. The trees were removed without incident and with the assistance of local arborist Craig Wilson.

Emergency Management

- Greg Gibbs of the NSW Office of Emergency Management visited the Island 15-18
 June 2016. Greg is a planning Officer for Welfare Services and during his visit, he
 met with staff from the LHIB and members of the Adventist Development Relief
 Agency to develop a Concept of Operations for welfare assistance in the event of an
 Emergency/Disaster impacting the Island.
- The Local Emergency Management Committee (LEMC) met on 23 June 2016. Consequence Management Guides (CMGs) for impacts of storm/flash flooding and tsunami were tabled. The CMGs form part of the LHI Emergency Management Plan and are being developed for high risk emergency situations affecting the Island.
- The Annual Oil Spill Training Exercise is planned to be held on Monday 31 October 2016, with participants including LHIB staff, Marine Parks Authority staff, LHI Seafreight personnel, Roads & Maritime staff and NSW Police. As is the usual practice the exercise will be based on a fuel release during the unloading of the Island Trader. The exercise will be conducted by Shayne Wilde of Transport for NSW. During his visit Shayne will also be undertaking a National Competency Based Equipment Training Course with exercise participants.
- Air Ambulance patient retrievals year to date (Friday 26 August 2016) total nine (9), seven (7) of which were residents and two (2) visitors. Three (3) residents required treatment for injury and four (4) for illness. Of the visitors, one (1) was for illness and one (1) for injury. Patient retrievals for the same period in 2015 totalled fourteen (14), ten (10) of which were residents and four (4) visitors. All required treatment for illness.
- NSW SES Assistant Commissioner Kaylene Jones and regional Controller Stephen Hart visited the island for a familiarisation and award ceremony. Jack and Cindy Shick, Audrey Ball and Lindy Cameron all receive 5 year service awards with John Tofaeono receiving 10 year recognition.

Marine Facilities

- High Density Polyethylene (HDPE) and Ultra-high-molecular-weight polyethylene (UHMWEP) fendering has been operational now for several months with very positive feedback from the ship's management and master/s. Board staff completed an adjustment and maintenance on the fenders mid-August.
- The Lagoon pontoon has been removed, serviced and cleaned and is due to be relocated to its new location, just to the north of the original location, in early September. The pontoon is being moved to accommodate an increase in distance between pontoon users and commercial vessels accessing the area.

General items

- Staff continue to monitor drinking water quality for NSW Health compliance.
- Staff continue to monitor mosquito larvae as per the Lord Howe Island Mosquito Surveillance & Vector Monitoring Program.
- Staff continue to monitor wastewater at the WMF for EPA licence compliance.
- Staff continue to assist residents and businesses with their onsite wastewater management system installations and/or upgrades.
- Planning is underway for the replacement or upgrading of wastewater systems at the following Board properties in 2016/17:
 - Doctor and MEWH Houses
 - o Doll's House
 - o Depot \ Admin and Gov House in a cluster with the school and Bowling Club
 - WMF in October \ November
 - o TC Douglass Drive houses cluster
 - o Jetty shed in September
 - o Finalisation of Public Hall and Electrical Workshop in September \ October
- Staff continue to conduct building certification for Construction Certificates as part of the Development Application process.
- 6 x new turpentine piles arrived during July, to be used to replace the piles attached to the commercial vessel boarding stairs. A timing for their replacement is being planned.
- Works to finalise the Windy Point rock wall re-commenced in August and were completed within about 2 weeks. Erosion protection works will be completed between the end of the new rock wall to just past the Pinetrees Boatshed during October.
- The site of the old powerhouse has had its final level and will now be seeded and left
 to stabilise. The last job left to do is to turn on the new substation (located between
 the *Island* Showcase and the Marine Park office, and turn off and demolish the old
 switchyard next to the Post office. Following this and when there is a healthy grass,
 the site will be reopened.
- A Conservation Risk Assessment (CRA) has been prepared and submitted for the installation of an electric BBQ at the Playground. Upon successful application the LHIB plans to have the electric BBQ installed and operational by the end of September. The proposed area has been pegged out at the northern end of the grassed area at the playground.

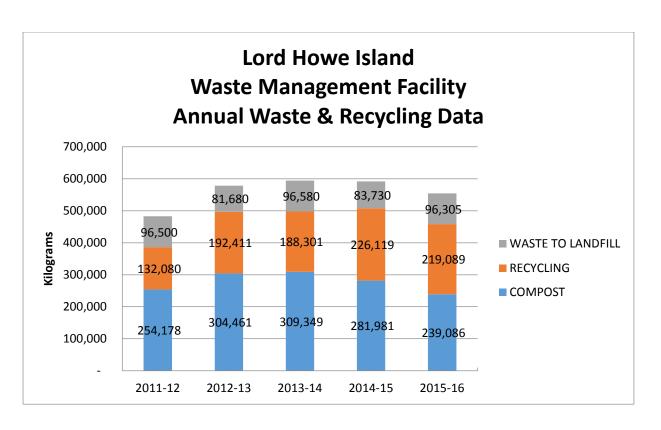
Waste Management Facility

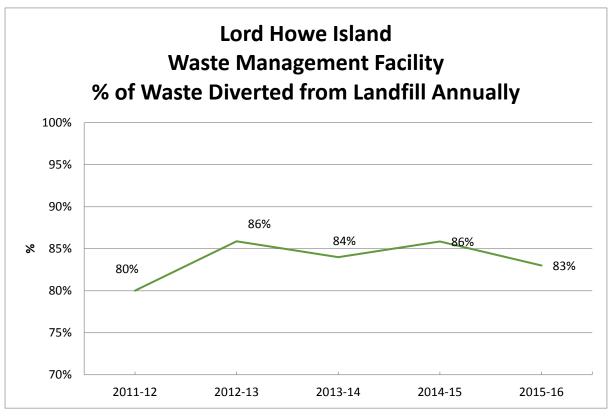
 A comparison of the 2015/16 year waste data with previous years is provided in the following table.

YEAR	COMPOST (kgs)	RECYCLING (kgs)	WASTE TO LANDFILL (kgs)	TOTAL AT WMF (kgs)	% DIVERTED ANNUALLY
2011-12	254,178	132,080	96,500	482,758	80%
2012-13	304,461	192,411	81,680	578,551	86%
2013-14	309,349	188,301	96,580	594,230	84%
2014-15	281,981	226,119	83,730	591,830	86%
2015-16	239,086	219,089	96,305	548,808	83%

- APC Waste Consultants (Anne Prince) have prepared contract and tender documents for the WMF's new composting system. It is hoped this will go out to tender in September.
- General maintenance and service on all equipment has been undertaken with some extra low season maintenance on all of the equipment.
- The large volume of waste timber collected necessitated the burning of the timber pile. A permit to burn was issued under the new LHIB/RFS guidelines. The fire was lit on the 16th August whilst the WMF was closed to the public to ensure safety. Both the RFS fire truck and the LHIB water tanker were charged and on station during the burn.
- Two damaged bearings on the VCU discharge system have been replaced and damaged chains on the discharge system have been repaired.
- Summer operating hours will commence the week of 5th September as below:

Monday
Wednesday
Friday
Saturday
7am to 10am
7am to 10am
7am to 10am
7am to 10am





ELECTRICAL SERVICES UNIT

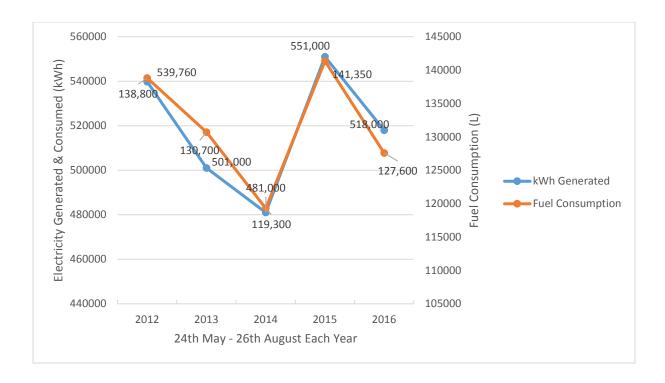
Operation of the Powerhouse and Reticulation System for the reporting period 24th May 2016 to 26th August 2016

Overview of Activities

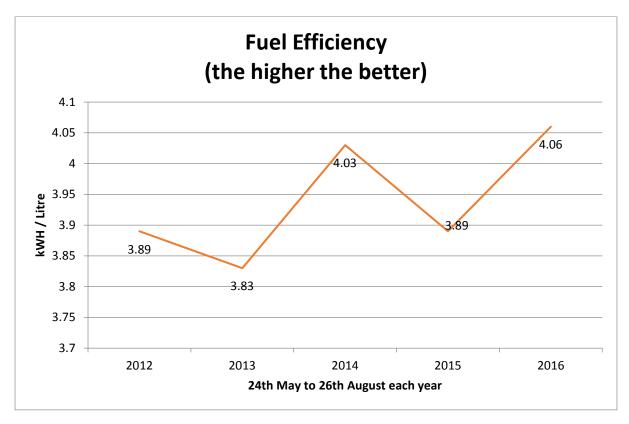
- Routine maintenance on Generating Units 1, 2 and 3 was completed.
- Routine maintenance on Generator no.1, 2 and 3 battery banks was completed.
- Routine maintenance on Generator no.3 and control board battery chargers was completed.
- Routine maintenance on Generator no.1 and 2 Air Circuit Breakers was completed.
- Routine maintenance on Generator no.1 day fuel tank and pumping system was completed.
- Routine maintenance on Substation no.6 Middle Beach Road and associated distribution pillars was completed.
- Routine maintenance on Substation no. 7 Mulley Drive and associated distribution pillars was completed.
- Routine maintenance on Substation no.8 Airport and associated distribution pillars was completed.
- Routine maintenance on Ventilation fan no.1 was completed.
- Supply load surveys were carried out on Substations no.6 Middle Beach Road, No.7
 Mulley Drive and no.8 Airport along with their associated distribution pillars.
 Distribution pillars were monitored for their voltage levels. Substations were
 monitored for maximum demand and voltage levels. All maximum demand and
 voltage levels in the surveyed areas were within acceptable limits.
- Mackies Electrical, Taree provided relief staff for the LHIB to cover powerhouse duties during the Senior Electrical Officers' annual leave.

Information for Board Members

- Energy demand for the reporting period was 518 000 kWh.
- Fuel consumption for the reporting period was 127 600 litres.



Fuel energy efficiency for the reporting period was 4.06 kWh/L



- Presently there are 109 kW of privately owned solar panels connected to the electrical distribution system. An additional 14 kW of approved solar panels were connected to the system during the reporting period.
- Maximum demand for the period was 452 kW on the 26th June.

- There were no powerhouse supply interruptions during the reporting period. The last powerhouse supply interruption occurred on 30th June 2015.
- There were seven distribution system supply interruptions during the reporting period.
 - o Four interruptions were the result of localised customer overloading
 - o One interruption was the result of a lightning strike at Skyline Drive
 - Two interruptions were the result of faulty cable connections on customer meter boards
- A new 250 kVA padmount substation, high voltage / low voltage cabling and substation earthing was installed on the old powerhouse site as part of the site refurbishment plan. This padmount substation once connected will allow the removal of the existing switchyard, provide increased capacity and reliability to the Neds beach Road area and improve overall HV cable switching capability on the distribution system. The High Voltage cable connection work will be carried out by certified cable jointers and is expected to be completed by the end of September 2016.
- There are presently 280 customers connected to the supply system.

Board Meeting: September 2016 Agenda Number: 5 File Ref: CO0008

LORD HOWE ISLAND BOARD

Business Paper

OPEN SESSION

ITEM

Report on Vehicle Approvals since last meeting.

RECOMMENDATION

The report is submitted to the Board for information.

BACKGROUND

Since the last Board meeting ten applications to import or transfer motor vehicles were determined by the Chief Executive Officer under the 'Vehicle Importation, Transfer and Use Policy':

CURRENT POSITION

There will be an increase of four vehicles to the island since the last Board meeting.

Applicant	Vehicle Type	Preferred Vehicle	Use	Variation	Comment
Bruce Thompson	Honda CTX	No	Private	0	Approved 26/05/2016 Replacement vehicle
NBN	Isuzu D- Max	No	Commercial	N/A	Approved 28/05/2016 Temporary approval
NBN	Nissan Navara	No	Commercial	N/A	Approved 28/05/2016 Temporary approval
Darrin Nobbs	Mazda Titan	No	Commercial	0	Approved 31/05/2016 Replacement vehicle (Extension of previous approval)
Roads & Maritime	Boat Trailer	No	Essential	1	Approved 1/06/2016
Lee Kent	Toyota Hilux	No	Commercial	1	Approved 15/07/2016
Darcelle Matassoni	Toyota Corolla	No	Private	1	Approved 15/07/2016
Bill Shead	Box Trailer	No	Commercial	N/A	Approved 26/07/2016 Temporary approval
Steve & Gracey Krick	Foton Tunland	No	Private	0	Approved 26/07/2016 Replacement vehicle
Ros & Chris Wade	Nissan X- Trail	No	Private	1	Approved 4/08/2016

As at August 2016

Registered Re	Registered Road Vehicles						
Essential	Commercial	Private	Hire	Plant & Equipment	Imported Without Approval	Total	
21	85	140	9	26	74	355	

At the May 2010 meeting it was requested that further differentiation in the vehicle statistics to identify motor vehicles and motor cycles / scooters and trucks separately be presented. This information is presented below.

Registered R	Registered Road Vehicles							
Car/Utility	Bus	Motorcycle / Scooter	Truck	Plant & Equipment	Trailers	Total		
168	31	49	7	28	72	355		

At the June 2016 meeting it was requested that future reports include trends in regards to vehicles imported without approval and clarification that these are vehicles which pre-date the Board approval and monitoring process.

The current Vehicle Importation, Transfer and Use Policy way adopted at the September 2015 Board meeting.

There have been 74 vehicles which have been imported without approval.

- 72 vehicles were imported without approval prior to 2014. The majority of these vehicles were trailers.
- One vehicle, a boat trailer, was imported without approval in 2015.
- One vehicle, a trailer, was imported without approval in 2016.

The following table shows further differentiation in the vehicle statistics to identify the types of vehicles that have been imported without written approval.

Vehicles Im	Vehicles Imported Without Approval – By Type						
Car/Utility	Bus	Motorcycle	Truck	Plant &	Trailers	Total	
		/ Scooter		Equipment			
13	2	11	1	3	44	74	

RECOMMENDATION

The report is submitted to the Board for information.

Prepared	Belinda Panckhurst	Administration Officer
Endorsed	Penny Holloway	Chief Executive Officer

Board Meeting:	Agenda Item:	File Reference:
September 2016	7 (iv)	DA2016-31

LORD HOWE ISLAND BOARD

Business Paper

OPEN SESSION

Item: DA 2016-31– Vessel launch and retrieval facility - Foreshore adjacent to Lord Howe Island Waste Management Facility, Lord Howe Island

1.0 Summary Assessment Report

Mia Fay – Consultant Planner
Foreshore adjacent to Lord Howe Island Waste Management Facility, Lord Howe Island
Construct a vessel launching and retrieval facility including two concrete bunded work areas, a cradle, electric winch and pollution control system at the Waste Management Facility
DA2016-31
Lord Howe Island Board
The land is Crown land. Owners consent is granted by virtue of the LHIB lodging the application.
\$700,000
A site inspection was been undertaken by Mia Fay (Consultant Planner) on 9 September 2015. Note this was before the concept was developed.
Site is currently zoned Zone 9 Marine Park, Zone 7 Environment Protection and Zone 5 Special Uses. Permissibility is determined by Clause 35 of the LEP.
The site contains Significant Native Vegetation (SNV). The proposal does not result in the damage or removal of SNV.
The Development Application was placed on public exhibition between 3 June – 4 July 2016
Three submissions were received, including one submission raising 'no objection'.

2.0 Consent Authority

The LHIB CEO and Chairperson has delegation to grant consent to development applications subject to the following conditions:

- The value of the development must not total \$150,000 or more (as calculated by the LHIB).
- The development application must not relate to the subdivision of land or the erection of new dwellings.
- No more than 3 written submissions received within 14 days of the public exhibition period.

The proposal exceeds the value of development of the CEO and chairpersons delegation. It is also a Board proposal and for these reasons the application is referred to the Board for determination.



3.0 Site Description

The site is located in the central part of Lord Howe Island to the south-west of the LHI Aerodrome and adjacent to the Island's Waste Management Facility and extends to Cobbys Beach. The site is legally referred to as unidentified crown land bordered by Lot 108 and 109 DP 757515 to the east and Cobbys Beach to the west.

The site is shown in Figures 1 and 2 below.

The site currently contains a vehicle access track over the dune from the Waste Management Facility to Cobbys Beach, vegetated and disturbed dune and a gravel hardstand area associated with the Waste Management Facility. Note there is a new hardstand area not shown in the images, indicated in Figure 1. The access track is used by Board excavator to assist with opening of Cobbys Creek and other maintenance along the section of beach. The hardstand area has been recently used for storage for the airport reseal project. Mulch has been stored in the foredune. Images of the site are provided in Figures 5 to 9. Note these were taken during a site visit in September 2015.

The site is accessed via the un-named road to Waste Management Facility. The Facility has a lockable gate which restricts vehicular access. It is open on the following days / hours:

- Winter, Wed & Sat (6:30am-3pm).
- Summer, Wed, Fri & Sat (6:30am-3pm).

The land stretches across three zones in the Lord Howe Island Local Environmental Plan 2010 (LEP 2010) including Zone 9 Marine Park, Zone 7 Environment Protection and Zone 5 Special Uses as shown in Figure 3. It is also mapped to contain Significant Native Vegetation (SNV) on the northern and southern sides of the access track as shown in Figures 1 and 4. It is not mapped as being flood prone land, but is located within the Foreshore Building Line as can be seen in Figure 2.

Neighbouring uses beyond the adjacent Waste Management Facility include:

- Portion 108 to the north-east with various industrial uses for the Board such as sheds, wood storage and bulky goods.
- Portions 183, 21 and 20 to the south-east comprising a residential heritage listed dwelling and studio garage, held under perpetual lease by the Sinclair / Curtin.
- Further to the east is the Lord Howe Island Airport and Bureau of Meteorology.





Figure 1 Subject site (SNV shown in hatching and rough site area circled in red)



Figure 2 Context of subject site (foreshore building line shown in red)



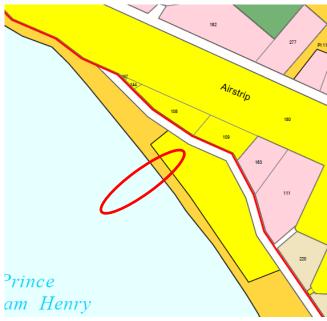


Figure 3 Extract from LEP 2010 Zoning Map. Zone 7 Environment Protection coloured orange. Zone 5 Special Uses coloured in yellow. Zone 9 Marine Park in light blue.

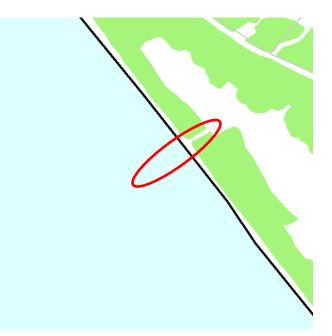


Figure 4 Extract from the LEP 2010 Significant Vegetation Map. SNV coloured green



Figure 5 View south-west towards proposed location of cradle





Figure 6 View south-west from location of proposed cradle

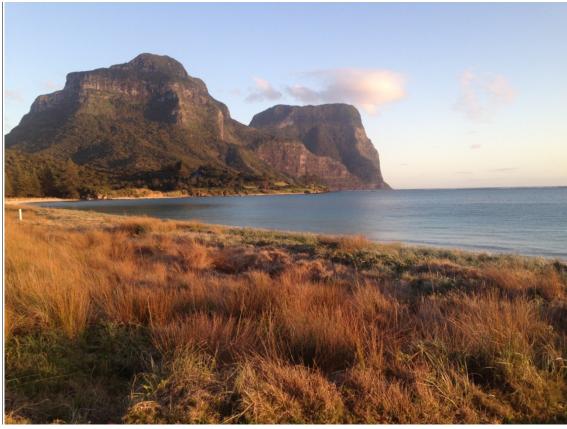


Figure 7 View south from the site on the dune





Figure 8 View north from the site on the dune (mulch in foreground)



Figure 9 Cobbys Beach south of the site facing north



4.0 Proposed Development

The proposed development involves the construction of a vessel launching and retrieval facility including two concrete bunded work areas, a cradle, electric winch and pollution control system at the Waste Management Facility.

The applicant has outlined that a vessel launching and retrieval system is required to enable the servicing, external inspection and surveys of larger private and commercial vessels. Commercial vessels are required to undertake an annual statutory survey by RMS and are needed to be retrieved from the water to do so. Pleasure craft on and visiting the island will also be able to make use of the facility.

The proposed facility is located partially on the foredune and area behind and is shown in Figures 10 and 14. It involves:

- A 8m by 15m concrete work area containing the slipway cradle and winch box. A drain is proposed to support this area and a washdown water pump out collection well. The proposed cradle height is 4.5m.
- A 6m by 10m concrete trailer boat washdown area and new gravel adjacent (to the south) to match the existing.
- A gravel car park adjacent to the north.
- A cradle swept path into the water.

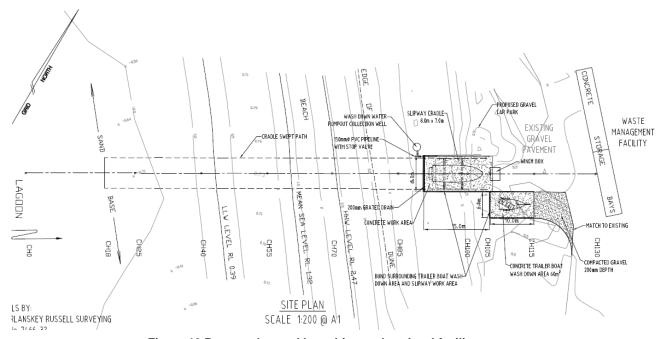


Figure 10 Proposed vessel launching and retrieval facility



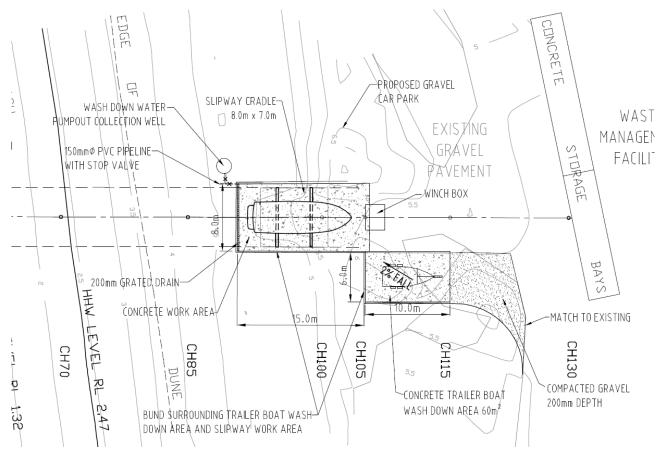


Figure 11 Proposed work areas and parking

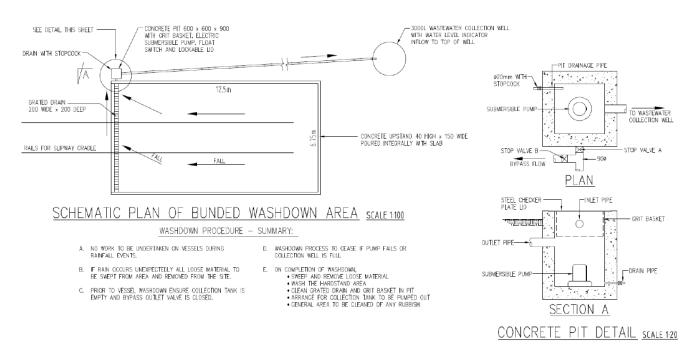


Figure 12 Bunded washdown area (Drawing J of submitted report)

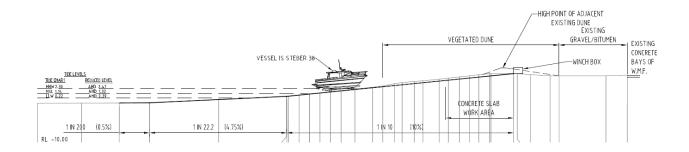


Figure 13 Longitudinal section of proposed system

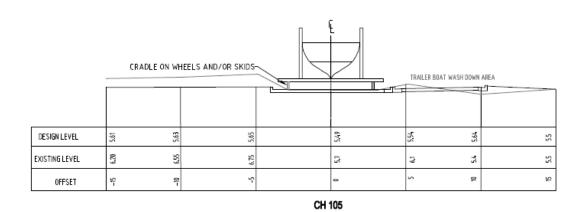


Figure 14 Cross section of cradle

The details of the proposed system are set out in Table 1 below.

Table 1 Details of proposed development

Features	Details of proposal
Maximum vessel size	20 tonnes displacement and 1.5m draft. It will be less than 15m in length to fit within the cradle work area which is 15m.
	The cradle will be taken across the sand to the water to a depth adequate to load by a tractor or large vehicle with a long yoke. A winch may be incorporated to assist the tow vehicle. There will be no permanent track on the beach on the seaward side of the dune.
Vessel loading	The adequate water depth to retrieve the vessel will be determined by the size of the vessel. The maximum draft of 1.5m will require a tide level slightly above Mean Sea Level (which is 1.23m).
	 Once retrieved onto the cradle, the vessel will be towed by a vehicle or winched by an electrical winch to the work area.
	The operation of the facility with a wheeled and/or skidded cradle means the sand height will not impact its operation.
	The tow vehicle will have adequate power, a winch and variations to tyre pressures to satisfy the demands of sand density, moisture and dune/beach grade.
Accommodating sand movement	■ There may be some sand reinforcement below surface level required. Sand reinforcement would consist of heavy duty plastic mud boards laid down temporarily to transit across soft ground. The boards would enable the tow vehicle and \ or cradle to move over the softer sand without bogging. The extent of these boards would depend on the areas of soft sand, and also tide levels. The boards would only be in place during moving of the vessel on the beach, and then stored at the bunded area when not in use.
	 Long term management of the build of sand will be the responsibility of the operators.
Types of work to be	 Washing vessel hulls to remove slime and growth with a high pressure water jet.



Features	Details of proposal
carried out to vessels	Application of anti-fouling paint to the underwater area
	 Replacement of anodes
	 Checking and maintenance of propeller, bearings, rudders, skin fitting and any woodwork.
	Painting of topsides.
	Equipment required for this work is likely to be high pressure water unit, paint scrapers, drills, sanders, spanners, paint brushes and rollers.
Water for cleaning	Fresh water for cleaning the vessels and hardstand areas is required. It is estimated that the water flow rate of the unit required to clean the vessel and hardstand 1085L/hour. The time to clean a vessel is estimated by the applicant to not exceed one hour, and hardstand washdown being 10 minutes. Smaller vessels would be less. An estimated volume of required water annually is 20,460L.
	Consequently, a 6,000L rainwater tank is proposed (albeit not shown on plan), providing for six retrievals. Note that such a tank may be approximately 3m by 3m.
	It is proposed for the system to be a cradle, supported on either wheel/tyre axles and possibly skids. This will be confirmed at the detailed design stage.
Design options	Piling or foundations are not in the subject design however, may be required at the detailed structural design stage. The impact of concrete \ steel piles, if required, will not be additional to that of the cradle working area excavation and concrete slab placement. The piles are likely to be constructed from within the footprint of the working area & either driven in with an excavator or excavated out for concrete placement. They are likely to be placed at the edges of the cradle work area and spacings to be determined during detailed design.
	The work area is proposed to be bunded on the sides and end with a grated drain across the full extent of the work area to collect wash down and cleaning water and debris.
	The polluted water will drain to a pit and be pumped to a settlement tank. As part of the detailed design process, the slipway will undertake the pre-treatment of the wastewater and store temporarily before pumping it to the wastewater management system at the Waste Management Facility. The applicant has advised that:
Waste and pollution management	 It is expected that a new Waste Water Management System will be installed at the Waste Management Facility by the time that the subject proposal is operational. This will incorporate disposal for the slipway waste.
	 Should the new system not be installed prior to operation, the existing waste management system at the Waste Management Facility has the capacity to accommodate the load.
	The washdown area for smaller trailer boats will have polluted water drain into a control device. This will likely involve a pit and flow into underground tank where there would be a level of settlement removal and pumping to the waste management facility.
Landscaping	It is intended to provide landscaping on the dunes subject to the direction of the Board.
	The volume of traffic from the slipway facility is not expected to be a significant increase or place additional demand on the site. The majority of boats are worked on over winter when visitor and resident numbers on the Island are at their lowest & patronage of the Waste Management Facility is also at its lowest.
Access	 Most vessels navigating the waters to the cradle will approach from the north, with some occasionally from the south.
	 Access for the Board excavator to would continue with the use of rubber mats or timber.
	Note that the submitted documentation stated the work area is proposed to be fenced approximately 1m from the work area and winch, however the applicant has confirmed this no longer forms part of the proposal.
Car parking	Car parking is proposed adjacent to the work area to accommodate 3 to 4 vehicles. It will utilise existing gravel surface.
	 There are approximately 6 vessels that are likely to use the cradle, potentially 3 times a year. Cradle usage is therefore expected to be about 22 vessels per year.
Expected Usage	 Trailer vessels expected to use the smaller washdown area 40 times a year.
Expedied Usage	It is expected that the majority of boats will be worked on over winter.
	 Maximum average tow vehicle frequency of 8 to 10 occasions per month with a duration of 30 minutes.



Features	Details of proposal			
	7am to 5pm Monday to Sunday.			
Hours	Unless it is an emergency, it is expected that the vessel owner and slipway operator will load and unload the vessel at high tide during daylight hours.			
	Movement of boats on trailer into the area past the Waste Management Facility would be arranged for when the Waste Management Facility is closed, to minimise impacts.			
Management	The facility will be managed by a community group, responsible for the maintenance of operational equipment, to be determined by the Board.			
	1 to 2 people will be required to operate the system.			
	 No vessel is to be retrieved from or enter the water if there is any risk of conflict with smaller boats operating in the area. 			
	 Before operating the system, members of the public are to be clear for safety. 			
	 Conditions of use will be required to be signed by the owner of a vessel to be slipped. 			
	Damage and public liability insurance will be required			
	Washdown area:			
Operational procedures	 No work to be undertaken on vessels during rainfall events 			
	 If rain unexpectedly occurs all loose material to be swept from area and removed from the site. 			
	 Prior to vessel washdown ensure collection tank is empty and bypass outlet valve is closed 			
	 Turn on wastewater pump and check pump float switch is operational 			
	 Washdown process to cease if pump fails or collection well is full 			
	 Follow clean up procedures on completion of washdown including arranging for the collection tank to be pumped out. 			

5.0 Referrals

5.1 Internal referrals

The LHIB has advised that the application was distributed to the relevant internal specialists for review. No objections to the proposal were raised. Table 2 below Table 2 belowoutlines the issues raised by these specialists and how these issues are addressed.

Table 2 Comments received from internal specialists

Specialist	Issue	Comment
Manager Environment – World Heritage Hank Bower	The development is located within a disturbed area with an existing vehicular access track to be used as the access track for vessel retrieval. The existing access track and vegetation directly adjacent to the concrete work area are not mapped as Significant Native Vegetation (SNV) and are heavily disturbed. The proposal will require removal some native vegetation in the location of the concrete work area, however this is not mapped as SNV. Any vegetation loss with be offset by conditions for landscaping	Noted and recommended accordingly.
	The Subject site supports vegetation and habitat resources that provides known or potential habitat for at least 8 threatened species being; Knicker Nut Caesalpinia bonduc, LHI Gecko Christinus guentheri, LHI Skink Oligosoma lichenigera, LHI Currawong Strepera graculina crissalis, LHI Golden Whistler Pachycephala pectoralis contempta, LHI Silvereye Zosterops lateralis tephropleura and Lord Howe Woodhen Gallirallus sylvestris. The disturbed nature of the Subject site renders it unsuitable for LHI Placostylus Placostylus bivaricosus. A single Knicker Nut plant is located in the foredune approximately 20 metres	



Specialist	Issue	Comment
	south of the proposed access track. During construction works it will be clearly flagged and site workers inducted on its location and exclusions. All other species (except the LHI Placostylus) are considered to potentially use vegetated habitats at the site, with Woodhen also regularly traversing open areas and feeding from mulch piles at the WMF. None of these species will have habitat disturbed or impacted by the proposal and the proposed development	
	will not result in any significant impacts on any Threatened species, populations or ecological communities, or their habitats. Subsequently none of these species have been considered in a 7 part test.	
	Recommendation That the development be approved subject to all workers being inducted on threatened species locations and habitat requirements at the site prior to commencement.	
	Landscaping	
	I suggest we condition the applicant to revegetate the dune directly to the north of the access track	
	The approximate area is 65 m long and up to 10 m wide = 650 square metres - total 440 plants	
	To be completed by September 2017 Trees to be planted with wetted water crystals, fertilised and screened and site	
	maintained. Any plants that die are to be replaced	
Kate Dignam	I have assessed the applicant's DA and note the following:	Noted and
Team Leader – Compliance and Projects	 All construction work is to be carried out and completed in accordance with the Building Code of Australia. 	recommended accordingly.
	 Ensure Construction Certificate Plans are the same as the approved Development Application Plans. 	It is noted that as Crown Development, a
	 Prior to the issuing of a Construction Certificate the applicant is to provide detailed structural engineering plans. These plans are to be certified by an appropriately qualified Structural Engineer in accordance with AS1170.2. 	Construction Certificate is not obtained.
	Wastewater	
	It is noted that the polluted waters from the proposed facility operations are to be pumped to the wastewater treatment system for the Waste Management Facility. The applicant is to ensure that the capacity, water treatment levels and irrigation area of the wastewater treatment system are appropriate for the expected load from the proposed facility.	
	WaterAll plumbing work, including any disconnections and connections to the	
	wastewater system, is to be undertaken by a licensed plumber. Waste Management	
	All construction waste is to be contained within the site and then be recycled	
	or disposed of at the authorised waste management facility on the Island. This excludes asbestos waste, if any, which is the responsibility of the applicant to remove from the Island. No waste shall be placed in any location or in any manner that would allow it to fall, descend, blow, wash, percolate or otherwise escape from the site.	
	 Waste disposal fees will be charged in accordance with the Lord Howe Island Board's schedule of fees and charges. 	
	Construction	
	 All electrical work must be carried out by a licensed electrician and an Electrical Compliance Certificate issued with the application for Occupancy Certificate for the building additions and alterations. 	
	 All works are to be undertaken in accordance with approved Construction Certificate documentation. 	
	Pre-Commencement meeting to be arranged with the Owner, Builder and	



Specialist	Issue	Comment
	Board Personnel prior to any work commencing on site.	
	Inspections	
	The Principal Certifying Authority (PCA) will require the following mandatory inspections to be undertaken during construction, some of which may be combined:	
	 Pre-commencement/set-out for the facility 	
	 Final Inspection prior to Occupation Certificate being issued 	
Dave Kelly –	Comments in relation to coastal sand movements are below.	Noted.
Manager of Environment & Community Services	A concrete hardstand is proposed generally in the location of the crest of the dune, in the location of the existing access way to the beach. The concrete trailer boat hardstand is further to the east and behind the dune in a now disturbed area which was used as a batching plant during the reseal of the airstrip and is part of the greater Waste Management Facility.	
	In the Coastal Hazard Study, the site is identified growing in sand volume by 620+ cubic metres / year or moving seaward (prograding) – see Page 29.	
	Page 76 of the report indicates that site falls within the 2050 hazard line.	
	The report also states "the location of an asset landward of the Immediate Hazard Line does not mean it could not be affected by coastal erosion at present, rather that there is a low probability (in the order of 1% each year) of erosion extending landward of the Line at present (as of 2011)."	
	Given the nature of the facility, being a concrete storage tank under the dune, I believe the overall risk of damage to the infrastructure due to coastal erosion / recession would be low.	
	In terms of excavation of the foredune, this would only be required to create a suitable gradient for winch operations.	

5.2 External referrals

Fisheries NSW

The application was referred to Fisheries NSW. It was advised they have no objections to the proposal.

The proposal does include dredging and reclamation and approvals must be obtained from the relevant public authority for the works to be carried out (s199 Fisheries Management Act 1994).

Section 55 of the Marine Estate Management Act

The application requires the concurrence of the Minister for Primary Industries under Section 55 of the Marine Estate Management Act. The application was sent for comment on 6 June 2016. A letter of concurrence and terms of approval has not yet been received, however it is understood a response will be provided in the next week.

Section 79B(11) of the *EP&A Act 1979* allows a development application to be determined without concurrence if a decision has not been provided from that person within 21 days of the receipt of the last submission. The last submission was received on 11 July 2016 and this period has therefore expired.

Notwithstanding that the development application can now be determined, the feedback is considered to be critical to the outcomes of the project and it is recommended that they are obtained and complied with as part of the deferred commencement consent.

EPBC Referrals

The Board contacted the Commonwealth Department of the Environment to ascertain whether referral of the application was desired. The response was that the proposal is not a controlled action under section 75 of



the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and referral is not required.

5.3 Commonwealth legislation

5.3.1 Environmental Protection and Biodiversity Conservation Act 1999

The EPBC Act provides for the protection of certain matters of national environmental significance (NES) listed under the Act, which include:

- World Heritage Areas
- National Heritage Places
- Ramsar wetlands of international importance
- Commonwealth listed threatened species and ecological communities
- listed migratory species
- Commonwealth marine areas
- Great Barrier Reef Marine Park
- nuclear actions.

Under the EPBC Act, Commonwealth approval is required from the Minister of Sustainability, Environment, Water, Population and Communities (Minister) for any action that will have or is likely to have a significant impact on a NES, or on the environment of Commonwealth land or on the environment if the action is proposed to be taken by a Commonwealth agency (known as a 'controlled action').

A person proposing to take a controlled action must refer the proposal to the Minister for determination. A person proposing to take an action that the person thinks is not a controlled action may refer the proposal to the Minister for the Minister's decision whether or not the action is a controlled action.

Lord Howe Island is a declared World Heritage Property. Section 12 of the EPBC Act requires approval of actions that involve a significant impact on a declared World Heritage Property.

An Advisory Note has been provided, recommending that the applicant make independent enquiries with the Australian Government's Department of Sustainability, Water, Environment, Population and Communities once the detailed design is confirmed, visual appearance and reflectivity/glare is understood, to confirm whether this Department considers the proposed actions as detailed in this report are likely to have any impact on the heritage values of the:

- World Heritage and National Heritage listed Lord Howe Island Group ID 105085 and 105694
- Register of the National Estate listed Lord Howe Island Group and Marine Environs ID 201.

5.4 **NSW** legislation

5.4.1 Threatened Species Conservation Act 1995

The *Threatened Species Conservation Act 1995 (NSW)* (TSC Act) sets the framework for the listing of threatened species, populations and ecological communities, and key threatening processes in NSW, and the preparation and implementation of recovery plans and threat abatement plans.

The TSC Act also provides the mechanism for applying for and obtaining licences to take actions, which could result in harm to a threatened species, population or ecological community, or their habitat, or damage to critical habitat.



The Board's Manager of Environment/World Heritage advised that the development will not adversely impact anythreatened species, populations or ecological communities. The recommendations of the Statutory Ecological Assessment by Naturecall Environmental have also been considered and recommended to minimise impact. This is discussed further in section 6.2.

5.4.2 NSW Heritage Act 1977

The main objective of the Heritage Act is to encourage the conservation of the heritage of NSW. Pursuant to Section 91 of the EP&A Act 1979, Section 58 and Section 57(1) of the Heritage Act are triggered by this application.

The Lord Howe Island Group is listed on the State Heritage Register. Section 57 (1) of the Heritage Act requires that all applications to carry out development on Lord Howe Island, be referred to and granted concurrence by the NSW Heritage Office.

On 9 January 2015, the NSW Minister for Heritage published an order under section 57(2) of the Heritage Act, providing for an exemption to refer specific activities to the Heritage Division, instead requiring referral of only those applications requiring consent under clause 39 of the LHI LEP 2010. The site does not require consent under clause 39 as it is not a listed heritage item within the LEP 2010. Therefore referral to the NSW Heritage Division of this application is not required.

5.4.3 Marine Estate Management Act 2014 No 72

The Marine Estate Management Act 2014 manages marine waters costs and estuaries. The proposal is within the Lord Howe Island Marine Park and therefore the Act applies. Section 55 of the act contains provisions for development within marine parks.

Part 4 determination under section 55	Proposal
 (1) Before determining a development application under Part 4 of the <i>Environmental Planning and Assessment Act 1979</i> for the carrying out of development within a marine park or an aquatic reserve, a consent authority must: (a) take into consideration: (i) if there are management rules for the marine park or aquatic reserve, the purposes of the zone within which the area concerned is situated as specified in those management rules, and 	The Marine Estate Management (Management Rules) Regulation 1999 contains the Lord Howe Island Marine Park Management Rules under Part 4. Any anchoring in the Lagoon is to be in accordance with Division 8. Division 8 outlines that a person must not use a motorised wheeled vehicle in any part of the marine park, otherwise than at a location designated by the Lord Howe Island Board as a jetty or vessel launching facility, except with the consent of the relevant Ministers. The proposal includes a wheeled vehicle over the sand. This requirement however does not apply where planning approval has been granted in accordance with Section 55 of the Marine Estate Management Act 2014.
(ii) the permissible uses of the area concerned under the regulations or those management rules, and	No prohibited activities under the clause are proposed.
(iii) if a management plan for the marine park or aquatic reserve has been made, the objectives of the marine park or aquatic reserve, and	The Management Rules to not identify objectives for the Marine Park.
(iv) any relevant marine park or aquatic reserve notifications, and	There are no known notifications.
(b) if the consent authority intends to grant consent to the carrying out of the development, obtain the concurrence of the relevant Ministers to the granting of the consent.	Concurrence was requested however has not been obtained within the set period. See comments in section 5.2.



5.5 Local Statutory Plans and Policies

5.5.1 Lord Howe Island Local Environmental Plan 2010

The LEP 2010 is the principal environmental planning instrument applying to the proposal.

The following summary table details the various LEP provisions relevant to the subject proposal with assessment and/or comment included as required.

Table 3 LEP 2010 compliance summary table

Table 3 LEF 2010 Compliance Summary table					
LEP 2010 Clause		Comment			
Part 1 Preliminary					
		Each of the aims of the LEP 2010 have been considered in the assessment of this application.			
Commencement and Aims of Plan	Y	The proposal is consistent with the aims in that it will enhance the wellbeing and welfare of the current and future community, providing public utilities with minimal environmental impacts.			
Land to which plan applies	Y	The LEP 2010 applies to the subject site which is part of Lord Howe Island, as defined in Section 3 of the <i>Lord Howe Island Act 1953</i> .			
Who is the consent authority for this Plan?	Y	The Lord Howe Island Board (LHIB) is the relevant consent authority.			
Maps	Y	Noted.			
Matters that must be satisfied before development consent granted	Υ	All relevant matters are satisfied. Refer to section 5.5.1.1 below.			
eral Provisions applyi	ng in particular zo	nes			
Land Use Zones	Y	The land is zoned Zone 5 Special Uses, Zone 7 Environment Protection and Zone 9 Marine Park.			
Zone 5 Special Uses	Y	The land is partially zoned special uses. The proposed facility is not one of the listed permitted uses in the zone, however, is subject to clause 35 of the LEP. Permissibility is therefore assessed under Clause 35. The proposal is not inconsistent with the zone objectives in providing utility services essential to the community's needs and sympathetic to the heritage and natural values of the Island.			
Zone 7 Environment Protection	Y	The land is partially zoned Environment Protection. The proposed facility is not one of the listed permitted uses in the zone, however, is subject to clause 35 of the LEP. Permissibility is therefore assessed under Clause 35. The proposal is not inconsistent with the zone objectives.			
Zone 9 Marine Park		The site is partially zoned Marine Park. Development for the purpose of facility is permitted with consent. The assessment of the impacts as outlined in this report deem that the proposal will not adversely impact the marine ecosystem and scenic amenity of the Marine Park, and is therefore consistent with the zone objectives.			
Part 3 Special Provisions					
Provisions that apply t	o particular land				
Land adjoining Zone 7 or 8	Υ	The proposal is both on and adjoins Zone 7 land. The proposal involves some revegetation of the dune subject to			
	Commencement and Aims of Plan Land to which plan applies Who is the consent authority for this Plan? Maps Matters that must be satisfied before development consent granted eral Provisions applyi Land Use Zones Zone 5 Special Uses Zone 7 Environment Protection Zone 9 Marine Park cial Provisions Provisions that apply to Land adjoining	Commencement and Aims of Plan Land to which plan applies Who is the consent authority for this Plan? Maps Matters that must be satisfied before development consent granted eral Provisions applying in particular zo Land Use Zones Y Zone 5 Special Uses Y Zone 7 Environment Protection Y Zone 9 Marine Park Cial Provisions Provisions that apply to particular land Land adjoining			



LEP 2010) Clause	Compliance Y/N	Comment
			the direction of the Board. Conditions have been recommended to ensure the planting is appropriate and undertaken in accordance with the Lord Howe Island Board Vegetation Rehabilitation Plan as per this clause.
			(a) the proposed development is in the public interest and does not significantly reduce public access to the foreshore, and
			The proposal is considered to be in the public interest as discussed in section 6.1.
			There is an existing track to the beach where the vessel launch and retrieval facility is proposed. It is used by the Board excavator to assist with opening of Cobbys Creek and other maintenance along the section of beach. Access across the concrete footing would continue with the use of rubber mats or timber and is included as a condition of consent. This is not otherwise utilised by the public and public access will not be reduced.
			(b) the bulk and scale of the proposed development will not detract from the visual amenity of the foreshore area, and
			The visual impact of the proposal is considered in detail in section 6.2. It concludes that the visual impact could be acceptable subject to the recommended conditions. This includes a deferred commencement recommendation that the detailed design drawings be provided to the Board for approval, given the limited visual details provided with this assessment.
35.	Foreshore Development		(c) the proposed development addresses any need to restore lost or disturbed plants that are native to the Island, particularly if restoring those plants may enhance visual amenity, and
			Revegetation is proposed to improve amenity. Conditions are recommended to ensure it is appropriate.
			(d) there is a demonstrated Island community-based, or marine-based, business need for it, and
			Currently boats too large for a trailer are required to travel to the mainland for a survey or cease operating. A vessel launch and retrieval facility is required on the Island to cater for these locally and support local commercial businesses that require such vessels. It will encourage the better maintenance of vessels and consequential safety and also reduce.
			(e) the proposed development will not be adversely affected by, or adversely affect, coastal processes, and
			The interaction of the proposal and coastal processes has been considered. Comments have been provided by the Boards Manager of the Environment and Community Services, with consideration to the Royal Haskoning Coastline Management Study and further assessment in section 6.2. It is considered that given the location of the structures on the dune and that there is an annual accretion of sand along Cobbys Beach, it is unlikely that the proposed facility would be structurally impacted by sand movements. The small excavation amounts of sand required for the construction and operation of the



LEP 2010) Clause	Compliance Y/N	Comment	
			facility are also not expected to adversely affect coastal processes. (f) in the case of proposed development involving the erection of a structure—the purpose of that structure could not practicably be fulfilled by an existing structure, and There are no existing structures on the Island that could provide for the purpose of this proposal. (g) in the case of development proposed to be carried out on land that is also within Zone 9 Marine Park—the proposed development is not inconsistent with any advice about the development that is provided to the consent authority by the Marine Parks Authority. A deferred commencement condition is recommended ensuring that the terms of approval from the Marine	
			Parks is obtained and complied with prior to the consent becoming operational.	
Division 3	Heritage conservation			
39.	Development affecting heritage items	Y	The subject site is not a listed heritage item within the LEP 2010. The proposal is over 200m to the heritage item known as Kentia onPortion 21.	
40.	Heritage assessment	Υ	All relevant matters are satisfied. Refer to assessment of heritage impact under section 6.2.	
Division 4	Miscellaneous			
41.	What DA's are required to be advertised?	Υ	The application has been formally advertised.	
42.	Requirement for environmental report	NA	The applicant has provided an environmental report.	

5.5.1.2 Clause 11 Matters that must be satisfied before development consent granted

Clause 11 provides that the consent authority must not consent to the carrying out of development unless it is satisfied of the following matters (to the extent that they are of relevance to the proposed development):

Table 4 Clause 11 Compliance summary table

CLAUSE 11 REQUIREMENT	COMPLIANCE Y/N	DISCUSSION
 a) The proposed development is consistent with the aims of this plan and the objectives of any zone, as set out in the plan, within which the development is proposed to be carried out, 	Y	The proposal meets the objectives of the zones as discussed under clauses 15, 17 and 19 above.
b) There is an adequate area available for the disposal or treatment of any effluent treatment of any effluent treatment or disposal system and any such system will not have any adverse impact on groundwater quality,	Υ	 The applicant has advised that: It is expected that a new Waste Water Management System will be installed at the Waste Management Facility by the time that the subject proposal is operational. This will incorporate disposal for the slipway waste. Should the new system not be installed prior to operation, the existing waste management system at the Waste Management Facility has the capacity to



CLAUSE 11 REQUIREMENT	COMPLIANCE Y/N	DISCUSSION
	1/14	accommodate the load.
		A condition has been recommended to ensure the development only proceeds with the assurance that the existing wastewater management system has the capacity to treat the additional waste generated by the proposal.
c) No part of the proposed development: i. will result in any damage to, or removal of, significant native vegetation, or ii. will have a significantly adverse impact on the habitat of any plants, or animals, that are native to the Island,	Y	The proposed development does not involve any damage to or removal of SNV. An ecological assessment has been carried out which deems that the site will not have adverse impacts on animals or plants native to the island. See sections 5.1 and 6.2 for more information.
d) Access is, or will be, available to the site of the proposed development and the provision of any such access will not: i. result in any damage to, or the removal of, significant native vegetation, or ii. have a significantly adverse impact on the habitat of any plants, or animals, that are native to the Island,	Y	The proposed road does involve the damage to or removal of SNV. A condition is recommended to ensure SNV is protected during construction.
e) Any proposed landscaping will provide various species of plants that are native to the Island and common in the locality to enhance any significant native vegetation,	Y	A condition is recommended that landscaping is to be undertaken in accordance with Lord Howe Island Board Vegetation Rehabilitation Plan
f) The proposed development will not be adversely affected by any landform limitations, including flooding, landslip, unstable soils and steep slopes,	Y	An assessment has been undertaken of the proposed location and environmental processes in section 6.2. It is considered that it is unlikely the development will be affected by these limitations.
g) Adequate services in respect of the proposed development can be provided without significant additional cost to the Board or the community of the Island,	Y	The facility will be managed by a community group, responsible for the maintenance of operational equipment, to be determined by the Board. Any sand build up which impacts the operation of the slipway will need to be managed by the slipway operators. The broader build up along the beach will be the responsibility of the Board. This is conditioned accordingly.
h) The appearance of the proposed development (when considered by itself or in conjunction with existing buildings and works) will not have any significantly adverse impact on the locality,	Y	The appearance of the proposed development is not considered to have a significant adverse impact on the locality. This is assessed in detail in section 6.2.
 i) The proposed development will not cause any significant overshadowing of adjoining land, 	Y	There will be no shadow impacts on adjoining land.
 j) The proposed development will not cause any significant reduction in the privacy of occupiers of adjoining land 	Y	The proposal will not impact privacy.



5.5.2 Lord Howe Island Development Control Plan 2005

The Lord Howe Island Development Control Plan 2005 (DCP 2005) applies to the subject site. The provisions primarily relate to the design of buildings (residential in particular) and do not relate to infrastructure such as that proposed. The objectives of the DCP 2005 include:

- (a) to encourage quality design of residential and non residential development;
- (b) to assist in achieving the aims and strategies of the REP;
- (c) to provide guidelines on appropriate, sustainable building designs and locations;
- (d) to promote design solutions which respect the Island character and minimise loss of amenity for neighbours;
- (e) to ensure that the scale and appearance of new development is compatible with the Island character:
- (f) to protect and/or re-establish environmental integrity;
- (g) to encourage energy and water efficient designs;
- (h) to require and maintain high quality landscaped areas;
- (i) to promote a high level of protection from natural hazards in design for both current and future residents; and
- (j) to protect the community's interests.

The proposal is consistent with these objectives which are addressed in detail by the assessment of environmental impact in section 6.2.

Section 3.4 provides provisions for development within the Foreshore Building Line. It prevents any more than 3 slipways to exist on the island at any one time. There is currently 1 operational slipway on the Island, however this does not comply with relevant Australian Standards and Regulations.

It outlines that slipways are to be constructed and operated so as not to:

adversely affect public use of beach and dune areas

The proposal is adjacent to the Waste Management Facility and will not adversely impact public use of the beach and dune area.

create adverse impacts on natural flora and fauna

See ecology impact assessment in section 6.2.

cause erosion of dunes, or

See coastal processes impact assessment in section 6.2.

create an unacceptable visual impact

See visual impact assessment in section 6.2.

It also states that new boatshed or slipway, if approved, is to be located in an area within the foreshore building line between Ned's Beach Road and Middle Beach Road. The proposed facility is not within this



area. There have been various locations considered for the needed slipway, including a proposal at Wilsons landing in 2012 which was refused. This requirement of the DCP is outdated and was translated across from the old REP over 10 years ago and is not a mandatory requirement. An alternative location can be justified. This area, comprising the Boatshed Precinct, has high visitor patronage, is highly visible and co-located with non-industrial uses. It is considered that it currently would not provide the best location on the island because of potential land use conflicts, visual impacts, impacts on local amenity (such as noise) and concerns regarding safety given high usage of the area.

The proposed location has been the subject of detailed study, including a Board appointed community based working group, who have identified that the Waste Management Facility is a better location in balancing community needs and environmental impact. An alternative sites analysis was also prepared by Alan Taylor and Associates and provided as Attachment A to this assessment report.

6.0 Environmental Effects

6.1 Environmental Planning and Assessment Act 1979

Under the provisions of section 79C(1) of the EP&A Act, in determining a development application, a consent authority is to take into consideration the following matters as are of relevance to the development the subject of the development application.

- (a) the provisions of:
 - i. any environmental planning instrument
 - ii. any draft environmental planning instrument that is or had been placed on public exhibition and details of which have been notified to the consent authority, and
 - iii. any development control plan
 - iiia any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and
 - iv. any matters prescribed by the regulations that applied to the land to which the development relates
 - v. any coastal zone management plan (with the meaning of the Coastal Protection Act 1979)
- (a)(i) The key relevant planning instrument is the LEP 2010. The proposal has been assessed against the relevant planning instruments (see Section 7.0) and is found to comply.
- (a)(ii) There are no draft instruments for consideration.
- (a)(iii) The proposal has been assessed against the LHI DCP in Section 5.5.2 and is found to comply.
- (a)(iiia) There are no planning agreements relevant to the application.
- (a)(iv) There are no relevant matters prescribed by the regulations.
- (a)(v) There are no coastal zone management plans relevant to the application.
 - (b) The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts on the locality

The environmental impacts of the proposed development are considered in detail in section 6.2. The assessment concludes that it is unlikely that there will be significant adverse environmental, social or economics on the locality.



(c) the suitability of the site for the development

The site is considered to be suitable for the development. The facility is industrial in nature and located among other industrial uses. It has adequate access and area for parking to support the users and no significant adverse impacts have been identified on the surrounds. The suitability of the site from an environmental perspective, considering matters like coastal processes is further assessed in section 6.2.

(d) any submissions made in accordance with this Act or the regulations

The application was notified and advertised. Three submissions were received, including one submission raising 'no objection'. The following concerns were raised in the two remaining submissions:

- The location is not considered to be suitable for the slipway. Would like the Wilsons Landing site proposed under the original slipway proposal to be reconsidered. If this is not reconsidered, then Dignam's slipway as there are facilities already there.
 - Comment: An assessment of various locations for the slipway has been undertaken in the site selection process by the applicant. The Board and the LHI Slipway Association has identified the Waste Management Facility site as the preferred location. Nothing has been identified which has warranted the site as being unsuitable. This is discussed further in response to (c) above.
- The Dignam Slipway joint venture is the most practical approach and will not interfere with public use of the Lagoon.

Comment. As above.

- The function of the slipway may be compromised due to sand movement and weather conditions Comment: An assessment of coastal processes and sand migration is provided in Section 6.2. It concludes that it is unlikely the facility will be adversely impacted by these processes.
- Small boats using the boat ramp will be require to use the washdown area, requiring trailered boats to be driven across the island to the Waste Management Facility.
 - *Comment*: The location is suitable in its primarily industrial context. Transportation of trailered boats via vehicle to the facility is not excessive and considered to be suitable.
 - (e) the public interest

It is considered that the proposal is in the broad public interest, subject to appropriate conditions being proposed. It is in the public interest in its purpose to support recreational, commercial and tourist vessels on the island without adverse impact on its visual qualities. This is assessed in detail in section 6.2 below.

6.2 Likely Environmental Impacts

Ecological

The ecological impacts of the proposal have been considered by the Board's Manager Environment/World Heritage and an Environmental Statutory Ecological Assessment prepared by Naturecall. Construction and operational impacts are considered. Key considerations include:

- Fragmentation of landscape will not significantly change
- Risk of damage to marine life due to anchor drag and the risk is low, with no seagrass or coral in the area, maritime regulations, natural coastal processes and traffic in the area.
- Noise occurring from the operation is unlikely to disturb fauna near the site, with species having high tolerance.
- Washdown is to be collected to avoid runoff pollution
- Erosion will need to be monitored and controls considered.



A single Knicker Nut plant is located in the foredune approximately 20 metres south of the proposed access track. During construction works it will be clearly flagged and site workers inducted on its location and exclusions. All other species (except the LHI Placostylus) are considered to potentially use vegetated habitats at the site, with Woodhen also regularly traversing open areas and feeding from mulch piles at the WMF. None of these species will have habitat disturbed or impacted by the proposal and the proposed development will not result in any significant impacts on any Threatened species, populations or ecological communities, or their habitats.

Recommendations from the impact assessment include the following, which have been recommended as conditions of consent:

- The clearing of the site is to be managed as follows:
 - The extent of the site/development footprint is to be clearly marked (e.g. via pegging/fencing with paramesh/flagging) before clearing in order to prevent any inadvertent clearance/rock removal beyond what is required and has been assessed.
 - This fencing/marking is to remain until all clearing and construction is completed. In particular, this
 fencing is to designate the edge of the adjacent forest as a "no-go" zone for all equipment and
 activities.
 - Site induction is to specify that no clearing is to occur beyond the marked area. All vehicles are only to be parked in designated areas. Similarly, any materials associated with the development are to be stored outside any retained vegetation and not in close proximity to the adjacent vegetation.
- To minimise the risk of rat and mice establishment, bait stations are recommended to be set up and maintained at the site.
- Specific provisions to prevent material and rubbish being blown into adjacent waters are to be provided (eg waste bins with closable lids) at the site, but not visually prominent. This is so that any such material must be binned immediately to prevent transport into the lagoon.
- Standard quarantine controls will apply to all imported materials, etc, for the project to ensure pathogens such as Phytophora and Myrtle Rust are not introduced. No rock base, etc, is to be imported unless it is certified (eg via VENM protocol). Any imported raw timber must similarly be according to the quarantine strategy (ie no bark and treated for pathogens prior to importation).
- Any earthmoving machinery, etc, is to be sterilised (eg washdown to removal all soil, vegetative material, etc, from the track and body) at the mainland departure point prior to importation to LHI. Written confirmation to the LHIB should be provided.
- The development be approved subject to all workers being inducted on threatened species locations and habitat requirements at the site prior to commencement.

Navigation, Access & Traffic

It is unlikely that the proposal would not have significant adverse impacts on access, navigation and traffic.

The facility will not generate frequent visitors or the like. Car parking is provided for uses adjacent to the facility within the Waste Management Facility. There appears to be sufficient area for turning circles, overtaking of vehicles and alternative areas to park and stop within the Waste Management Facility for people disposing of their waste. A condition of consent is recommended to ensure that the adopted operational plan of management includes measures to ensure that the operation of the slipway does not interfere with people using the Waste Management Facility, including blocking of access and the like.

The works are proposed over an existing track to the beach. This is used by Board excavator to assist with opening of Cobbys Creek and other maintenance along the section of beach. Access across the concrete footing would be able to continue with the use of mats or timber.



The Erscott's passage entrance will be the primary passage used to navigate to the proposed slipway site, with adequate water depth to allow access to the cradle. The applicant has advised that the majority of this route was tested in 2015 as part of the runway project where tug boats and dumb barges with deeper drafts than the Island vessels travelled past this point to the end of the runway.

To improve safety, a condition is recommended that vessel owners be provided with clear details of marine navigation passages and requirements to use the vessel launch and retrieval system. This is to include the adequate water depth to retrieve the vessel and the required tide level.

Heritage

The subject site is not listed as a heritage item under the LEP 2010 but forms part of the Lord Howe Island State and World heritage listings.

The site is in the vicinity of one locally listed item "Kentia" (formerly house of A Christian), Lagoon Road, Portion 111, about 210m to the south-east. The proposed works will not be visible from the heritage item and will not adversely impact its heritage significance.

The archaeological potential for the site is considered to be low given its location on a sand dune.

Coastal Processes - Sand Migration

Previous slipways located in the lagoon have been made inoperable by being undercut by the erosion of sand and accretion of sand.

In the Royal Haskoning Coastline Management Study, the 700m length of Cobbys Beach is subject to sand accretion of 620 cubic meters a year. The applicant has considered the following options to account for the sand movement:

- Option A: A slipway set at a level above the assessed future sand levels, fully supported on driven piles founded on rock. This is a high cost option and would have a greater visual and potentially environmental impact.
- Option B: The work area placed on the existing dunal area and rails supported by sleepers sitting on the sand at about existing levels. Sand would need to be removed and filled around the rails requiring ongoing maintenance costs.
- Option C (chosen): A vessel launch and retrieval system with the work area placed on the existing dunal sand and a cradle sitting on wheels and/or skids travelling on the beach. Risks associated with sand build up are less as it operates over sand and would require occasional sand and gradient straightening.

Any sand build up which impacts the operation of the slipway will need to be managed by the operators of the facility. The broader build up along the beach will be the responsibility of the Board. This is conditioned accordingly. Excavation of the foredune would only be required to create a suitable gradient for winch operations. This is conditioned to minimise impact.

Moveable plastic (or similar) mats will be placed on the sand and used to enable the tow vehicle and/or cradle to move over the softer sand without bogging. The extent of these boards would depend on the areas of soft sand, and also tide levels. The boards are only to be in place during moving of the vessel on the beach, and then stored at the bunded area when not in use. This will lessen the impact of driving over stand and is conditioned in the recommendations.

A concrete hardstand is proposed generally in the location of the crest of the dune, in the location of the existing access way to the beach, minimising the excavation required. The concrete trailer boat hardstand is



further to the east and behind the dune in a now disturbed area which was used as a batching plant during the reseal of the airstrip and is part of the greater Waste Management Facility.

The Boards Manager Environment & Community Serviceshas advised that it is considered the overall risk of damage to the infrastructure due to coastal erosion would be low.

The site falls within the 2050 hazard line however, the Haskoning Report also states 'the location of an asset landward of the Immediate Hazard Line does not mean it could not be affected by coastal erosion at present, rather that there is a low probability (in the order of 1% each year) of erosion extending landward of the Line at present (as of 2011)'.

Visual Impact

The proposed development is located along the foreshore and will be visible from some surrounding public areas. Its visibility is heightened as development along Cobbys Beach is limited, and hidden behind the existing dune and vegetation.

Alan Taylor and Associates have prepared a Visual Impact Assessment considering viewpoints identified in Figure 15. Excerpts of these views are provided in Figures 16 to 18. Rather than displaying the proposed structures, it shows a boat, and does not indicate its size or the like. The boats that are slipped will vary in size. There is also a secondary washdown area proposed that is not shown.

It concludes that the visual impact from these viewpoints is low with the exception of Viewpoint 3 from the water's edge deemed to be moderate (Figure 17).

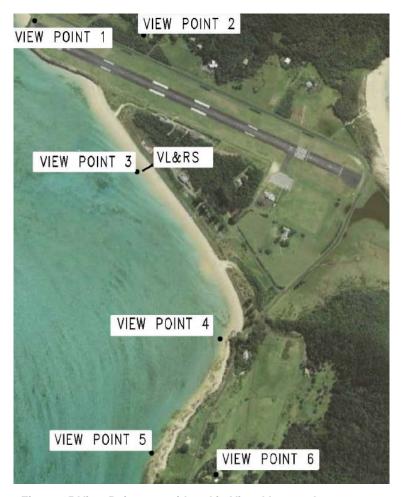


Figure 15 View Points considered in Visual Impact Assessment





Figure 16 View Point 1 – low impact



Figure 17 View Point 3 – moderate impact





Figure 18 View Point 4 – low impact

Though a boat will be notably visible when sitting on the cradle, this will be limited to about 22 occasions per year, and the permanent structure itself needs to be considered. Drawings provided of the cradle structure is limited to the section shown in Figure 19 below. The applicant has advised that the cradle arms will be about 4.5m high and will be visible so that boats can navigate their way to the facility. Details of the design are intended to be finalised post consent and colours and the like of the cradle have not been provided. A condition is recommended that all permanent construction elements on land to be painted a dark colour to blend into background existing vegetation to lessen the impact.

It is noted that the documentation also suggests safety fencing is proposed (albeit not shown), however the applicant confirmed that this is not longer required, its visual impact has not been assessed and is conditioned accordingly.

It is not intended to operate the cradle at night and therefore no lighting is proposed which would make the proposal visible at night.

Landscaping is proposed to be carried out on the northern side of the dune which will provide further buffering of the visibility of the facility. Given the largely industrial nature of the area, location next to the Waste Management Facility and Airport, the visual impact of the structure in the context is considered to be acceptable, subject to the provision of the final design details. This is requested as a deferred commencement condition for final sign off.



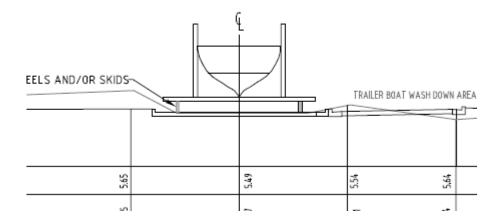


Figure 19 Section of cradle

Reflectivity

The proposal is located adjacent to the Lord Howe Island Airport and runway. It is not expected that the proposal would have any impact on aviation, however to be sure a condition has been recommended ensuring that selected materials and finishes do not cause any significant glare as to impact aviation.

Acoustic

The Alan Taylor and Associates Report provides comment on the acoustic impacts. It acknowledges the following limits on audible noise:

- Acceptable 55dB(A)
- Recommended Max 60dB(A)

The proposal will have to following key potential noise sources:

- Tow vehicle tractor or truck
 - » About 30 minutes and 8 to 10 minutes
- Boat noise
 - » Boat engines as they move in and out of the cradle and clanging sounds from rigging on masts
- Boat maintenance and repairs
 - » Hand pumps, hand held power tools (angle grinders, circular saws, pressure washers) and the like
- Road traffic
 - » A small number of additional visitors using the existing road

The nearest sensitive receiver is a dwelling at Portion 21, 210m to the north-east and south-east. This residence is adjacent to the airport and Waste Management Facility and buffered by vegetation.

Noise monitoring has not been undertaken for the purpose of this assessment. The NSW Industrial Noise Policy outlines the following amenity criteria for noise levels from industrial sources on residents in suburban amenity areas:

Table 5 Recommended noise levels within suburban areas

Time	Recommended LAeq Noise Level, dB(A)	
	Acceptable	Maximum Recommended



Time	Recommended LAeq Noise Level, dB(A)		
Day	55	60	
Evening	45	50	
Night	40	45	

It is noted that there are higher levels for 'Urban' and 'Urban/Industrial Interface' however, these may not be appropriate for a low key industrial area with residential interface such as this.

The acoustic impacts should be acceptable provided they comply with the NSW Industrial Noise Policy above. This is recommended as a condition of consent.

Social & economic

The likely net socio-economic impacts are considered to be positive. There will be economic benefits in enabling the localised maintenance and safety check of commercial vessels that would have otherwise been needed to be taken to the mainland at a greater cost. Ease of access to the facility will encourage better maintenance of larger local vessels and therefore increased public safety, avoiding issues with the vessels.

It will support and encourage visiting vessels to the area for tourism purposes, contributing to the economy.

Construction

Conditions are recommended to ensure that construction is undertaken in accordance with best practice to minimise any adverse impacts.

7.0 Conclusion

This application has been assessed with regard to the provisions of Section 79C of the EP&A Act, the LEP 2010 and DCP 2005 and the relevant codes and policies of the Lord Howe Island Board.

This assessment has found that the proposal is worthy of approval by the Board subject to the application of a number of standard and proposal specific conditions.

8.0 Recommendation (Deferred Commencement Approval)

That the Board APPROVE (deferred commencement approval) Development Application No. 2016-31 to construct a vessel launching and retrieval facility including two concrete bunded work areas, a cradle, electric winch and pollution control system at the Waste Management Facility, Lord Howe Island, subject to the following conditions:

PART 1 – DEFERRED COMMENCEMENT

(A) The following deferred commencement conditions must be satisfied prior to the consent becoming operative:

1. Detailed design

Drawings showing the detailed design of the vessel launch and retrieval system are to be provided to the Board for planning review and sign off, showing all proposed structures with dimensions, materials and colours. This is also to include:



- a) Details and location of the proposed 6,000L water tank. It is to be in a location which is hidden behind the dune by vegetation and not visible from the foreshore.
- b) Details of any piling, foundations or other structures required that were not provided on the submitted plans.
- c) Details of any excavation and piping required to transport the waste generated to the wastewater management system at the Waste Management Facility.

The acceptability of the impacts of the above final designs will be considered in the review.

2. Comments from NSW Department of Primary Industries – Lord Howe Island Marine Park

Referral comments from the NSW Department of Primary Industries in relation to the Marine Park are to be obtained and it is to be demonstrated to the Boards satisfaction that their general terms of approval will be complied with.

- (B) evidence that those matters identified in deferred commencement conditions listed above must be submitted to the Board within 24 months or the consent will lapse;
- (C) the consent will not operate until such time that the Council notifies the Applicant in writing that deferred commencement consent conditions as indicated in clause (A) above, have been satisfied; and
- (D) upon the Board giving written notification to the Applicant that the deferred commencement conditions in clause (A) above have been satisfied, the consent will become operative from the date of that written notification, subject to the following conditions of consent and any other additional conditions reasonably arising from consideration of the deferred commencement consent conditions.

PART 2

This consent cannot operate until such time as the Board is satisfied with the evidence produced in response to PART 1 and has notified the applicant in writing of the date from which the consent operates.

1. Approved Plans and Supporting Documentation

The development is to be carried out in accordance with the plans and documentation provided with DA 2016-31 as listed below and endorsed with the Lord Howe Island Board's stamp, except where amended by other conditions of consent and signed off plans under PART 1.

- a) Completed Development Application Form
- Analysis and Review of Environmental Factors prepared by Alan Taylor and Associates, dated 19 April 2016.
- c) Statutory Ecological Assessment, prepared by Naturecall Environmental, dated March 2016
- d) Drawings C-13 and C14, Option 4, prepared by Alan Taylor and Associates, dated 30 March 2016
- e) Clarified details of the development as set out in this planning assessment report for DA2016-31, including the details of the proposed development at Table 1.

Reason: To ensure the development is carried out in accordance with the details submitted in the Development Application.



2. Facility Usage

This approval is for the use of the facility as follows:

- a) The cradle is to hold vessels less than 15m in length so that all waste is confined to the 15m long bunded area.
- b) Approximately 22 vessels using the cradle per year and 40 uses by trailer boats per year.
- c) The majority of boats being worked on over winter.
- d) The approved facility is not a storage area for boats. Timing for their positioning on the cradle is to be minimised, as set out in a Management Plan as per condition 26 of this consent.

Reason: To outline approved usage

3. Sand Movement and Management

- e) Any sand movement and build up which impacts the operation of the facility is to be managed and maintained by the facility operators. The broader build up along the beach is the responsibility of the Board.
- f) Moveable plastic (or similar) boards shall be temporarily placed on the sand and used to enable the tow vehicle and \ or cradle to move over the softer sand without bogging. The boards are only to be in place during moving of the vessel on the beach, and then stored at the bunded area when not in use.
- g) Excavation of the foredune is to be limited to create a suitable gradient for winch operations. Details of the expected required excavation are to be provided to the Board prior to construction and also outlined in the Management Plan (as per condition 26 of this consent).
- h) Any future works requiring lowering the whole concrete work area due to major sand migration will be subject to the necessary development approvals.

Reason: To ensure impacts relating to sand movement are minimised and managed appropriately.

4. Signage

No permanent signs approved apart from those required for construction or traffic direction within the Waste Management Facility.

Reason: To minimise visual clutter and impact.

5. Lighting

No lighting is to be installed to enable the operation of the facility at night

Reason: To minimise visual impact.

6. Fencing

No fencing around the facility is approved.

Reason: To minimise visual impact.



7. Ecology

- a) The clearing of the site is to be managed as follows:
 - i. The extent of the site/development footprint is to be clearly marked (e.g. via pegging/fencing with paramesh/flagging) before clearing in order to prevent any inadvertent clearance/rock removal beyond what is required and has been assessed.
 - ii. This fencing/marking is to remain until all clearing and construction is completed. In particular, this fencing is to designate the edge of the adjacent forest as a "no-go" zone for all equipment and activities.
 - iii. Site induction is to specify that no clearing is to occur beyond the marked area. All vehicles are only to be parked in designated areas. Similarly, any materials associated with the development are to be stored outside any retained vegetation and not in close proximity to the adjacent vegetation.
- b) All workers on the site are to be inducted on threatened species locations and habitat requirements at the site prior to commencement.
- c) To minimise the risk of rat and mice establishment, bait stations are recommended to be set up and maintained at the site.
- d) Specific provisions to prevent material and rubbish being blown into adjacent waters are to be provided (eg waste bins with closable lids) at the site, but not visually prominent. This is so that any such material must be binned immediately to prevent transport into the lagoon.
- e) Standard quarantine controls will apply to all imported materials, etc, for the project to ensure pathogens such as Phytophora and Myrtle Rust are not introduced. No rock base, etc, is to be imported unless it is certified (eg via VENM protocol). Any imported raw timber must similarly be according to the quarantine strategy (ie no bark and treated for pathogens prior to importation).
- f) Any earthmoving machinery, etc, is to be sterilised (eg washdown to removal all soil, vegetative material, etc, from the track and body) at the mainland departure point prior to importation to LHI. Written confirmation to the LHIB should be provided.
- g) The development be approved subject to all workers being inducted on threatened species locations and habitat requirements at the site prior to commencement.

Reason: To minimise impact on local fauna and flora

8. Reflectivity

Selected materials and finishes are not to cause any significant glare as to impact aviation.

Reason: To ensure the finishes to not cause glare.

9. Colours

All permanent construction elements on land to be painted a dark colour to blend into background existing vegetation.

Reason: To minimise the visual impact on the landscape.



10.Access

Access is to be continued to be achievable for an excavator around the proposed facility to maintain the opening of Cobbys Creek and the beach. This may be achieved through the temporary placement of rubber mats or the like.

Reason: To ensure access is not compromised by the proposal.

11. Marine Navigation

Vessel owners are to be provided with clear details of marine navigation passages and requirements to use the vessel launch and retrieval system. This is to include the adequate water depth to retrieve the vessel and the required tide level.

Reason: To minimise impacts of vessels potentially disrupting the lagoon floor and improve marine safety.

12. Approval under the Fisheries Management Act 1994

Approval is required under Section 199 of the *Fisheries Management Act 1994* prior to the carrying out of dredging and reclamation work.

Reason: This is a legislative requirement.

13.NSW Department of Primary Industries – Lord Howe Island Marine Park

The terms of approval obtained under Part 1 of this consent from the NSW Department of Primary Industries are to be complied with.

Reason: To minimise impact on the Marine Park

14. Landscaping

- a) The applicant is to revegetate the dune directly to the north of the access track subject to the proposal. The approximate area is 65 m long and up to 10 m wide, 650 square metres and requires a total of 440 plants. This is to be completed by September 2017
- b) Trees must be planted with wetted water crystals, fertilised and screened and site maintained. Any plants that die are to be replaced.
- c) Planting is to be undertaken in accordance with the Lord Howe Island Board Vegetation Rehabilitation Plan.

Reason: To facilitate the appropriate revegetation of the dune and improve the visual buffer provided by vegetation along the foreshore.

15. Significant Native Vegetation

- a) This consent does not approve any damage to or removal of any Significant Native Vegetation (SNV). SNV is to be protected during access to, construction and operation of the facility.
- b) Prior to commencement of construction the Board is to be satisfied that the construction methodology would not damage SNV.



Reason: Damage to and removal of SNV is prohibited in accordance with the LHI Local Environmental Plan

16. Structural details

Prior to building work certification the applicant is to provide detailed structural engineering plans. These plans are to be certified by an appropriately qualified Structural Engineer in accordance with AS1170.2.

Reason: To ensure the design is structurally sound.

17. Waste disposal

- c) All waste is to be contained with the site during construction and then be recycled or disposed off at the authorized waste facility on the Island. No waste shall be placed in any location or in any manner that would allow it to fall, descend, blow, wash, percolate or otherwise escape from the site. Waste disposal fees will be charged in accordance with the Lord Howe Island Board's fees and charges schedule.
- d) Wastewater Management Plan is to be prepared and approved by LHIB and Marine Parks Authority prior to construction. Details of the method of treatment and disposal of effluent are to be included. Details of system breakdown alarms must to be included. The plan must incorporate inclusion of an alarm light or other suitable mechanism that is triggered when there is a pump failure or the holding is full.
- e) Wastewater effluent is not to be disposed of through any residential or commercial wastewater systems that have not been designed to handle this type of wastewater. Wastewater effluent is to be tested and if able to be treated through the WMF wastewater system then the effluent can be disposed of at the WMF Wastewater system. If wastewater effluent is not appropriate for disposal through the WMF Wastewater system then effluent will need to be disposed through an appropriate Liquid waste facility on the mainland.
- f) The slipway management is to enter into a Servicing Agreement for the management of Wastewater. The LHIB is to be a party to that agreement and conditions and charges regarding disposal of effluent at the WMF will apply. The agreement is to be in place prior to the LHIB granting approval for slipway to operate. A business licence will be required and a condition of this licence would be existence of a Servicing Agreement.
- g) A Wastewater Management Plan and Service Agreement is to be approved prior to operation of Slipway.

Reason: To ensure waste disposal is carried out appropriately.

18. Certification of works

The building works are to be certified in accordance with the *Environmental Planning and Assessment Act 1979*. A Construction Certificate is not required to be obtained where Crown Building Work is certified in accordance with section 109R.

Reason: To comply with NSW building laws.

19. Construction Hours

To limit the impact of the development on adjoining owners, all construction work shall be restricted to the hours of 7.00am to 6.00pm Monday to Friday and 8.00am to 1.00pm Saturdays. No construction work shall take place on Sundays or Public Holidays.



Reason: To limit the potential for any loss of amenity to adjoining owners and/or occupiers associated with the construction of the approved works.

20. Building Code of Australia

All construction work is to be carried out and completed in accordance with the Building Code of Australia.

Reason: This condition is prescribed under the Environmental Planning and Assessment Regulation 2000.

21. Inspections

The Principal Certifying Authority (PCA) will require the following mandatory inspections to be undertaken during construction, some of which may be combined:

- Pre-commencement/set-out for the facility
- Final Inspection prior to Occupation Certificate being issued

Reason: To ensure the site and works are appropriate.

22. Erection of construction signs

A sign must be erected in a prominent position on any site on which building work, is being carried out:

- a) showing the name, address and telephone number of the principal certifying authority for the work, and
- showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and
- c) stating that unauthorised entry to the work site is prohibited.

Any such sign is to be maintained while the building work is being carried out, but must be removed when the work has been completed,

Reason: This condition is prescribed under the Environmental Planning and Assessment Regulation 2000.

23. Construction Waste Management

- a) All construction waste is to be contained within the site and then be recycled or disposed of at the authorised waste management facility on the Island. This excludes asbestos waste, if any, which is the responsibility of the applicant to remove from the Island. No waste shall be placed in any location or in any manner that would allow it to fall, descend, blow, wash, percolate or otherwise escape from the site.
- b) Waste disposal fees will be charged in accordance with the Lord Howe Island Board's schedule of fees and charges.

Reason: To ensure waste is disposed of appropriately.

24. Plumbing and Electrical Work

Any plumbing and electrical work must be carried out by licensed contractors.



Any electrical additions must be carried out in accordance with the following requirements:

- a) All wiring must be carried out by a licensed electrical contractor to AS/NZS3000.2007 standard. A signed compliance form for electrical works is required from the contractor within two weeks of completion of all new electrical works.
- b) The advice of the LHIB Senior Electrical Officer must be obtained regarding the location a High Voltage cable and Telstra Infrastructure prior to any excavation work being undertaken on the lease.

Any new installations cannot be connected to full supply until all compliance forms have been submitted and the installation has been inspected by the LHIB Senior Electrical Officer.

Reason: To ensure that plumbing and electrical work is undertaken to an acceptable standard.

25. Acoustic amenity

Any noise emanating from the use at any time shall not have any detrimental effect on local residential amenity. The operation shall comply with the requirements of the *NSW Industrial Noise Policy 2000* considering acceptable noise levels for suburban areas. It shall also not give rise to the transmission of offensive noise as defined in the *Protection of the Environment Operation Act 1997 (NSW)*.

Reason: To ensure acoustic amenity to neighbouring residents.

26. Management Plan

A Management Plan is to be prepared for the operation of the subject facility outlining as a minimum:

- a) The waste management procedures and responsibilities and, vessel launching and retrieval system operating procedure and Conditions of Use set out in the *Analysis and Review of Environmental Factors* prepared by Alan Taylor and Associates.
- b) Operational and safety procedures.
- c) Arrangements for access to the facility and hours, considering the Waste Management Facility.
- d) Details of sand excavation requirements.
- e) Limiting the length of time a vessel can use the cradle.

The Management Plan is to be provided to the Board for sign off prior to the commencement of operation of the facility. The facility is to operate in accordance with the adopted Management Plan.

Reason: To ensure the facility operates appropriately.

Advice to Applicant:

It is recommended that the Board terminate the Permissive Occupancy Agreement for the existing slipway facility held by Mr Kevin Wilson upon commencement of the new facility. As part of the termination process the site will need to remediated to a natural dune profile and testing conducted to determine whether there is a risk of contamination.



Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 provides that a person must not take an action which has, will have, or is likely to have a significant impact on

A matter of national environmental significance (NES) matter; or Commonwealth land without an approval from the Commonwealth Environment Minister.

This application has been assessed in accordance with the New South Wales Environmental Planning & Assessment Act, 1979. The determination of this assessment has not involved any assessment of the application of the Commonwealth legislation.

It is the proponent's responsibility to consult Environment Australia to determine the need or otherwise for Commonwealth approval and you should not construe this grant of consent as notification to you that the Commonwealth Act does not have application.

The Commonwealth Act may have application and you should obtain advice about this matter. There are severe penalties for non-compliance with the Commonwealth legislation.

Section 97 of the EP&A Act confers on an applicant who is dissatisfied with the determination of a consent authority a right of appeal to the Land and Environment Court. This right of appeal is only valid for 12 months from the date of the consent. To determine the extent to which the consent is liable to lapse refer to Section 95 of the EP&A Act.

Report prepared by

Approved / Not approved

Mia Fay

Date: 9 September 2016

LHI Consultant Town Planner

Penny Holloway

Date:

Chief Executive Officer

Lord Howe Island Board



ATTACHMENT A – ALTERNATIVE SITES ANALYSIS



4.0 ALTERNATIVE SITES

4.1 General Criteria

Some eight sites for a proposed vessel launching & retrieval system have been assessed taking into consideration:

- The past performance of slipways at the particular site where applicable
- The proximity of utilities and services
- The location of the moorings of vessels likely to need the facility
- The depth of water
- The likely cost of design and construction
- Forecast longevity of the facility.

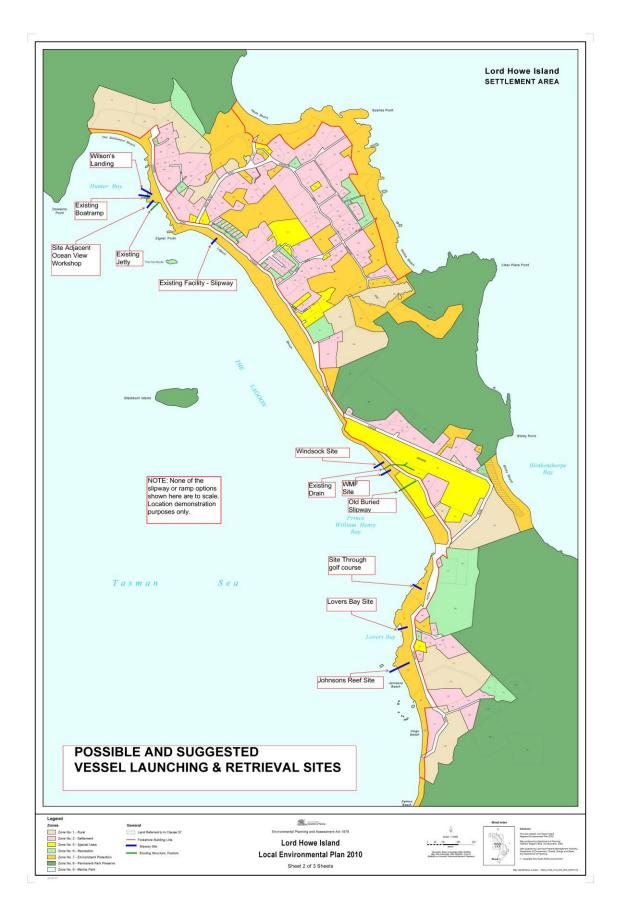
4.2 Schedule of Sites Analysed

The following schedule details the sites analysed together with a commentary on each. A map showing the location of each is shown in Map 1.

Ocean View - Good separation from - boat ramp use	Grade at 1:15 with a 1.5m high rail support trestle over rock
Boatshed boat ramp use - Deep water	trestle structure over rock batter to beach No excavation at workshop or trees area Reduced threat to tree, canopy still to be trimmed interaction with jetty steps and boat users, especially in windy weather inhibits or sterilises cargo handling area located at stormwater egress from paved area to lagoon – need for piping and culvert construction to keep flow out of work area

Johnson Reef – off Esven Fenton lease	- deep water - minimal tide dependence	 Concern that this area has had 3 or 4 slipways before, and none have stood the test of time. exposed to weather & sea excavation quantity cost of road access from Lagoon road to work area cost of utilities – power/water construction cost of lead in structure
		from ocean bed to reef - located long distance from existing moorings - cost of piling through coarse sand coral
Lovers Bay	- minimal tide dependence	 exposed to wind & sea cost of road access construction excavation to access beach removal of trees/bush cost of utilities long distance from moorings this activity may be considered unsympathetic with an area called "Lovers Bay".
Golf Course # 8 Hole	- minimal tide dependence	 wind & sea exposed long distance from moorings cost of utilities require Golf Club consent to cut road through 8th fairway cost of road access this activity is unsympathetic with current "golf" use.
WMF Site on Cobbys Beach	 utilities nearby water depth use sympathetic with surrounding use 	 active sand dune & beach movement long distance from moorings cost of piling through sand to and through calcarenite if Option 1 required previous attempt leaves buried slipway in area
Windsock at northern end of Cobbys Beach	- water depth	 utilities a further distance, thus increased cost active sand dune & beach movement previous attempt leaves buried slipway in area long distance from moorings

Existing Site Wilsons Slipway Lagoon Road. Adjacent to Environmental Tours Boatshed	last slipway used close to existing moorings	 cost of piling through sand closer to airport runway than WMF, therefore visually more obtrusive to visitors arriving buried in sand, up to 1.8m deep active sand dune with beach sand movement variable support in sand strata to use slip, sand to be removed by hydraulic excavator Hazard of excavator working on Lagoon Beach, close to tourist beach activity. Extensive upgrade costs required eg control of wash-down wastewater.
Wilsons Landing	 area currently used for launching smaller boats & like activities boat repairers accessible and available open site site is close to main population, ready access for boat repairs for community. Minimal excavation due to bank height second closest to existing moorings cost effective compared to alternatives utilities adjacent marine theme – sympathetic with adjacent uses. no impact on cargo handling easy access to both facilities (ie boat ramp & slipway) 	 adjacent to BBQ area – need to mitigate negative impact. Excavation in calcarenite broadside alignment to wave action maximum impact on Boat Ramp – need to ensure safety of small boat users impact on walkers along Wilsons Landing beach area. – Need to accommodate their requirements.



Map 1: Possible & Suggested Vessel Launching & Retrieval Sites Lord Howe Island VL & RS

Three of the assessed sites have been analysed in detail including site surveys and the production of concept drawings. This detail work has been completed for sites at:

- Wilsons Landing Refer Drawing A
- Ocean View Boatshed/Workshop Refer Drawing B
- Waste Management Facility Refer Drawings C to H.

Wilsons Landing Site

The Wilsons Landing proposal was subjected to an Ecological Assessment and other studies and analyses necessary for a Development Application to the LHI Board.

A DA for the development at this site was submitted to the LHI Board in 2012, but was refused on 12 December 2012. Refer to Drawing A.

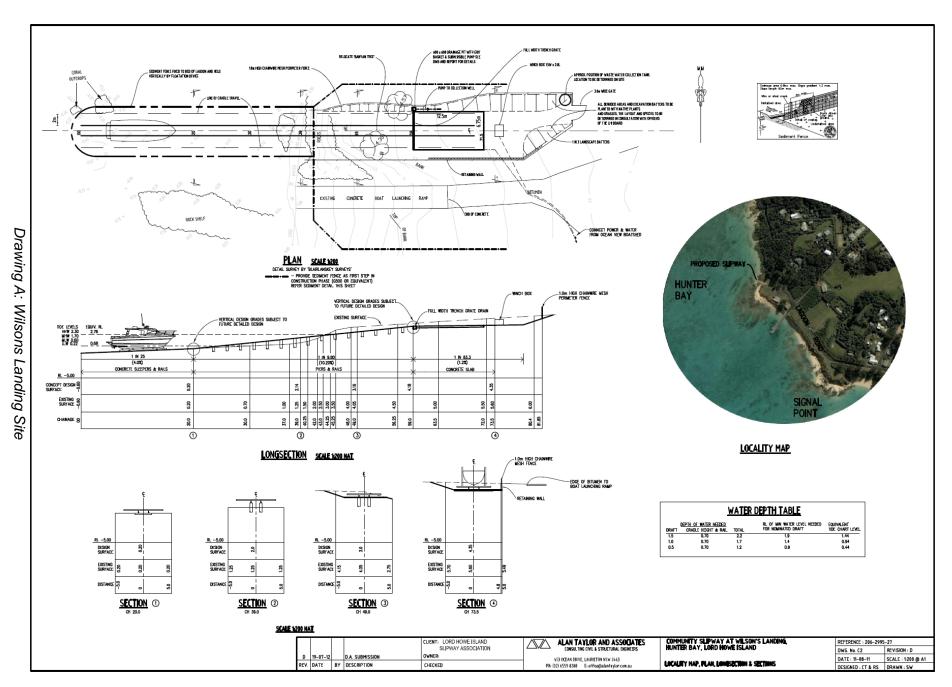
The main reasons stated for refusing the application is that "The Consent Authority is not satisfied that the slipway proposal is in the public interest due to:

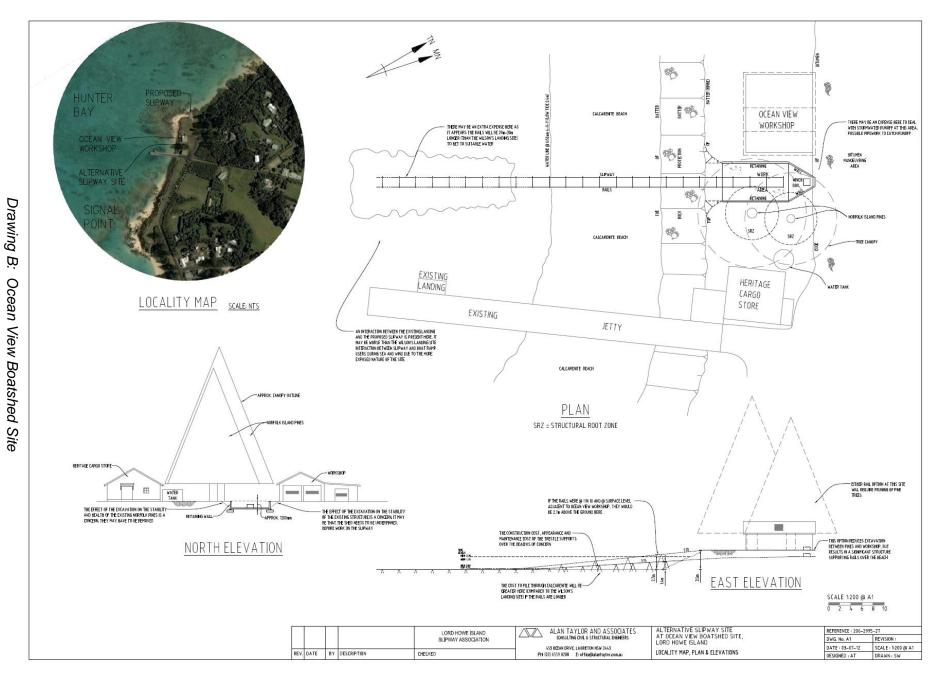
- a. The identified impacts of the development on the safe operation of the adjoining public boat ramp, which is used frequently by members of the boating community.
- b. The impact of the slipway on the scope of the planned future upgrading and reorientation of the public boat ramp to comply with current standards and desired future requirements.
- c. The impacts of the proposed slipway on adjacent areas, including the picnic and BBQ area, from airborne particulates.
- d. The availability of alternative methods to a slipway or alternative sites for a slipway that are considered likely to result in less impacts to community and public assets."

The Board also decided that "The board work cooperatively with the LHI Community Slipway Association and the island community to identify a viable method to provide for the maintenance and periodic survey of marine vessels."

Ocean View Boatshed Site at Wharf

The Ocean View Boatshed site at the wharf was considered unsuitable due to the large quantity of earthworks and major structure involved as well as the possibility of damage to the significant pine trees and the boatshed. Refer to Drawing B.





Waste Management Facility Site

The Board nominated community slipway working group set up to examine possible sites met on three occasions and approved, in principle, the establishment of a vessel launching & retrieval system at the Waste Management Facility site directly opposite the concrete bins used for waste collection.

Following the decision in 2012 to reject the Wilsons Landing application the Board commissioned Royal Haskoning DHV to appraise the various alternative sites for a slipway including the Waste Management Facility site.

Haskoning carried out an investigation of this site and prepared a concept plan for a suspended slipway 120m long, sitting on 5m long piles. Refer to Drawing C.

The estimated cost of this proposal as determined by Haskoning in June 2014, was \$1.45m.

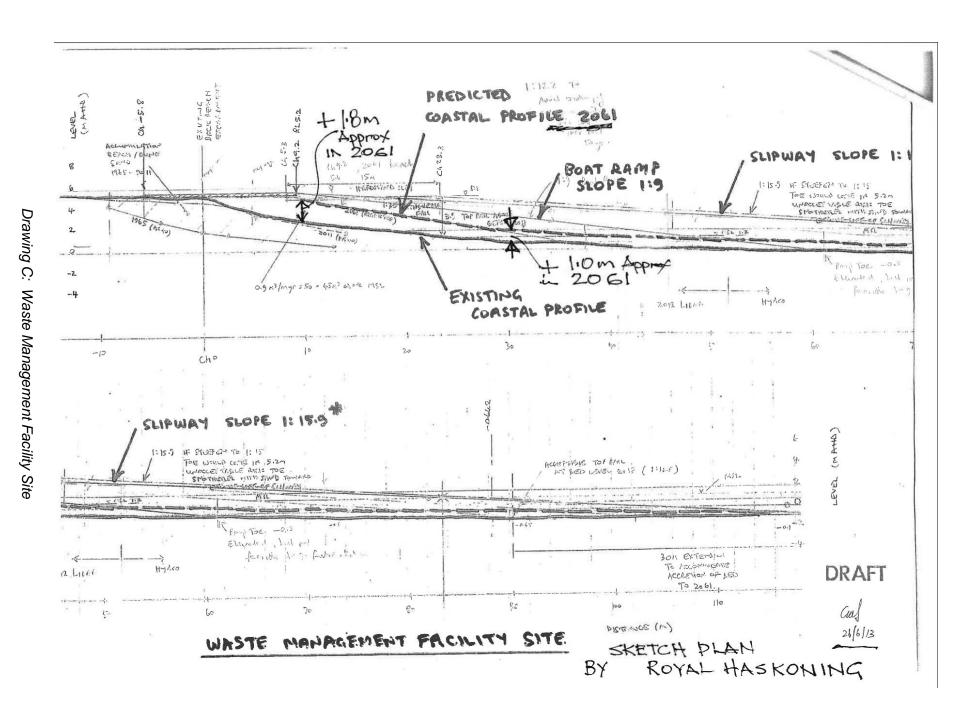
In 2014 Alan Taylor & Associates was commissioned to undertake an investigation of the strata in the bed of the lagoon and prepare concept plans for alternative designs at this WMF site.

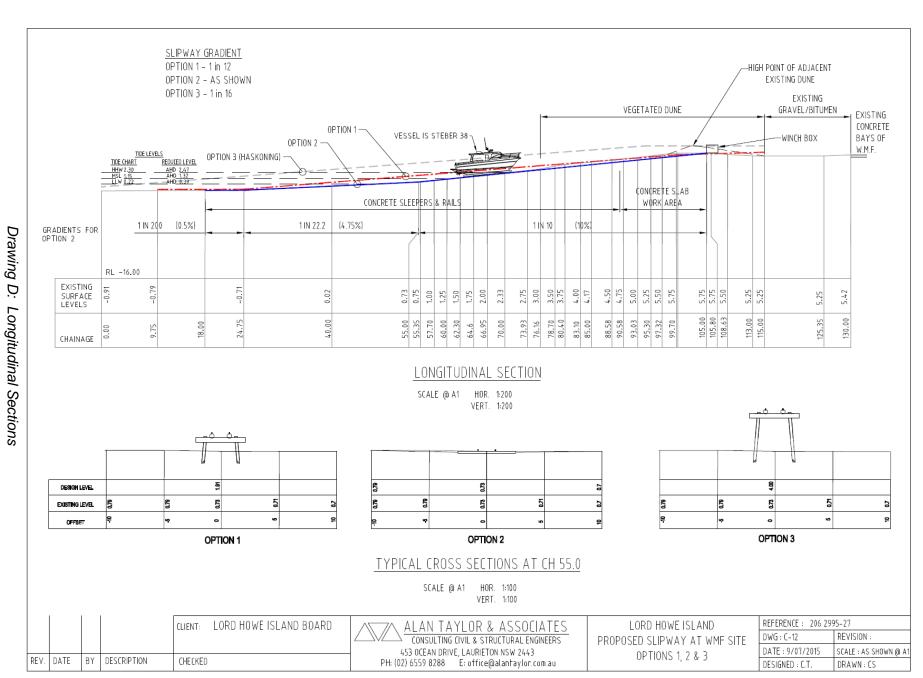
Two slipway profiles were considered by Alan Taylor & Associates and noted as Option 1 and Option 2. Option 1 is a design using piling to support the structure and Option 2 was for a concrete work area and rails/sleeper system sitting on the natural sand surface. Refer to Drawing D for long sections of Options 1 & 2. Drawing C shows the Haskoning long section noted as Option 3.

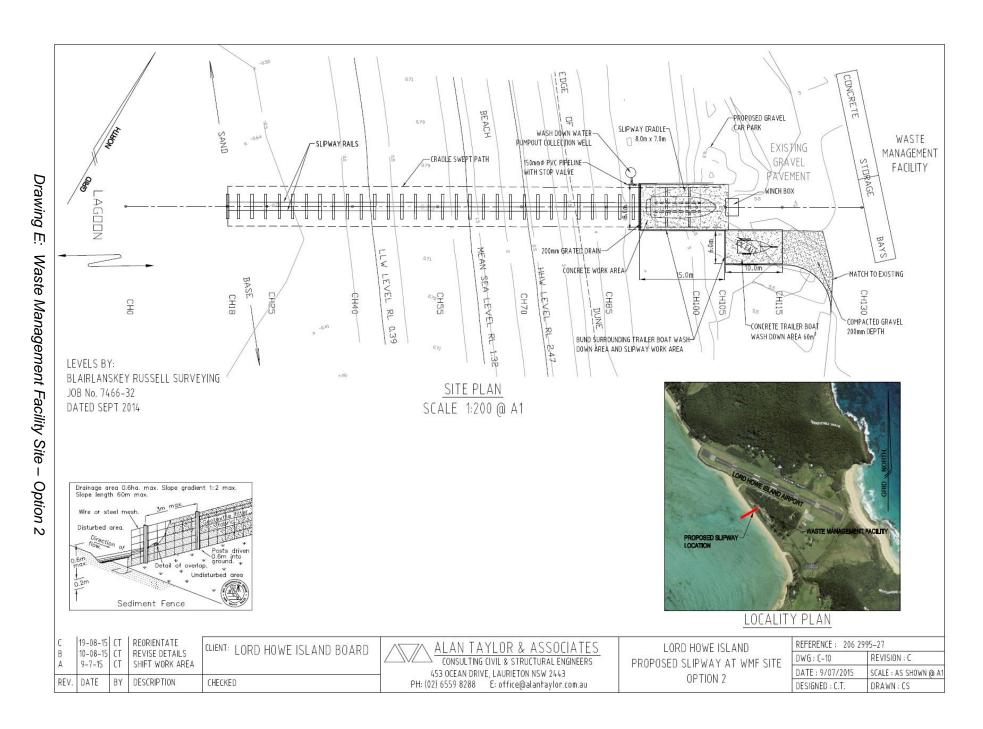
An additional option (Option 4) is a cradle mounted on wheels and/or skids travelling on the sand surface of the beach and lagoon bed. See Drawing G & H.

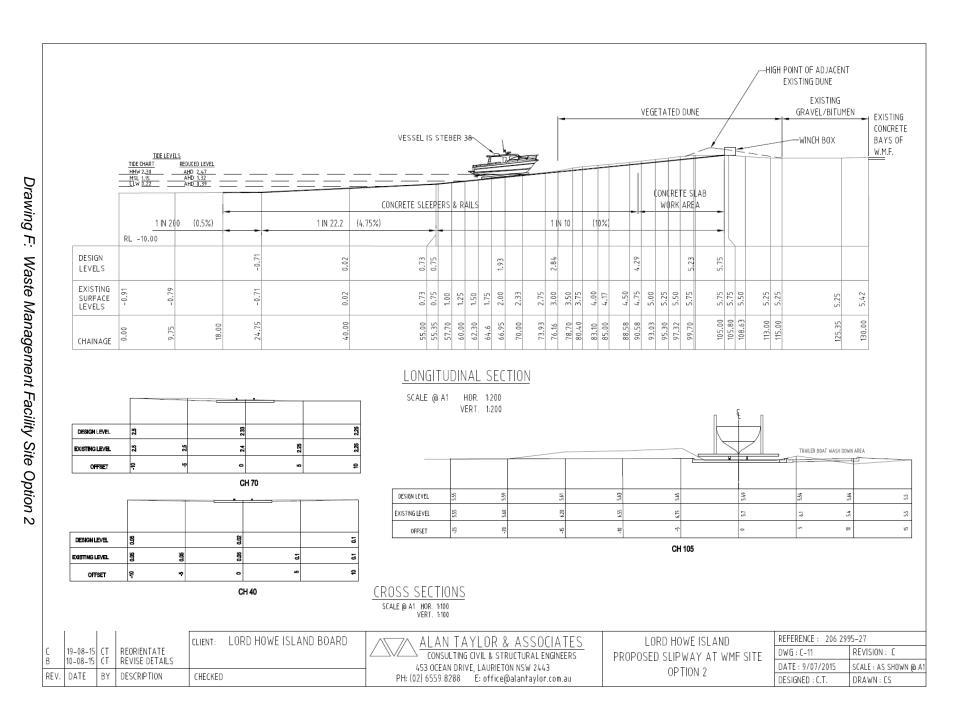
The concept design now selected for this Development Application is Option 4.

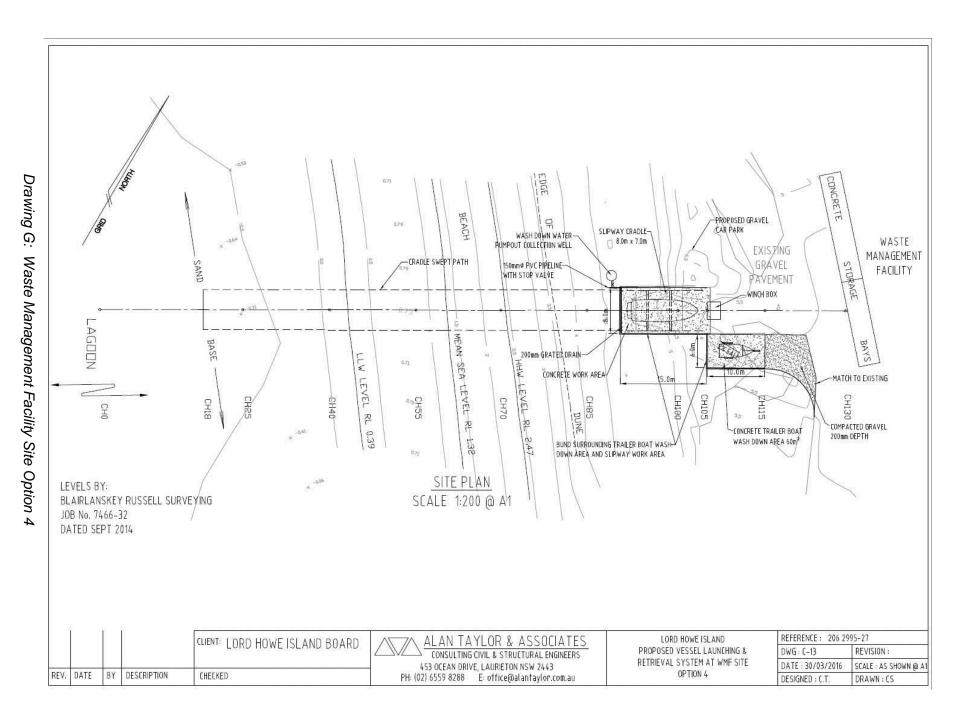
It is to be noted however that the provision of a foundation structure of piers or piles raised above the existing natural surface would reduce the effect of the known sand migration issue.

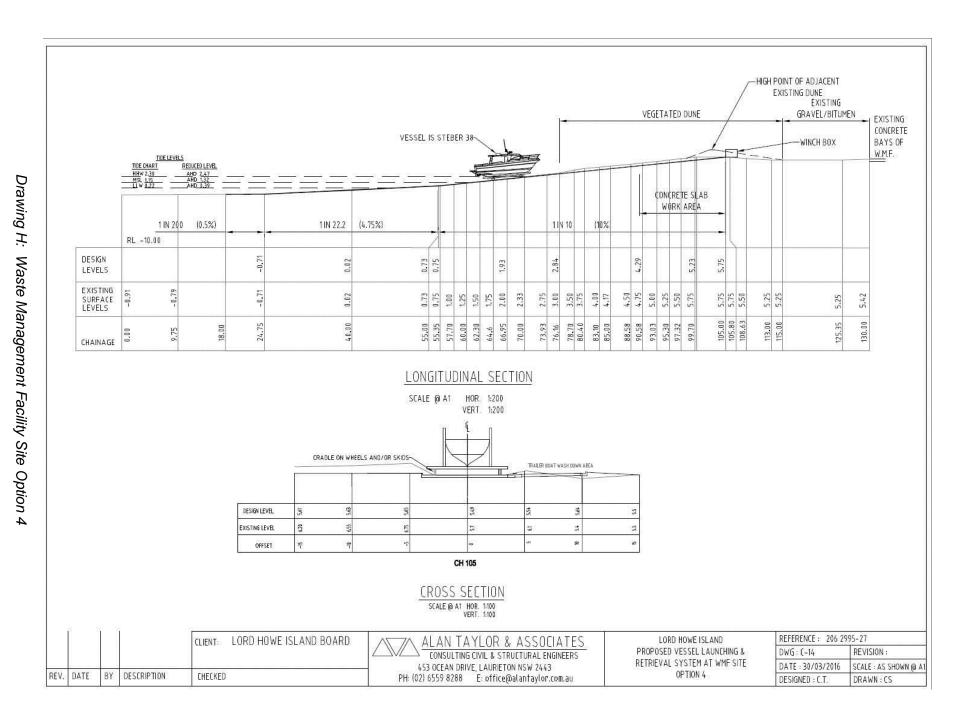












Board Meeting: September 2016 Agenda Number: 7 (vi) File Ref: PL0036

LORD HOWE ISLAND BOARD

Business Paper

OPEN SESSION

<u>ITEM</u>

List of Owner's Consents dealt with under Delegated Authority.

RECOMMENDATION

The report is submitted to the Board for information.

BACKGROUND

The Minster for the Environment has approved delegated authority regarding the issuing of owners consents by the CEO providing:

- 1. The development value is not more than \$2 million,
- 2. Does not relate to development for the purpose of a new dwelling, and
- 3. Complies with any planning instrument in force relating to the Island.

CURRENT POSITION

The following Owner's Consent applications complied with the above requirements and have been processed by the CEO since the last Board meeting, as detailed below:

ОС	Applicant	Site	Proposal	Zone	Decision
OC2016- 20	lan Fitzgerald	Portion 277	Transfer of effluent to M Fitzgerald's wastewater treatment system.	Zone 2 Settlement	Approved 14/06/2016
OC2016- 23	James McFadyen	Portion 317	Installation of roof mounted solar panel system.	Zone 2 Settlement	Approved 25/05/2016

The above applications were forwarded to the Board's Planning Consultant who assessed the proposals and recommended support to the granting of owner's consent.

RECOMMENDATION

The report is	submitted to	the Board for	information.

Prepared	Belinda Panckhurst	t Administration Officer
Endorsed	Penny Holloway	Chief Executive Officer

Board Meeting: September 2016 Agenda Number: 7 (vii) File Ref: PL0001

LORD HOWE ISLAND BOARD

Business Paper

OPEN SESSION

<u>ITEM</u>

List of Development Applications dealt with under Delegated Authority.

RECOMMENDATION

The report is submitted to the Board for information.

BACKGROUND

The Minster for the Environment, under section 80(1) of the Environmental Planning & Assessment Act, issued authority to the CEO to determine development applications providing:

- 1. The development value is not more than \$150,000
- 2. No more than 3 written objections are received within the exhibition period; and
- 3. The application has not been called up for full Board determination by any Board Member. (All Lord Howe Island Board development applications are to be determined by the full Board)

CURRENT POSITION

The following development applications complied with the above requirements and have been determined by the CEO since the last Board meeting, as detailed below:

DA	Applicant	Site	Proposal	Zone	Decision
DA2016-22	Sharon Van Gelderen	Lot 1 DP1118575	Alterations and additions to existing dwelling including relocation of dwelling bedroom/ensuite, bathroom, provision of transit room, laundry facilities to support staff accommodation.	Zone 2 Settlement	Approved 12/05/2016 subject to conditions.
DA2016-28	Richard & Noelle Hoffman	Portion 231	Installation of wastewater management system.		Approved 7/07/2016 subject to conditions.

RECOMMENDATION

Prepared	Belinda Panckhurs	st Administration Officer
Endorsed	Penny Holloway	Chief Executive Officer

Board Meeting: September 2016 Agenda Number: 8 (i) File Ref: AD0059

LORD HOWE ISLAND BOARD Business Paper

OPEN SESSION

ITEM:

Draft Operations Plan 2016/2017

RECOMMENDATION:

It is recommended that the Board adopt the draft Operations Plan 2016/2017.

BACKGROUND:

In August 2016, the Board adopted the three year Corporate Plan 2016 to 2019. The Board also received a report on the annual review of the Operation Plan 2015/2016 and noted achievements against KPIs and measures therein.

The Operations Plan for the financial year 2016/2017 has now been developed based on the structure of Corporate Plan and identified the programs and activities that are to be undertaken to achieve the first year of the new Corporate Plan.

The Operations Plan has been formulated around the six strategic directions:

- Effective Governance and Leadership
- Strong and Sustainable Economy
- Sound Infrastructure and Services
- Outstanding Environment
- Responsible Land Management
- Strong and Engaged Community

The Operations Plan links the strategies, actions and KRA's to the approved annual budget allocations.

COMMENT:

Attached is the draft Operations Plan for 2016/2017. The Plan identifies ongoing activities, programs and services as well as specific projects to be undertaken and completed within this financial year. Those activities which were not able to be completed in 2016/2016 have been included in this Plan.

Some of the projects to be undertaken in 2016/2017 include:

- Develop and implement a Customer Service Improvement Plan
- Implement the TRIM electronic records management system.

- Undertake a comprehensive visitor survey, jointly funded by Board, LHITA, QantasLink and Destination NSW.
- A new Regular Passenger Transport licence is put in place with Transport for NSW during 2017 for the period after 1 March 2018.
- Finalise and implement the walking track strategy.
- Manage design and construction for Airport Terminal Upgrade.
- Construction of new composting system at the Waste Management Facility
- Design and install new wastewater sludge processing system at the Waste Management Facility
- Undertake asset management maintenance and upgrade works (inc. Board building upgrades; road resurfacing works, including Lagoon Road from Public Hall to wharf)
- Reduce erosion impacts on the northern edge Old Settlement Creek to reduce erosion impacts.
- Manage Cobby's Creeks to reduce flooding impacts on properties and salt intrusion on the Sally Swamp area.
- Hybrid Renewable Energy Project Construct solar panel component; seek development consent for wind turbines component
- Finalise Stage One and commence Stage Two Review of LHI Local Environment Plan
- Complete planning and approvals stage of rodent eradication program and seek decision on whether or not to implement the program
- Aim to have Electric vehicles conditionally registered on LHI
- Develop a program to phase out the sale of plastic water bottles on the Island
- Commence review of the LHI Permanent Park Preserve Plan of Management.
- Develop a management plan for Stevens Reserve and other vacant crown lands

RECOMMENDATION:

It is recommended that the Board adopt the draft Operations Plan 2016/20	<i>J17</i>
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Prepared	Penny Holloway	Chief Executive Officer
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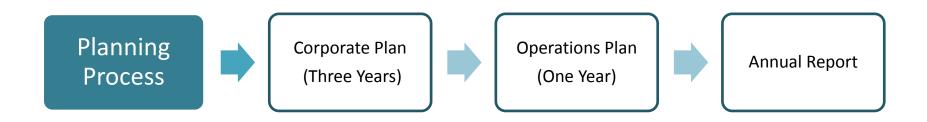
OPERATIONS PLAN 2016-2017

Operations Plan 2016-17

Within the Board's Charter, the Corporate Plan sets the framework and the direction for the Lord Howe Island Board over the three years from 2016 to 2019.

The key performance indicators measuring the Board's success against the Plan are incorporated into the Board's annual Operations Plan. The Operations Plan identifies specific outputs, activities and measures that will ensure the strategies of the Corporate Plan are achieved for one year of the Plan.

At the end of each financial year, overall performance against the Operations Plan's targets and the Corporate Plan's key result areas are reported to the Board and the community through the Board's Annual Report.



Strategic Direction: Effective Governance and Leadership

Strategy	1.1	Ensure accountability, fairness and transparency in the Board's decision-making and relationships with all its stakeholders.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	1.1.1	Hold Board meetings on a quarterly basis in public.	Four public meetings held per annum. Code of Meeting Practices is adhered to.	CEO / MBCS	
Action	1.1.2	Develop and implement appropriate policies and procedures to ensure decisions are merit based, transparent and defendable.	Policies and procedures reviewed in accordance with the schedule to ensure currency and completeness.	MBCS	
Action	1.1.3	Ensure all conflicts of interest of Board members and staff are declared and managed in accordance with the Board's Code of Conduct.	A record is kept of conflicts of interest declared. Declarations of Pecuniary Interests are completed on an annual basis.	MBCS	
Action	1.1.4	Ensure appropriate community engagement and consultation opportunities are provided so that community input to decisions and plans is obtained and considered.	Program of meetings and engagement opportunities undertaken. Community input to policy development is sought as appropriate.	CEO	
Action	1.1.5	Implement a level of delegated authority to ensure efficient and equitable organisational operations.	Appropriate delegations of authority are enacted to provide staff with sufficient powers to enforce the LHI Act and Regulation and other legislation administered by the Board.	CEO	
Strategy	1.2	Ensure corporate governance practices meet legislative requirements.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Strategy Action	1.2.1		ARC meets four times per year. Internal audit work plan completed on time.	-	-
		legislative requirements. Work with the Audit and Review Committee (ARC)	ARC meets four times per year.	Officer	-
Action	1.2.1	legislative requirements. Work with the Audit and Review Committee (ARC) and auditors. Provide relevant and timely advice to Government	ARC meets four times per year. Internal audit work plan completed on time. Prepare briefings and submissions as required to the	Officer CEO / MBCS	-
Action	1.2.1	legislative requirements. Work with the Audit and Review Committee (ARC) and auditors. Provide relevant and timely advice to Government on matters affecting the management of the island.	ARC meets four times per year. Internal audit work plan completed on time. Prepare briefings and submissions as required to the Minister, DPE, OLG and Treasury as appropriate.	Officer CEO / MBCS CEO / MBCS Responsible	December 2016 Half Yearly Review
Action Action Strategy	1.2.1 1.2.2 1.3	legislative requirements. Work with the Audit and Review Committee (ARC) and auditors. Provide relevant and timely advice to Government on matters affecting the management of the island. Work to achieve long term financial sustainability. Work with the NSW Government on a sustainable	ARC meets four times per year. Internal audit work plan completed on time. Prepare briefings and submissions as required to the Minister, DPE, OLG and Treasury as appropriate. KPI / Measure Agreement on sustainable funding is achieved. Achieve adequate capital funding to fund the total Asset Management Plan. Achieve recurrent funding that will allow the Board to meet its objectives in accordance with the Corporate	Officer CEO / MBCS CEO / MBCS Responsible Officer	December 2016 Half Yearly Review

Action	1.3.4	Seek ongoing funding from the NSW Government for the care and maintenance of the Permanent Part Preserve (PPP)	Agreement with the NSW Government on ongoing funding is achieved.	CHAIR	
Strategy	1.4	Ensure risks are properly managed.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	1.4.1	Implement the risk management policies and procedures.	Progress against the implementation of policies and procedures is reviewed quarterly.	MBCS	
Action	1.4.2	Regularly review the Risk Register.	Risk Register is reviewed quarterly.	CEO	
Action	1.4.3	Develop Risk Treatment Plans (RTPs) to manage risk impacts.	RTPs tabled at management meetings.	CEO / Unit Managers	
Action	1.4.4	Develop and implement a Business Continuity Plan to ensure the continuance of Board services should a significant event occur.	Business Continuity Plan completed and tested by end June 2017.	CEO	
Strategy	1.5	Provide internal IT and communications systems which are secure, stable and support business operations.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	1.5.1	Implement ICT policies and procedures.	Projects completed on time and on budget.	MBCS	
Action	1.5.2	Support and maintain corporate ICT.	Systems operational 99% of the time during business hours.	MBCS	
Strategy	1.6	Provide efficient and effective records management and information management.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	1.6.1	Review and implement policies and procedures regarding information management.	100% of staff informed of record keeping responsibilities.	MBCS	
Action	1.6.2	Implement the TRIM electronic records management system.	TRIM is implemented and relevant staff are trained by mid-2017.	MBCS	
Strategy	1.7	Ensure effective management of human resources.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	1.7.1	Ensure organisational structure is aligned to strategic priorities and legislative requirements and is adequately resourced.	Review undertaken annually.	CEO	
Action	1.7.2	Attract, develop and retain an effective workforce that delivers required outcomes.	Required recruitment process implemented. Training programs provided in line with the training budget.	CEO / Unit Managers	
Action	1.7.3	Provide workplaces that ensure the health, safety and welfare of employees.	Risk Management Policy and Guidelines and all associated policies and procedures implemented and reviewed at appropriate intervals. WH&S Management Plan reviewed annually. Incidents and injuries are reviewed. Safe work procedures and training requirements are in place.	CEO / Unit Managers	

Action	1.7.4	Ensure that Work and Development Plans are	Work and Development Plans are completed annually,	CEO / Unit	
		completed for all staff.	including Customer Service Objectives.	Managers	
Action	1.7.5	Review and implement actions from the Workforce	Establish a Mechanic apprenticeship for 2017/18.	CEO / Unit	
		Plan 2015-18.	Create a database of volunteers in appropriate areas.	Managers	
			Develop a training calendar.		
Strategy	1.8	Provide timely and proactive communication to all	KPI / Measure	Responsible	Half Yearly Review
0,		stakeholders.	·	Officer	December 2016
Action	1.8.1	Develop and implement a Communication /	A Communication / Engagement Strategy in place by end	CEO / MECS	
		Community Engagement Strategy.	June 2017.	•	
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Action	1.8.2	Promote Board programs and services through	All materials prepared as required to a high standard.	CEO / Unit	
		meetings, advertising and written materials.		Managers	
Action	1.8.3	Maintain information on the Board's website.	Number of page views per month.	MBCS	
Strategy	1.9	Ensure high standards of customer service.	KPI / Measure	Responsible	Half Yearly Review
0,		3	·	Officer	December 2016
Action	1.9.1	Provide appropriate services efficiently and	Communication of and access to information improved.	CEO / Unit	
		effectively to the appropriate service level.	Efficiency and effectiveness of employees enhanced.	Managers	
Action	1.9.2	Develop and implement a Customer Service	Implement actions from the CSIP, including the following:	CEO / Unit	
		·	-		
		Improvement Plan (CSIP).	Develop a Social Media Policy and Procedures.	Managers	
		·	Develop a Social Media Policy and Procedures. Review and improve the Work and Development		
		·	Develop a Social Media Policy and Procedures. Review and improve the Work and Development Planning system		
		·	Develop a Social Media Policy and Procedures. Review and improve the Work and Development Planning system Source and implement appropriate customer service		
		·	Develop a Social Media Policy and Procedures. Review and improve the Work and Development Planning system Source and implement appropriate customer service training.		
		·	Develop a Social Media Policy and Procedures. Review and improve the Work and Development Planning system Source and implement appropriate customer service training. Review and update Guarantee of Service Policy.		
		·	Develop a Social Media Policy and Procedures. Review and improve the Work and Development Planning system Source and implement appropriate customer service training.		

Strategic Direction: Strong and Sustainable Economy

Strategy	2.1	Market the island as a tourist destination.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	2.1.1	Maintain and enhance the sustainable tourism 'product' through the provision of infrastructure, engineering and environmental services.	Direct feedback from community members and tourists.	CEO	
Action	2.1.2	Conduct visitor surveys as required, in conjunction with partners where appropriate, to inform product planning and destination marketing.	Visitor surveys conducted, analysed and assessed to inform product planning and destination marketing.	CEO	
Action	2.1.3	Work in partnership with LHI Tourism Association (LHITA), Destination NSW and other bodies in the ongoing implementation of the Destination Management Plan.	Regular consultation and information sharing takes place. Undertake a comprehensive visitor survey, jointly funded by Board, LHITA, QantasLink and Destination NSW.	CEO / MBCS	
Action	2.1.4	Promote the island in key source markets as resources allow.	Results of marketing activities are measured.	CEO / MBCS	
Action	2.1.5	Ensure website content is current and relevant.	Website content is refreshed and updated as necessary.	Manager Admin	
Action	2.1.6	Review the Destination Management Plan (DMP) annually, in consultation with the LHITA.	The DMP is reviewed by December 2016. Those parts of the DMP for which the Board is responsible are implemented.	CEO / Unit Managers	
Action	2.1.7	Ensure efficient and effective visitor information services are provided.	Ensure that the MOU between the Board and the LHITA is implemented in a manner that achieves this outcome.	CEO / Unit Managers	
Strategy	2.2	Foster an environment that supports sustainable economic development.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	2.2.1	Work with business regarding options and plans for sustainable business growth.	Support for local business development provided.	CEO	
Action	2.2.2	Pursue avenues of funding to implement economic development projects.	Funding opportunities reported.	MBCS	
Action	2.2.3	Develop and maintain contemporary policies to aid sustainable development.	Policies regularly reviewed and red tape reduced.	MBCS	
Action	2.2.4	Work with the Nursery lessees to support the development of a major tourist attraction.	Regular meetings held with the Nursery lessees and plans developed cooperatively.	MBCS	

Strategy	2.3	Effectively manage the Board's business enterprises.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	2.3.1	Operate the LHI Liquor Store.	Budgeted revenue and expenditure targets are met.	MBCS / Liquor Store Manager	
Action	2.3.2	Operate the island's airport and wharf facilities.	Airport and wharf facilities are operational when required and revenue and expenditure targets are met.	MIES / MBCS	
Strategy	2.4	Effectively manage the Board's commercial leases.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	2.4.1	Ensure that fair market rental return is achieved on commercial leases.	Commercial leases are revalued at least every three years and annual CPI increases are applied.	MBCS	
Strategy	2.5	Take action to ensure appropriate and adequate servicing of the island by a major airline.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	2.5.1	Support the Air Services Working Group and negotiate with Qantas and other airlines to ensure services to the island beyond 2018.	A new Regular Passenger Transport licence is put in place with Transport for NSW during 2017 for the period after 1 March 2018.	CEO / MBCS	
Action	2.5.2	Review the strategy for the future of the airport to enable continued air services.	The Air services Strategy is updated. Funding is obtained for a Feasibility Study into the extension of the runway.	CEO / MBCS	

Strategic Direction: Sound Infrastructure

Strategy	3.1	Provide sound asset management.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	3.1.1	Review and update TAMPLAN annually for Board approval in March.	TAMPLAN is updated annually to support Treasury CAPEX requests.	MIES	
Action	3.1.2	Develop procedures then undertake and document preventative maintenance on all assets to reduce failures.	Progress of TAMPLAN reported at quarterly Board meetings.	MIES	
Action	3.1.3	Plan for implementing Authority Asset Maintenance System (AMS).	Planning for implementing Authority AMS completed by end June 2017.	MIES / MBCS	
Action	3.1.7	Refurbish rainwater collection at Depot \ Admin, Gov House and Public Hall to maintain supply levels.	New steel panel tanks installed at Depot \ Admin and Public Hall by March 2017.	MIES	
Action	3.1.8	Finalise and implement walking track strategy.	Draft walking track strategy is placed on public exhibition by November 2016. Implement Commercial Tour Operator licensing system for Mt Gower Walk by 30 June 2017. Commence works to reopen Mutton Bird Point Walking Track	MECS	
Action	3.1.9	Replacement or new plant items.	New grader and utility vehicle purchased by end December 2016. Planning for punt, trailer & outboard purchase in place so that purchase can occur if funding available.	MIES	
Strategy	3.2	Maintain recreational facilities for visitor and community use.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	3.2.1	Maintain and improve standard of recreational facilities through regular maintenance.	Recreational facilities are available for use. Electric BBQs installed at Playground by end December 2016. New treated water supply system installed at North Bay by end December 2016. New gas BBQ installed at Lover's Bay by end December 2016.	MIES	
Action	3.2.2	Undertake improvements to Ned's Beach shed precinct.	Minor improvements and maintenance are carried by end June 2017, including new interps signage with Marine Parks.	MIES	
Action	3.2.3	Manage design and construction for Airport Terminal Upgrade.	Design and consent completed by end December 2016. Construction commenced prior to May 2017.	MIES	

Strategy	3.3	Operate Aerodrome safely for Regular Passenger Transport (RPT) services, medical evacuations and general aviation.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	3.3.1	Arrange Annual Aerodrome Technical inspections and participate in CASA audits.	Annual Aerodrome Technical Inspections and CASA Audits completed and recommendations acted on.	Aerodrome Controller / MIES	
Action	3.3.2	Review effectiveness Bird and Animal Hazard Management Plan annually.	Bird and Animal Hazard Management Plan effectiveness reviewed annually. Strategies to minimise risk of bird strike to aircraft implemented.	Aerodrome Controller / MIES	
Action	3.3.3	Review Aerodrome Manual annually.	Aerodrome Manual updated annually and distributed.	Aerodrome Controller / MIES	
Action	3.3.4	Hold Aerodrome emergency exercises annually.	Field aerodrome emergency exercise held in 2016/2017.	Aerodrome Controller / MIES	
Strategy	3.4	Maintain road network in good condition for all road users.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	3.4.1	Implement road renewals as per TAMPLAN, subject to budget allocations.	Road renewals completed on budget and within timeframes.	MIES	
Action	3.4.2	Regular routine road maintenance programmed.	Standard of roads is maintained or improved.	MIES	
Action	3.4.3	Lagoon Road from Public Hall to wharf is rehabilitated.	Work completed by March 2017.	MIES	
Strategy	3.5	Maintain wharf to serve shipping contractor, charter operators and visiting boats.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	3.5.1	Maintain wharf as per TAMPLAN.	Wharf is available 100% of the time when required and scheduled maintenance and upgrade works are carried out by end June 2017.	MIES	
Strategy	3.6	Maintain Board building and property assets.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	3.6.1	Maintain Board buildings as per TAMPLAN.	Buildings are maintained to an acceptable standard for commercial and residential purposes.	MIES	
Action	3.6.2	Replace old Electrical Workshop roof and guttering.	Electrical Workshop roof and gutter replaced by end December 2016.	MIES	
Action	3.6.3	Depot shed extension	Work designed and consented by end March 2017. Construction completed by end June 2017.	MECS	
Action	3.6.4	Research Facility extension	Work consented by end March 2017. Construction completed by end June 2017.	MECS	
Action	3.6.5	Hospital garage and morgue	Agreement reached with NSW Health on funding arrangements by end December 2016. Design completed by end June 2017.	CEO / MIES	

Strategy	3.7	Provide facilities in conjunction with Roads and Maritime Services for all Island boat users to safely and efficiently launch, retrieve and maintain boats in an environmentally sound manner.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	3.7.1	Undertake detailed design, planning and construction for upgraded boat ramp and launch/retrieval system.	Subject to Board decision, upgraded boat ramp and launch/retrieval system completed by 30 June 2017.	MIES	
Strategy	3.8	Provide reliable and efficient electricity supply.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	3.8.1	Maintain electricity generation and distribution system to provide a reliable and safe supply.	Unplanned electricity outages are maintained at 2015/2016 levels.	MIES	
Action	3.8.2	Hybrid Renewable Energy Project continues to progress.	ARENA funding agreement obligations met. Construction commences on Stage 1 Solar PV. Development consent, incl EPBC, obtained for Stage 2 Wind turbines.	MIES	
Action	3.8.3	Old Powerhouse substation removed.	Work completed by end December 2016.	MIES	
Strategy	3.9	Provide efficient and environmentally sustainable waste and recycling management services.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	3.9.1	Maintain and upgrade the Waste Management Facility using grants and allocations to improve composting and waste diversion.	Construction of new composting system completed by end June 2017. Compost is sold back to the community by end June 2017. > 90% of waste is diverted from landfill.	MIES	
Action	3.9.2	Maintain compliance with EPA licence for waste management, with regards to PRPs.	New wastewater system installed by 30 September 2016, or advice provided to EPA. New liquid/hazardous storage area constructed by 31 December 2016.	MIES	
			New compost system & sealed hardstand area for composting installed by 30 June 2017 or advice provided to EPA by October 2016.		

Strategic Direction: Outstanding Environment

Strategy	4.1	Protect and manage the environment in a manner that recognises and promotes the World Heritage values of the Island.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	4.1.1	Protect threatened species, populations and ecological communities, and their habitats through implementation of LHI Biodiversity Management Plan (BMP)	Significant progress against identified actions in the LHI Biodiversity Management Plan (BMP) is demonstrated. Review of the BMP is commenced.	MECS	
Action	4.1.2	In accordance with the LHI LEP, manage development in order to protect landscape values and scenic features.	Development applications and activities are assessed in accordance with relevant environmental legislation, policies, and procedures.	MECS	
Action	4.1.3	Contribute to World Heritage Area conservation by being a member of the Australian World Heritage Advisory Committee (AWHAC).	Active contribution to AWHAC.	CEO / MEWH	
Strategy	4.2	Work to prevent the introduction of exotic pests and pathogens to and eradicate exotic pests from the Island.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	4.2.1	Implement biosecurity measures to protect against the introduction of exotic pests and pathogens to the Island.	High priority actions identified in the LHI Biosecurity Strategy are implemented	MECS	
Action	4.2.2	Implement the LHI Weed Management Program.	Weed Management Strategy 2016 adopted. Demonstrated progress in landscape scale reduction/eradication of priority invasive weeds including the settlement area	CEO	
Action	4.2.3	Eradicate African Big-headed Ants from the Island	African Big-headed Ants are eradicated by December 2016 across Island apart from Lots 208 and 209 (to be monitored until April 2018)	MECS	
Action	4.2.4	Undertake Planning and Approvals stage of Rodent Eradication Program.	Planning and approval process to inform the implementation phase is complete The technical and non-technical feasibility of the program is demonstrated. Decision made to proceed/not proceed	CEO	
Strategy	4.3	Identify, protect and value heritage items.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	4.3.1	Assist the LHI Historical Association and the community with conservation of heritage items	Applications for community grants and external funding for heritage conservation initiatives are supported.	MECS	
Strategy	4.4	Improve awareness and understanding of the environment through education and research.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016

Action	4.4.1	Develop and implement a communication plan to increase awareness and understanding of the natural and cultural heritage values of the Island.	Communication plan completed and 25% of actions completed per year.	MEWH	
Action	4.4.2	Encourage appropriate environmental research which is of benefit to LHI environment and community.	Support high priority research. Survey of LHI Phasmid on Balls Pyramid completed.	MECS	
Action	4.4.3	Increase opportunities for the community to be involved in the protection of natural and cultural heritage.	Seek EOIs for community involvement in natural and cultural heritage protection projects	MECS / MEWH	
Strategy	4.5	Improve environmental sustainability of Board programs and operations (waste disposal; wastewater; renewable energy).	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	4.5.1	Develop better knowledge within the resident and tourist populations of the waste program objectives activities.	Waste data regularly updated at WMF, The Signal and/or Community Bulletin. Semi-permanent display on environmental sustainability located at the Museum.	MIES	
Action	4.5.2	Improve the sustainability of transport on the Island.	Electric vehicles can be conditionally registered on LHI on June 2017. Covered bike parking area installed at Board offices for staff and visitors.	MIES / CEO	
Action	4.5.3	Support community in implementing On-site Wastewater Strategy.	Demonstrated progress by commercial and residential leases to upgrade wastewater systems to meet Strategy deadlines.	MIES	
Action	4.5.4	Reduce the environmental impact of wastewater from Board properties.	All remaining Board properties which do not meet the Strategy are upgraded by end June 2017.	MIES	
Action	4.5.5	Undertake monitoring of LHI groundwater monitoring well network on annual basis and establish data management and reporting.	Data on quality and levels is collected and data is managed to enable sensible reporting.	MIES	
Action	4.5.6	Undertake two waste audits to monitor and record waste types and volumes received from the community.	Audits completed by end June 2017.	MIES	
Action	4.5.7	Develop a program to phase out the sale of plastic water bottles on the Island	Install one more water refill station on Island by end December 2016. Program prepared for review by Board and consultation with Island retailers by end June 2017.	MIES	

Strategic Direction: Responsible Land Management

Strategy	5.1	Design land use and development policies that balance environmental, economic and social outcomes.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	5.1.1	Finalise Stage 1 review of the LHI Local Environmental Plan (LEP)	Planning proposal to be placed on public exhibition by DPE by June 2017	MECS	
Action	5.1.2	Commence Stage 2 review of the LHI Local Environmental Plan (LEP)	Draft Planning proposal completed by June 2017.	MECS	
Action	5.1.3	Undertake a review of the Dwelling Allocation and Entitlement Policy	Dwelling Allocation and Entitlement Policy is reviewed	MECS	
Strategy	5.2	Provide an efficient and effective development planning and assessment service.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	5.2.1	Provide development planning and assessment through the services of an independent planning consultant.	Contract in place for planning and assessment services. Annual performance reviews of planning contract undertaken.	MECS	
Action	5.2.2	Undertake audits of planning and assessment systems and processing to monitor compliance with legislative and policy matters under the control of the Board.	Biannual report of planning and assessment systems and processes undertaken.	MECS	
Strategy	5.3	Provide an effective lease administration system.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	5.3.1	Administer leases in accordance with the Act.	All necessary administration undertaken accurately and in a timely manner.	MECS	
Action	5.3.2	Implement recommendations from independent review of land tenure and allocation arrangements.	Priority actions from Land Tenure and Land Allocation review are implemented.	MECS	
Strategy	5.4	Protect and manage the LHI Permanent Park Preserve in a manner that recognises the World Heritage values of the Island.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	5.4.1	Ensure LHI Permanent Park Preserve is managed in accordance with Plan of Management.	Establish Community Advisory Committee for PPP; Commence review of the LHI Permanent Park Preserve Plan of Management.	MECS	
Strategy	5.5	Protect and manage vacant crown lands.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	5.5.1	Develop a management plan for Stevens Reserve and other vacant crown lands.	Draft Stevens Reserve Management Plan is placed on public consultation by June 2017.	MECS	

Strategy	5.6	Rehabilitate degraded areas.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	5.6.1	Undertake rehabilitation of the Old Powerhouse Precinct to allow alternative uses.	Traffic improvements considered and planned for 2017/18. Post office relocation facilitated. Public Hall improvements considered as part of grant funding application in April 2017.	MIES	
Action	5.6.2	Finalise review of LHI Vegetation Rehabilitation Plan, 2003 and implement high priority actions.	Draft Vegetation Rehabilitation Plan placed on public exhibition by June 2017. Measurable improvement of condition and extent of priority sites.	MEWH	
Action	5.6.3	Implement LHI Coastal Study recommendations to manage erosion and recession risks.	Erosion protection works at Windy Point and near Pinetrees Boatshed are completed by end December 2016. Old Settlement Creek is managed to reduce erosion impacts on the northern edge. Cobby's Creeks is managed to reduce flooding impacts on properties and salt intrusion on the Sally Swamp area. If grant funding received, Sediment Tracing Study commenced.	MIES	

Strategic Direction: Strong and Engaged Community

Strategy	6.1	Plan for appropriate services for the community.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	6.1.1	Support a whole of government approach to the provision of health, education and other services.	Meetings held with NSW Health, RMS, Police, SES and RFS every 12 months.	SMT	
Strategy	6.2	Improve relationship with the community through engagement and consultation.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	6.2.1	Develop a communication / community engagement strategy to support an informed and involved community.	Communication / community engagement strategy developed by June 2017.	CEO / MECS	
Strategy	6.3	Provide professional environmental and public health services.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	6.3.1	Ensure compliance with public health standards for LHIB drinking water supplies, wastewater management and food safety.	Scheduled inspection and testing regime is implemented.	MECS / MIES	
Action	6.3.2	Prepare and implement Drinking Water Quality Assurance Program for Board supplies.	Drinking Water Quality Assurance Program implemented and documented fully.	MIES	
Strategy	6.4	Support capacity building in community organisations.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	6.4.1	Make funds available under Community Grants Program for activities or projects that benefit the LHI community.	Seek Expressions of Interest for Community Grants every 12 months in accordance with Policy.	MECS	
Strategy	6.5	Promote programs that provide for children.	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	6.5.1	Make funds available under LHI Scholarship Program to support the completion of tertiary education that contributes to LHI.	Provide \$10,000 pa to LHI Scholarship Program.	MECS	
Action	6.5.2	Support community events.	Develop event calendar and identify priority events for Board assistance.	MECS	
Strategy	6.6	Manage the Local Emergency Management Committee (LEMC) and Emergency Management Plan (EMPLAN).	KPI / Measure	Responsible Officer	Half Yearly Review December 2016
Action	6.6.1	Arrange quarterly meetings of LEMC.	Quarterly meetings of LEMC held.	LEMO / MIES	
Action	6.6.2	Implement EMPLAN as required and coordinate	EMPLAN implemented for any emergencies and	LEMO / MIES	
		annual review.	annual review completed.		

Board Meeting: September 2016 Agenda Number: 8 (ii) File Ref: VE0001

LORD HOWE ISLAND BOARD Business Paper

OPEN SESSION

<u>ITEM</u>

Cruise Ship Policy

RECOMMENDATION

It is recommended that:

- 1. The Board maintain the existing Cruise Ship Policy, and
- 2. the Policy be reviewed three years from now.

BACKGROUND

There is no restriction in the *Lord Howe Island Act, 1953* and supporting *Regulation* preventing tourists arriving on the Island by Cruise Ship or by aircraft. Lord Howe Island is a port under the *Ports and Maritime Administration Act, 1995* and, unless closed by the Harbour Master, operates in the same manner as any other port on the NSW coast.

At the September 2012 meeting the Board adopted the current Cruise Ship Policy (attached). However, in so doing, the Board resolved to review the dates in the policy for the definition of Shoulder, Low and Peak Season 'in two years'. The policy in its entirety is also overdue for review.

CURRENT POSITION

The dates in the policy for the definition of Shoulder, Low and Peak Season have not been reviewed since September 2012.

The dates applicable to each of the periods identified in the policy are as follows:

- Peak Season: 1 December to 31 January and Easter (one week prior to and one week following Easter),
- Shoulder season: 1 February to 30 April (excluding the two-week Easter Peak period), and 1 September to 30 November, and
- Low Season: 1 May to 31 August.

In order to inform consideration of appropriate dates for the definition of Shoulder, Low and Peak Season, visitor arrival numbers for financial year 2015/16 are provided below.

Jul	658
Aug	901
Sep	1,306
Oct	1,514
Nov	1,522
Dec	1,860
Jan	1,927
Feb	1,587
Mar	1,792
Apr	1,787
May	1,232
Jun	728
Total	16,811

In view of the above the existing dates for the definition of Shoulder, Low and Peak Season appear to be appropriate.

Since the policy was adopted in 2012 there have been no changes to external or internal factors to infer that amendment to the existing policy is required.

RECOMMENDATION

It is recommended that:

- 3. The Board maintain the existing Cruise Ship Policy, and
- 4. the Policy be reviewed three years from now.

Bill Monks	Manager Business and Corporate Services
Penny Holloway	Chief Executive Officer
	Bill Monks Penny Holloway

LORD HOWE ISLAND BOARD POLICY

TITLE	Cruise Ship Policy				
DATE ADOPTED	March 2005	AGENDA ITEM	9v March 2005		
CURRENT VERSION	September 2012	AGENDA ITEM	7i September 2012		
REVIEW	3 years	FILE REFERENCE	VE0001		
ASSOCIATED LEGISLATION	Lord Howe Island Act 1953 (NSW) Lord Howe Island Regulation 2014 (NSW) Environmental Planning and Assessment Act 1979 Marine Parks Act 1997 Marine Parks (Zoning Plan) Regulation 1999 Marine Parks Regulation 2009 Lord Howe Island Local Environment Plan 2010				
ASSOCIATED POLICIES	Lord Howe Island Marine Park Operational Plan 2004				

1 Introduction

1.1 Title and Commencement

This policy is titled Lord Howe Island Board Cruise Ship Policy. The policy was adopted by the Lord Howe Island Board (LHIB) at its September 2012 meeting. It replaces the previous document titled Lord Howe Island Board Cruise Ship Guidelines that was first adopted in March 2005.

1.2 Purpose of the Policy

The purpose of the policy is to provide a clear framework to guide the Board in determining applications from cruise ship operators to disembark passengers on the island. The provisions of the policy have been developed to minimise impacts of cruise ship visitation on the island's environment, infrastructure, residents and visitors and to satisfy the Board's regulatory responsibilities.

1.3 Objectives and Coverage of the Policy

The objectives of this policy are:

- a) Define the criteria used by the Board to assess applications from cruise ships operators to visit/disembark Lord Howe Island;
- b) Assist cruise ship operators to plan and apply for relevant approvals to visit/disembark the island;
- c) To minimise the impact of cruise ship visits on the islands unique ecosystems and limited infrastructure;
- d) To minimise the impact of cruise ship visits on the quality of the island-accommodated visitor holiday;

e) To manage cruise ship visitation in accordance with the requirements and objectives of the relevant legislation and planning instruments.

The Policy is applicable to all proposed landings on the island of vessel passengers by commercial cruise ships operators.

The Policy does not apply in the following circumstances:

- a) Any cruise ship that does not propose to disembark passengers on the island but has obtained approval from Marine Parks Authority (MPA) to anchor in one of the six MPA roadstead's.
- b) Innocent passage of any cruise ship through Lord Howe Island waters.
- c) Visits by Navy, Customs and Police vessels.

1.4 Background to the Policy

Lord Howe Island has an exceptional diversity of spectacular landscapes and unique ecosystems. In recognition of the island's environmental significance Lord Howe Island was listed as a UNESCO World Heritage site in 1982. In recognition of this significant and fragile environment regulatory measures are in place to minimise the current impact and future growth of activities on the island that may affect the island's World Heritage environment. The *Lord Howe Island Act 1953* (LHI Act 1953) enables the Board to control tourist trade and to regulate business activity on the island. The Policy provides a framework to satisfy the regulatory responsibilities in relation to tourist visitation.

The Marine Parks Act 1997 (MPA Act 1997) allows the ministers to regulate commercial activities (ie cruise ship visitation) in NSW Marine Parks. The Marine parks (Zoning Plans) Regulation 1999 prohibits all vessels over 25 metres anchoring within Lord Howe Island Marine Park except at the six allocated roadstead's.

2 Policy Statement

The disembarkation of passengers by cruise ship operators onto the island is deemed by the Board to be a commercial activity requiring consent under section 49 of the *Lord Howe Island Regulation 2014* (LHI Regulation 2014). The Board shall consider any application for a cruise ship visit, required under s49, in accordance with the guidelines provided in the policy.

Operators proposing to include Lord Howe Island on a trip itinerary must obtain the relevant approvals from Board prior to public promotion of a visit to Lord Howe Island. To seek approval a proponent must formally apply to the Board providing details of the proposed visit. Proposals must demonstrate satisfaction of the provisions of the policy.

3 Guidelines

All applications must include information to demonstrate compliance with the following criteria:

- a) Proposals must address all criteria outlined in the policy to enable the Board to assess the application.
- b) Approval may only be issued for cruise ships visits that involve the disembarkation of no more than 80 persons per visit.
- c) The maximum duration of stay on the island is eight hours.
- d) No approvals will be issued for a cruise ship to visit the island during NSW school holiday periods or the peak season as defined above.

- e) The Board will only consider approving applications for disembarkation during the shoulder and low season (excluding NSW School Holidays). The dates applicable to each of the periods identified in the policy are as follows:
 - Shoulder season: 1st February to 30th April and 1st September to 30th November
 - Low Season: 1st May to 31st August
 - Peak Season: 1st December to 31st January and Easter (one week prior to and one week following Easter)
- f) The Board may approve a maximum of six cruise ship visits per annum restricted to a maximum of two per shoulder season and four during low season each year.
- g) No staff or crew are permitted ashore except in a work capacity.
- h) The operator must demonstrate to the Board a proven history of successful operation in similar environmental and social contexts and is able to demonstrate compliance with all best practice standards for the operation of ship based tourism in sensitive natural and cultural environments.

4 Activities

All on shore activities to be undertaken as part of an organised tour run by a local tourism operator local licenced under section 49 of the LHI Regulation 2014.

All water based activities within the marine park, except transport directly to and from the cruise ship and island, will be undertaken as part of an organised tour, run by an approved local tour operator being the holder of a LHIB Business Licence and MPA Permit where activities occur within the Lord Howe Island Marine Park.

5 Prior to Arrival

Prior to arrival of any approved voyage the operator must notify the Board 24 hours prior to the scheduled arrival of the vessel to the island.

The Operator will provide all passengers, prior to disembarking, with any material which the Board and/or the MPA deem necessary to ensure that passengers are aware of issues such as natural environment sensitivity, quarantine issues, waste and water management etc.

Where Lord Howe Island is the first port of call in Australia waters, operators will ensure that all customs and quarantine requirements are met and completed prior to passengers leaving the vessel. The operator will also comply with any additional quarantine requirement imposed by the Board, provided to the Operator at least 14 days prior to arrival at Lord Howe Island.

6 Other Approvals

The operator shall obtain all relevant approvals including from the NSW MPA. Any approval issued by the Board or MPA will be subject to the operator complying with relevant conditions included in the approval issued by the other agency.

7 Fees and Charges

The cruise ship operator shall pay the standard fee for a licence issued under section 49 of the LHI Regulation 2014. The Operator shall pay, per head, a levy being an amount equivalent to Lord Howe

Island Passenger Levy and Lord Howe Island Environmental Levy as approved by the Board under the published LHIB Fees & Charges Schedule.

8 Right to Vary or Revoke

The LHIB reserves the right to vary or revoke this policy at any time in consultation with relevant parties.



Board Meeting: September 2016 Agenda Number: 8 (iii) File Ref: AD0069

LORD HOWE ISLAND BOARD Business Paper

OPEN SESSION

<u>ITEM</u>

Protected Disclosures Policy

RECOMMENDATION

It is recommended that the Board resolve to appoint the Board's chairperson, Ms Sonja Stewart, to the position of Principal Officer in accordance with the *Protected Disclosures Act* 1994.

BACKGROUND

In 2009 a corporate governance consultant, Mitchell Morley, identified that the Board did not have an adequate policy in place for dealing with protected disclosures made under the provisions of the *Protected Disclosures Act 1994*. Consequently a policy was developed, and approved at the September 2009 Board meeting.

The object of the Act is to encourage and facilitate the disclosure, in the public interest, of corrupt conduct, maladministration, serious and substantial waste, government information contravention and local government pecuniary interest contravention in the public sector by:

- (a) enhancing and augmenting established procedures for making disclosures concerning such matters,
- (b) protecting persons from reprisals that might otherwise be inflicted on them because of those disclosures, and
- (c) providing for those disclosures to be properly investigated and dealt with.

CURRENT POSITION

At the September 2009 Board meeting it was resolved to appoint the chairperson of the Board as Principal Officer.

As Ms Sonja Stewart is now the chairperson, the Policy (attached) requires updating to reflect her appointment, should the Board so resolve, to the position of Principal Officer.

RECOMMENDATION

It is recommended that the Board resolve to appoint the Board's chairperson, Ms Sonja Stewart, to the position of Principal Officer in accordance with the *Protected Disclosures Act* 1994.

Prepared	Bill Monks	Manager Business and Corporate Services	
Endorsed	Penny Holloway	Chief Executive Officer	

Lord Howe Island Board POLICY

TITLE	LHIB Protected Disclosures Policy		
DATE ADOPTED	September 2009	AGENDA ITEM	11(i)
CURRENT VERSION	November 2012	AGENDA ITEM	7 (iv)
REVIEW	Every two years	FILE REFERENCE	AD0069
ASSOCIATED LEGISLATION	Public Interest Disclosures Act 1994 (NSW) Lord Howe Island Act 1953 (NSW) Independent Commission Against Corruption Act 1988		
ASSOCIATED POLICIES	Code of Conduct for Board Members and Officials Code of Ethics and Conduct for NSW Government Sector Employees Fraud and Corruption Prevention Policy		

1. SUPPORT FOR PEOPLE WHO MAKE DISCLOSURES

The Lord Howe Island Board does not tolerate corrupt conduct, maladministration or serious and substantial waste of public money.

The Lord Howe Island Board is committed to the aims and objectives of the *Public Interest Disclosures Act*. It recognises the value and importance of contributions of staff to enhance administrative and management practices and strongly supports disclosures being made by staff who disclose corrupt conduct, maladministration, or serious and substantial waste of public money.

The Lord Howe Island Board will take all reasonable steps to provide protection to staff who make such disclosures from any detrimental action in reprisal for the making of the disclosure.

2. PURPOSE OF THE POLICY

This policy establishes an internal reporting system for the reporting of disclosures of corrupt conduct, maladministration or serious and substantial waste of public money by the Lord Howe Island Board or its staff. The system enables such internal disclosures to be made to the Disclosure Coordinator or a nominated disclosure officer, as an alternative to the Principal Officer.

This policy is designed to complement normal communication channels between supervisors and staff. Staff are encouraged to continue to raise appropriate matters at any time with their supervisors, but as an alternative have the option of making a protected disclosures in accordance with this policy.

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3. OBJECT OF THE PUBLIC INTEREST DISCLOSURES ACT 1994

The object of *Public Interest Disclosures Act 1994* (the Act) is to encourage and facilitate the disclosure, in the public interest, of corrupt conduct, maladministration, serious and substantial waste, government information contravention and local government pecuniary interest contravention by:

- enhancing and augmenting established procedures for making disclosures concerning such matters, and
- protecting persons from reprisals that might otherwise be inflicted on them because of those disclosures, and
- providing for those disclosures to be properly investigated and dealt with.

4. DEFINITIONS

Three key concepts in the internal reporting system are 'corrupt conduct' (4.1), 'maladministration' (4.2) and 'serious and substantial waste of public money' (4.3).

4.1 Corrupt Conduct

Corrupt conduct is defined in s.8 and 9 of the *Independent Commission Against Corruption Act* 1988 (ICAC Act). The definition used in the Act is intentionally quite broad. Corrupt conduct is defined to include the dishonest or partial exercise of official functions by a public official. Conduct of a person who is not a public official, when it adversely affects the impartial or honest exercise of official functions by a public official, also comes within the definition.

Corrupt conduct can take many forms. Taking or offering bribes, public officials dishonestly using influence, blackmail, fraud, election bribery and illegal gambling are some examples.

4.2 Maladministration

Maladministration is defined in the *Public Interest Disclosures Act* as conduct that involves action or inaction of a **serious nature** that is:

- contrary to law, or
- unreasonable, unjust, oppressive or improperly discriminatory, or
- based wholly or partly on improper motives (s. 11).

The conduct covered by these terms includes:

• contrary to law, e.g.:

- o a decision or action contrary to law
- o a decision or action *ultra vires* (i.e. the decision-maker had no power to make the decision or to do the act)
- a decision or action contrary to lawful and reasonable orders from people or agencies with authority to make or give such orders
- o a breach of natural justice or procedural fairness
- improperly exercising a delegated power (e.g. a decision or action not authorised by a delegation or acting under the direction of another)
- unauthorised disclosure of confidential information
- a decision or action induced or affected by fraud

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• unreasonable, e.g.:

- a decision or action inconsistent with adopted guidelines or policies or with a decision or action which involves similar facts or circumstances not justified by any evidence, or so unreasonable that no reasonable person could so decide or act (i.e. irrational)
- o an arbitrary, partial, unfair or inequitable decision or action
- a policy that is applied inflexibly and without regard to the merits
 of an individual case
- a decision or action that does not take into account all relevant considerations or that takes into account irrelevant considerations
- o serious delays in making a decision or taking action
- o failing to give notice of rights
- o giving wrong, inaccurate or misleading advice leading to detriment
- o failing to apply the law
- o failing to rectify identified mistakes, errors, oversights or improprieties
- o a decision or action based on incorrect or misinterpreted information
- failing to properly investigate

• unjust, e.g.:

- o a decision or action not justified by any evidence or that is unreasonable
- o a partial, unfair, inequitable or unconscionable decision or action

• oppressive, e.g.:

- o an unconscionable decision or action
- where the means used are not reasonably proportional to the ends to be achieved
- o an abuse of power, intimidation or harassment

• improperly discriminatory, e.g.:

- the inconsistent application of a law, policy or practices when there is no reasonable, justifiable or appropriate reason to do so
- applying a distinction not authorised by law, or failing to make a distinction which is authorised or required by law

based wholly or partly on improper motives, e.g.:

- a decision or action for a purpose other than that for which a power was conferred (i.e. in order to achieve a particular outcome)
- o a conflict of interest
- bad faith or dishonesty
- o seeking or accepting gifts or benefits in connection with performance of official duties
- o misusing public property, official services or facilities.

4.3 Serious and substantial waste

The term serious and substantial waste is not defined in the *Act*. The Auditor-General provides the following working definition:

"Serious and substantial waste refers to the uneconomical, inefficient or ineffective use of resources, authorised or unauthorised, which results in a loss/wastage of public funds/resources".

In addressing any complaint of serious and substantial waste regard will be had to the nature and materiality of the waste.

The following delineation of the definition of serious and substantial waste may be of assistance to public officials and/or public authorities.

Types:

<u>Absolute.</u> Serious and substantial waste might be regarded in absolute terms where the waste is regarded as significant, for example \$200,000.

<u>Systemic.</u> The waste indicates a pattern which results from a system weakness within public authorities.

<u>Material</u>. The serious and substantial waste is/was material in terms of the public authority's expenditure or a particular item of expenditure or is/was material to such an extent so as to affect a public authority's capacity to perform its primary functions.

Material By Nature Not Amount

The serious and substantial waste may not be material in financial terms but may be significant by nature. That is it may be improper or inappropriate. [alternatively, this type of waste may constitute 'maladministration' as defined in the *Act*]

Note: It is possible that in assessing the seriousness of waste or administrative conduct for the purposes of whether either is covered by the Act, differences in the size, budgets, responsibilities of agencies may be taken into account (what is serious for a small agency may not be so serious for a large agency).

Waste can take many forms, for example:

- misappropriation or misuse of public property,
- the purchase of unnecessary or inadequate goods and services,
- too many staff being employed in a particular area, incurring costs which might otherwise have been avoided,
- staff being remunerated for skills that they do not have, but are required to have under the terms or conditions of their employment,
- programs not achieving their objectives and therefore the costs being clearly ineffective and inefficient.
- Waste can result from such things as:
- the absence of appropriate safeguards to prevent the theft or misuse of public property,
- purchasing procedures and practices which fail to ensure that goods and services are necessary and adequate for their intended purpose, and
- purchasing practices where the lowest price is not obtained for comparable goods or services.

5. WHAT DISCLOSURES ARE PROTECTED UNDER THE ACT?

5.1 What disclosures are protected?

Disclosures are protected under the Act if they:

are made:

- o in accordance with this internal reporting policy, or
- to the Principal Officer of the Lord Howe Island Board or
- o to one of the investigating authorities nominated in the Act, and
- show or tend to show corrupt conduct, maladministration, or serious and substantial waste of public money by the Lord Howe Island Board or any of its staff or Board members, and
- are made voluntarily.

5.2 What disclosures are not protected?

A disclosure is not protected under the Act if it is made by a public official in the exercise of a duty imposed by or under an Act.

Protection is also not available for disclosures which:

- are made frivolously or vexatiously,
- primarily question the merits of government policy, or
- are made solely or substantially with the motive of avoiding dismissal or other disciplinary action.

It is an offence to wilfully make a false or misleading statement when making a disclosure.

6. REPORTING UNDER THE INTERNAL REPORTING SYSTEM

The people or positions to whom internal disclosures can be made in accordance with the Act and this policy are:

- the Disclosure Coordinator, Ms Penny Holloway, Lord Howe Island Board Chief Executive Officer. Telephone (02) 65632066;
- the nominated Disclosure Officer, Ms Jemima Spivey, Lord Howe Island Board Administration Manager. Telephone (02) 65632066; and
- the Principal Officer, Ms Sonja Stewart, Lord Howe Island Board Chair and Deputy Secretary, Government, Corporate and Regional Coordination Group, Department of Premier and Cabinet. Telephone (02) 99954163.

Where a person contemplating making a disclosure is concerned about publicly approaching the Disclosure Coordinator or the nominated Disclosure Officer (or the Principal Officer) they can request a meeting in a discreet location away from the workplace.

7. ROLES AND RESPONSIBILITIES

This internal reporting policy places responsibilities upon staff at all levels within the Lord Howe Island Board.

7.1 Staff

Staff are encouraged to report known or suspected incidences of corrupt conduct, maladministration or serious and substantial waste in accordance with this policy.

All staff of the Lord Howe Island Board have an important role to play in supporting those who have made legitimate disclosures. They must abstain from any activity that is or could be perceived to be victimisation or harassment of any person who has made a disclosure.

Further, they should protect and maintain the confidentiality of any person they know or suspect to have made disclosures.

7.2 Nominated Disclosure Officers

Nominated disclosure officers are responsible for receiving, forwarding and/or acting upon disclosures made in accordance with the policy. Nominated disclosure officers will:

- clearly explain to the person making a disclosure what will happen in relation to the information received,
- when requested, make arrangements to ensure that disclosures can be made privately and discreetly (if necessary away from the workplace),
- put in writing and date any disclosures received orally (and have the person making the disclosure sign the document),
- deal with disclosures impartially,
- forward disclosures to Ms Penny Holloway, the Disclosure Coordinator, or Ms Sonja Stewart, Principal Officer, for assessment,
- take all necessary and reasonable steps to ensure that the identity of the person who
 has made a disclosure, and any person who is the subject of a disclosure, are kept
 confidential, and
- support any person who has made a disclosure and protect them from victimisation, harassment or any other form of reprisal.

7.3 Disclosure Coordinator

The Disclosure Coordinator has a pivotal position in the internal reporting system and acts as a clearing house for disclosures. The Disclosure Coordinator will:

- provide an alternative internal reporting channel to nominated disclosure officers and to the Principal Officer, Ms Sonja Stewart;
- impartially assess each disclosure to determine:
 - whether the disclosure appears to be a protected disclosure within the meaning of the Act, and
 - o the appropriate action to be taken in relation to the disclosure, for example:
 - no action/decline,
 - the appropriate person to take responsibility for dealing with the disclosure,
 - preliminary or informal investigation,
 - formal investigation,
 - prosecution or disciplinary action,
 - referral to an investigating authority for investigation or other appropriate action, or
 - referral to the Police Service (if a criminal matter) or the ICAC (if the matter concerns corrupt conduct).
- consult with the Principal Officer
- be responsible for carrying out or coordinating any internal investigation arising out of a disclosure, subject to the direction of the Principal Officer in carrying out their functions,

- report to the Principal Officer on the findings of any investigation and recommended remedial action,
- take all necessary and reasonable steps to ensure that the identity of the person who
 has made a disclosure, and any person who is the subject of a disclosure, are kept
 confidential, and
- support any person who has made a disclosure and protect them from victimisation, harassment or any other form of reprisal.
- report actual or suspected corrupt conduct to the Principal Officer in a timely manner to enable that officer to comply with the ICAC Act.

7.4 Principal Officer

Disclosures may be made direct to the Principal Officer, rather than by way of the internal reporting system established under this policy. The Principal Officer will:

- impartially assess each disclosure to determine:
 - whether the disclosure appears to be a protected disclosure within the meaning of the Act,
 - o the appropriate action to be taken in relation to the disclosure, for example:
 - no action/decline.
 - the appropriate person to take responsibility for dealing with the disclosure.
 - preliminary or informal investigation,
 - formal investigation,
 - prosecution or disciplinary action,
 - referral to an investigating authority for investigation or other appropriate action, or
 - referral to the Police Service (if a criminal matter) or the ICAC (if the matter concerns corrupt conduct),
- receive reports from the Disclosure Coordinator on the findings of any investigation and any recommendations for remedial action, and determine what action should be taken,
- take all necessary and reasonable steps to ensure that the identity of the person who
 has made a disclosure, and any person who is the subject of a disclosure, are kept
 confidential, and
- have primary responsibility for protecting any person who has made a disclosure, or provided information to any internal or external investigation of a disclosure, from victimisation, harassment or any other form of reprisal,
- be responsible for implementing organisational reform identified as necessary following investigation of a disclosure, and
- report criminal offences to the Police Service and actual or suspected corrupt conduct to ICAC (under s.11 of the ICAC Act).

8. ALTERNATIVE AVENUES FOR DISCLOSURES

Alternative avenues available to staff for making a protected disclosure under the Act (**other than** by means of the internal reporting system established under this policy for the purpose of the Act), are as follows:

- to the Principal Officer or
- to one of the investigating authorities under the Act (e.g. the Ombudsman, ICAC, Auditor-General, Police Integrity Commission (PIC), Inspector of the PIC or Director-General of the DPC), or
- to a journalist or a member of Parliament.

Disclosures made to a journalist or a member of Parliament will **only** be protected **if certain conditions** are **met**:

- the person making the disclosure to a journalist or member of Parliament must have already made substantially the same disclosure through the internal reporting system or to the Principal Officer or an investigating authority in accordance with the Act,
- the responsible officer must have reasonable grounds for believing that the disclosure is substantially true and disclosure must be substantially true, and
- the investigating authority, agency, staff or public official to whom the matter was originally referred has:
 - decided not to investigate the matter, or
 - decided to investigate the matter but not completed the investigation within six months of the original disclosure, or
 - investigated the matter but not recommended any action in respect of the matter, or
 - o failed to notify the person making the disclosure, within six months of the disclosure, of whether the matter is to be investigated.

9. RIGHTS OF A PERSON WHO IS THE SUBJECT OF A DISCLOSURE

- The rights of any person who is the subject of a disclosure will also be protected. In this regard:
- the confidentiality of the identity of any person who is the subject of a disclosure will be protected and maintained (where this is possible and reasonable),
- all disclosures will be assessed and acted on impartially, fairly and reasonably,
- responsible officers who receive a disclosure in accordance with this policy are obliged to:
 - protect and maintain the confidentiality of the identity of any person who is the subject of a disclosure,
 - o assess the disclosure impartially, and
 - act fairly towards any person who is the subject of a disclosure,
- all disclosures will be investigated as discreetly as possible, with a strong emphasis on maintaining the confidentiality of both the identity of the whistleblower and any person who is the subject of a disclosure,
- where investigations or other enquires do not substantiate a disclosure, the fact the
 investigation/enquiry has been carried out, the results of the investigation/enquiry, and
 the identity of any person who is the subject of a disclosure will be kept confidential,
 unless they request otherwise.
- a person who is the subject of a disclosure (whether a protected disclosure under the Act or otherwise) which is investigated by or on behalf of an agency, has the right to be:

- o informed as to the substance of the allegations,
- informed as to the substance of any adverse comment that may be included in a report/memorandum/letter or the like arising out of any such investigation, and
- o given a reasonable opportunity to put their case (either orally or in writing) to the people carrying out the investigation for or on behalf of the agency,

before any final decision/determination/report/memorandum/letter or the like is made,

- where the allegations in a disclosure have been investigated by or on behalf of an agency, and the person who is the subject of any allegations is aware of the substance of the allegations, the substance of any adverse comment, or the fact of the investigation, they should be formally advised as to the outcome of the investigation, regardless of the outcome, and
- where the allegations contained in a disclosure are clearly wrong or unsubstantiated, the person who is the subject of a disclosure is entitled to the support of the agency and its senior management (the nature of that support, i.e. what is reasonable and appropriate, would depend on the circumstances of the case e.g. it could include a public statement of support or a letter setting out the agency's views that the allegations were either clearly wrong or unsubstantiated).

10. PROTECTION AVAILABLE UNDER THE ACT

10.1 Protection against reprisals

The Act provides protection by imposing penalties on a person who takes detrimental action against another person substantially in reprisal for a protected disclosure. Penalties can be imposed by means of fines and imprisonment.

Detrimental action means action causing, comprising or involving any of the following:

- injury, damage or loss,
- intimidation or harassment,
- discrimination, disadvantage or adverse treatment in relation to employment,
- dismissal from, or prejudice in, employment, or
- disciplinary proceeding.

In any such proceedings the whistleblower only needs to show that they made a protected disclosure and suffered detrimental action. It then lies on the defendant to prove that the detrimental action shown to have been taken against the whistleblower was **not** substantially in reprisal for the person making the protected disclosure.

Any member of staff who believes that detrimental action is being taken against them substantially in reprisal for the making of an internal disclosure in accordance with this policy should immediately bring the allegations to the attention of the Principal Officer, Ms Sonja Stewart.

If a member of staff who made an **internal disclosure** feels that such reprisals are not being effectively dealt with, they should contact the Ombudsman or the ICAC.

If an external disclosure was made to an investigating authority, the authority will either deal with the allegation or provide advice and guidance to the person concerned.

10.2 Protection against actions

The Act provides that a person is not subject to any liability for making a protected disclosure and no action, claim or demand may be taken or made of or against the person for making the disclosure. This provision has effect despite any duty of secrecy or confidentiality or any other restriction on disclosure by a public official.

A person who has made a protected disclosure has a defence of absolute privilege in proceedings for defamation.

A person who has made a protected disclosure is taken not to have committed any offence against an Act which imposes a duty to maintain confidentiality with respect to any information disclosed.

10.3 Confidentiality

The Act requires investigating authorities, agencies and public officials to whom protected disclosures are made or referred, not to disclose information that might identify or tend to identify any person who makes a disclosure. The exceptions to the confidentiality requirement are where:

- The person consents in writing to the disclosure of that information, or
- it is essential, having regard to the principles of natural justice, that the identifying information be disclosed to the person who is the subject of the disclosure, or
- the investigating authority, agency, staff or public official is of the opinion that disclosure of the identifying information is necessary to investigate the matter effectively or disclosure is otherwise in the public interest.

Decisions about natural justice, effective investigation and public interest will be made by the Principal Officer, Ms Sonja Stewart. In all cases the person who made the disclosure will be consulted before such a decision is made.

Note: If guidance is needed in relation to the requirements of natural justice, effective investigation and public interest, this may be sought from an investigating authority.

10.4 Government Information (Public Access) exemption

Under the *Government Information (Public Access) Act 2009*, a document is exempt from release if it contains matter the disclosure of which would disclose matters relating to a protected disclosure within the meaning of the Act.

11. NOTIFICATION OF ACTION TAKEN OR PROPOSED

Any person who makes a protected disclosure must be notified, within six months of the disclosure being made, of the action taken or proposed to be taken in respect of the disclosure.

If a disclosure is made in accordance with this policy, the Disclosure Coordinator is responsible for the six month notification to the person who made the disclosure, unless this responsibility has been retained by or allocated to another staff member by the Principal Officer, Ms Sonja Stewart.

The notification provided to the person who made the disclosure should contain sufficient information to demonstrate that adequate and appropriate action was taken, or is proposed to

be taken, in respect of the disclosure. This should include a statement of the reasons for the decision made or action taken in response to the disclosure.

The notification should include sufficient information to enable the person who made the disclosure to make an assessment as to whether the circumstances listed in section 19(3) (a)-(c) of the Act (relating to disclosures to members of Parliament and journalists) apply, i.e. whether:

- a decision was made not to investigate the matter, or
- a decision was made to investigate the matter, but the investigation was not completed within six months of the original decision being made, or
- a decision was made to investigate the matter, but the investigation has not been completed within six months of the original decision being made, or
- the matter was investigated but no recommendation was made for the taking of any action in respect of the matter.

One of the purposes of this is to give the whistleblower enough information to be able to properly assess whether it is appropriate or warranted to make a disclosure to an MP or journalist.

12. REVIEW

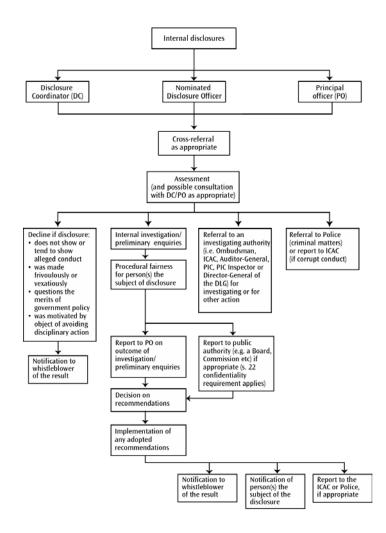
This policy shall be reviewed every two years to ensure that it meets the object of the legislation, and facilitates the making of disclosures under the Act.

13. APPROVAL

This policy shall be reviewed every two years to ensure that it meets the object of the legislation, and facilitates the making of disclosures under the Act.

CHIEF EXECUTIVE OFFICER	Date

MODEL INTERNAL REPORTING SYSTEM



Board Meeting: September 2016 Agenda Number: 8 (iv) File Ref: RO0001

LORD HOWE ISLAND BOARD Business Paper

OPEN SESSION

<u>ITEM</u>

Update on Geotechnical report for Muttonbird Point track.

RECOMMENDATION

It is recommended that the Board note the attached information.

BACKGROUND

In June 2011 a heavy rainfall event led to a landslide that affected the Muttonbird Point track. An assessment by Coffee Geotechnics in July 2011 recommended track closure and further assessment of options to reopen the track. In March 2012, the Board engaged consultants Regional Geotechnical Solutions to undertake a landslide geotechnical assessment for the site and to provide risk reduction recommendations. Regional Geotechnical Solutions recommended that the track be re-instated at a bench area approximately 12m upslope from the existing track within the landslide area. They also recommended that any excavation be supported by retaining walls. After funding was secured in March 2015, a helicopter transferred building materials to the landslide area in preparation for upgrade of the track.

In early April 2015 Lord Howe Island experienced a further significant rainfall event. Unfortunately this caused further landslide movement and resulted in some of the building materials for the track restoration works being buried and washed down slope. Following this event, the Board determined at the time that the landslide site was not stable enough to permit the re-opening of the track given the uncertainty of the stability of the site and associated risk to the public.

In view of the above sequence of events the Board engaged Jacobs to prepare a Quantitative Risk Assessment (QRA) and recommendations for risk reduction measures to assess the annualised lives risk for users of the track in the landslide area. Due consideration was given for an assessment of a range of scenarios to enable appropriate management decisions to be made for consideration of re-opening the track through the landslide area.

The QRA assessment was required to assess the following scenarios within the landslide area:

- Use of the current track alignment without any risk reduction management controls.
- Use of the current track alignment with risk reduction management controls. Such
 controls could involve physical site works and non-physical controls such as site
 closure during high rainfall periods and a combination of both physical and nonphysical risk reduction measures. With due consideration to the likelihood of ongoing

- movement of the landslide, physical controls under consideration would involve improvement to site drainage and erosion control such as re-vegetation given that scour erosion is a critical mode of instability at the site.
- Assessment of geotechnical implications for alternative walking track routes such as relocating the track upslope and around the back scarp head of the slide.

In July 2016 a draft QRA report was submitted with the final submitted in August 2016.

CURRENT POSITION

The QRA returned an acceptable risk to walkers only if:

- 1. Drainage works immediately above the track and above the slip site are installed;
- 2. That the track can be reinstated near to the original site; and
- 3. The Board is willing to temporarily close the track immediately following >=50mm rainfall event within the preceding 24 hour period to allow for track, slip and rain inspection/clearing.

The report identifies there is a risk of further movement although the risk to walkers can be managed through site remediation (drainage works upslope prior to opening the track), establishing a rainfall trigger (as stated above), adoption of a monitoring and maintenance schedule and that this information should be interpreted for the visiting walker as well as residents through signage and education. This approach accepts that there is a risk that further slips and interruptions are likely.

The Board administration has prepared a scope of works which is currently being costed. A budget of \$25,000 was allocated to this project at the 2016/17 budget to enable the works to commence. The Review of Environmental Factors (REF) for the previous Muttonbird Point track works will be amended with the new information.

It is anticipated that remediation works to enable the track to be re-opened will commence from November 2016.

RECOMMENDATION

It is recommended that the Boa	mended that the Board note the attached information.			
Prepared	David Kelly	Manager Environment & Community Services		
Endorsed	Penny Holloway	Chief Executive Officer		

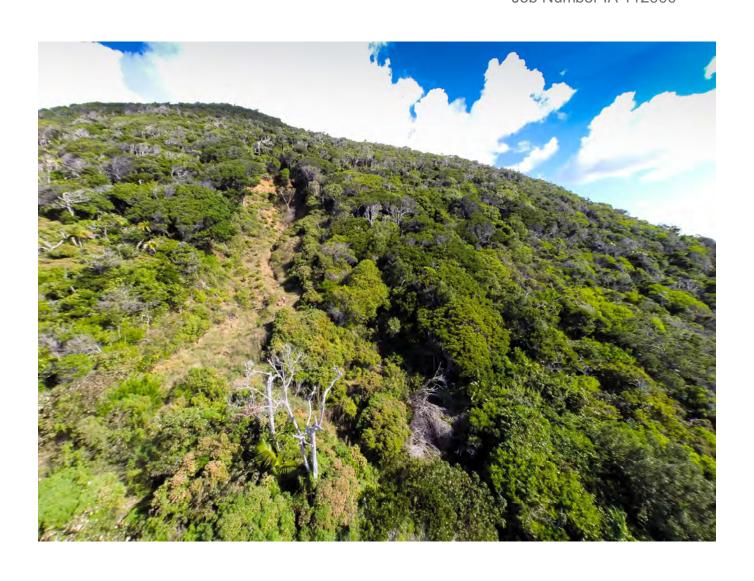
JACOBS

Quantitative Risk Assessment for Mutton Bird Point Walking Track Landslide and Recommendations for Risk Reduction Measures

Lord Howe Island Board

Report

R001B 22 August 2016 Job Number IA 112900



Mutton Bird Point Walking Track Landslide Assessment



Project no:

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Document history and status

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Revision	Date	Description	Ву	Review	Approved
А	29/06/2016	Draft Report	Steven Rosin	Scott Raynsford	Steven Rosin
В	22/8/2016	Report	Steven Rosin	Scott Raynsford	Steven Rosin

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Appendix A. Estimated Number of Daily Walking Track Users

Appendix B. Slope Topographical Plans and Sections

Appendix C. Site Photos

Appendix D. Selected Photos From Drone Aerial Photo Survey

Appendix E. QRA Input and Output Example

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Important note about your report

The sole purpose of this report and the associated services performed by Jacobs is to undertake a Quantitative Risk Assessment and to review risk reduction options for a recent landslide site along the Mutton Bird Track, Lord Howe Island. The scope specifically excludes any design advice associated with risk reduction advice. The work was undertaken for the Lord Howe Island Board in accordance with the scope of services set out in the Jacob's proposal and contract between Jacob's and the Lord Howe Island Board. The scope of services, as described in this report, was developed with the Lord Howe Island Board.

In preparing this report, Jacobs has relied upon, and presumed accurate, any information (or confirmation of the absence thereof) provided by the Lord Howe Island Board and/or from other sources. Except as otherwise stated in the report, Jacobs has not attempted to verify the accuracy or completeness of any such information. If the information is subsequently determined to be false, inaccurate or incomplete then it is possible that our observations and conclusions as expressed in this report may change.

Jacobs derived the data in this report from information sourced from the Lord Howe Island Board (if any) and/or available in the public domain at the time or times outlined in this report. The passage of time, manifestation of latent conditions or impacts of future events may require further examination of the project and subsequent data analysis, and re-evaluation of the data, findings, observations and conclusions expressed in this report. Jacobs has prepared this report in accordance with the usual care and thoroughness of the consulting profession, for the sole purpose described above and by reference to applicable standards, guidelines, procedures and practices at the date of issue of this report. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this report, to the extent permitted by law.

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1. Introduction

This report presents the results of a Quantitative Risk Assessment (QRA) prepared by Jacobs Group Australia Pty Ltd (Jacobs) for the Lord Howe Island Board (LHIB) for a landslide site along the Mutton Bird Point Walking Track to assess lives risk to users of the track. The scope of work for the report was defined in the LHIB brief (LHIB Contract 2016/03) and Jacobs proposal submitted 23 March 2016. The landslide site is shown in **Plate 1** below and is located along the eastern loop of the Mutton Bird Point Walking Track on the south east coast of the Island.

The site is roughly half way (approx. 300m) between the entrance to the track at Lagoon Road in the north near the air strip and Mutton Bird Point in the south. The track rises up steeply from Lagoon Road and then runs along the mid to lower north east facing slopes of Intermediate Hill. The natural slopes are typically of the order of 30 degrees towards the coast and are thickly vegetated. The track comprises a thin walking trail constructed predominantly along the contours with minor upslope and down slope deviations. It was originally constructed with very minor associated earthworks and is in compliance with Class 4 Walking Tracks (as per AS2156).

The landslide was triggered on the 1 and 2 June 2011 after a period of heavy rain which necessitated the closure of the track in the interests of public safety (refer to **Plate 2** below). At the time, over a 3 day period between 31 May and 2 June 2011, a total of 215mm was recorded. The slide was noted also at the time to have reached a maximum width of approximately 25m and total length of the order of 100m. It does not seem to have significantly changed in shape based on our recent inspections. It also appears that the slide was initiated along the alignment of a natural drainage path most probably exhibiting previous instability (refer to **Plate 3** below from a 2005 air photo). It is noted that on the 18 June 1996 the Island recorded 449mm of rain over a 24 hour period and many parts of the track were washed away including the subject landslide site (refer to **Plate 4** below).

In March 2012, LHIB engaged consultants Regional Geotechnical Solutions to undertake a landslide geotechnical assessment for the site and provided risk reduction recommendations. Regional Geotechnical Solutions recommended that the track be re-instated at a bench area approximately 12m upslope from the existing track within the landslide area. They also recommended that any excavation be supported by retaining walls. After funding was secured in March 2015, a helicopter transferred building materials to the landslide area in preparation for upgrade of the track.

In early April 2015 Lord Howe Island experienced a further significant rainfall event. Unfortunately this caused further landslide movement and resulted in some of the building materials for the track restoration works being buried and washed downslope. This period of significant rainfall occurred over a 2 day period on the 22 and 23 April 2015 where a combined rainfall of 220mm fell. Following this event, LHIB determined at the time that the landslide is not stable enough to permit the re-opening of the track given the uncertainty of the stability of the site and associated risk to the public.

In view of the above sequence of events in accordance with the LHIB requested Brief, a QRA was to be undertaken by Jacobs to assess the annualised lives risk for users of the track in the landslide area. Due consideration was to be given for an assessment of a range of scenarios to enable appropriate management decisions to be made for consideration of re-opening the track through the landslide area. The QRA assessment was required to assess the following scenarios within the landslide area;

- Use of the current track alignment without any risk reduction management controls.
- Use of the current track alignment with risk reduction management controls. Such controls could involve
 physical site works and non-physical controls such as site closure during high rainfall periods and a
 combination of both physical and non-physical risk reduction measures. With due consideration to the
 likelihood of ongoing movement of the landslide, physical controls under consideration would involve
 improvement to site drainage and erosion control such as re-vegetation given that scour erosion is a
 critical mode of instability at the site.



• Assessment of geotechnical implications for alternative walking track routes such as relocating the track upslope and around the back scarp head of the slide.

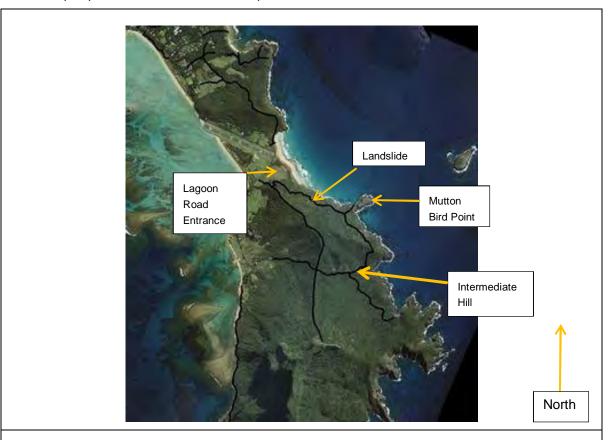


Plate 1 – Location of land slide along Mutton Bird Point Walking Track.



Plate 2- March 2013 Figure of Mutton Point Walking Track Showing Slip Location





Plate 3- 2005 Aerial Photo Showing Landslide Site

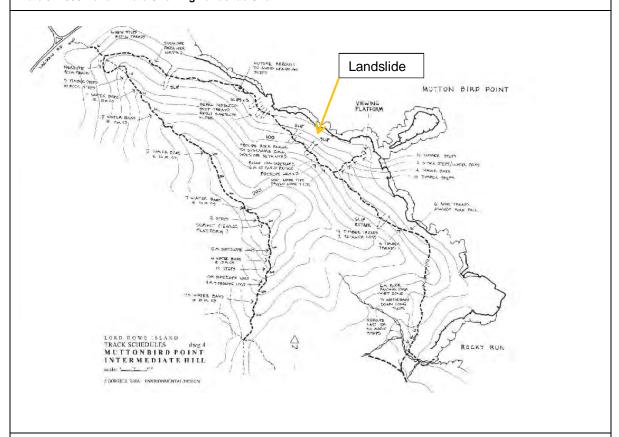


Plate 4- March 2013 Aerial Photo Showing Landslide Site



2. Scope of Tasks

Project co-ordination was provided by Megan Bennett on behalf of the LHIB to assist Steven Rosin, a Senior Principal Geotechnical Engineer based in Jacobs Sydney office who undertook the risk assessment. The following tasks were then completed as detailed below;

- A background review of available information supplied by LHIB was undertaken which included a range of past reports, correspondence, aerial photos and plans related to the site.
- The estimated number of daily users of the Mutton Bird Point Track required for the QRA was provided by LHIB based on historical survey data, other data and various assumptions and is provided in Appendix A.
- Prior to the site visit the Jacobs survey team compiled preliminary plans and sections of the landside
 area from LiDAR imagery in preparation for the field work. Following the site visit these plans were
 further developed in addition to interpretation of the landslide geomorphology as provided in **Appendix** B₋
- A site visit to the Island was undertaken by Steven Rosin from the 26 to the 29 March 2016. Steven Rosin undertook an initial reconnaissance inspection of the landside site on the 26 March 2016 with Megan Bennett and then with Christo Haselden of LHIB on the 27 March 2016. A more detailed inspection was undertaken on the 28 March 2016 in the company of Hank Bower of LHIB when 14 GPS locations were recorded in the field (Sites 1-14). The locations of the sites are provided in Appendix B in Figures B1 (General Layout for Area) and Figure B2 (Site Layout Plan). In addition to this, cross sections following a north east downslope trend of the slide are provided in Figure B3 (regional Section A-A) and Figure B4 (Local Section B-B). Cross slope sections are also provided respectively as Figures B5 to B8 for sections C-C to F-F as shown on Figure B2.
- Selected Site photos from various site locations (Sites 1-14) within the landslide have been provided in **Appendix C**.
- Selected high resolution land slide aerial photos from a drone survey undertaken by Sea to Summit Expeditions in early May 2016 are provided in **Appendix D.**
- Daily rainfall data from the LHI Aero weather station from November 1988 to Mid May 2016 (27.5 years of data) was provided by LHIB for analysis of rainfall trends as discussed further in **Section 5.3** of the report.
- A QRA assessment was undertaken for the track, based on information on the number of track users, the size and frequency of landslides and a range of other factors. Example inputs and outputs from the risk assessment are provided in **Appendix E** with the results discussed in **Section 9.0** of the report.
- On the basis of the results of the QRA, a range of slope risk reduction options are discussed in the Section 10.



3. General Geology

Lord Howe Island is the eroded remnant of a large shield volcano that erupted about 6.9 Ma ago. It is built adjacent to the boundary between the two major oceanographic features of the region, namely the Lord Howe Rise to the east and the Tasman Basin to the west. The Lord Howe Rise is a continental crustal block that became separated from the Australian continent by sea floor spreading of new oceanic crust that forms the deep Tasman Sea Basin to the west. This episode of sea floor spreading occurred during the late Cretaceous and early Tertiary period between 60-80 Ma ago. (Mc Dougall et al 1981).

The geological sketch map of Lord Howe Island showing the distribution of the major units is given in Plate 5.

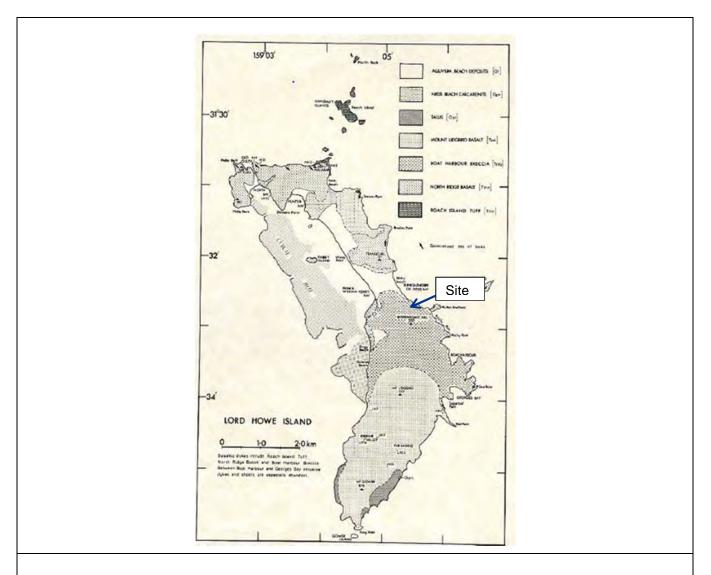


Plate 5 – Generalised Geological Map of Lord Howe Island (after McDougall et al 1981)

Apart from the locally erupted Roach Island Tuff, the oldest formation exposed on the island is the North Ridge basalts underlying most of the northern half of the island. These rocks consists of typical shield building basalt lava flows that dip about 5-8 degrees away from the eruptive centre located somewhere in the vicinity of Mount Lidgbird in the southern part of the island.



The Mutton Bird Point walking track area is underlain by the next oldest sequence referred to as the Boat Harbour Breccia (**Photo 1**) which is a massive and well indurated, unbedded formation that occupies the country between the south end of Blinky Beach and the northern slopes of Mount Lidgbird.



Photo 1- Exposure of Boat Harbour Breccia along West Coast, South of Salmon Beach (note angular large eruption fragments in finer ground mass)

These rocks are especially well exposed on the south east coast of the island. Their origin is uncertain but is most likely of an agglomeratic breccia formed within the main throat of the volcano near Mount Lidgird.

The older rocks on the island, namely the Roach Island Tuff, North Ridge Basalts and Boat Harbour Breccia are intruded by numerous steeply dipping basaltic dykes, many of which strike towards the Mount Lidgbird eruptive centre in the south. The dykes average 1-2m in width but may be up to 4m wide. Generally the dykes dip steeply towards the south west. On the east coast portion of the island the frequency of dykes increases dramatically and the dips decrease to about 30 degrees (to the SW) to form a basaltic sheet complex indicating proximity to the major vent.

Most of the dykes in the northern half of the island strike NW –SE whereas the dykes along the south-east coast to the north and south of Mutton Bird Point strike NE–SW radiating out from the location of eruption in the vicinity of Mount Lidgbird. This NE-SW trend is consistent with the orientation of the gully feature within the landslide area and a cove along the coast extension to this strike. This suggesting that the dykes are weaker and more erodible rock compared to the surrounding Boat Harbour Breccia and its presence is likely to control the presence of the drainage channel and thus the occurrence of the landside (refer Plate 3).

The Boat Harbour Breccia and associated sheet complex are overlain by the Mount Lidgird Basalts which occupy the southern one third of the island. Virtually the whole of the Mt Gower –Lidgbird Massive is composed of the Lidgbird Basalt an essentially flat lying sequence of lavas infilling a large caldera formed by the collapse of the summit of the shield volcano bring to a close the volcanic history of the island. Subsequently erosion has modified the volcano profoundly so that only small portions of the original structure remain.

On the island, the youngest formations are all less than a few millions years old and include the coral reef, beach and alluvial deposits and beach calcarenites. Of particular note are the landslide prone colluvial deposits

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(talus) that mantle the sloping areas throughout the island . This colluvium makes up the bulk of the landslide debris material as discussed in the next section.



4. Features Observed after April 2015 Landslide Event

Selected photos mainly from the inspections undertaken by Andrew Logan (LHIB) immediately following the April 2015 landslide event are presented below to provide an indication of the nature of instability experienced at the time.



Photo 2- Upslope (south west) of the backscarp of the slide in area of exposed hard rock. Note evidence of gravel and boulder fragments and vegetation debris washed down slope due to likely high run off from large catchment above.





Photo 3- Main backscarp area showing two scour channels incised into weathered bedrock (weathered soft dyke materials?) with overlying mantle of colluvium exposed within the back face of the scarp and transported boulder debris in the foreground.



Photo 4; Further downslope showing gravel, boulders and fine soils with vegetation washed down slope forming debris piles.





Photo 5; Exposure of north west face of main channel of slide showing upper colluvial mantle containing large boulders and underlying weathered bedrock in left bottom corner of photo.



Photo 6; Pile of debris containing a mixture of soil and boulders that were either washed down during the 2015 slide or more likely show erosion of debris materials associated with past larger debris slide events.





Photo 7 – Erosion channel formed in the vicinity of the walking track showing dislodged construction materials.



Photo 8- Timber beams and debris washed down slope by possibly 25m from proposed construction site to the lower walking track section to the north west.



5. General Geotechnical Conditions

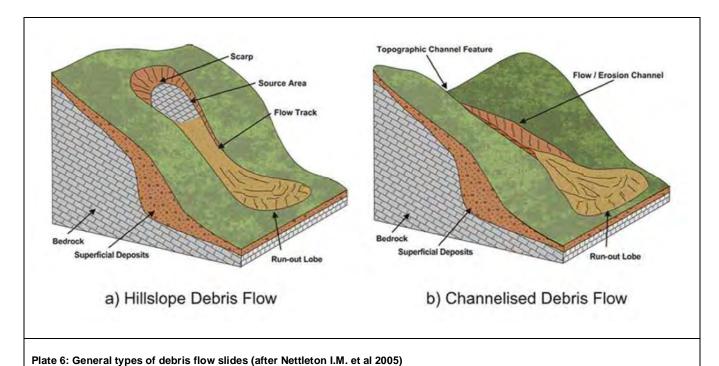
5.1 Landslide Failure Model

There are many different landslide types in nature. However, a review of the slope failure site features indicate in accordance with landslide terminology (Varnes,1996) that the mechanisms of failure is classified as a "debris flow slide". Debris flow slides usually comprise a mixture of fines (clay, silt and sand) and coarse (gravel, cobbles and boulders) with a variable quantity of water. They are often of a high density 60% to 80% by weight solids (Varnes 1978).

Debris flow are potentially very destructive as they can cause significant erosion of the substrate over which they flow, thereby increasing their sediment discharge and further increasing their erosive capabilities. The density and potentially rapid movement of the debris flow materials can yield a mass with significant energy which has the ability to pick up and transport large objects thereby giving rise to significant damage.

Two forms of debris flow are distinguishable, based on topographical and geological conditions desribed below and shown in **Plate 6.**

- Type a) Hillslope (open-slope) debris flows; These form with their path down valley slopes with the material eroded from the crest of the slide referred to as the "depletion zone" and the material deposited further down the slope within the runout lobe referred to as the "accumulation" zone.
- **Type b)** These follow existing channel type features; e.g. valleys, gullies, deprssions, and often have high densities and may be associated with larger volumes of water due to formal channel flows in larger catchments.



The Hillslope Debris flow slide Type (a) – Hillslope Debris Flow model best fits the Mutton Bird Point track slide site. The triggering events that result in the initiation and mobilisation of hillslope landslides is due to the



development of transient high pore-water pressures along pre-existing or potential rupture surfaces. High pore-water pressures are typically generated as a result of extreme antecedent (longer duration) rainfall conditions and intense rainfall storms, both of which can result in high groundwater levels and perched groundwater conditions. If the soil becomes fully saturated surface water flows may occur which can result in erosion and triggering of hillside debris flows.

5.2 Site Topography and Geotechnical Interpretation

With due consideration to the hill slope debris slide flow model mentioned in the previous section, the extent of the zone of "depletion" in the head scarp area and the zone of "accumulation" is presented in **Plate 7** below. In addition to this, a cross section geological model of the entire slope including the landslide mid slope section is presented in **Plate 8** with the summary characteristics of the slope units presented in **Table 1** below.

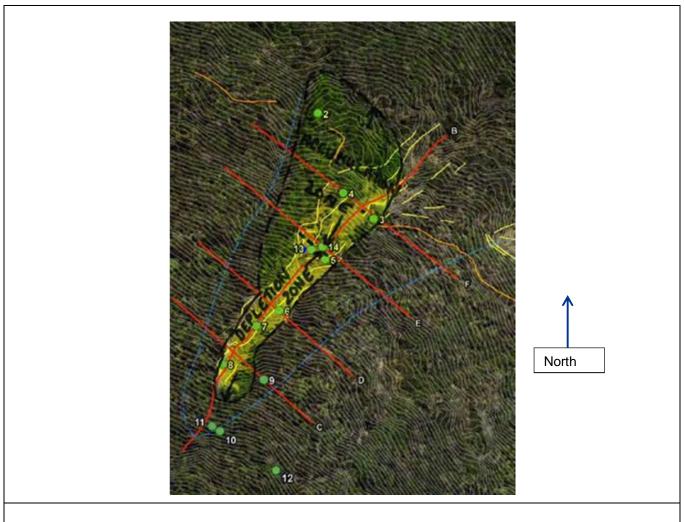


Plate 7; Plan view of slide showing extent of depletion and accumulation zones (run-out lobe)



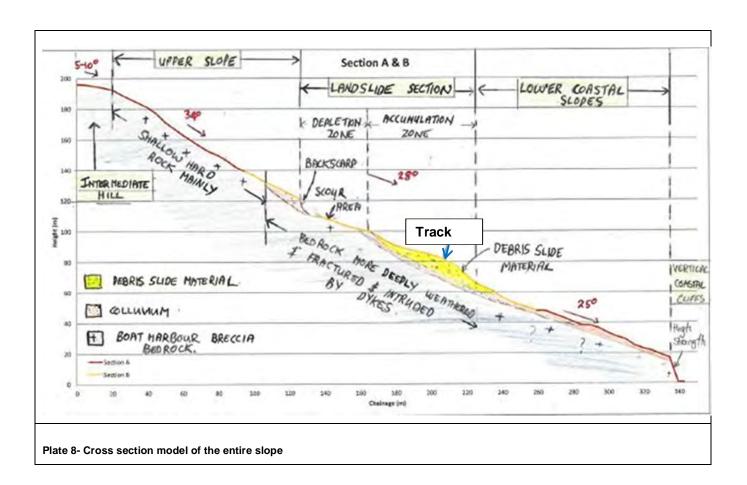


Table 1- Characteristics of slope units

Slope Unit	Approximate Elevation Range (RL mAHD)	Typical slope angle (degrees)	Anticipated geology
Intermediate Hill Escarpment area	190-195	5-10	Hard rock
Upper Steep Slopes	120-190	34	Hard rock but appears deeply weathered near contact with back scarp of landslide
Landslide Section	68-120	28	Backscarp, depletion and accumulation zones with underlying weathered bedrock and dyke intrusions.
Lower Coastal Slopes	18-68	25	Unknown, but expected to be hard rock overlain by colluvium and some slide debris.
Sea cliff	0-18	Near vertical	Hard rock coastal cliffs

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Key interpretations and findings of the overall topographical and geotechnical interpretation are as follows;

- The extent of the debris slope accumulation zone is far more extensive as shown in Plate 7 than that
 described in the Regional Geotechnical Solutions March 2012 report. It is possible that debris could
 extend much further down slope than shown on Plate 8 however given site access constraints; such
 areas could not be inspected.
- The May /June 2011 land slide initiation event was not a statically very significant rainfall event and thus it is possible that at the time the normal site drainage pattern in the upslope areas may have changed and exacerbated the scour problem. For this reason it is most likely that the slide is a very old landform feature but dramatically changed following the May/June 2011 event.
- The cross sectional model of the entire slope (**Plate 8**) shows that the "Upper Slope" is steeper than the "Landslide Section" suggesting that the change in grade may also be causing a "hydraulic jump" in surface flows and more turbulent flows at the point of change in slope contributing to scour problem in the back scarp area of the slide.
- Field inspections show that directly upslope of the backscarp there is evidence of ongoing colluvial slope instability and developing tension cracks and local slumping into the landslide channel below. This demonstrates that if flows cannot be effectively diverted away from the landslide area then the backscarp will progressively regress upslope over time and enlarge. For this reason re-directing the track above the slide is not considered a stable viable long term solution for the site.
- However, approximately 30m upslope of the backscarp there was both a significant increase in slope angle and extensive surface outcrop of very high strength bedrock, possibly basaltic flows (refer Photo 2). The outcrop of these rocks may limit the final extent of regression of the slide upslope in the longer term.

5.3 Trigger Mechanisms and Rainfall Trends

Various trigger mechanisms can initiate slope failures for typical slopes as listed below;

- Intense storm
- Prolonged rainfall events
- Scour erosion from run off down slope from the catchment above
- · Tree root jacking and very strong wind
- Earthquakes

The fundamental trigger mechanism for the landslide for this site however is due to specific periods of intense rainfall most likely in combinations with the addition of prior wet periods and only such events will be considered for the QRA. Such rainfall related landslide trigger patterns result in a complex inter-relationship between elevated pore pressure (from both antecedent and short duration intense rainfall) within the slope and high scour run off. Therefore it is difficult to predict accurately the required rainfall to trigger a landslide at such a site given the complex environment.

The summary table below of the rainfall preceding the most recent slides however provides some guidance in rainfall trigger thresholds for the site.



Table 2 - Rainfall Data For landslide events

Daily rainfall Values For Periods
> 23/5/2011-3mm
> 24/5/2011-76mm
> 25/5/2011-11mm
> 26/5/2011-10mm
> 27/5/2011-dry
> 28/5/2011-dry
> 29/5/2011-dry
> 30/5/2011-dry
> 31/5/2011-35mm
> 1/6/ 2011125mm
> 2/6/ 2011- 55mm
 Relatively dry for preceding two weeks
> 22/4/2016-134mm
> 23/4/2016- 86mm

This table shows that the period of intense rainfall for both the 2011 and 2015 failures were very similar (215-220mm), both occurring over a period of 2-3 days. The difference however is that for the 2011 event in the preceding week an extra 100mm of rainfall occurred and possibly this was sufficient to elevate pore pressures within the soils and trigger the initial larger slide event.

Table 3 provides a statistical analysis of the rainfall gauge data to provide some guidance on rainfall protocols for track closure given the fundamental control that rainfall has as a risk reduction management tool.



Table 3- Statistical Analysis of Aero Rainfall Gauge Data.

Daily Rainfall Magnitude Event (mm)	Event Ranking Over Recorded period (Note 1)	Percentage (%) Time Exceeded over recorded period (Note 2)	Annual Frequency estimate of event occurrence over recorded period (Note 3)
449	1	0.009	0.036
374	2	0.02	0.07
238	3	0.03	0.11
230	4	0.04	0.15
150	6	0.06	0.22
125	12	0.12	0.43
100	17	0.17	0.62
75	42	0.42	1.52
50	114	1.13	4.13
25	382	3.80	13.86

Notes

- 1) The event ranking extends over rainfall recordings of 10060 days or 27.56 years.
- 2) Calculated by (column 2 value /10060x100%)
- 3) Calculated by column 2 value / 27.56 years

5.4 Slope Failure Hazards

In reviewing the site topography and geological conditions three main slope failure hazards (H1 to H3) have been identified and considered for incorporation into the QRA as follows;

Small Debris Slide Volumes (<200m³)-H1;The discharge of relatively small saturated debris slide volumes of less than 200 m³ from upslope areas reaching the track. The source of the slide could be from both the back scarp area and anywhere else upslope of the track. Such slides would most likely be triggered during periods of high rainfall events but because the slopes are only moderate (about 28 degrees), the debris flows are likely to be at speeds of "rapid" to "very rapid" (3m/minute - 2m/second) in accordance with Cruden and Varnes ,1996. For these reason their likelihood of run out to the track and direct impact of a walker would be "moderate to high" but the vulnerability associated with direct impact of a walker would be "high" (i.e. high potential for loss of life on actual impact of slide debris). Maybe the 22 and 23 April 2015 event would fit into the H1 hazard rating.

Large Debris Slide Volumes (200-1500m³)-H2; The discharge of large saturated debris slide volumes from upslope areas reaching the track. The source of the slide materials again could be from both the back scarp areas and anywhere else upslope of the track. Such slides would most likely be triggered during periods of very high rainfall events but because of the increased volumes the speed of the slide would be greater than H1 and

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have been assumed to be "rapid" to "very rapid" (3m/minute to- 2m/second) but more likely at the higher speed range given the mixture with water entrained in the saturated mass. For these reasons their likelihood of run out to the track and direct impact of a walker would be "high" and the vulnerability associated with direct impact of a walker could be "very high" (i.e. greatest potential for loss of life on actual impact). Maybe the 1st and 2nd of June 2011 would fit into the H2 hazard rating.

Individual Rock Falls (H3); The release of individual rock blocks (0.5-1.0m diameter or greater) that may erode out of the exposed colluvial slopes along batters upslope of the track. Such failures are envisaged to occur at any time including during relatively dry weather. Examples of potential boulders that could detach are shown in Photo 5 and Sites 8 and 9 in **Appendix C**. Because these blocks are quite angular and the general slope within the landslide floor is only moderately steep (about 28 degrees), for the most part such boulders are expected to have a low probability of gathering momentum and reaching the track. In addition to this, their speed is expected to be less than 2m/second classed as "very rapid" with reduced destructive significance. For these reasons their likelihood of run out to the track and direct impact of a walker would be relatively low given the small size of the boulders. However with direct impact of a walker, the potential for loss of life would be "high" (i.e. great potential for loss of life on actual impact).

All of the above factors have been considered in the selection of input parameters for the QRA.



6. QRA Risk Assessment Methods

6.1 General

The main steps in the QRA approach include hazard assessment, consequence analysis, risk calculation and risk evaluation.

The risk calculations involve determination of the probability of an event occurring (release of rock) and reaching the walking track, multiplied by the probability that someone is within the affected area when the failure occurs, multiplied by the probability that the person is within the failure zone at the time that the failure occurs (temporal probability), multiplied by the vulnerability of that person (i.e. the probability of being killed if impacted by the failure), multiplied by the number of people exposed to the rockfall hazard.

Simply, the risk calculation for loss of life can be reduced to the following standard equation as presented in Australian Geomechanics Society (2007):

$$ALR = P_{(H)} x P_{(S:H)} x P_{(T:S)} x V x N$$

Where,

ALR: Annualised life risk (which may be thought of as the annual probability of a fatality occurring for an element at risk e.g. track users etc.).

P(H): Annual probability of the hazardous event detaching and reaching the element at risk.

P(S:H): Probability of spatial impact (or accident) given the hazardous event reaching the track. This is a function of the spatial relationships between track users and the debris slide/ boulders (H1,H2 & H3) along its trajectory path, such as the person's length, walking speed and the number of people using the track over a specific period of the year.

P(T:S): Temporal probability of the consequence occurring i.e. probability a person being present within the impact zone for a portion of time throughout the year. If the track is open all year round then the value would be 1.0 and this value was thus adopted. (If the track is only open for 6 months it would be 0.5.)

V: Vulnerability of the element at risk (occupants) within the zone of impact due to the hazardous event. This value varies between 1.0 (certain death) and 0 (no death). The vulnerability value depend largely on the size and speed of the slide.

N: The elements at risk being the number of persons exposed to the hazard. The element at risk of 2 was adopted in computation. This value assumes that there are 2 person exposed along the track at the time of the failure. This assumes that walking groups in small clusters are considered to be conservative.

6.2 Bunce Equation

The risk calculation used for the walking track is based on the method published by Bunce et al. (1996) which has been developed into an Excel spreadsheet specifically for the project and is an amended form of the AGS equation described above. It is based on the binomial theorem using the number of failure events, the average daily number of track users and a measure of the exposure of the track users to hazards reaching the track.



The equation caters for a range of possible hazard impact scenarios that all need to be summed to compute the total risk to motorists but can be directly applied to walkers along a track as follows;

- Impact of a falling rock/slide on a stationary walker.
- Impact of a falling rock/slide on a moving walker.
- Impact of a fallen rock/slide on a moving walker.

Only the second scenario has been adopted for the site with respect to the walking track. The other scenarios are not really applicable, as walkers are generally not stationary along the track in the first instance, and in the third instance walkers are assumed to generally carefully walk around fallen rock after the event and thus this scenario is normally not considered in the lives risk assessment.

The computations associated with the impact of a falling rock on a moving walker are outlined below.

$$P(S) = 1 - (1 - P(S:H))^{N_r}$$

$$P(S:H) = \frac{\frac{N_{v}}{24} \frac{L_{v}}{1000}}{V_{v}}$$

Where,

P(S): Probability that a slide or rock hits a person, the product of P (H) and P(S: H).

P(S: H): Probability of walker being impacted given a slide/rock fall (spacial impact).

N_p: Number of people that pass per day (values were provided by the LHIB multiplied by the percentage of walkers during high/low season and day/night time).

 L_p : Average length of a person using the track.

 V_p : Average a person's speed.

N_r: The annual number of rock falls/slides.



7. Risk Acceptance Criteria

7.1 Societal risk criteria

Societal risk represents the annualised risk to which society in general is exposed by say driving along a road, living in a residential area or using a walking track. This risk is totally different to a voluntary risk such as undertaking a high risk activity of mountain climbing or sky diving. Societal risk captures the total geotechnical risk from each hazard type including to which the traffic volume is exposed at any time.

There are currently no widely agreed limits of unacceptability for Annualised Live Risk (ALR). However the ANCOLD 2003 guidelines are the most widely used and indicate that for existing structures, risk above 1 x 10⁻³ or 1 fatality in 1,000 years (1x10⁻³) is considered unacceptable or intolerable.

Acceptable (target) risks are usually considered to be less than one order of magnitude smaller than intolerable risks (1x10⁻⁴). There have been recent changes in various guidelines to assume the limit of acceptability as either one and a half or two orders of magnitude (1x10⁻⁵). Ultimately it's the clients decision (LHIB) on the limit of acceptability for any particular project.

Risk which falls between 1 x 10⁻³ and 1 x 10⁻⁴ should be subjected to the ALARP principle which applies a test of whether the risks have been reduced As Low as Reasonably Practicable. Risk reduction measures should be implemented until no further risk reduction is possible without very significant capital investment, major environmental impact or other resource expenditure that would be grossly disproportionate to the level of risk reduction achieved.

Societal risks below 1 x 10⁻⁴ are considered acceptable and are referred to as the Target risk level and should be monitored and managed.

QRA societal risk is also presented as a curve of cumulative frequency of events with deaths (F) versus the number of fatalities (N) typically referred to as an F-N curve as presented in **Plate 9.**

The ANCOLD criteria show a general trend of lower tolerance to risk with increasing potential for loss of life. **Plate 9** also indicates actual statistics of various risks to which society is exposed. The societal risk for the Lawrence Hargrave Drive (LHD) site prior to geotechnical risk reduction works being undertaken for the Sea Cliffs Bridge section of Wollongong NSW is included in **Plate 9** for comparison.



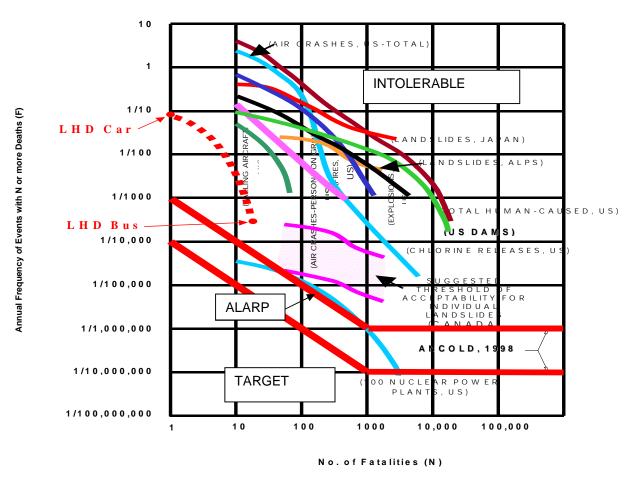


Plate 9: Societal Risk F-N Chart

7.2 Individual Risk

Individual risk captures the risk imposed on an individual or group of individuals from the geotechnical hazards. Unlike societal risk, which considers the total traffic volume, individual risk focuses on a single person or group who uses a facility such as a road or a track most frequently such as the local residents and businesses who travel along the road almost on a daily basis.

This could also relate, for example, to open pit mine workers or teams exposed to pit slopes on a daily basis Published individual risk criteria are available for a range of industries. In judging the tolerability of risks to life of individuals, the increment of risk imposed on any person by a facility such as a road should not be more than a specified value which is usually a small fraction of the average background risk that the population lives with on a daily basis (Societal risk).

The proposed limit of tolerability for individual risk as established by the British Health and Safety Executive (HSE) reference and ANCOLD 1998 is 1 x 10⁻⁴ (1 fatality in 10,000 years) which is an order of magnitude less than the societal risk 'intolerable' criteria.

For landslides, consensus criteria have also been put forward for the tolerable individual risk for loss of life due to constructed slopes (Landslide Risk Management, Australian Geomechanics Society, May 2007 provided in **Table 4**.

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The AGS Tolerable risk is $1x10^{-5}$ for the person most at risk and is usually adopted for risk assessments as outlined in the table below and has been adopted as the criteria for this project as ARL of $1x10^{-5}$ /annum in reference to note 1 below.

Table 4: Tolerable risk criteria (AGS 2007)

Situation	Suggested tolerable loss of life risk for the person most at risk
Existing slope/ existing development	10 ⁻⁴ / annum
New constructed slope/ near development/ existing landslide (1)	10 ⁻⁵ / annum

Notes:

1) According to the criteria "existing landslides" have been considered likely to require remedial works and hence would become a New Constructed slope and require a lower risk. Even where remedial works are not required per se, it would be reasonable expectation of the public for a known landslide to be assessed to the lower category of 1x10⁻⁵ as a matter of public safety.



8. Input Parameters for Risk Assessment

8.1 General

The detailed input assumptions that were adopted following the outcome of the assessment with the results for various cases presented in **Appendix E** for the various hazards. The results for the various cases are presented in **Section 9** of this report.

The broad procedure that was adopted in developing the risk event tree involved a logical step wise process as follows for each element at risk:

- Step 1 Assign inputs for the computation of event tree analysis, e.g. average daily number of walkers for high and low seasons, start and end dates of high and low seasons, average number of hours of day and night, and number of elements at risk at day and night.
- Step 2 Assign probability of detachment from the landslide upslope of the track.
- **Step 3** Assign probability that debris or individual blocks will run out the required distance down slope to the element at risk along the track.
- **Step 4** Assign the vulnerability (potential for loss of life) of the various elements at risk if impacted by a debris or rock block (e.g. a direct impact of a walker).
- **Step 5** Compute the annualised lives risk for walkers for a particular mechanism (e.g. H1, H2 or H3 small or large debris slide or large boulder).

8.2 Guidance on assigning probabilities

For guidance on assigning conditional probabilities for this project, Table 5 was used (after Barneich et al 1996) as provided in the AGS slope risk management Guidelines (2007). Experience has shown that this table helps in obtaining consistent estimates of conditional probabilities within event trees. Thus this table was used for guidance on assigning probabilities on run out to elements at risk, and probability of impact for the QRA.

Table 5: Guidance on assigning conditional probabilities

Description of Condition or Event	Order of Magnitude of Probability Assigned
Occurrence is virtually certain	1
Occurrences of the condition or event are observed in the available database	10-1
The occurrence of the condition or event is not observed, or is observed in one isolated instance, in the available database; several potential failure scenarios can be identified.	10-2
The occurrence of the condition or event is not observed in the available database. It is difficult to think about any plausible failure scenario; however, a single scenario could be identified after considerable effort.	10 ⁻³
The condition or event has not been observed, and no plausible scenario could be identified, even after considerable effort.	10-4

8.3 Guidance on Assigning Vulnerabilities

The vulnerability refers to the probability of the event causing death, assuming that the person is within the zone of influence of the failure or that the vehicle is lost into in to a void caused by the failure etc. The rating scale definitions which are based on event tree analyses, describe the vulnerability of individuals impacted by rock falls under a variety of circumstances such as:

- In buildings.
- In the open.
- In vehicles directly impacted by a moving boulder or driving into a debris pile on the road from a recent failure.



Table 6 provides a guide to vulnerability ratings obtained from the RMS Slope Guide (RTA 2011) and those adopted for the QRA computation. For further guidance on assigning vulnerabilities reference should be made to additional tables from this guide.

Table 6: Vulnerability ratings definitions

Rating	Probability Range	Definition
VI	> 0.5	Person in the open unable to evade rockfall or other debris (movement very/extremely rapid), or buried, or engulfed in a building collapse. Vehicle impacting a block > 1 m high or lost into a deep, narrow void at highway speeds.
V2	0.1 – 0.5	Partial building collapse. Person in open may be able to evade debris. Vehicle impacting a 0.5 – I m high block at highway speeds or a block > I m high at urban speeds or lost into a shallow void.
V3	0.01 – 0.1	Building penetrated, no collapse. Emergency evacuation possible. Most people in open able to evade debris. Vehicle impacting a $0.5-1$ m high block at urban speeds, or a block >1 m high at low speeds. Vehicle impacting loose or wet mixed soil/rock debris (or crossing a stepped surface with c $0.1-0.2$ m steps caused by a developing embankment failure) at highway speeds.
V4	0.001 - 0.01	Building struck, damaged but not penetrated. Vehicle impacting a block around 0.2 m high at highway speeds or a 0.5 – 1 m high block at low speeds. Vehicle impacting loose or wet mixed soil/rock debris (or crossing a stepped surface with c 0.1 – 0.2 m steps caused by a developing embankment failure) at urban speeds. Vehicle interacting with a shallow void/depression where the guardfence may prevent a vehicle from leaving the road.
V5	< 0.001	Building struck, only minor damage etc. Vehicle impacting a block around 0. m high at urban speeds or a smaller block at highway speeds. Vehicle impacting loose or wet mixed soil/rock debris at low speeds. Vehicle traversing an irregular surface formed by soil or small (< 100 mm min dimension) rock, or by a developing embankment failure, at highway speeds.

For this project it has been assumed that the size of small boulders is within the range 0.3-0.5m and large boulders greater than 0.5m to equal to 1.0 m. The adopted vulnerability values for small boulder and large boulders are 0.1 and 0.9 respectively.

8.4 Computation Assumptions

Main assumptions were made for the various elements of risk in the model are as follows and input parameters for QRA are presented in Table 7 and 8.

- Average speed of a person is assumed to be 5.0 km/h.
- Average length of a person is assumed to be 1.0 m.
- Average daily number of walkers during high season and low season are based on the data provided in Appendix A of this report and summarised in Table 7. For the purpose of a QRA the total number of walkers are assumed with no distinction between visitor, resident or persons from the LHIB.
- High season starts on the 1 September and ends on the 30 May with the low season from the 1 June to the 30 August each year. This means there are 274 days (75%) during high season and 91 days (25%) during low season.
- Day time starts at 7:00am and ends at 5:00 pm; with the night time from 5pm-7am the following morning thus, the ratio for day time and night time are 41.5 % to 58% each.
- It is noted that prediction of the number of walkers at day time and night time are assumed to be around 95% and 5% respectively in accordance with **Table 7.**



- On the basis of review of the landslide history of occurrence and rainfall trends as given in **Tables 2** and **3** the annual landslide hazard trigger probability of once every 4 years has been assumed for a small debris slide (H1), once every 10 years for a large debris slide (H2) and twice a year for a rock fall (H3) as given in **Table 8** below for the QRA
- The assigned runout probabilities and vulnerabilities assumed for the QRA are also provided in Table 8 below

Table 7; Estimated number of daily users of Mutton Bird Point Track

Season	Daily day Time Users (7am-5pm)		Daily Night Time Users (5pm-7am)		
	Low traffic case	High traffic case	Low traffic case	High traffic case	
High Season	21.7	36.9	1.5	1.8	
1 Sept31 May					
(273 days)					
Low Season	13.6	24.2	0.65	1.2	
1 June -31 August					
(92 days)					

- On the basis of review of the landslide history of occurrence and rainfall trends as given in Tables 2 and 3
 the annual landslide hazard trigger probability of once every 4 years has been assumed for a small debris
 slide (H1), once every 10 years for a large debris slide (H2) and twice a year for a rock fall (H3) as given in
 Table 8 below for the QRA
- The assigned Runout probabilities and vulnerabilities assumed for the QRA are also provided in Table 8 below

Table 8: Landslide Input Parameters for QRA

Hazard	Description of hazard	Annual trigger (detachment) probability	Run-out probability to element at risk (walker) on the track	Vulnerability
1	Small debris slide	0.25	0.9	0.5
2	Large debris slide	0.1	1.0	0.9
3	Rock fall	2	0.01	0.2

Appendix E presents the QRA input values and event tree models for the risk assessment, example output and the summary charts are presented in the next section.



9. Results of Risk Assessment for Existing Conditions

9.1 Base Case Without Risk Reduction Measures

The results of the QRA computations are provided for two base case scenarios to demonstrate the sensitivity of the lives risk to varying daily walker volumes over a 24 hour period. These cases reflect the lower and upper bound projected estimates of track users provided by LHIB as follows:

9.1.1 Case 1 – Low traffic scenario

- Assume 23.2 people per day during high season
- Assume 14.24 people per day during low season

9.1.2 Case 2 – High traffic scenario

- Assume 38.7 people per day during high season
- Assume 25.4 people per day during low season

The results for the two base case scenarios are shown in Plate 10 and 11.

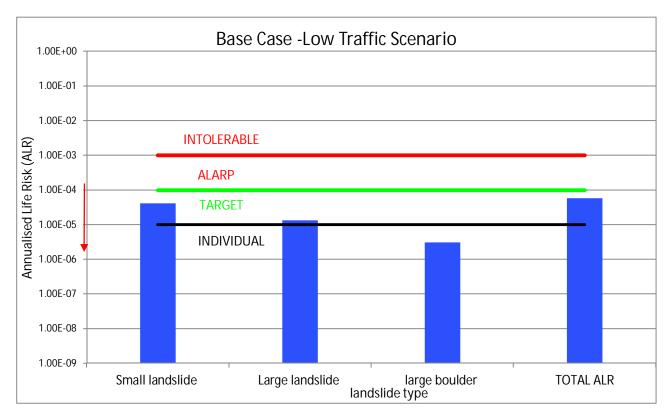


Plate 10- Case 1- Base case low traffic scenario



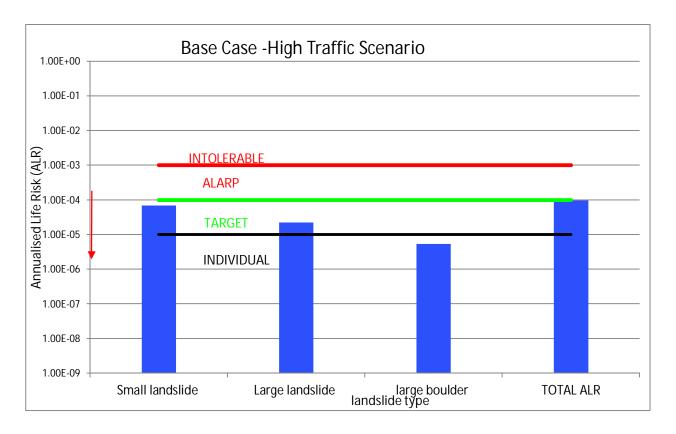


Plate 11: Case 2- Base Case- High Traffic Scenario

It is concluded from the base case results shown in Plates 10 and 11 the following;

- The individual ARL for the small debris slide (H1) is greater than for the large landslide (H2) due to the overriding factor that that the smaller debris slide is assumed to occur more frequently.
- The ARL for the large boulder (H3) has the lowest individual ARL due to the lowest probability of reaching the track and its lowest vulnerability.
- The total ARL for the Case 1- Low Traffic (5.78x10⁻⁵) and Case 2-High Traffic (9.68x10⁻⁵) is above the acceptability criteria for individual risk at 1x10⁻⁵ and is approaching the ALARP range (1x10⁻⁴) and for these combined reasons warrants risk reduction measures.

9.2 Consideration for Risk Reduction Measures

In order to provide guidance on feasible risk reduction measures for the site, consideration has been given to applying a rainfall threshold track closure management approach which is widely used in the industry and it is understood is currently applied by LHIB for the Mt Gower Walking Track (LHIB 2013). It is understood that this track is to be closed associated with rock fall/ landslide risk during inclemental weather considered to be when 50mm of rain has fallen in the previous 24 hour period (as shown on the BOM website). The track is to remain closed for 24-48 hours subject to the condition of the track assumed based on assessment by a LHIB representative.

On this basis two 24 hour rain fall threshold scenarios have been considered to provide guidance on the risk reduction benefit for adopting a rainfall track closure protocol for the Mutton Bird Point track. If it is broadly assumed that about 320mm of rain is required over a short period (refer Table 2) to trigger a large landslide (H2 event) as occurred in early June 2011 and about 220mm is required to trigger a smaller slide as appears to have occurred on the 22 and 23 April 2015 (H1 event). Such information can be used to provide guidance on risk reduction benefit by closing the track during lessor rainfall events and the following has been assumed;



- Track closure where 100mm rainfall is exceeded over a short period (say of a few days) would result in at least 3 times the reduction in detachment probability for H1 and H2. It is assumed that this would apply for H3 hazards as well, although rockfalls could occur at any time. Erosion, however, associated with a large rainfall event would be a significant contributor to detachment of large blocks.
- Track closure where 50mm rainfall is exceeded over a short period (say of a few days) would result in at least 5 times the reduction in detachment probability for a slide. Again it is assumed that that this would apply for H3 as well, although rockfalls could occur at any time as mentioned above.

Various track closure scenarios have been reviewed by assuming for a certain rainfall event the track would be closed and this would result in a reduction in the probability of detachment in the model to take into account reduced exposure to a landslide by walkers. This does not actually mean a failure would not occur but rather a walker would not be present at the time of the failure. This assumption is made because there is a reduced chance that a walker would be present if a slide occurs with all other conditions and input values for the QRA kept unchanged. The computed ARLs for these scenarios are presented in **Plates 12** to **15** below.

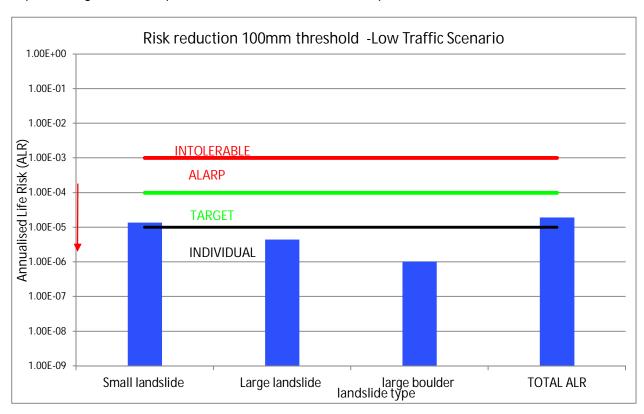


Plate 12- Risk Reduction 100mm rainfall Threshold – Low Traffic Scenario



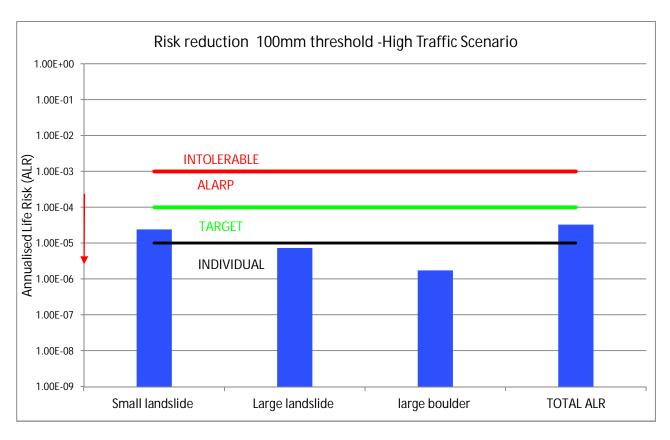


Plate 13- Risk Reduction 100mm rainfall Threshold – High Traffic Scenario

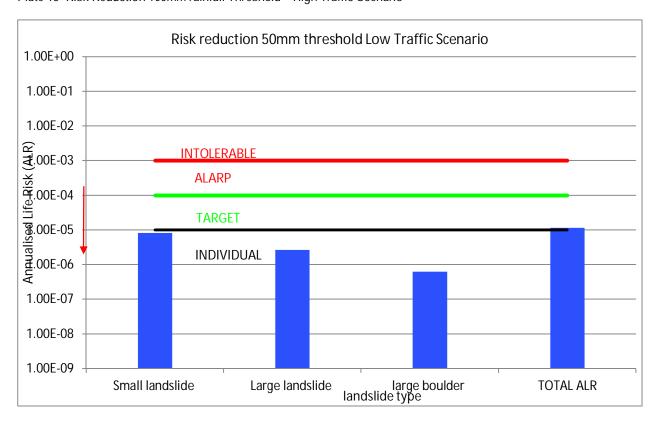


Plate 14- Risk Reduction 50mm rainfall Threshold – Low Traffic Scenario





Plate 15- Risk reduction 50mm rainfall threshold – High Traffic Scenario

From the various rainfall threshold criteria shown in Plates 12 -15 the following is concluded;

- The individual ARL for the small debris slide (H1) is greater than for the large landslide (H2) due to the overriding factor that that the smaller debris slide is assumed to occur more frequently despite the size of the slides. Again The ARL for the large boulder (H3) has the lowest individual ARL due to the lowest probability of reaching the track and its lowest vulnerability.
- For the 100mm threshold low traffic case (**Plate 12**), the total ARL is 1.9 x10⁻⁵ and the high traffic case (**Plate 13**) is 3.35x10⁻⁵ is above the acceptability criteria for individual risk at 1x10⁻⁵ and thus warrants further risk reduction measures.
- For the 50mm threshold low traffic case (**Plate 14**), the total ARL is 1.16 x10⁻⁵ and the high traffic case (**Plate 15**) is 1.9x10⁻⁵. which is just above the acceptability criteria for individual risk at 1x10⁻⁵ and thus is approaching acceptability from an individual risk criteria demonstrating such measures are feasible.



10. Discussion and Recommendations

The following general discussion and recommendations are provided from this risk assessment;

- Based on the QRA, currently the annual lives risk to walkers using the track associated with landslides
 is almost at the same level as considered acceptable for Societal Risk and about one order of
 magnitude higher than considered acceptable for Individual Risk acceptance criteria. Such criteria are
 widely accepted Australian Standards of practice and also adopted internationally for landslides.
 Currently Individual Risk is adopted in Australia as the prime criteria for landslides risk assessment as
 proposed by the Australian Geomechanics Society and should be adopted for the walking track. For this
 reasons life risk reduction measures for users of the track are warranted to reduce the risk to
 acceptable levels.
- If the track is to be opened to the public, then the most feasible risk reduction approach is considered to be to impose a rainfall track closure-re-opening protocol similar to that currently adopted for the Mt Gower walking track. Various track closure scenarios have been reviewed by assuming for a certain rainfall event the track would be closed and this would result in a reduction in the probability of detachment in the model to take into account reduced exposure to a landslide by walkers. This does not mean a failure would not occur but rather a walker would not be present at the time of the failure. The analysis shows that if the frequency of failure is reduced by 5 times, assumed to be related to a rainfall event of 50mm then the total risk would generally fall within the limits of acceptability for individual risk. It has been assumed that this reduction in population exposure for a 50mm rainfall event would occur on about 4 occasions during the year (refer Table 3). This is generally a simplistic view as the trigger potential for debris slides are not only related to intense rainfall events as assumed in the risk model but also the build-up in pore-pressure within the slope from antecedent rainfall patterns. In any event it is difficult to conceive that a 50mm rainfall event would trigger a debris slide when past failures seemed to have occurred during rainfall events of the order of between 200-300mm.
- It is thus recommended that further analysis of rainfall data be undertaken (given the limited scope of this study) to better understand rainfall trends in relation to past landslides. This will provided more justification for the selection of the rainfall track closure and re-opening protocols.
- Re-directing the track around and above the backscarp of the slide from a geotechnical view point does
 not appear to be viable given the risk of ongoing instability upslope of the slide and the potential for the
 backscarp to retrogress uphill over time.
- It is rather recommended that surface drainage controls in the form of crestal cut off drains be installed above the backscarp of the slide to re-direct surface water around the slide to the natural drainage system. Formalised channel drainage within the slide foot print is also recommended to minimise scour and better control flows. It is understood that LHIB personnel propose to determine the layout and design of such works. It is recommended that the adopted design be reviewed by a suitably qualified hydrologist to ensure that the drainage design is effective and does not exacerbate the scour problem.
- It is also recommended that the exposed soil batters within the foot print of the landslide be revegetated with appropriate species to also limit the potential for future erosion.



11. References

Australian Geomechanics Society (AGS) 2007a, *Guideline for Landslide Susceptibility, Hazard and Risk Zoning for Land Use Planning*, AGS Journal and News of the Australian Geomechanics Society, Volume 42, No. 1.

Australian Geomechanics Society (AGS) 2007b, Commentary on Guideline for Landslide Susceptibility, Hazard, Risk Zoning for Land Use Planning, AGS Journal and News of the Australian Geomechanics Society, Volume 42, No. 1.

Australian Geomechanics Society (AGS) 2007c, *Practice Note Guidelines for Landslide Risk Management 2007*, AGS Journal and News of the Australian Geomechanics Society, Volume 42, No. 1.

Australian Geomechanics Society (AGS) 2002, *Practice Note Guidelines for Landslide Risk Management Concepts and Guideline*, Australian Geomechanics, Volume 37, No.2

Australian Geomechanics Society (AGS) 2007d, Commentary on Practice Note Guidelines for Landslide Risk Management 2007, AGS Journal and News of the Australian Geomechanics Society, Volume 42, No. 1.

ANCOLD (1998); ANCOLD GUIDELINES on risk assessment. Position paper.

ANCOLD, 2003, Guidelines to Risk Assessment; http://www.ancold.org.au/publications.asp

Barneich, J., Majors, D., Moriwaki, Y., Kulkarni, R., and Davidson, R. 1996, *Application of reliability analysis in the Environmental Impact Report (EIR) and design of a major dam project*, Geotechnical Engineering Division, ASCE.

Bunce, C. M. Cruden, D. M. and Morgenstern, N. R. 1996, Assessment of the hazard from rock fall on a highway, Canadian Geotechnical Journal, Vol. 34 (3): 334-356, 10.1139/t97-009.

Hungr O, Evans SG, Bovis M, and Hutchinson JN, 2001. Review of the classification of landslides of the flow type. Environmental and Engineering Geoscience, VII, 221-238.

McDougall, I Embleton B.J.J.J & Stone D B; Origin and Evolution of Lord Howe Island, South Pacific Ocean. Journal of the Geological Society of Australia (1981), 28,155-176.

Nettleton I M, Martin S, Hencher S, Moore R; Debris Flow Types (obtained from the Scottish Executive website)

Regional Geotechnical Solutions (29 March 2012) Lord Howe Island Board, Mutton Bird point walking track Lord Howe Island landslide Risk Assessment.

Mt Gower Walking Track Risk Assessment, May 2013 LHIB

Varnes D J; 1978; Slope movement types and Processes Special report 176; Landslide Analysis and Control; editor Schuster et al TRB National Research Council, Washington DC.

Quantitative Risk Assessment for Mutton Bird Walking Track and Recommendations for Risk Reduction Measures



Appendix A. Estimated Number of Daily Walking Track Users

Estimated number of daily users of Mutton Bird Point Track

Casaar	Daily Day time users 7am – 5pm			Daily Night time users 5pm – 7am		
Season	max (min)			max (min)		
	Visitor	Resident	LHIB	Visitor	Resident	LHIB
High season Sep – May (274)	32.25 (20.62)	4.38 (0.97)	0.26 (0.13)	1.61 (1.03)	0.22 (0.49)	0.005 (0.0025)
Low season Jun – Aug (91 days)	19.53 (13.02)	4.40 (0.49)	0.26 (0.13)	0.97 (0.65)	0.22 (0)	0.005 (0.0025)

Historical survey data

2007 Marine Parks Visitor and Expenditure Survey 376 surveys completed for 1476 individuals:

- Survey conducted January to April 2007 (120 days of almost half of high season).
- There were 6556 net tourist arrivals during that period (Qantas passenger reports to LHIB).
- Therefore survey represented 22.5% of visitors which is considered statistically relevant (when compared to other survey results published)
- 61% took an unguided walk in the Permanent Park Preserve.

1995 LHIB Walking Track Survey

- A walking track survey was conducted for the majority of 1995 and it returned 74
 responses. Of those responses 29 indicated that they walked the Blinky Beach to Mutton
 Bird Point.
- 39% of walkers take the Mutton Bird Point Walking Track.

Other data

- In 2014/15 14,204 passenger arrivals during the high season and 2323 during low season (Source: Qantaslink passenger numbers provided to LHIB).
- Average 2% annual visitor number growth is 2% (Source: 2014 17 LHI Destination Management Plan).
- Weed team on or below the site an average of 38 days per year high season (28.5) and low season 9.5) (Source: LHIB Weed Database).
- 2011 ABS Census Data:

Age category	Numbers
Total Persons	360
Total in 0-4; 15-19; 75-84; 85+	93
Total in other age groups	267

Assumptions:

- Applying the 2% growth to 2014/15 passenger data:
 - o 2015/16 High season arrivals: 14488.08
 - o 2015/16 Low season arrivals: 2369.46
- That users are spread evenly across days of the week.
- That 39% (min) 61% (max) of visitors take the Mutton Bird Point Track unguided spread evenly through the entire high season period.
- That 50% (min) 75% (max) of visitors take the Mutton Bird Track unguided spread evenly though the entire low season. Rationale – that visitors are participating in more land based activities than water based activities due to lower water temperature, and unpredictable swell and wind conditions.
- LHIB undertake:
 - o Max 12 annual ad hoc maintenance visits in response to maintenance requests eg track clearing following wether event high season (9 days) and low season (3 days).
 - o Max 6 monthly cyclic maintenance high season (1 day) and low season (1 day).
 - Max 1 search and rescue in both seasons.
 - Minimum taken as 50% of maximum due to lost time due to weather, absenteeism, training etc.
- 5% of walkers take a sunrise/sunset walk/star gazing walk.
- That residents aged 0-4; 15-19; 75-84; 85+ do not walk the Mutton Bird Track. Rationale those at either end of the age spectrum are not capable of walking the track. The age group 15-19 are also excluded because they are off island for most of the year.
- That 50% of capable residents (133.5) walk the track (Source: anecdotal observation):
 - o monthly (max)
 - o 4 times per year (min), three times in high season (including a sunset/sunrise/night time walk) and once in low season.

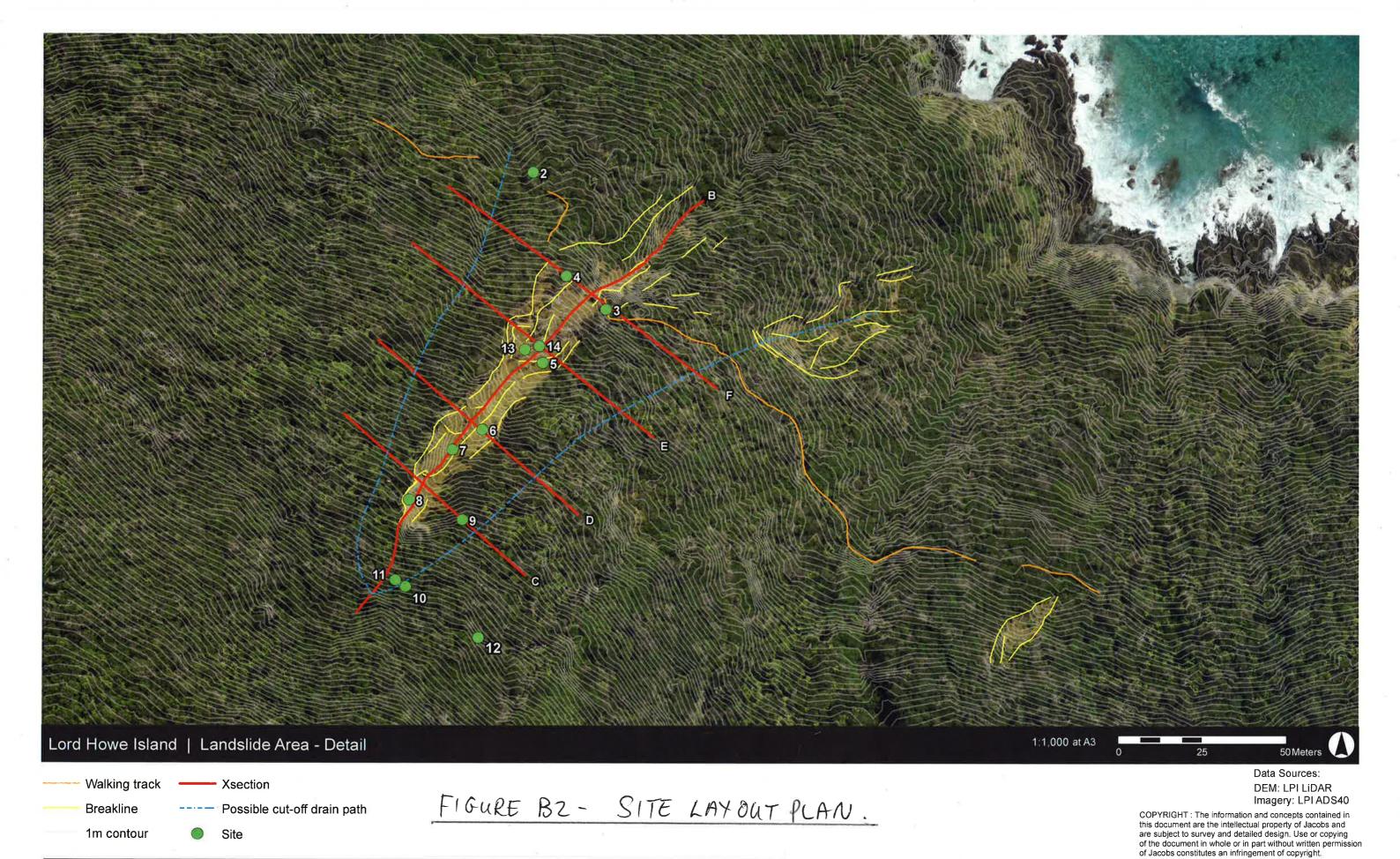
Quantitative Risk Assessment for Mutton Bird Walking Track and Recommendations for Risk Reduction Measures



Appendix B. Slope Topographical Plans and Sections



JACOBS



JACOBS

ACT SPATIAL - GIS MAP file : LordHowe_Landslide-Detail | 03/06/16 | DRAWN BY: LK



JACOBS

ACT SPATIAL - GIS MAP file : LordHowe_Landslide-Detail [03/06/16 | DRAWN BY: LK

Section A

ection A					
oint numl	E	N	Z	section dist	chainage
1	508052.7	6509771	195.9867	0	0
2	508055.6	6509775	195.6823	5	5
3	508058.6	6509779	194.7495	5	10
4	508061.1	6509783	193.6575	5	15
5	508063.4	6509788	192.3416	5	20
6	508065.7	6509792	189.1846	5	25
7	508067.8	6509797	186.4188	5	30
8	508069.7	6509801	183.609	5	35
9	508071.7	6509806	180.7992	5	40
10	508073.5	6509811	176.8975	5	45
11	508075.1	6509815	171.1316	5	50
12	508076.7	6509820	167.0763	5	55
13	508078.5	6509825	162.8545	5	60
14	508080.4	6509829	159.1648	5	65
15	508082.3	6509834	155.3393	5	70
16	508084.6	6509838	152.0417	5	75
17	508086.9	6509843	149.6757	5	80
18	508089.2	6509847	146.2109	5	85
19	508091.5	6509852	141.9046	5	90
20	508093.6	6509856	138.883	5	95
21	508096.7			5	
		6509860	136.3667		100
22	508099.9	6509864	132.8034	5	105
23	508102.6	6509868	130.1276	5	110
24	508104.5	6509873	127.4884	5	115
25	508105.4	6509878	124.5741	5	120
26	508106.2	6509883	121.9425	5	125
27	508109.1	6509887	116.7927	5	130
28	508111.4	6509891	111.6077	5	135
29	508113.6	6509895	108.5989	5	140
30	508117	6509899	106.8497	5	145
31	508120.2	6509903	104.3716	5	150
32	508123	6509907	102.5764	5	155
33	508126	6509911	101.2985	5	160
34	508129	6509915	99.87488	5	165
35	508132.3	6509919	97.14782	5	170
36	508135.3	6509923	93.4633	5	175
37	508138.6	6509926	90.58196	5	180
38	508142.3	6509930	89.02685	5	185
39	508146.2	6509933	87.40267	5	190
40	508149.6	6509936	86.15518	5	
					195
41	508153	6509940	84.78045	5	200
42	508156	6509944	82.93384	5	205
43	508159.5	6509948	80.18644	5	210
44	508163.1	6509951	77.2404	5	215
45	508167.4	6509954	71.84397	5	219
46	508171.9	6509956	66.82051	5	
47	508176.1	6509958	63.74052	5	229
48	508180	6509962	61.25875	5	234
49	508183.6	6509965	57.13292	5	239
50	508186.5	6509969	54.02025	5	244
51	508189.5	6509973	51.56706	5	249
52	508192.9	6509977	49.96143	5	254
			47.63339	5	
53	508197	6509980			259
54	508201	6509983	47.62203	5	264
55	508204.6	6509986	45.23844	5	269
56	508207.6	6509990	43.10782	5	274
57	508210.2	6509994	40.58799	5	279
58	508213.9	6509998	38.18411	5	284
59	508217.6	6510001	37.95322	5	289
60	508221.4	6510004	36.22082	5	294
61	508225.1	6510007	33.13223	5	299
62	508229.7	6510009	30.67966	5	304
63	508234	6510012	28.92349	5	309
64	508237.4	6510015	24.97503	5	314
65	508240.6	6510019	22.86045	5	319
66	508243.9	6510023	21.3491	.5	324
67	508247.6	6510026	18.92643	5	329
68	508251.4	6510029	16.84149	5	334
69	508255	6510033	0.784032	5	339
70	508257.4	6510035	0.721355	3	342
				116	

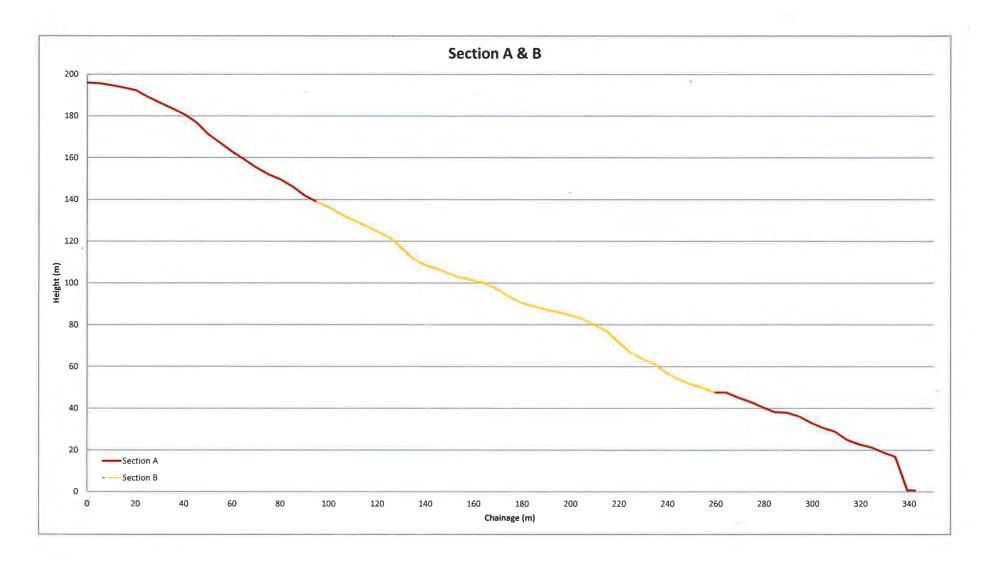


FIGURE B3- SECTION A-A.

Section A

ection A					
oint numl	E	N	Z	section dist	chainage
1	508052.7	6509771	195.9867	0	0
2	508055.6	6509775	195.6823	5	5
- 3	508058.6	6509779	194.7495	5	10
4	508061.1	6509783	193.6575	5	15
5	508063.4	6509788		5	20
			192.3416		
6	508065.7	6509792	189.1846	5.	25
7	508067.8	6509797	186.4188	5	30
8	508069.7	6509801	183.609	5	35
9	508071.7	6509806	180.7992	5	40
10	508073.5	6509811	176.8975	5	45
11	508075.1	6509815	171.1316	5	50
12	508076.7	6509820	167.0763	5	55
13	508078.5	6509825	162.8545	5	60
14	508080.4	6509829	159.1648	5	65
15	508082.3	6509834	155.3393	5	70
16	508084.6	6509838	152.0417	5	75
17	508086.9	6509843	149.6757	5	80
18	508089.2	6509847	146.2109	5	85
19	508091.5	6509852	141.9046	5	90
20	508093.6	6509856	138.883	5	95
21	508096.7	6509860	136.3667	5	100
22	508099.9	6509864	132.8034	5	105
23	508102.6	6509868	130.1276	5	110
24	508104.5	6509873	127.4884	5	115
25	508105.4	6509878	124.5741	5	120
26	508106.2	6509883	121.9425	5	125
	508100.2	6509887	116.7927	5	130
28	508103.1	6509891	111.6077	5	135
29	508113.6	6509895	108.5989	5	140
30	508117	6509899	106.8497	5	145
31	508120.2	6509903	104.3716	5	150
32	508123	6509907	102.5764	5	155
33	508126	6509911	101.2985	5	160
34	508129	6509915	99.87488	5	165
35	508132.3	6509919	97.14782	5	170
36	508135.3	6509923	93.4633	5	175
37	508138.6	6509926	90.58196	5	180
38	508142.3	6509930	89.02685	5	185
39	508146.2	6509933	87.40267	5	190
40	508149.6	6509936	86.15518	5	195
41	508153	6509940	84.78045	5	200
42	508156	6509944	82.93384	5	205
43	508159.5	6509948	80.18644	5	210
44	508163.1	6509951	77.2404	5	215
45	508167.4	6509954	71.84397	5	219
46	508107.4	6509956	66.82051	5	224
47	508176.1	6509958		5	229
48	508180	6509962	61.25875	5	234
49	508183.6	6509965	57.13292	5	239
50	508186.5	6509969		5	244
51	508189.5	6509973	51.56706	5	249
52	508192.9	6509977	49.96143	5	254
53	508197	6509980	47.63339	5	259
54	508201	6509983	47.62203	5	264
55	508204.6	6509986	45.23844	5	269
56	508207.6	6509990	43.10782	5	274
57	508210.2	6509994	40.58799	5	279
58	508213.9	6509998	38.18411	5	284
59	508217.6	6510001	37.95322	5	289
60	508221.4	6510004	36.22082	5	294
61	508225.1	6510007	33.13223	5	299
62	508229.7	6510009	30.67966	5	304
63	508234	6510003	28.92349	5	309
64				5	
	508237.4	6510015	24.97503		314
65	508240.6	6510019	22.86045	5	319
66	508243.9	6510023	21.3491	5	324
67	508247.6	6510026	18.92643	5	329
68	508251.4	6510029	16.84149	5	334
69	508255	6510033	0.784032	5	339
70	508257.4	6510035	0.721355	3	342

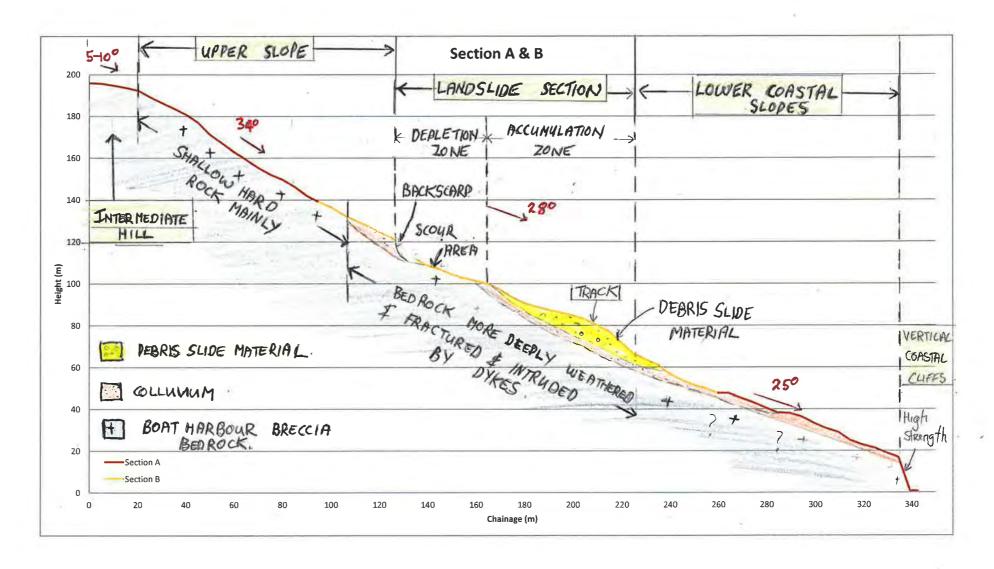


FIGURE B3- SECTION A-A (INTERPRETATION).

Section B

ection	ıB					
oint n	uml E		N	Z	section dist	chainage
	20	508093.6335	6509856.225	138.883	0	0
	21	508096.6513	6509860.184	136.3667	5	5
	22	508099.8564	6509864.021	132.8034	5	10
	23	508102.6225	6509868.143	130.1276	5	15
	24	508104.4905	6509872.745	127.4884	5	20
	25	508105.3726	6509877.664	124.5741	5	25
	26	508106.1882	6509882.511	121.9425	5	30
	27	508109.0858	6509886.577	116.7927	5	35
	28	508111.3863	6509890.967	111.6077	5	40
	29	508113.5803	6509895.458	108.5989	5	45
	30	508117.034	6509898.961	106.8497	5	50
	31	508120.1687	6509902.768	104.3716	5	55
	32	508122.9566	6509906.908	102.5764	5	60
	33	508126.0072	6509910.868	101.2985	5	65
	34	508128.996	6509914.865	99.87488	5	70
	35	508132.2898	6509918.61	97.14782	5	75
	36	508135.3435	6509922.568	93.4633	5	80
	37	508138.5666	6509926.389	90.58196	5	85
	38	508142.3076	6509929.661	89.02685	5	90
	39	508146.1674	6509932.834	87.40267	5	95
	40	508149.5694	6509936.494	86.15518	5	100
	41	508153.0086	6509940.123	84.78045	5	105
	42	508156.0484	6509944.088	82.93384	5	110
	43	508159.4588	6509947.733	80.18644	5	115
	44	508163.0904	6509951.168	77.2404	5	120
	45	508167.3786	6509953.667	71.84397	5	124
	46	508171.9376	6509955.713	66.82051	5	129
	47	508176.1103	6509958.466	63.74052	5	134
	48	508179.9547	6509961.595	61.25875	5	139
	49	508183.5816	6509964.955	57.13292	5	144
		508186.4584	6509969.011		5	149
		508189.5415	6509972.943		5	154
	52	508192.925	6509976.601		5	159
	53	508196.9684	6509979.541	47.63339	5	164

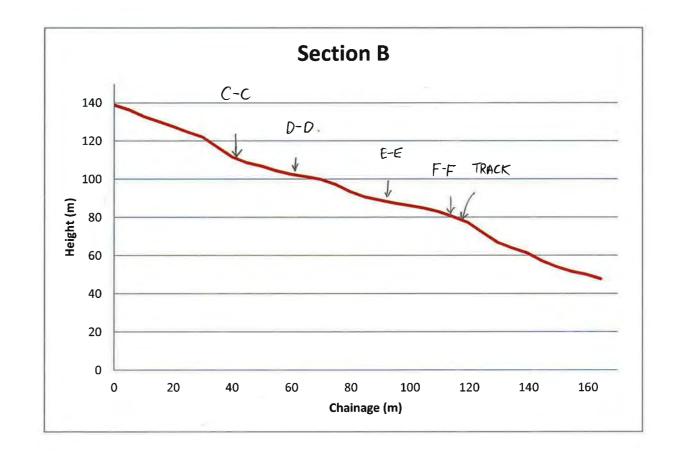


FIGURE B4-SECTION B-B

Section C

Point num	E	N	Z	section di	st chainage	<u> </u>
· 1	508089.7	6509916	111.0888	()	0
2	508093.4	6509912	111.5559	Ţ	5	5
3	508097.1	6509909	112.1298	į	5 :	10
4	508100.9	6509906	112.7689	Ţ	5 :	15
5	508104.6	6509902	113.4649	Ţ	5 2	20
6	508108.3	6509899	114.3339	į	5 2	25
7	508112.1	6509896	112.266	į	5 3	30
8	508115.8	6509892	108.9203	ţ	5 3	35
9	508119.5	6509889	111.735	Ţ	5 4	10
10	508123.3	6509886	115.1135	į	5 4	1 5
11	508127	6509882	117.4274		5 5	50
12	508130.7	6509879	118.4925	Ţ	5 5	55
13	508134.5	6509876	119.0462	Ţ	5 6	60
14	508138.2	6509872	119.1515	ţ	5 6	55
15	508141.9	6509869	119.3655		5 7	70
16	508143.8	6509867	119.4109	3	3 7	73

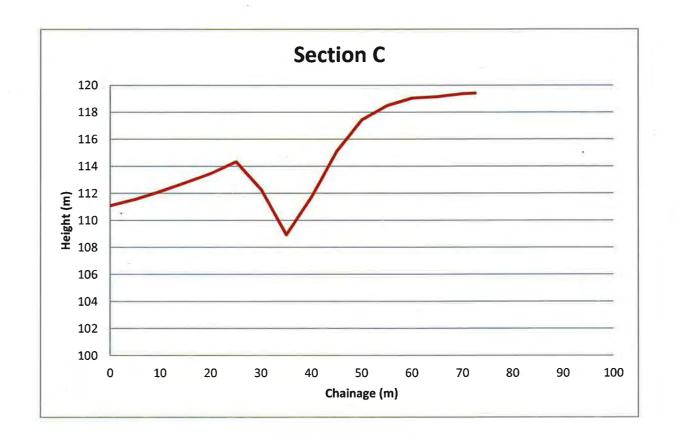


FIGURE BS - SECTION C-C

Section D

Point numl	E	N	Z	section dist	chainage
1	508099.7	6509938	97.4042	0	0
2	508103.4	6509934	97.69709	5	5
3	508107.2	6509931	97.9291	5	10
4	508111	6509928	97.92297	5	15
5	508114.8	6509925	99.20856	5	20
6	508118.5	6509921	100.5027	5	25
7	508122.3	6509918	101.7443	5	30
8	508126.1	6509915	101.498	5	35
9	508129.9	6509912	99.52232	5	40
10	508133.6	6509908	101.6156	5	45
11	508137.4	6509905	102.3552	5	50
12	508141.2	6509902	103.5695	5	55
13	508145	6509898	104.8272	5	60
14	508148.7	6509895	105.4372	5	65
15	508152.5	6509892	106.1056	5	70
16	508156.3	6509889	106.0169	5	75
17	508159.7	6509886	105.7056	5	80

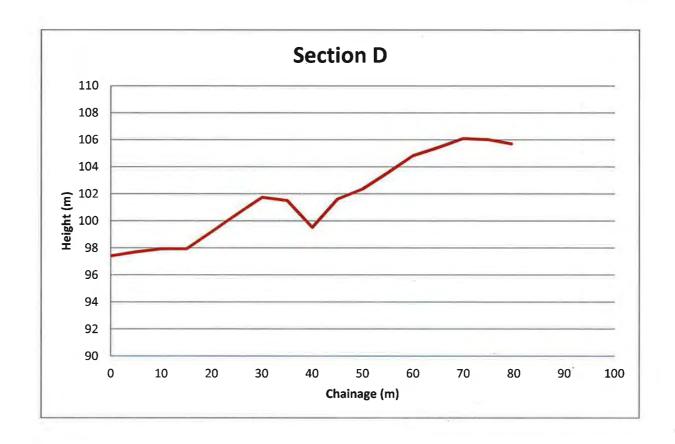


FIGURE B6 - SECTION D-D.

Section E

Jection L							
Point numl E		N	Z	section dist chair	section distchainage		
1	508109.8	6509967	80.28449	0	0		
2	508113.7	6509964	81.27958	5	5		
3	508117.6	6509961	81.94813	5	10		
4	508121.5	6509957	82.71245	5	15		
5	508125.4	6509954	82.72614	5	20		
6	508129.3	6509951	82.034	5	25		
7	508133.2	6509948	83.3979	5	30		
8	508137.1	6509945	84.79343	5	35		
9	508141	6509942	86.31519	5	40		
10	508144.9	6509939	86.01394	5	45		
11	508148.8	6509935	86.56211	5	50		
12	508152.7	6509932	87.1001	5	55		
13	508156.6	6509929	87.06923	5	60		
14	508160.5	6509926	89.23213	5	65		
15	508164.4	6509923	90.19979	5	70		
16	508168.3	6509920	89.3802	5	75		
17	508172.2	6509917	88.99007	5	80		
18	508176.1	6509914	87.68335	5	85		
19	508180	6509910	86.15804	5	90		
20	508182.3	6509909	85.96698	3	93		

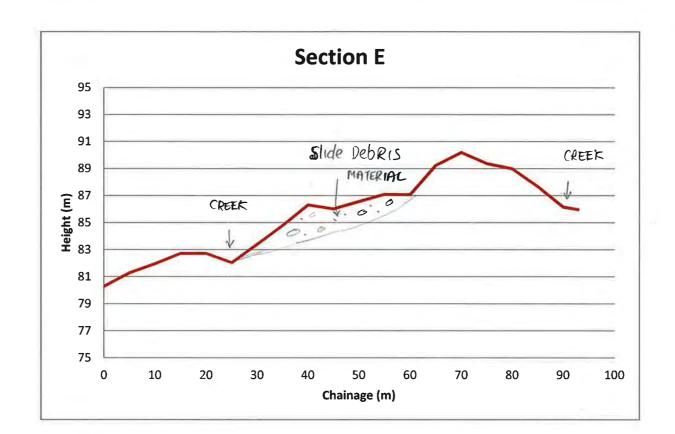


FIGURE B7 - SECTION E-E

Section F

Section						
Point numl	E	N Z		section distchainage		
1	508120.5	6509984	68.09486		0	0
2	508124.5	6509981	68.95844		5	5
3	508128.5	6509978	68.40019		5	10
4	508132.6	6509975	67.36662		5	15
5	508136.6	6509972	69.6128		5	20
6	508140.6	6509969	71.62292		5	25
7	508144.6	6509966	73.07896		5	30
8	508148.6	6509963	74.77183		5	35
9	508152.6	6509960	75.51219		5	40
10	508156.6	6509957	76.77052		5	45
11	508160.6	6509954	77.02239		5	50
12	508164.6	6509951	76.79752		5	55
13	508168.6	6509948	75.88151		5	60
14	508172.6	6509945	76.10797		5	65
15	508176.6	6509942	75.6362		5	70
16	508180.6	6509939	76.59374		5	75
17	508184.6	6509936	76.41665		5	80
18	508188.6	6509933	76.35073		5	85
19	508192.6	6509930	75.65251		5	90
20	508196.6	6509927	74.18653		5	95
21	508200.6	6509924	73.95959		5	100
22	508201.2	6509923	73.98772		1	101

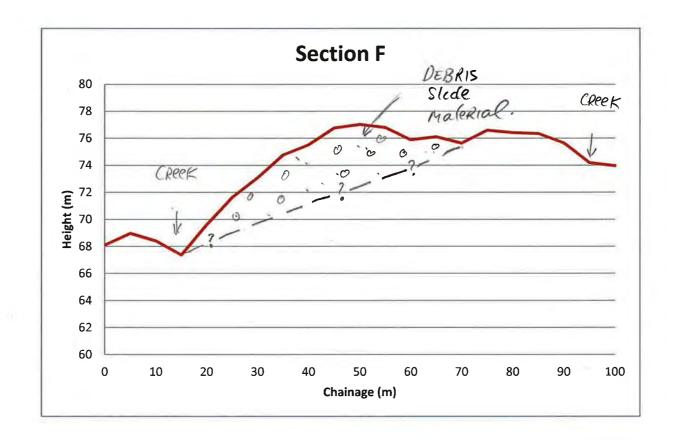


FIGURE B8 - SECTION - F-F

Quantitative Risk Assessment for Mutton Bird Walking Track and Recommendations for Risk Reduction Measures



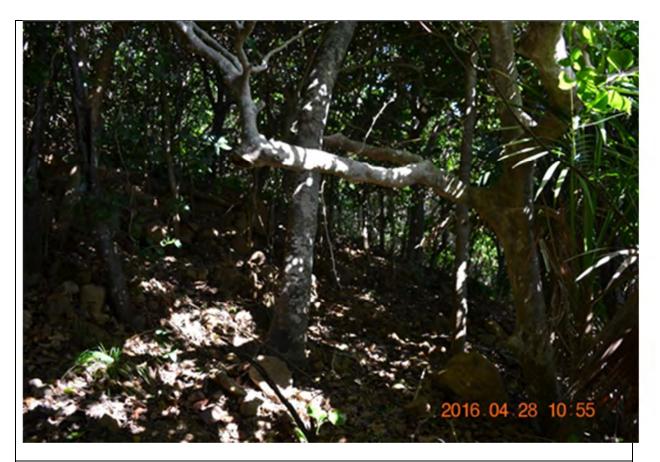
Appendix C. Site Photos



Site 1 –Revegetated old debris slide site 300m west of landslide Area on walking track.



Site 2 North western downslope toe area of debris slide looking wests



Site 2- North western downslope toe area of debris slide looking south east and upslope adjacent to path



Site 2 North western downslope toe area of debris slide looking south east and upslope along track at base of rope access into main slide area



Site 3 North east side of track looking downslope towards toe of debris slide



Site 4 North western downslope toe area of debris slide looking north west and downslope at top of rope access along track in main slide area



Site 5 Lower mid slope area of slide looking upslope to the south west towards backs scarp



Site 5 Lower mid slope area of slide looking upslope to the north east towards toe with building materials from previous proposed works in foreground



Site 6 Midslope of slide looking downslope towards track



Site 6 Midslope of slide looking upslope towards backscarp area with scour channel running along the base along walking route.



Site 6-exposed floor of mid-slope section of slide showing weathered outcrop of weathered but competent Boat Harbour Breccia bedrock



Site 7- Mid to upper slope area looking north west to exposed colluvial batters with large rock "floaters" that could detach down slope towards the track



Site 7 Mid to upper slope area looking south west to exposed colluvial batters with rock "floaters" that could detach down slope towards the track



Site 7 Mid to upper slope area looking south west towards backscarp area



Site 7 Mid to upper slope area looking towards opposite southeast colluvial batters of slide area



Site 7 Mid to upper slope area looking downslope towards track



Site 8 Upper slope of slide looking upslope to backscarp



Site 8 general view of scour channelling in back scarp area



Site 8 Close up of clolluvial batters with large floaters that could detach downslope towards track.



Site 8 Exposed floor of Upper slope section of slide showing extremely weathered outcrop of very weak basaltic dyke with soil like fabric and strength



Site 8 Back scarp area looking upslope



Site 8 Backscarp area looking toward the south eastern colluvial batters



Site 8 Backscarp area looking downslope towards track



Site 9 View from backscarp area of southe western batters from top of bank



Site 9 View from backscarp area of western batters from top of bank





Site 9 View from backscarp area of western batters from top of bank further downslope



Site 10/11/12 Typical View of hard basalt rock outcrop about 20m upslope of slide

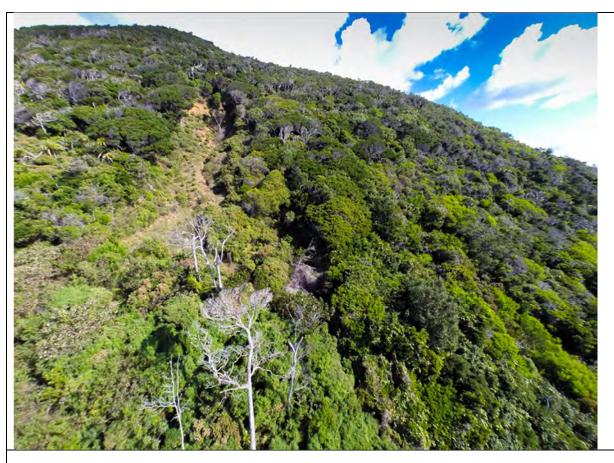


Site 14 Typical View Looking Upslope

Quantitative Risk Assessment for Mutton Bird Walking Track and Recommendations for Risk Reduction Measures



Appendix D. Selected Photos From Drone Aerial Photo Survey













Quantitative Risk Assessment for Mutton Bird Walking Track and Recommendations for Risk Reduction Measures



Appendix E. QRA Input and Output Example



1. BUNCE CALCULATION

1.1 Impact of a falling rock on a moving vehicle

$$P(S) = 1 - (1 - P(S:H))^{N_r}$$

$$P(S:H) = \frac{\frac{N_v}{24 \cdot 1000}}{V}$$

where:

P(S) Probability that a rock hits a vehicle, the product of P(H) and P(S:H)

P(S:H) Probability of vehicle impact given a rock fall N_p Number of people that pass per day

 L_p Average length of a person using the walking track V_p

Average person's speed (assumed to be 5 km/h)

Number of rocks

1.2 Impact of a moving vehicle on a fallen rock

$$P(S) = 1 - (1 - P(S; H))^{N_r}$$

$$\begin{split} P(S:H) &= \frac{\frac{N_p}{24} \frac{L_{dd}}{1000}}{\frac{V_p}{24 \cdot 1000}} \\ \lambda L_{did} &= \lambda \left\lfloor \left(\frac{VM \times rJ}{3.6} \right) + \left\lfloor \frac{V^2}{254 \times d} \right\rfloor \right] \end{split}$$

where: P(S)

Probability that a rock hits a vehicle, the product of P(H) and P(S:H) Probability of vehicle impact given a rock fall P(S:H)

 N_v Number of vehicles that pass per day

Length of decision sight distance L_{dsd}

 V_{v} Average vehicle speed (assumed to be equal to the posted speed limit)

N, Number of rocks

V Initial Vehicle Speed (km/hr)

Reaction Time (seconds) RT

Coefficient of Longitudinal Deceleration

Factor based on engineering judgement, distinguishing good, moderate, and poor line of sight

Notes:

(1) The length of the decision sight distance for a specific vehicle speed (L_{dad}) is used for the calculation involving impact of a moving vehicle on a fallen rock or debris.

(2) Each initial vehicle speed along with its corresponding coefficient of longitudinal

deceleration are used to calculate the Ldsd values.

2. ANNUALISED LIFE RISK

$$ALR = P_{(H)} \times P_{(S:H)} \times P_{(T:S)} \times V \times N$$

ALR

Annualised risk, which may be thought of as the annual probability of a fatality

Annual probability of the hazardous event (Hazards H1 to H6) $P_{(H)}$

Probability of spatial impact (or accident) given the hazardous event taking into $P_{(S:H)}$

account travel distance, given the event

Temporal probability of the consequence occurring, ie probability a vehicle being PITIS

present within the impact zone

Vulnerability of the element at risk (occupants) within the zone of impact due to the

The elements at risk being the number of persons exposed to the hazard (ie

occupancy of vehicles/buses)

3. PROBABILITY OF OCCURRENCE Extract from AGS Commentary on Practice note Guidelines for landslide Risk Management 2007

Table C7 - Mapping Scheme Linking Description of likelihood to Quantitative probability

Description of Condition or Event	Order of Magnitude of Probability Assigned
Occurrence is virtually certain	1
Occurrences of the condition or event are observed in the available database	10-1
The occurrence of the condition or event is not observed, or is observed in one isolated instance, in the available database; several potential failure scenarios can be identified.	10-2
The occurrence of the condition or event is not observed in the available database. It is difficult to think about any plausible failure scenario; however, a single scenario could be identified after considerable effort.	10-3
The condition or event has not been observed, and no plausible scenario could be identified, even after considerable effort.	10-4

4. VULNERABILITY

Extract from RMS Guide to Slope Risk Analysis Version 4

Table 16 - Vulnerability (V) Rating Definitions

Rating	Probability Range	Definition
VI	> 0.5	Person in the open unable to evade rockfall or other debris (movement very/extremely rapid), or buried, or engulfed in a building collapse. Vehicle impacting a block > 1 m high or lost into a deep, narrow void at highway speeds.
V2	0.1 - 0.5	Partial building collapse. Person in open may be able to evade debris. Vehicle impacting a 0.5 – 1 m high block at highway speeds or a block > 1 m high at urban speeds or lost into a shallow void.
V 3	0.01 - 0.1	Building penetrated, no collapse. Emergency evacuation possible. Most people in open able to evade debris. Vehicle impacting a 0.5 - 1 m high block at urban speeds, or a block > 1 m high at low speeds. Vehicle impacting loose or wet mixed soil/rock debris (or crossing a stepped surface with c 0.1 - 0.2 m steps caused by a developing embankment failure) at highway speeds.
V4	0.001 - 0.01	Building struck, damaged but not penetrated. Vehicle impacting a block around 0.2 m high at highway speeds or a 0.5 – 1 m high block at low speeds. Vehicle impacting loose or wet mixed soil/rock debris (or crossing a stepped surface with c 0.1 – 0.2 m steps caused by a developing embankment failure) at urban speeds. Vehicle interacting with a shallow void/depression where the guardfence may prevent a vehicle from leaving the road.
V 5	< 0.001	Building struck, only minor damage etc. Vehicle impacting a block around 0.2 m high at urban speeds or a smaller block at highway speeds. Vehicle impacting loose or wet mixed soil/rock debris at low speeds. Vehicle traversing an irregular surface formed by soil or small (< 100 mm min dimension) rock, or by a developing embankment failure, at highway speeds.

5: REFERENCES

- Bunce, C. M., Cruden, D.M., Morgenstern, N.R., 1997, Assessment of the hazard from rock fall on a highway, Canadian Geotechnical Journal, vol. 34, no. 3, pp 344-356.
- AGS 2007a, Guideline for landslide susceptibility, hazard and risk zoning for land use planning, Australian Geomechanics, vol. 42, no. 1, Australian Geomechanics Society.
- AGS 2007b, Commentary on guideline for landslide susceptibility, hazard and risk zoning for land use planning, Australian Geomechanics, vol. 42, no. 1, Australian Geomechanics Society.
- AGS 2007c, Practice note guidelines for landslide risk management, Australian Geomechanics, vol. 42, no. 1, Australian Geomechanics Society. 4.
- AGS 2007d, Commentary on practice note guidelines for landslide risk management, Australian Geomechanics, vol. 42, no. 1, Australian Geomechanics Society. 5.
- 6. AGS 2007e, Australian geoguides for slope management and maintenance, Australian Geomechanics, vol. 42, no. 1, Australian Geomechanics Society.
- American Association of State Highway and Transportation Officials (AASHTO) 2001, A policy on Geometric Design of Highways and Streets , AASHTO, 4th Edition, Washington DC.

123 INPUT

123 OUTPUT



 SITE DATA
 Site specific data for each element at risk
 Speed (km/hr)
 Avg. Person's Length (m) The Average of a person's speed The Average of a person's length Average daily no. of walkers (people) - high season Average daily no. of walkers (people) - low season 23.20 14.3 Low traffic case scenario High season High season (start date) High season (end date) High season (days) 1/09/2015 31/05/2016 273 92 75% 25% Low season(days) High season (%) Low season (%) The probability that a person occupies the trajectory of the rock at the same time as it falls towards the track Time of event Day (start)
Day (end)
Day (no. of hours)
Day (%)
Night (%) 7:00 AM 5:00 PM 10:00 41.67% 58.33% N_p, Elements at Risk (no. of walkers): Day (%) Night(%) High season, day (people) High season, night (people) 95% 5% 22.04 1.16 13.54 0.71

2. ANNUAL HAZARD PROBABILITY OF DETACHMENT, REACHING THE ELEMENT AT RISK, AND IMPACTING

(neam)	of a	falling	rock	on a	movina	vehicle

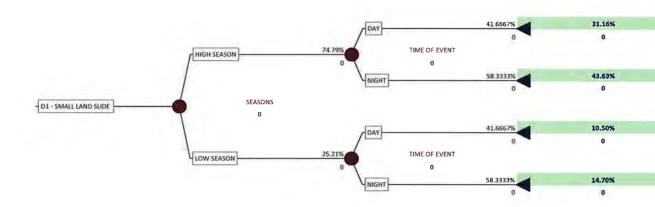
Low season, day (people) Low season, night (people)

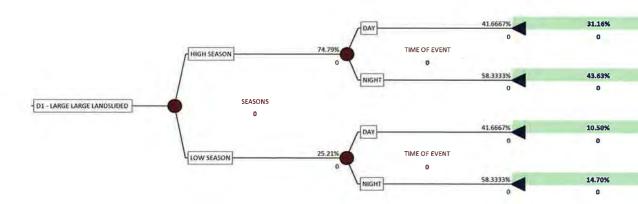
						Doma	ain 1		_			
15		H1 (Small	landslide)			H2 (Large	Landslide)			H2 (Large	boulder)	
Annualised Risk Calculation	High s	eason	Lows	eason	High s	eason	Lows	eason	High s	season	Lows	eason
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
Detachment probability, Pp		0.25000			0.10000		2.00000					
Runout to element at risk, PR	0.90			1.00			0.01					
Annual number of rockfalls, N _r =P _D x P _R	0.225			0.	0.100		0.020					
The average daily walkers, N _P	22	1	14	1	22	1	14	-1	22	1	14	1.
The average length of a person, Lp (m)	1	1	1	. 1	- 1	.1	- 1	1.	1	-1	- 1	1
The average speed of a person, V _P (km/h)	5	5	5	5	5	5	5	5	5	5	5	5
The daily probability of impact given a rock fall /			A COMPANY									
runout to element at risk, P(8:H)	1.84E-04	9.67E-06	1.13E-04	5.94E-06	1.84E-04	9.67E-06	1.13E-04	5.94E-06	1.84E-04	9.67E-06	1.13E-04	5.94E-06
The daily probability that a person occupies the portion of the track affected by a rock fall, P ₍₈₎	4.13E-05	2.18E-06	2.54E-05	1.34E-06	1.84E-05	9.67E-07	1.13E-05	5.94E-07	1.84E-05	9.67E-07	1.13E-05	5.94E-07

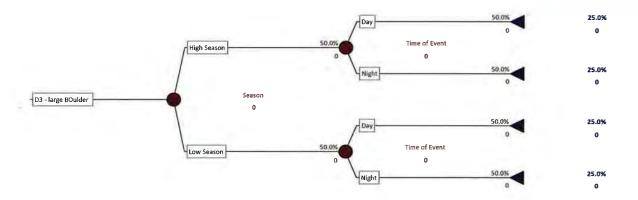
N = %N x Daily average daily no. of walkers

3. VULNERABILITY

Road u	sers			
Impact of falling rock	on moving vehicle			
Domain	Small landslide	Large Landslide	Large boulder	time
1	0.5	0.9	0.2	Day
	0.5	0.9	0.2	Night







Small landslide

	RATIO	PROBABILITY OF A WALKER OCCUPIES THE TRACK P(S)	VULNERABILITY V	ELEMENTS AT RISK N	ALR
Day	31.16%	4.13E-05	5.00E-01	2	1.29E-05
Nigh	t 43.63%	2.18E-06	5.00E-01		1.80E-05

Day	10.50%	2.54E-05	5.00E-01	2	4.34E-06
Night	14.70%	1.34E-06	5.00E-01	2	6.08E-06
	TOTAL ALR				4 135.05

Large Landslide

		RATIO	PROBABILITY OF A WALKER OCCUPIES THE TRACK P(S)	VULNERABILITY V	ELEMENTS AT RISK N	ALR
ason	Day	31.16%	1.84E-05	9.00E-01	2	1.03E-05
ugu se	Night	43.63%	9.67E-07	9.00E-01	2	7.59E-07

	Day	10.50%	1.13E-05	9.00E-01	2	2.13E-06
eason						
Low se	Night	14.70%	5.94E-07	9.00E-01	2	1.57E-07
-	_	TOTAL ALR				1.3353E-05

Large boulde

		RATIO	PROBABILITY OF A WALKER OCCUPIES THE TRACK P(S)	VULNERABILITY V	ELEMENTS AT RISK N	ALR
ason	Day	25.00%	1.84E-05	2.00E-01	2	1.84E-06
High sea	Night	25.00%	9.67E-07	2.00E-01	2	9.67E-08

-	Оау	25.00%	1.13E-05	2.00E-01	2	1.13E-06

N	light	25.00%	5.94E-07	2.00E-01	2	5.94E-08
_	_	TOTAL ALR				3 1210F-06

Land slide	TOTAL RISK (ALR)	Intolerable	Target	Individual
Small landslide	4.13E-05	0.001	0.0001	0.00001
Large landslide	1.34E-05	0.001	0.0001	0.00001
large boulder	3.12E-06	0.001	0.0001	0.00001
TOTAL ALR	5.78E-05	0.001	0.0001	0.00001



Board Meeting: September 2016 Agenda Number: 8 (vi) File Ref: PO0011

LORD HOWE ISLAND BOARD

Business Paper

OPEN SESSION

ITEM

Scientific Research Policy 2016

RECOMMENDATION

It is recommended that the Board adopt the Scientific Research Policy 2016.

BACKGROUND

In December 2009, the Board adopted the current Research Policy to guide research on Lord Howe Island. The policy outlines the criteria for assessing research applications, research assistance provided by the Board, and requirements for approved research projects.

CURRENT POSITION

The Draft Scientific Research Policy has been revised and updated. The key updates include:

- Reference to the Board's Biosecurity and Weed Management strategies to guide identification and priority for research along with the BMP and POM.
- Scientific research knowledge being delivered through Board programs as well as collaborations with research partners and other organisations.
- Reference to scientific rigour, i.e. process of producing sound and defensible science.

In June 2016, the Board resolved to recommend that the Draft Scientific Research Policy 2016 be placed on public exhibition for a period of 28 days from Friday 24th June 2016.

No submissions were received.

RECOMMENDATION

Prepared	David Kelly	Manager Environment & Community Services
Endorsed	Penny Holloway	Chief Executive Officer

LORD HOWE ISLAND BOARD POLICY

TITLE	DRAFT Scientific Research Policy		
DATE ADOPTED	December 2009	AGENDA ITEM	
CURRENT VERSION	December 2016	AGENDA ITEM	
REVIEW	5 years	FILE REFERENCE	CO0018 & PO0011
ASSOCIATED LEGISLATION	Lord Howe Island Act 1953 (LHI Act) Lord Howe Island Regulation 2014 (LHI Reg) Animal Research Act 1985 (AR Act) Environmental Planning and Assessment Act 1979 (EPA Act) Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) National Parks and Wildlife Act 1974 (NPW Act) National Parks and Wildlife Regulation 2009 (NPW Reg.) Threatened Species Conservation Act 1995 (TSC Act)		
ASSOCIATED POLICIES	LHI Biodiversity Management Plan Strategic Plan for the LHI World Heritage Property LHI Permanent Park Preserve Plan of Management LHI Biosecurity Strategy LHI Plant Importation Policy LHI Weed Management Strategy		

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6	Board programs to address knowledge needs	. 3
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1 Introduction

The Lord Howe Island Board (Board) is obligated to manage, protect, restore, enhance and conserve the Island's environment and World Heritage values in a manner that is consistent with and promotes the principles of ecologically sustainable development, pursuant to the Charter in the *Lord Howe Island Act 1953*.

Scientific research delivers knowledge and evidence on which the Board can base management decisions.

The Board also recognises the interest of the broader Australian and global community in the values of the Island, and recognises the desirability of independent research, which may or may not contribute directly to the Board's management programs.

2 Scope of Policy

This policy applies to the Lord Howe Island Group as inscribed on the IUCN's World Heritage Convention excluding the area designated as the Lord Howe Island (commonwealth Waters) Marine Park.

3 Objectives

The main objectives of this policy are to:

- 3.1 Establish a process for identifying and prioritising research that meets existing or emerging knowledge needs.
- 3.2 Deliver identified scientific research knowledge through establishment and maintenance of Board programs.
- 3.3 Encourage collaboration with research partners and other organisations to deliver identified knowledge needs.
- 3.4 Permit and support research that meets the standards of scientific rigour in a consistent, equitable and transparent manner.
- 3.5 Manage and share scientific research.

4 Identifying and prioritising research needs

- 4.1 Biodiversity and conservation knowledge gaps and research needs are identified during the development of Board strategies and plans e.g:
 - LHI Biodiversity Management Plan
 - LHI Permanent Park Preserve Plan of Management
 - LHI Weed Management Strategy
 - LHI Biosecurity Strategy

- 4.2 The Board will give first priority to research that is consistent with the actions and recommendations in the above documents, is critical to the progress and delivery of the Board's Corporate and Operational Plans and makes a significant contribution to the understanding of the Island's environmental values.
- 4.3 Priority will also be given to research which addresses critical social or economic information gaps, makes a significant contribution to the understanding of the Island's social or economic values and will provide a tangible and immediate improvement in the social or economic wellbeing of the Island
- 4.4 Research that may not meet the above criteria should also be considered for approval where the applicant(s) can demonstrate a unique and opportunistic proposal that contributes to biodiversity management and conservation, social or economic wellbeing on LHI.

5 Scientific Rigour

Scientific rigour is a process of ensuring sound and defensible science (OEH 2013) by:

- 5.1 Appropriate design including:
 - establishing a clear objective
 - selecting a scientifically sound and appropriate method
 - ensuring the people involved have relevant skills and experience to undertake the work
 - peer review of the design before implementation
- 5.2 Meticulous implementation including:
 - adhering to the adopted method, and documenting variations
 - ensuring data are reproducible, secure, discoverable and accessible
- 5.3 Objective analysis and reporting of results, including:
 - ensuring evidence supports results and conclusions
 - peer review prior to publishing data, results and conclusions
 - publishing results in appropriate media.

6 Board programs to address knowledge needs

- 6.1 The Board will establish and maintain programs to meet knowledge needs where it can be demonstrated that it is an efficient and effective use of resources e.g. Annual LHI Woodhen survey; Permanent threatened flora monitoring; Weed eradication trends.
- 6.2 A scientific project should only be undertaken or commissioned by the Board if it will meet standards of scientific rigour.
- 6.3 A Board Scientific Research Permit is not required for Board staff with delegation under s171 of the NPW Act to undertake routine management or incidental actions on LHI.

- 6.4 Board staff undertaking coordinated activities such as survey, monitoring or other research on LHI may require a Scientific Licence under the NPW Act and/or approval from an Animal Care and Ethics Committee (ACEC) for work involving animals.
- 6.5 Volunteers assisting Board staff with research must comply with the Board's Volunteer Policy.

7 Collaboration with research partners

7.1 The Board will actively seek partnership with research partners and other organisations to meet knowledge needs where it can be demonstrated that it is not efficient and effective use of Board resources, or if the Board does not hold the required expertise.

8 Permit process

- 8.1 The Board will approve, under the *LHI Act 1953* (LHI Act) and *LHI Regulation 2014* (LHI Reg), where relevant and appropriate, bone fide research projects that meet standards of scientific rigour and that meet the conditions of clause 4.1 and 4.2.
- 8.2 The Board may approve, under the *LHI Act 1953* (LHI Act) and *LHI Regulation 2014* (LHI Reg), where relevant and appropriate, bone fide research projects that meet standards of scientific rigour and that meet the conditions of clause 4.3.
- 8.3 Scientific research that requires the damage, removal, or export of any flora, fauna or substances forming part of the Island requires the approval of the Board under the LHI Reg. A Board research permit satisfies approval under the LHI Reg.
- 8.4 The Board may refuse an application or impose conditions that limit access to sensitive sites and target species, restrict the quantities or volume of flora, fauna and/or substances proposed to be damaged or removed and otherwise modify the methods proposed to be used to reduce impact.
- 8.5 Approval to conduct research on the Island is subject to complying with the conditions outlined in the LHIB Research Permit including the Code for Responsible Conduct of Research.
- 8.6 The Board may make funds and resources available to support and facilitate scientific research. The Board's Chief Executive Officer (CEO) is delegated to approve research, financial assistance and the use of the Board's Research Facility, without further referral to the LHI Board. Research that requires financial support exceeding \$10,000 including the use of the Board's Research Facility will be referred to the LHI Board for consideration.
- 8.7 In order to satisfy clauses 8.1 and 8.2 researchers must submit a LHIB Research Application Form. The following factors will be taken into account when assessing an application for Scientific Research:
 - Potential impacts to target and non-target flora and fauna species or populations, in particular threatened species, populations, ecological communities and identified critical habitat.

- Potential impacts to the habitat of flora and fauna species and other site or ecosystem values, in particular the values of the LHI Permanent Park Preserve.
- Potential impacts to karst, geodiversity and/or other non-biotic features.
- The risk of spreading disease, pathogens, pest species or factors contributing to a listed Key Threatening Processes.
- Potential impacts to residents or visitors and particularly their businesses and access and enjoyment of the island, in particular the values of the LHI Permanent Park Preserve.
- 8.8 Relevant stakeholders will be consulted, where required, to ensure that the benefits and risks of an application are fully assessed.
- 8.9 LHIB Scientific Research Permits are usually issued for a single project. A project may include multiple parties, species or sites.
- 8.10 LHIB Scientific Research Permit terms will be up to the discretion of the LHIB depending on the nature and scope of the proposed activity.
- 8.11 A Permittee may seek the renewal of a permit subject to completion of any annual reporting requirements and compliance with the conditions of the LHIB Scientific Research Permit.

9 Research requiring additional approvals

- 9.1 It is the research permit applicant's responsibility to obtain all relevant approvals and licences prior to commencement of the project such as:
 - a 'scientific licence' under section 132C of the National Parks and Wildlife Act 1974 (NPW Act).
 - a LHI Marine Parks scientific research approval under the Lord Howe Island Marine Parks Act 2004 and the Marine Parks Regulation 1999.
 - an approval from an Animal Care and Ethics Committee (ACEC)
 constituted under the Animal Research Act 1985 (AR Act). The key
 objective of the AR Act is to protect the welfare of animals used in
 connection with research.

10 Managing and sharing scientific research

- 10.1 The Board will monitor compliance with the conditions of the LHIB research permit. Failure to comply with the conditions of a permit may result in a variation, suspension or cancellation of the permit. In severe cases a penalty infringement notice may be issued or a prosecution initiated.
- 10.2 Results of the scientific research will be published in appropriate media and shared with those responsible for relevant management decision-making.

11 Policy Review

The LHIB is responsible for coordinating the review of this policy every 5 years.

12 References

Office of Environment and Heritage, 2013. *Scientific Rigour Position Statement*. http://www.environment.nsw.gov.au/resources/research/OEHSciRigPosnStmtJul13.p df. Accessed 24 May 2016.

National Health and Medical Research Council, the Australian Research Council and Universities Australia. (2007) *Australian Code for the Responsible Conduct of Research Conduct of Responsible Research*. http://www.nhmrc.gov.au/index.htm Accessed 24 May 2016.

Board Meeting: September 2016 Agenda Number: 8 (vii) File Ref: PO 0008

LORD HOWE ISLAND BOARD Business Paper

OPEN SESSION

ITEM

Procedure for cleaning second hand vehicles, plant and equipment prior to importation

RECOMMENDATION

It is recommended that the Board:

- a) place the Draft procedure for cleaning second hand vehicles, plant and equipment prior to importation on public exhibition for a period of 28 days.
- b) that the definition of vehicle under Section 11 of the Vehicle Importation, Transfer and Use Policy 2015 be amended to include second hand plant and equipment as follows: "If a vehicle (including a trailer, plant and equipment) to be imported is second hand, the importer must provide a statutory declaration stating that the vehicle has been inspected and cleaned with a high pressure hose to ensure that no weeds, seeds, insects, spiders, etc. are transported to the island. Such a declaration is required to be submitted to the Board prior to the vehicle leaving the mainland".

BACKGROUND

In March 2016 the Board adopted a revised Biosecurity Strategy 2016 which identified improved biosecurity measures for the island. The Vehicle Importation, Transfer and Use Policy 2015 is silent in regard to the procedures for cleaning second hand vehicles and the requirements for importation of second hand plant and equipment, which presents a biosecurity risk through transport of soil, seeds, plant pathogens and fauna. This biosecurity risk can be mitigated through amending the definition of a vehicle in Section 11 of the Vehicle Importation, Transfer and Use Policy 2015 to include second hand plant and equipment and the development of a procedure for proof of cleaning vehicles.

CURRENT POSITION

A draft procedure for cleaning second hand vehicles, plant and equipment prior to importation has been prepared (Attachment 1) to ensure the Board has proof that imported second hand vehicles (including trailers and plant and equipment) have been adequately cleaned prior to import.

RECOMMENDATION

It is recommended that the Board:

- a) place the Draft procedure for cleaning second hand vehicles, plant and equipment prior to importation on public exhibition for a period of 28 days.
- b) amend the definition of vehicle under Section 11 of the Vehicle Importation, Transfer and Use Policy 2015 to include second hand plant and equipment as follows: "If a vehicle (including a trailer, plant and equipment) to be imported is second hand, the importer must provide a statutory declaration stating that the vehicle has been inspected and cleaned with a high pressure hose to ensure that no weeds, seeds, insects, spiders, etc. are transported to the island. Such a declaration is required to be submitted to the Board prior to the vehicle leaving the mainland".

Prepared	David Kelly	Manager Environment & Community Development
Endorsed	Penny Holloway	Chief Executive Officer

Attachment 1:

Draft procedure for cleaning second hand vehicles, plant and equipment prior to importation

LORD HOWE ISLAND BOARD			
EXTERNAL PROCEDURE			
TITLE	Proof of cleaning second hand vehicles, plant and equipment prior to vehicle importation		
DATE ADOPTED	ТВА		
REVISED	-	REVIEW	5 years
FILE REFERENCE	PO0008		
ASSOCIATED POLICIES & PROCEDURES	Vehicle Importation, Tr Lord Howe Island Biose	·	2015

1 Introduction

The importation of used or second hand vehicles to Lord Howe Island requires approval from the Lord Howe Island Board in accordance with the Vehicle Importation, Transfer and Use Policy 2015. Section 11 of that Policy states "If a vehicle (including a trailer) to be imported is second hand, the importer must provide a statutory declaration stating that the vehicle has been inspected and cleaned with a high pressure hose to ensure that no weeds, seeds, insects, spiders, etc. are transported to the island. Such a declaration is required to be submitted to the Board prior to the vehicle leaving the mainland".

1.1 Purpose of the Procedure

To ensure second hand vehicles (& trailers), plant or equipment imported to the island submit a Statutory Declaration to the Board advising that the vehicle has been cleaned in accordance with the Vehicle Importation, Transfer and Use Policy 2015 prior to being imported.

1.2 Application of the Procedure

Scope – external and internal cleaning

The procedure applies to all residents, contractors and employees given approval from the Board to import a used or second hand vehicle or plant and equipment to Lord Howe Island.

2 Procedure

- a) Importers of vehicles, plant and equipment must, prior to importation:
 - i. Send to the Board (fax 02 6563 2127 or scanned & emailed administration@lhib.nsw.gov.au) a Statutory Declaration signed by a registered Justice of the Peace indicating that the vehicle has been cleaned in accordance with Section 111 or 11.2 of the Vehicle Importation, Transfer and Use Policy 2015.
 - ii. Retain a copy the Statutory Declaration in the vehicle for shipping stevedores to sight prior to loading.
- b) Shipping stevedores must not import vehicles, plant or equipment that:
 - a. Do not have a signed Statutory Declaration, or
 - b. Have external or internal foreign material e.g. freight, produce, plant or animal material, and
 - must notify the Board and importer immediately.

c) The Manager Environment World Heritage reviews each shipping manifest prior to the ship's departure. If the Board has not received a Statutory Declaration for any listed vehicle, plant or equipment the shipping stevedores and importer will be advised immediately that the vehicle, plant or equipment can not be imported until condition (a) above has been met.

3 Associated Policies, Procedures and Checklists

- Vehicle Importation, Transfer and Use Policy 2015
- Biosecurity Strategy 2016

4 Procedure Review

The Procedure shall be reviewed at 5 years from the date of approval in accordance with the timeframe specific in the procedure. The procedure may however be reviewed and amended anytime within this period as required.

5 Approval	
CHIEF EXECUTIVE OFFICER	Date

Board Meeting: September 2016 Agenda Number: 10 (i) File Ref: P-L 352

LORD HOWE ISLAND BOARD Business Paper

OPEN SESSION

ITEM

Administration of the Estate of the Late Joyce Petherick – Perpetual Lease 1970/03

RECOMMENDATION

That the Board recommend to the Minister for the Environment, that Mr Ian Petherick as the Executor of the Estate of the Late Joyce Petherick be granted approval to hold Perpetual Lease 1970/03 of Lot 2 in Deposited Plan 1191456 Lord Howe Island until 30 September 2018 to enable him to complete the administration of the estate by either applying to the Board for a certificate from the Minister that the beneficiaries are entitled to hold the lease or to sell and transfer the lease.

BACKGROUND

An application has been received from Mr Ian Petherick, as executor of the Estate of the Late Joyce Petherick, requesting that Perpetual Lease 1970/03 of Lot 2 in Deposited Plan 1191456 Lord Howe Island be transferred into the name of the Estate of the Late Joyce Petherick to allow him to deal with the administration of the estate. A copy of this letter is attached Tab A.

A copy of the Grant of Probate of the Will of the late Joyce Petherick has been provided, naming Mr Ian Petherick as the executor of the Estate of the Will. Probate for the Estate was granted on 9 August 2016 (copy attached Tab B)

CURRENT POSITION

All land on Lord Howe Island vests in the Crown and may only be dealt with in accordance with the provisions of the *Lord Howe Island Act, 1953*. The Minister may grant perpetual leases of vacant Crown Land for the purposes of residence (section 21 LHI Act).

Section 23 of the LHI Act governs the transfer of perpetual leases, with subsections (10) to (13) dealing with the transfer of leases the subject of a will or intestacy.

Section 23(10)(a) provides that "If a lease under this Act devolves under a will or intestacy upon any person, such person may hold the lease for such period after the death of the testator or intestate as the Minister on the recommendation of the Board may permit."

By virtue of section 45 of the *Probate and Administration Act 1898* upon the grant of probate of a Will all real and personal estate of the deceased devolves to the executor of the estate

by operation of law. As probate of Mrs Petherick' estate has now been granted, perpetual lease 1970/03 has by operation of law devolved to Mr Ian Petherick as the executor of the estate.

The effect of section 23(10)(a) of the LHI Act is to limit the period of time that the executor of an estate to whom a perpetual lease had devolved may hold the lease to "such a period as the Minister on the recommendation of the Board may permit."

Section 23(10)(b) of the LHI Act then goes on to provide that during the time that the Minister permits the executor to hold the lease, the executor may either:

- apply to the Board to obtain a certificate from the Minister that they are entitled to hold the lease; or
- sell or transfer the lease.

It should be noted that if during the period the Minister permits the executor to hold the lease, the executor does not either obtain a certificate from the Minister that the persons are permitted to hold the lease or transfer the lease, the lease shall be liable to forfeiture (LHI Act section 23(10)(d)).

Mr Petherick as the executor of the Estate of the Late Joyce Petherick has written to the Board requesting that the current lease be transferred into the name of the Estate of the Late Joyce Petherick to allow him to deal with the administration of the estate.

The LHI Act does not stipulate the period of time the Minister may approve an executor of an estate to hold a perpetual lease. The Board's "Transfer of Perpetual Lease Policy" recommends that "a maximum of 2 years from the date of probate as a reasonable period of time to enable an executor to either apply to the Board for a certificate from the Minister that the beneficiary is entitled to hold the lease or to sell and transfer the lease" (page 4).

RECOMMENDATION

That the Board recommend to the Minister for the Environment, that Mr Ian Petherick as the Executor of the Estate of the Late Joyce Petherick be granted approval to hold Perpetual Lease 1970/03 of Lot 2 in Deposited Plan 1191456 Lord Howe Island until 30 September 2018 to enable him to complete the administration of the estate by either applying to the Board for a certificate from the Minister that the beneficiaries are entitled to hold the lease or to sell and transfer the lease.

Prepared	David Kelly	Manager Environment & Community Services
Endorsed	Penny Holloway	Chief Executive Officer
Attachments: Attachment A: Letter from Mr Ian Attachment B: Probate of the Will		•

Ian Petherick 1 Aspect Place Narangba Qld 4504 12th August 2016.

Penny Holloway CEO Lord Howe Island Board Bowker Avenue Lord Howe Island NSW 2898

Dear Penny,

Re: Estate of the late Joyce Petherick – Lot 2 Douglass Drive.

This letter serves to confirm that I am the sole Executor of my late Mother's Will.

I request that the current Lease be transferred into the name of the Estate of the late Joyce Petherick to allow me administer the Estate moving forward.

I am currently in possession of the lease document for the abovementioned property.

Can you please confirm that this request is in order?

Thank you in advance.

Regards,

Ian Petherick.

Board Meeting: September 2016

Agenda Number: 10 (ii)

File Ref: P-L344

P-L414

LORD HOWE ISLAND BOARD Business Paper

OPEN SESSION

ITEM

Application for consent to transfer part of the land of Perpetual Lease 1961.01 from Mrs Mavis Fitzgerald to Mrs Sharon Van Gelderen, by way of issuing separate perpetual leases.

RECOMMENDATION

It is recommended that the Board approve the proposed transfer of part of Perpetual Lease 1961.01 from Mrs Mavis Fitzgerald to Mrs Sharon Van Gelderen and if approved:

- a) recommend to the Minister to grant a lease in perpetuity for the purpose of a residence, over Lot 30 of DP1222502 to Mrs Mavis Fitzgerald, subject to the standard perpetual lease conditions.
- b) recommend to the Minister to grant a lease in perpetuity for the purpose of a residence, over Lot 2 DP1118575 and Lot 31 of DP1222502 to Mrs Sharon Van Gelderen, subject to the standard perpetual lease conditions.

BACKGROUND

In March 2016, the Lord Howe Island Board approved a development application (DA2016-18) for a boundary adjustment (subdivision) of Lots 139 & 156 DP 757515, and Lot 1 DP 1118575 Lagoon Road, Lord Howe Island

On 19 July 2016, the subdivision was registered with the NSW Land & Property Information and Lot 30 and Lot 31 of DP1222502 were formed (Attachment 1).

The Board has received an application to transfer part of Perpetual Lease 1961.01, being Lot 31 DP1222502 from Mrs Mavis Fitzgerald to Mrs Sharon Van Gelderen. The residue of the lease (Lot 30 DP1222502) is to be retained by Mrs Fitzgerald.

Mrs Van Gelderen currently holds Perpetual Lease 2008.01 over Lot 2 DP1118575. Lot 31 will be transferred and included into a new perpetual lease to be held by Mrs Van Gelderen.

CURRENT POSITION

All land on Lord Howe Island is Crown land and may only be dealt with in accordance with the provisions of the *Lord Howe Island Act 1953* (the Act). Pursuant to section 21 of the Act the Minister may lease vacant Crown lands (of 2 hectares or less) in perpetuity for the purpose of residence to an Islander (as defined in section 3 of the Act).

Section 23 of the Act prescribes the form and manner by which the whole or part of a perpetual lease may be transferred. Approval to transfer a lease to an Islander requires the approval of the Minister (section 23(3)), made on the recommendation of the Board.

The Board has assessed the application to determine that the requirements of the Act have been satisfied. Mrs Van Gelderen is an Islander within the meaning of Section 3 of the Act (Attachment 2).

Section 23(1)(a) of the Act provides that the consideration for the transfer of a lease shall not exceed the fair market value of the interest of the transferor in the unimproved land the subject of the lease, the fair market value of the improvements on the land at the commencement of the lease and of any improvements subsequently effected with the Board's approval and if used for commercial purposes, the value of the business. Such fair market values shall be as determined by the NSW Valuer-General. The valuation is undertaken at arm length from the Board and the Board has no role or influence over the NSW Valuer-General.

The application includes a certificate of valuation on behalf of the Valuer General (Attachment 3). The Board has reviewed the transfer consideration and is satisfied that the sale price does not exceed the value as determined by the Valuer-General.

Section 23(4B) of the Act governs the transfer of part only of the land comprised in an original lease, where the original lease was a lease under section 21 of the Act and the residue of the land is retained by the transferor. In these circumstances, separate perpetual leases are to be issued in respect of the part transferred and the residue of the land retained, and the original lease shall be delivered up for cancellation.

Should the Minister approve the transfer, in accordance with the provisions of section 23(4B) of the Act separate perpetual leases are to be issued in respect of the part transferred and the residue of the land retained, and the original leases (1961.01 & 2008.01) must be delivered up for cancellation.

RECOMMENDATION

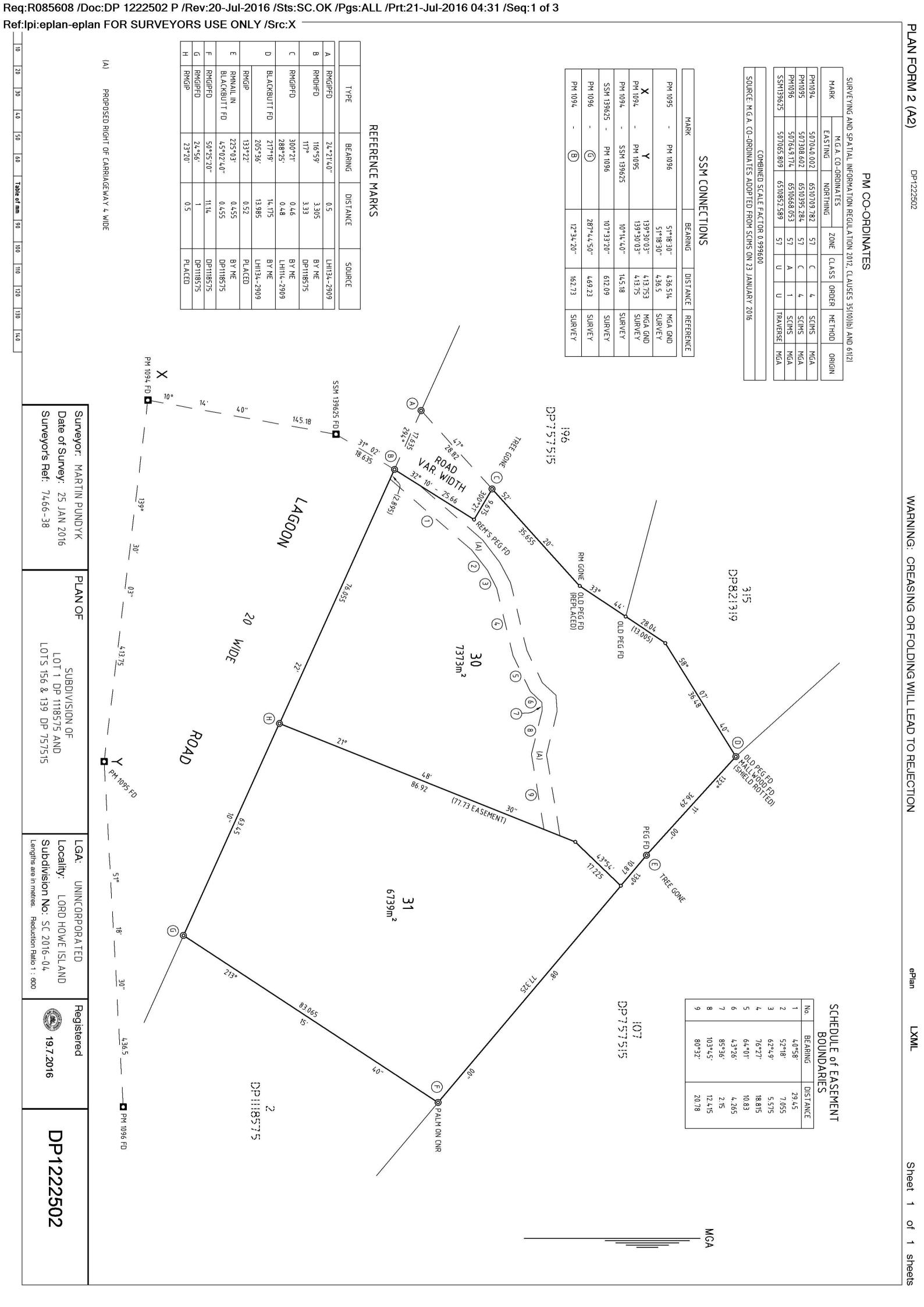
It is recommended that the Board approve the proposed transfer of part of Perpetual Lease 1961.01 from Mrs Mavis Fitzgerald to Mrs Sharon Van Gelderen and if approved:

- a) recommend to the Minister to grant a lease in perpetuity for the purpose of a residence, over Lot 30 of DP1222502 to Mrs Mavis Fitzgerald, subject to the standard perpetual lease conditions.
- b) recommend to the Minister to grant a lease in perpetuity for the purpose of a residence, over Lot 2 DP1118575 and Lot 31 of DP1222502 to Mrs Sharon Van Gelderen, subject to the standard perpetual lease conditions.

Prepared	David Kelly	Manager Environment & Community Development
Endorsed	Penny Holloway	Chief Executive Officer

Attachments:

- 1. Deposited Plan DP1222502 dated 19 July 2016
- 2. Statutory Declaration from Mrs Sharon Van Gelderen for Islander status
- 3. Certificate of Valuation (CONFIDENTIAL)



STATUTORY DECLARATION (Oaths Act 1900 (NSW)

SHARON VAN GELDEREN
of LACOON ROAD, LORD HOWE ISCAND, NSW 2898
Home duties, do solemnly and sincerely declare as follows:
 I resided on Lord Howe Island ("the Island"), continuously and in good faith as my usual home, without any other habitual residence immediately before 1 January 1982;
AND
2. (Please lick the appropriate box)
I am a person whose name was, on 22 April 1954, shown in the records of the Chief Secretary's Department as that of a holder (at any time before 22 April 1954) of a permissive occupancy of part of the Island from the Board of Control. OR
I am the spouse, widow or widower of
I am the issue of H.A. INNES who is a person whose name was, on 22 April 1954, shown in the records of the Chief Secretary's Department as that of a holder (at any time before 22 April 1954) of a permissive occupancy of part of the Island from the Board of Control. OR
I am the spouse, widow or widower of
And I make this sclerm declaration conscientiously believing the same to be true, and by virtue of the provisions of the Oaths Act 1900.
Declared at LORD HOWE GLAND DATE 27th Q folier 2015
Signature of person making declaration . D. Celcl.
Before me, signature of witness - Arayt-
Name of witness HAZEL DATEMA DAYTEN
Address of witness AGGEN ROAT LORD HOWE ISLAND
Authority of witness of the second se

Board Meeting: September 2016 Agenda Number: 10 (iii) File Ref: P-L357

LORD HOWE ISLAND BOARD Business Paper

OPEN SESSION

ITEM

Application for consent to transfer part of the land of Perpetual Lease 1972.01 from Mr Bruce Maxwell Thompson to Mrs Leilani Salumi Thompson, by way of issuing separate perpetual leases; and application for subsequent consent to transfer both Perpetual Leases by way of mortgage

RECOMMENDATION

It is recommended that the Board:

- 1. Approve the proposed transfer of part of Perpetual Lease 1972.01 from Mr Bruce Maxwell Thompson to Mrs Leilani Salumi Thompson, by way of issuing separate perpetual leases and if approved:
 - a) recommend to the Minister to grant a lease in perpetuity for the purpose of a residence, over Lot 2 DP 1129296 to Mrs Leilani Salumi Thompson, subject to the standard perpetual lease conditions.
 - recommend to the Minister to grant the transfer of the perpetual lease over Lot 2 DP 1129296 by way of mortgage from Mrs Leilani Salumi Thompson to the ANZ bank
 - c) recommend to the Minister to grant a lease in perpetuity for the purpose of a residence, over Lot 52 DP 757515 to Mr Bruce Maxwell Thompson, subject to the standard perpetual lease conditions.
 - d) recommend to the Minister to grant the transfer of the perpetual lease over Lot 52 DP 757515 by way of mortgage from Mr Bruce Maxwell Thompson to the Westpac Banking Corporation
- 2. Approve the registration of the plan of proposed right of way prepared by Martin Pundyk dated 15 September 2014.

BACKGROUND

Mr Bruce Maxwell Thompson holds the mortgage over Perpetual Lease 1972.01 which is currently held by way of mortgage by the Westpac Banking Corporation. This lease is comprised of Lot 2 DP 1129296 and Lot 52 DP 757515 (Attachment 1 and 2).

The Board has received an application to transfer part of Perpetual Lease 1972.01, being Lot 2 DP 1129296 from Mr Bruce Thompson to Mrs Leilani Thompson (Attachment 3). The residue of the lease (Lot 52 DP 757515) is to be retained by Mr Thompson.

The proceeds from the sale of Lot 2 DP 1129296 will be used to repay part of the mortgage with the Bank.

Subject to the Board receiving all the necessary documentation, Mrs Leilani Thompson has advised that subject to approval she intends to transfer the newly created perpetual lease to the ANZ bank, by way of mortgage. This will only proceed if the Board and the Minister approves the initial transfer of land.

CURRENT POSITION

All land on Lord Howe Island is Crown land and may only be dealt with in accordance with the provisions of the *Lord Howe Island Act 1953* (the Act). Pursuant to section 21 of the Act the Minister may lease vacant Crown lands (of 2 hectares or less) in perpetuity for the purpose of residence to an Islander (as defined in section 3 of the Act).

Section 23 of the Act prescribes the form and manner by which the whole or part of a perpetual lease may be transferred. Approval to transfer a lease to an Islander requires the approval of the Minister (section 23(3)), made on the recommendation of the Board.

The Board has assessed the application to determine that the requirements of the Act have been satisfied. Mrs Leilani Thompson is an Islander within the meaning of Section 3 of the Act (Attachment 4).

Section 23(1)(a) of the Act provides that the consideration for the transfer of a lease shall not exceed the fair market value of the interest of the transferor in the unimproved land the subject of the lease, the fair market value of the improvements on the land at the commencement of the lease and of any improvements subsequently effected with the Board's approval and if used for commercial purposes, the value of the business. Such fair market values shall be as determined by the NSW Valuer-General. The valuation is undertaken at arm length from the Board and the Board has no role or influence over the NSW Valuer-General.

The application includes a certificate of valuation on behalf of the Valuer General (Attachment 5). The Board has reviewed the transfer consideration and is satisfied that the sale price does not exceed the value as determined by the Valuer-General.

Section 23(4B) of the Act governs the transfer of part only of the land comprised in an original lease, where the original lease was a lease under section 21 of the Act and the residue of the land is retained by the transferor. In these circumstances, separate perpetual leases are to be issued in respect of the part transferred and the residue of the land retained, and the original lease shall be delivered up for cancellation.

Should the Minister approve the transfer, in accordance with the provisions of section 23(4B) of the Act separate perpetual leases are to be issued in respect of the part transferred and the residue of the land retained, and the original leases (1961.01 & 2008.01) must be delivered up for cancellation.

Dwelling entitlements

Both Lot 2 and Lot 52 have separate dwellings. Lot 2, the subject of the application contains the original dwelling. In January 2007, development consent was granted for the construction of a dwelling on Lot 52 under Category A of the Board's 'Allocation & Granting of Dwelling Entitlements Policy'. A condition of consent required the applicant to reside in the proposed dwelling within 36 months of the lease being granted.

In 2009, the Board obtained legal advice to clarify whether the new dwelling was being occupied in accordance with the consent. It was found that as Mr Thompson was one of the applicants and was residing in the new dwelling that this would satisfy the condition (as worded) and enforcement action would not be able to be taken under the *Environmental Planning & Assessment Act 1979*.

The proposed transfer of the part of the land of Perpetual Lease 1972.01 from Mr Bruce Thompson to Mrs Leilani Thompson addresses the original intention of Category A, albeit to a different family member.

A plan has been prepared by a registered surveyor to show a right of way across Lot 52 to Lot 2 (Attachment 6). It should be noted that the proposed right of way follows the existing formed access and traverses Lot 160 held under Special Lease by Mr Thompson.

A right of carriageway does not require development consent. In accordance with the Registrar Generals Directions, easements between Crown leases can only be created as rights stipulated in the terms of the individual leases. Thus the plan of proposed right of carriageway must be registered and the affected leases must be amended and approved by the Board and the Minister.

RECOMMENDATION

It is recommended that the Board:

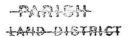
- Approve the proposed transfer of part of Perpetual Lease 1972.01 from Mr Bruce Maxwell Thompson to Mrs Leilani Salumi Thompson, by way of issuing separate perpetual leases and if approved:
 - e) recommend to the Minister to grant a lease in perpetuity for the purpose of a residence, over Lot 2 DP 1129296 to Mrs Leilani Salumi Thompson, subject to the standard perpetual lease conditions.
 - f) recommend to the Minister to grant the transfer of the perpetual lease over Lot 2 DP 1129296 by way of mortgage from Mrs Leilani Salumi Thompson to the ANZ bank
 - g) recommend to the Minister to grant a lease in perpetuity for the purpose of a residence, over Lot 52 DP 757515 to Mr Bruce Maxwell Thompson, subject to the standard perpetual lease conditions.

- recommend to the Minister to grant the transfer of the perpetual lease over Lot 52 DP 757515 by way of mortgage from Mr Bruce Maxwell Thompson to the Westpac Banking Corporation
- 2. Approve the registration of the plan of proposed right of way prepared by Martin Pundyk dated 15 September 2014.

Prepared	David Kelly	Manager Environment & Community Development
Endorsed	Penny Holloway	Chief Executive Officer

Attachments:

- 1. Plan for Portion 52
- 2. Deposited Plan DP1129296
- 3. Application for consent to transfer part of the land of Perpetual Lease 1972.01
- 4. Statutory Declaration from Mrs Leilani Thompson for Islander status
- 5. Certificate of Valuation (CONFIDENTIAL)
- 6. Plan of proposed Right of Way



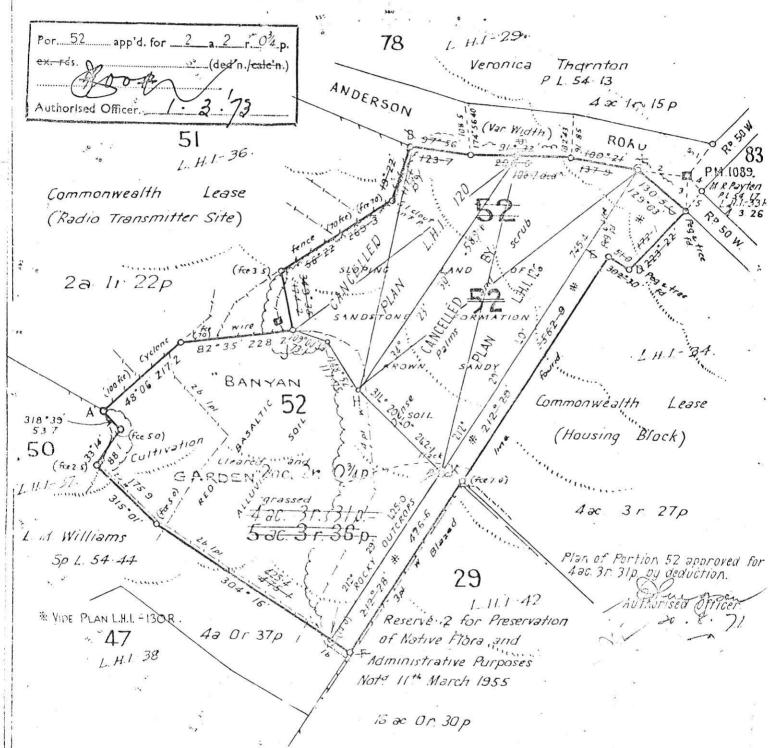
COUNTY

-LAND-BOARD-DIGTRIGT

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Applied for under the 22nd Section of the former tends Consolidation Act, 1953
LORD HOWE ISLATIO

Portion 52 John Maxwell Sydney Thompson Sp. L. 54-7



Surround Area 5.9768ac.

REFERENCE M	ARKS	P.	M. CO	NNECT	IONS
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C - 320 29 Yellow		3	181"	36' 20"	72 - /2
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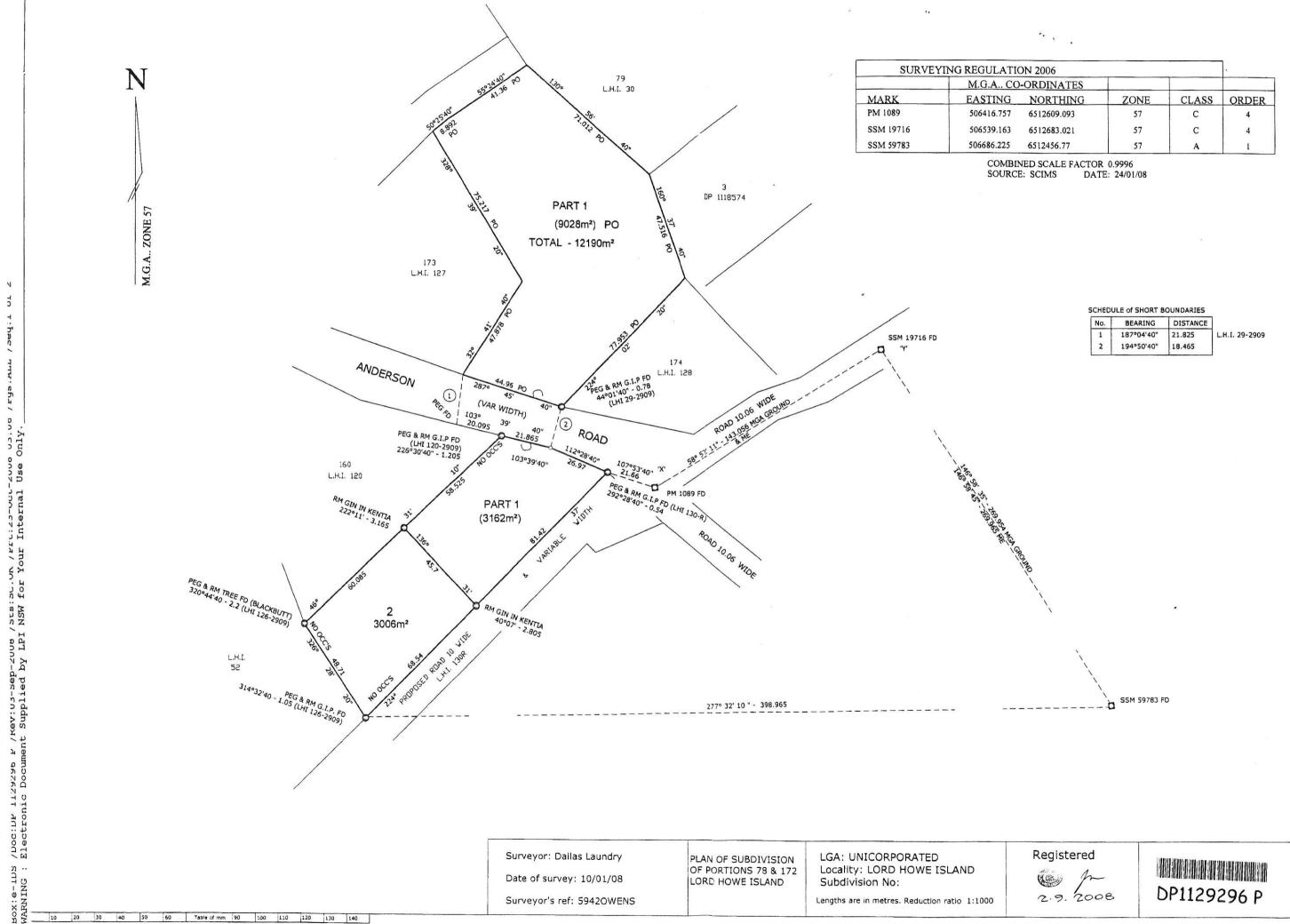
Daniel Stern Mulley Sydney

a Surveyor registered under the Surveyors Act 1929 hereby cortely that the survey represented in this pain is accurate and has been did in my made being in eccaraonce with the survey heactical legislations for interest between the social resulting profess of the Proportion of the Survey heact of Lends was supervisional momental in the Survey heact of the Survey and the social resulting of the Survey and the survey of t

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Surveyor: Dallas Laundry Date of survey: 10/01/08 Surveyor's ref: 59420WENS

PLAN OF SUBDIVISION **OF PORTIONS 78 & 172** LORD HOWE ISLAND

LGA: UNICORPORATED Locality: LORD HOWE ISLAND Subdivision No:

Lengths are in metres. Reduction ratio 1:1000

Registered

2.9. 200B

DP1129296 P

RECEIVED

PL357

3 0 AUG 2016

Lord Howe Island Board

Form 5

Application for consent to transfer a lease or part of a lease or to sublet a lease

(Clause 39 (1))

Lord Howe Island Act 1953, section 23

RECEIVED the sum of \$ 50, being the fee required with this application. Receipt No				
Pursuant to section 23 of the	Lord Howe Island Act 1953,			
I, [full name]BR	ICE MAXWELL -	THOURSON		
of [address]	derson rd ha	RD HOWE ISLAND		
the holder of the lease(s) spe Governor) (where required)	cified in Schedule 1, apply for	the consent of the Minister (a.t(s) of such lease(s) by way of		
to [proposed transferee or sublessees] LELAHI THOUPSON of [address] ANDERSON RD LORD HOWE ISLAND Declaration marked "A" has been made by me. I enclose a certified copy of the original agreement or contract for the sale of such lease(s) or part(s) of such lease(s) and apply for approval of that agreement or contract. [Strike out if there is no written agreement or contract] I also enclose a sketch showing the subdivision line or lines and indicating the part(s) of the lease(s) proposed to be transferred. [Strike out if it is proposed to transfer whole of lease(s)]				
Schedule 1				
Class of Lease (Perpetual or Special)	No of Lease	Area	Portion No	
PERPETUAL 1972.01 3,006 sqn LOT 2 DP 1129296				
Buce Hong			, - , ., j	

Address to which notices are to be sent:

To the Chairperson,

Lord Howe Island Board

Lord Howe Island NSW 2898

Declaration "A" by persons proposing to transfer or sublet

I, [full name] BRUCE MAXWELL THOUPSON	1
of [address] BANYAN CARDEN, ANDERSON RD.	LOPO HOWE ISLANO.

being the holder of the lease(s) specified in Schedule 1, solemnly declare and affirm that the answers to the questions in Schedule 2 are correct in every particular.

Schedule 2

1	What is the date of your birth?	19TH APRIL 1946
2	What are your reasons for wishing to transfer your lease(s) or part(s) of such lease(s) or sublet your lease(s)? State fully.	TRANSFER PART OF LEASE TO MY DAUGHTER
3	Are there any improvements on the land proposed to be transferred? Give brief particulars and estimated values of the improvements.	X PWELLING - ON CONCRETE SLAB. TIMBER FRAME, HARDIFLEX CLADDING IRON ROOF. A BEDROOM + ENSUITE. YALUED AT 575,000.00
4	What is the amount: (a) of the consideration agreed on? (b) of the sum for goodwill included in the consideration?	(a) \$515,000.00 (b)
5	Have you made any agreement or contract for the sale of the lease(s) or part(s) of such lease(s)? If so, a certified copy should be lodged with this application.	No.
6	Is the person to whom you propose to transfer your lease(s) or part(s) of such lease(s) or sublet your lease(s) an Islander?	YES.
7	If the person to whom you propose to transfer your lease(s) or part(s) of such lease(s), or sublet your lease(s), as the case may be, is not an Islander, is there any Islander residing on the Island who desires and is in a position to take such transfer or sublease? Indicate the grounds for your answer to this question.	

I make this solemn declaration as to the above matters according to the law in this behalf made and subject to the punishment by law provided for any wilfully false statement in any such declaration.

Signature of Declarant:
Made before me at LORD HOWE ISLAND
This Twenty APINTH day of AUGUST , 20.16
Signature of a Justice of the Peace, Commissioner-for Affidavits or Notary Public

Declaration "B" by proposed transferee or sublessee

I, [fu	ll name]	Leikam Solum	MI T401	np.	son		
of faddress							
solen	nnly declare and a	ffirm that I am the person	to whom				
prope	[the proposed transferor] BRUCE THOM PSONS proposes to transfer the lease(s) or part(s) of such lease(s) (or to sublet) the lease(s) particularised in Schedule 1, that the transaction is entered into in good faith, and that Schedule 3 contains a true statement of all lands now held by me, my spouse and my children living with me or dependent on me.						
Sch	edule 3						
Cl	ass of holding	No of holding	Area		Portion No	By whom he	eld (spouse or child)
٨	NIL If no land is held write "Nil"						
exclu		affirm that my sole objecthat the answers to the que					
1		der? If so, state the ground	ds on				
1	which you claim		as on		S. ISLAHA		
2 What is the date and place of your birth? 5TH July 1987 TAVEUNI - FIJI			(HI - FIJI.				
3	(a) What is your	r marital status?	(a)	ž	MARRI	EP	5
(b) State the age and sex of any children living with you or dependent on you.							
4	What is the amou	unt: deration agreed on?	(a)		\$515,00	0.00	
	consideratio)			
5	What are your reasons for wishing to acquire the subject lease(s) or part(s) of such lease(s)? Indicate the use you intend to make of the land.						
puni <i>C</i> Sign	shment by law pro		se statement	in a	ny such declaratio		d subject to the
Address to which notices are to be sent:							
		LORD Haws 15					
Made before me at LORD HOWE ISLAND							
This NENTY MINTH day of AUGUST , 20.16							
This wanty winth day of AUGUST , 20.16 Signature of a Justice of the Peace, Commissioner for Affidavits or Notary Public:							

STATUTORY DECLARATION (Oaths Act 1900 (NSW)

I, LEILANI SALUMI THOMPSON,
of ANDERSON ROAD, LORD HOWE ISLAND, NSW, 2,898
BUSH REGENERATOR , do solemnly and sincerely declare as follows:
 I reside on Lord Howe Island ("the Island"), continuously and in good faith as my usual home, without any other habitual residence
AND
 I have resided on the Island, immediately previously to this time, continuously for a period of
AND
 3. My continuous residence on the Island has not been interrupted other than: (a) to attend a school, college, university or other educational institution or (b) to gain experience in a trade, profession or gainful employment for a period of
And I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the Oaths Act 1900.
Declared at LORO HOUT SCAND Date 30/8/16
Signature of person making declaration
Before me, signature of witness.
Name of witness AM1 COUSE HICKET
Address of witness TL DOUGCAS OR, LORD HOLLE ISCAND
Authority of witness/IP/solicitor/other/folease state)): IP Registration Number: 20/507

L

Board Meeting: September 2016 Agenda Number: 10 (iv) File Ref: P-L396

LORD HOWE ISLAND BOARD Business Paper

OPEN SESSION

<u>ITEM</u>

Application to suspend the condition of residency - Perpetual Lease 1992.01 (ME Shick)

RECOMMENDATION

It is recommended that the Board approve the suspension of the condition of residence of Perpetual Lease 1992.01 for a period of 5 years, subject to provision of appropriate medical certificate/s.

BACKGROUND

Perpetual leases carry a requirement of residency (section 21(7)), which is defined as 'residing by the person referred to in the context continuously and in good faith ... as his or her usual home, without any other habitual residence' (section 3(1)).

The Board (section 21(7)), or the Minister (section 21(7A)) can suspend the condition of residency or attach conditions, reservations and provisions to the lease (section 21(8)) to deal with any special circumstances (sections 21(7)–21(8)).

Pursuant to section 21(7) of the Lord Howe Island Act, 1953:

Where the holder or the owner (subject to mortgage) or sublessee of the lease has been or shall be prevented by sickness of himself or herself or family or other adverse circumstance from performing such condition, the Board may, upon application as prescribed, and on sufficient reason being shown, suspend such condition for such period and subject to such conditions as the Board may approve.

COMMENT

Mr John Whitfield, who holds Power of Attorney for Mrs Shick, has requested that the residency condition on Mrs Shick's Perpetual Lease be suspended. Mrs Shick requires 24-hour care and is currently in a Nursing Home in Brisbane which precludes her from fulfilling the residency condition on her lease. A copy of the request is provided in Attachment 1.

Mrs Shick's circumstances are known on the Island and there is no objection raised to approval of the request. The provisions of Section 21(7) are clearly in place to address such eventualities. It is suggested however that appropriate supporting medical evidence be provided.

RECOMMENDATION

It is recommended that the Board approve the suspension of the condition of residence of Perpetual Lease 1992.01 for a period of 5 years, subject to provision of appropriate medical certificate/s.

Prepared	David Kelly	Manager Environment & Community Services
Endorsed	Penny Holloway	Chief Executive Officer
Attachments:		

1. Letter from Mr John Whitfield dated 15 July 2016 (CONFIDENTIAL)

Board Meeting: September 2016 Agenda Number: 11 (i) File Ref: AD0109

LORD HOWE ISLAND BOARD Business Paper OPEN SESSION

ITEM

Attestation Statement for Financial Year Ending 30 June 2016.

BACKGROUND

TPP 15-03 Internal Audit and Risk Management Policy for the NSW Public Sector requires the head of a statutory body, in accordance with a resolution of the governing body of the statutory body, to certify compliance with the eight Core Requirements for the prior financial year (the 'reporting period') annually. When reviewing the agency's compliance with the Policy, agencies will self-assess and determine whether they have been 'compliant', 'non-compliant' or 'in transition' in relation to each of the Core Requirements for the reporting period. A copy of the Attestation Statement must be separately submitted to NSW Treasury on or before 31 October each year. For any non-compliance with Core Requirements, agencies are required to also submit a copy of the relevant Portfolio Minister's exception approval.

The eight Core requirements are as follows:

1. Risk Management

Core Requirement 1.1: The agency head is ultimately responsible and accountable for

risk management in the agency

Core Requirement 1.2: A risk management framework that is appropriate to the

agency has been established and maintained and the framework is consistent with AS/NZS ISO31000:2009

2. Internal Audit

Core Requirement 2.1: An internal audit function has been established and maintained

Core Requirement 2.2: The operation of the internal audit function is consistent with

the International Standards for the Professional Practice of

Internal Auditing

Core Requirement 2.3: The agency has an Internal Audit Charter that is consistent

with the content of the 'model charter'

3. Audit and Risk Committee

Core Requirement 3.1: An independent Audit and Risk Committee with appropriate

expertise has been established

Core Requirement 3.2: The Audit and Risk Committee is an advisory committee

providing assistance to the agency head on the agency's governance processes, risk management and control frameworks, and its external accountability obligations

Core Requirement 3.3: The Audit and Risk Committee has a Charter that is consistent

with the content of the 'model charter'

An Audit and Risk Committee has been established under a Treasury approved shared arrangement with the following departments / statutory bodies:

- DPE (Principal Department).
- Building Professionals Board.
- Central Coast Regional Development Corporation.
- Office of Local Government.
- Lord Howe Island Board.

CURRENT POSITION

The Lord Howe Island Board has internal audit and risk management processes in operation that are compliant with the eight (8) core requirements set out in TPP 15-03 *Internal Audit and Risk Management Policy for the NSW Public Sector*.

RECOMMENDATION

It is recommended that the Board resolve to authorise the Chair to sign the Internal Audit and Risk Management Attestation Statement for the 2015/16 Financial Year.

Prepared	Bill Monks	Manager Business and Corporate Services
Endorsed	Penny Holloway	Chief Executive Officer

Internal Audit and Risk Management Attestation Statement for the 2015-2016 Financial Year for the Lord Howe Island Board

I, Sonja Stewart, on behalf of the Lord Howe Island Board, am of the opinion that the Lord Howe Island Board has internal audit and risk management processes in operation that are compliant with the eight (8) core requirements set out in the *Internal Audit and Risk Management Policy for the NSW Public Sector*, specifically:

Core Requirements

For each requirement, please specify whether compliant, non-compliant, or in transition ¹

Dial M	Ionagement Framework	
KISK IV.	Ianagement Framework	
1.1	The agency head is ultimately responsible and accountable for risk management in the agency	Compliant
1.2	A risk management framework that is appropriate to the agency has been established and maintained and the framework is consistent with AS/NZS ISO 31000:2009	Compliant
Intern	al Audit Function	
2.1	An internal audit function has been established and maintained	Compliant
2.2	The operation of the internal audit function is consistent with the International Standards for the Professional Practice of Internal Auditing	Compliant
2.3	The agency has an Internal Audit Charter that is consistent with the content of the 'model charter'	Compliant
Audit	and Risk Committee	
3.1	An independent Audit and Risk Committee with appropriate expertise has been established	Compliant
3.2	The Audit and Risk Committee is an advisory committee providing assistance to the agency head on the agency's governance processes, risk management and control frameworks, and its external accountability obligations	Compliant
3.3	The Audit and Risk Committee has a Charter that is consistent with the content of the 'model charter'	Compliant

Membership

The chair and members of the Audit and Risk Committee are:

- Brian Blood, Independent Chair term of appointment: four years starting 1 December 2013.
- Alan Zammit, Independent Member term of appointment: three years starting 27
 February 2012 and term renewed for a further three years commencing 27 February
 2015; and
- 3. Elizabeth Crouch, Independent Member term of appointment: three years commencing 21 October 2013.

In accordance with a resolution of the Lord Howe Island	Agency Contact Officer
Board at its September 2016 meeting	Bill Monks

Manager Business & Corporate Services
Tel: (02)65632066

(Sign and Date)	

Board Meeting: Sep 2016 Agenda Number: 12 (i) File Ref: AN0004

LORD HOWE ISLAND BOARD

Business Paper

OPEN SESSION

<u>ITEM</u>

Lord Howe Island Rodent Eradication Program Update

RECOMMENDATION

That the Board note the LHI Rodent Eradication Program (REP) update

BACKGROUND

On 18 May 2015, after the community consultation process over late 2014 and early 2015 ending with the community survey, the LHI Board decided to proceed with the planning and approvals stage of the Program leading towards implementation of the rodent eradication plan, if the required approvals were received.

The rodent eradication program has now been divided into three stages:

Stage One: Preliminary planning and community consultation

This stage has already been <u>completed</u>. It involved undertaking required initial trials including captive management and toxin resistance trials as well as initial operational planning. It included the biosecurity review and progressing of biodiversity outcome monitoring. Finally it included the community consultation and engagement process and the community survey.

Stage Two: Planning and Approvals

This stage is now <u>underway</u>. The key tasks during this stage are:

- Assemble personnel to undertake the work on the next stages
- Review the Rodent Eradication Plan to ensure that it takes into consideration all new information since it was drafted in 2009
- Develop individual property and livestock management plans, which will inform the eradication plan and the approval process. This will involve a detailed property by property consultation with individual leaseholders and residents.
- Undertake any necessary studies required for the approval process, including independent health assessment
- Continue the relevant baseline outcome monitoring
- Finalise detailed planning and all necessary risk assessments;
- Obtain required permits and approvals.

- Update and finalise operational details;
- Prepare tender documentation

Stage Three: Implementation and evaluation of the eradication plan

This Stage <u>will not happen</u> until Stage Two is completed.

After all the necessary approvals are obtained and the required planning is undertaken, the decision-makers, that is the Commonwealth and State funding bodies and the Board will consider all the information and make the decision about proceeding to Stage Three.

Stage Three will involve the eradication plan being implemented in winter 2017 over a three month period.

CURRENT POSITION

1. Approvals Applications Update

Australian Pesticide and Veterinary Medicine (APVMA) Permit Application

The APVMA initial assessment did not identify any further information that was required. The modules have been sent to relevant experts for assessment. A decision is expected approximately November / December 2016.

Environment Protection and Biodiversity Conservation (EPBC) Act Referral

A decision from the Department of the Environment (DoE) on the referral and the Assessment Level Decision was received on the 1 July. 62 public submissions were received with 53 supportive and 9 opposed to the project. The project is considered a "controlled action" and is to be assessed via a Public Environment Report (PER). DoE has prepared the Draft PER Guidelines and made them available for public comment. Next steps are:

- DoE issue Final PER Guidelines
- LHIB draft the PER and submit
- DoE assess adequacy of PER in addressing Guidelines and approve for publication
- Draft PER published with public comment period of 20 business days
- LHIB address comments and submit Final PER
- DoE prepares the assessment report for the Minister
- Minister to make decision within 40 business days of receiving final documents from proponent

The project is not assessable under the NSW Bilateral Assessment Agreement. However the PER should also suffice as the NSW Environmental Assessment report.

NSW Approvals

Additional external advice on requirements under the *Environment Planning and Assessment Act 1979* has been received. This concurs with previous NSW Government advice that the project does not trigger Part 5 of the Act (ie. a Review of Environmental Factors is not required).

The NSW Office of Environment and Heritage Director General requirements for the Species Impact Statement (SIS) have been received and are being compared to the draft SIS.

A briefing note to the Minister regarding the NSW Approvals process has been acknowledged.

DPI Fisheries and Marine Parks have advised that one assessment document can cover both agencies. The application for a "License to Harm" is 90% complete.

2. Human Health Risk Assessment (HHRA)

The NSW Office of the Chief Scientist and Engineer (OCSE) has accepted the HHRA engagement. The Expert Panel has been engaged and includes Prof Mary O'Kane (Chief Scientist), Dr Chris Armstrong (Director, OCSE), Prof Stephen Leader (University of Sydney), Prof Brian Priestly (Monash University). The Selection Committee has also been engaged and includes Andrew Walsh and Community Working Group members Dr Frank Reed and Rob Rathgeber. The Selection Committee is responsible for scope development and selecting the preferred consultant. The expert panel will oversee and review consultants' work. The Request for Quote (RFQ) for consultants has been issued by the OCSE. The expected timeframe for delivery of report is mid November.

3. Community Engagement Update

Community Working Group meetings were held on the Island in June and August.

In late July Penny was interviewed on Mid North Coast ABC local radio regarding a range of LHIB conservation programs including the REP.

Discussions were commenced and quotes received from HUMAN (the LHI Tourism Association's public relations contractor) for public relations and media services. Engagement has been delayed as a result of the primary contact at HUMAN leaving to start her own consultancy.

4. Island Cleanup

The island cleanup is approximately 70% complete. To date more than 270m³ of hard waste has been removed from the island with approximately the same volume at the WMF ready for removal.

5. Tenders

The Livestock Valuation tender has been awarded to Bill Hoffmann Consulting for a fee of \$15,000. Bill will be on the island from 7 to 10 September to complete the valuations with the final report expected at the end of August.

The Economic Evaluation tender has been awarded to Gillespie Economics for a fee of \$50,000. Dr Robert Gillespie was on the island from 10 to12 August for startup and initial consultation. The final report is expected by 7 November.

Expressions of Interest for providing workforce accommodation have been received. There should be sufficient capacity available in winter 2017 to accommodate the project workforce. The next step is to commence a procurement process to secure bookings.

Expressions of Interest (EOI) for helicopter providers have been received. The next steps are to assess the EOI responses and then commence a procurement process (no contracts will be signed until the Final Go / No Go decision is made).

In relation to planning for post eradication monitoring, initial detector dog information has been received. Detection dogs would only be used as part of a comprehensive monitoring plan after the eradication has occurred to check if all rodents have been eradicated.

6. Biosecurity

In relation to new legislation and framework for biosecurity in NSW, a consolidated Board on "Biosecurity Zone" requirements has been sent to the Department of Planning and Industry (DPI) for consideration.

7. Operational Planning

Taronga Zoo has been re-engaged for the captive management component of the program. Captive management is proposed for woodhens and currawongs. A construction team site visit is expected in September.

A Draft project team structure has been prepared.

A discussion paper for the detection and monitoring network has been prepared.

8. Project Timelines

An overall Project Schedule for Stages 2 to 4 has been developed and continues to be refined. Key milestones for Stage 2 are shown below.

Step	Description	Start Date	End Date	Status
1	Assemble resources	July 2015	30 Jul 2016	
	Engage staff to undertake the Planning and Approvals work: - Project Manager - Asst PM (Community) - Asst PM (Operations (PMcL)) Develop role descriptions for field staff	Jun 2016	Nov 2015 Oct 2015 30 Jul 2016	Completed Completed Completed Draft for SC comment
2	Community consultation/engagement	May 2015	30 June 2017	
	Community Engagement Plan developed Individual Property Management discussions Ongoing consultation	Jan 2016 Nov 2015 May 2015	Apr 2016 20 Mar 2016 30 June 2017	Complete 95% complete Ongoing
3	Eradication Plan update	Dec 2015	20 June 2016	
	Updated to support NSW approvals.	Dec 2015	20 June 2016	70% complete

4	Permits and approvals	Mar 2016	Jan 2017	
	Prepare applications for approvals: APVMA application submitted EPBC referral submitted PER Environment Report submitted DA, EA and Species Impact Statement submitted Other approvals applications submitted All approvals received		19 Apr 2016 13 May 2016 16 Sept 2016 15 June 2016 1 Jul 2016 Jan 2017	Complete Complete In progress 80% complete Not started
5	Livestock Management	Nov 2015	20 Sep 2016	
	Livestock Management discussions Livestock Valuation tender released Livestock Valuation tender awarded Livestock Valuation complete	Nov 2015	20 Apr 2016 28 May 2016 30 Jun 2016 31 Aug 2016	100% complete 100% complete 100% complete In progress
6	Human health assessment review	30 Mar 2016	30 Nov 2016	
	Identify and engage appropriate reviewer Review to be undertaken	30 May 2016	15 May 2016 30 Nov 2016	Complete RFQ issued in Aug. Report due Nov
7	Biodiversity outcome monitoring	1 July 2015	30 June 2017	
	Monitoring Plan confirmed Monitoring undertaken	May 2016	20 Mar 2016 30 June 2017	Complete In progress
8	Biosecurity arrangements	1 July 2015	30 June 2017	
	Finalise Biosecurity Plan Develop implementation plan Implement plan (subject to funding)		30 Apr 2016 30 Oct 2016 30 Jun 2017	Complete In progress Not started
10	Preparation of contracts	30 Nov 2015	24 Feb 2017	
	Tender documentation prepared for: Bait procurement Helicopter operations Captive management		24 Feb 2017	Not started EOI received Pending site visit
11	Technical, social and financial feasibility assessment	04 Jan 2017	27 Feb 2017	

Re	evised feasibility and risk assessment	04 Jan 2017	25 Jan 2017	Not started
	inal Go / No Go Decision made by HIB, CfoC and ET to proceed to Stage		27 Feb 2017	Not started

9. Budget

A budget summary as at 30 June 2016 is presented below.

	Previous Period Summary		FY15/16			
Funding Source	Total Funding Received (as at 30 June 2015)	Total Expenses (as at 30 June 2015)	Opening Balance (1 July 2015)	Funding Recieved FY15/16	Funding Expended (1 July 2015 to 30 June 2016)	Closing Balance
Caring for our Country	4,500,000	740,038	3,759,962	0	154,231	3,605,731
NSW Environment Trust	4,542,442	740,038	3,802,404	0	154,231	3,648,173
Activity Generated Income*	610,390		610,390	177,020	0	787,410
Total	9,652,832	1,480,076	8,172,756	177,020	308,462	8,041,314

The program is operating within budget.

RECOMMENDATION

That the Board note the LHI Rodent Eradication Program (REP) update

Prepared	Andrew Walsh, Rodent Eradication Project Manager
Endorsed	Penny Holloway, Chief Executive Officer
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Board Meeting: September 2016 Agenda Number: 12 (ii) File Ref: EL0034

LORD HOWE ISLAND BOARD

Business Paper

OPEN SESSION

ITEM

Renewable Energy Program

RECOMMENDATION

It is recommended that the Board note the information.

BACKGROUND

In 2012, the Lord Howe Island Board (the Board) adopted the Lord Howe Island Renewable Operations – Energy Supply Road-Map (the Road Map), to reduce the Island's reliance on diesel fuel for electricity generation. The Road Map was developed with the important assistance of the community based Sustainable Energy Working Group (SEWG).

The Road Map set the ambitious target for the island of 63% renewable energy by 2017. Funding for the project is provided through a \$4 million grant from the Federal Government via the Australian Renewable Energy Agency (ARENA), a \$5.9 million loan from NSW Treasury (to be paid back via diesel fuel savings), and \$0.5 million from the Board. With funding secured, work has continued on the next phase of the implementation of the Road Map. A requirement of the funding from ARENA was that the project achieves a minimum 1 megawatt (MW) of new renewable energy.

Consultants Jacobs were engaged by the Board in 2014 to lead the technical elements of the project, and community consultation. Jacobs completed a Technical Feasibility Study in March 2015 which examined the mix of solar panels, batteries and wind turbines. The study showed that using 450 kW of solar panels (around 2,000 panels), a 400kWh battery and two small 275kW wind turbines, will reduce the Island's diesel fuel consumption from 541,000 litres per year to around 180,000 litres per year, a 66% reduction. This combination also provides 67% of the Island's annual electricity needs, exceeding the target set in the Road Map.

CURRENT POSITION

ARENA Funding

A significant variation to the timing and project objectives has been proposed by the Board and remains under discussion.

Budget

The cost of the project to date (July 2014 to 31 August 2016) is \$1,231,325 (excl GST). Overall, the project budget remains appropriate. The first major check for the budget will be the tendered prices for the solar, battery and control system package of work.

Solar, Battery and Control System

The tender for the solar, battery and control system contract package of work was advertised on NSW e-tendering between 15 June and 24 August. The tenders are now under assessment, and it is planned for a recommendation to go to the NSW Environment Minister for approval during October. The most likely start date for on-site construction will be around March 2017.

Wind Turbines

Environmental Assessment Process

Consultants, NGH Environmental, have prepared a draft Environmental Report to support the Development Application for the wind turbine component of the project. The report includes specialist studies in Flesh-footed shearwaters, other sea birds and terrestrial birds, bats, visual impact assessment and noise. A DA is expected to be lodged in mid-September, with a 4 week exhibition period, and the aim of having the DA considered at the November Board meeting. A referral to the Federal Government under the *Environment Protection Biodiversity Conservation Act* will occur soon after the DA submission.

Noise

Two noise assessments were undertaken in 2015, measuring the background noise in summer and winter, and predicting the noise levels at each property on the Island, if two wind turbines were installed. Another assessment was carried out during April 2016 to assess an insulated version of the originally proposed Vergnet turbine and another model of turbine (XANT). Following feedback at the community meeting in May, a noise assessment was undertaken at Coral Bay in Western Australia (location of 3 Vergnet wind turbines) during July to assess mechanical noise from gear changing, audible noise and infrasound.

Dr Renzo Tonin is currently reviewing the Coral Bay noise assessment, and the findings of the assessment will be included in the Environmental Report.

Wind Energy Framework

During August, the NSW Department of Planning and Environment released a *Wind Energy Framework* for comment. When finalised, the Framework will replace the *Draft NSW Wind Farm Guidelines* (2011). The *Framework* will not apply to Lord Howe Island because the project is not classified at State Significant Development. State Significant Development applies to energy developments, like wind farms, where the capital investment value is more than \$30 million, or a capital investment value of more than \$10 million and is located in an environmentally sensitive area of State significance.

The South Australian Wind Farms Environmental Noise Guidelines (2009) will continue to be the tool to assess wind farm noise, including for Lord Howe Island. In addition, the visual impact assessment has taken consideration of the 2011 Draft Guidelines and the recently released *Framework*.

Wind Turbine Impacts on Airservices Australia (ASA) Infrastructure

ASA have been concerned about the potential impact of the wind turbines on their equipment and have requested additional work to understand the potential impact. The first stage of this further specialist assessment work was completed in August, and then submitted to ASA for assessment. The conclusion from the assessment by the consultants,

IDS, indicates little impact from the wind turbines on the ASA infrastructure. Feedback from ASA is expected in early October.

Project Finances

The financing of the project and the potential debt to the community have emerged relatively recently as important issues for some of the community. In late August, a householder on the project funding was issued, taking a lot of detailed background, and distilling it down to the key messages for the community. The key messages are considered to be:

- 1. The Board receives recurrent funding from the NSW Government each year, some of which is used to fund the gap between the cost of electricity supply and the revenue from users.
- 2. The \$5.9 million loan from the NSW Government will be paid back with savings in diesel consumption over the 20 year life of the project.
- 3. The projected diesel savings are expected to more than cover the loan repayment schedule.
- 4. Electricity prices will not rise to pay back the loan.
- 5. The loan will be required regardless of whether there are wind turbines.
- 6. The project is being built for the medium term, so the current low diesel price needs to be considered against the prospect of future spikes in prices, and the projected rise in diesel over the next 20 years.

Community Consultation

Since the May Samoan Circle meeting, Jacobs have assisted with the following community engagement activities:

- Setting up a Facebook page for the project, and regular updates.
- Providing content for Board website updates.
- Preparation of a householder regarding the project finances.
- Preparation of an updated Environmental Report Summary Booklet.

Wind and Avifauna Monitoring Mast

The wind and avifauna monitoring mast was installed and erected on 13 November 2014. Data is collected on a weekly basis and sent to Jacobs for analysis.

RECOMMENDATION

It is recommended that the Board note the above information.

Prepared	Andrew Logan	Manager, Infrastructure & Engineering Services
Endorsed	Penny Holloway	Chief Executive Officer

Board Meeting: September 2016 Agenda Number: 12 (iii) File Ref: AD0115

LORD HOWE ISLAND BOARD

Business Paper

OPEN SESSION

<u>ITEM</u>

Environmental Grants Progress Report, September 2016

RECOMMENDATION

It is recommended that the Board note the attached information.

BACKGROUND

The Board has been successful in obtaining a number of major externally funded grants. A summary of these grants is shown below:

Funding Body	Project Name	Total Project Value (excl. GST)
North Coast Local Land Services (NCLLS)	2015-18: Progressing the treatment and eradication of invasive weeds and African Big-headed Ants (ABhA) from World Heritage listed Lord Howe Island (NC00276)	\$470,610, being original grant of \$186,610 plus \$54,000 (variation 1) plus \$230,000 (variation 2)
Caring for Our Country (Australian Government)	Managing the World Heritage Values of Lord Howe Island (NSW) A0000010418G	\$793,500 (being original Fee of \$530,100 plus an additional \$263,400 + GST)
NSW Environmental Trust	2015-17: The Tide is Turning - Driving Weed Eradication on Lord Howe Island (2014/MG/0005)	\$483,946 (+ GST)
Green Army	Accelerating the demise of the five worst weeds on LHI Project 1(B0340031501G)	\$42,000 (+ GST)

CURRENT POSITION

Progress reports for each project for the period between June and September 2016 are provided in Attachment A. A progress report on the Rodent Eradication is provided in a separate paper.

RECOMMENDATION

It is recommended that the Board note the attached information.

Prepared	David Kelly	Manager Environment & Community Services
Endorsed	Penny Holloway	Chief Executive Officer

Attachment A

continue to treat priority invasive weeds and maintain the Island a 'myrtle rust' free. In May 2016 the Board was successful in obtaining an additional \$54,000 from NCLLS, for the following projects. a) Restoration of Sallywood Swamp Forest Critically Endangered Ecological Community; b) Progressing the treatment and eradication of invasive weeds o Lord Howe Island; and c) Removal of Tree Weed Species from Settlement Area on Lord Howe Island. In June 2016, the Board was successful in obtaining an additiona \$230,000 for the following projects: d) Propagation of local plants for revegetation at priority sites e) Additional Grid Search Effort – All Terrain weeding f) Helicopter Lance Spraying g) Helicopter Winch Operations Activities completed during the reporting period include: • Draft Ant Identification brochure commenced (text and hig resolution photos). • Letters sent to leaseholders to offer assistance in felling of complex tree weeds (listed noxious) – no response. • Removed 3 Staghorn ferns from island. • Helicopter lance spray operation for weeds on cliffs conducted in the last week of July 2016. • Ongoing grid search and control of priority weeds. • Preparation and planting of revegetation site at golf club. Commenced first sweep of weed control.	Program Name:	North Coast Local Land Services (NCLLS)
Project Manager Grant Reference No: NC00276 Maximum Funding Amount: \$470,610, being original grant of \$186,610 plus \$54,000 (variation 1) plus \$230,000 (variation 2); \$84,179 Funding Term: 10 June 2015 - 31 May 2018 This project aims to monitor and treat residual infestations of ABh. continue to treat priority invasive weeds and maintain the Island a 'myrtle rust' free. In May 2016 the Board was successful in obtaining an additional \$54,000 from NCLLS, for the following projects. a) Restoration of Sallywood Swamp Forest Critically Endangered Ecological Community; b) Progressing the treatment and eradication of invasive weeds o Lord Howe Island; and c) Removal of Tree Weed Species from Settlement Area on Lord Howe Island. In June 2016, the Board was successful in obtaining an additional \$230,000 for the following projects: d) Propagation of local plants for revegetation at priority sites e) Additional Grid Search Effort – All Terrain weeding f) Helicopter Lance Spraying g) Helicopter Unich Operations Activities completed during the reporting period include: • Draft Ant Identification brochure commenced (text and hig resolution photos). • Letters sent to leaseholders to offer assistance in felling of complex tree weeds (listed noxious) – no response. • Removed 3 Staghorn ferns from island. • Helicopter lance spray operation for weeds on cliffs conducted in the last week of July 2016. • Ongoing grid search and control of priority weeds. • Preparation and planting of revegetation site at golf club. Commenced first sweep of weed control.	Project Name:	
Project Manager Sue Bower (weeds), Hank Bower (ABhA, Revegetation)		, ,
Maximum Funding Amount: \$470,610, being original grant of \$186,610 plus \$54,000 (variation 1) plus \$230,000 (variation 2)	Project Manager	
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Say 1.79		
Expenditure: \$84,179 Funding Term: 10 June 2015 - 31 May 2018 Brief Description of Project: This project aims to monitor and treat residual infestations of ABh. continue to treat priority invasive weeds and maintain the Island a myrtle rust free. In May 2016 the Board was successful in obtaining an additional \$54,000 from NCLLS, for the following projects. a) Restoration of Sallywood Swamp Forest Critically Endangered Ecological Community; b) Progressing the treatment and eradication of invasive weeds o Lord Howe Island; and c) Removal of Tree Weed Species from Settlement Area on Lord Howe Island. In June 2016, the Board was successful in obtaining an additiona \$230,000 for the following projects: d) Propagation of local plants for revegetation at priority sites e) Additional Grid Search Effort – All Terrain weeding f) Helicopter Lance Spraying g) Helicopter Winch Operations Activities completed during the reporting period include: • Draft Ant Identification brochure commenced (text and hig resolution photos). • Letters sent to leaseholders to offer assistance in felling of complex tree weeds (listed noxious) – no response. • Removed 3 Staghorn ferns from island. • Helicopter lance spray operation for weeds on cliffs conducted in the last week of July 2016. • Ongoing grid search and control of priority weeds. • Preparation and planting of revegetation site at golf club. Commenced first sweep of weed control.	Maximum Funding Amount.	
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NCLLS and LHIB website. In August 2016, a Partnership Agreement between the Lord Howe		 Draft Ant Identification brochure commenced (text and high resolution photos). Letters sent to leaseholders to offer assistance in felling of complex tree weeds (listed noxious) – no response. Removed 3 Staghorn ferns from island. Helicopter lance spray operation for weeds on cliffs conducted in the last week of July 2016. Ongoing grid search and control of priority weeds. Preparation and planting of revegetation site at golf club. Commenced first sweep of weed control. Developed media articles for local publication and for NCLLS and LHIB website. In August 2016, a Partnership Agreement between the Lord Howe Island Board and North Coast Local Land Services was developed which identifies opportunities for collaboration, and using the

Program Name:	World Heritage Grants 2013-18
Project Name:	Managing World Heritage Values of Lord Howe Island
Grant Reference No:	A0000010418G
Project Manager	Hank Bower
Maximum Funding Amount:	\$793,500 (being original Fee of \$530,100 plus an additional \$263,400 + GST)
Expenditure:	(\$137,032) against \$263,400
Funding Term:	January 2014 to 30 June 2016. Extension granted 13 May for another 2 years (30 June 2018).
Brief Description of Project:	Employment of a Lord Howe Island Group World Heritage Area Executive Officer (Manager Environment/World Heritage). See previous reports for further detailed information.
Activities completed during the reporting period:	This grant secures funding for the MEWH position till 30 June 2018.
	The MEWH has been developing and implementing programs to protect the World Heritage values of the island in accordance with the position description, grant obligations and legislative responsibilities. The position coordinates projects within the Environment & Community Development Unit including the Rehabilitation Plan, Quarantine Strategy and progresses targets identified in the LHI Biodiversity Management Plan. The position undertakes ecological assessments for Development Assessments and Tree Removal requests. The position also promotes environmental initiatives and information to the broader community through newsletters, community forums, media releases and provides reports to federal, state and regional NRM bodies and key stakeholders.
	Attend AHWAC tele conferences as scheduled.
	Submitted end of year progress report and financial statements.
	MEWH delivered presentation of LHI Ecological Restoration program planning, progress and results at the Australian Association of Bush Regenerators (AABR) Society for Ecological Restoration Australia (SERA) Symposium in Sydney in July 2016. Each presentation was video recorded for AABR's 'RegenTV' (see http://www.aabr.org.au/regentv/), an educational video platform that will be disseminated nationally as an educational tool providing examples of best practise ecological restoration programs that meet the Australian Society for Ecological Restoration National Standard. The presentation provided an overview of the restoration projects the Board is implementing to protect and restore the islands World Heritage values.

Program Name:	NSW Environmental Trust
Project Name:	The Tide is Turning - Driving Weed Eradication on Lord Howe
	Island
Project Manager	Sue Bower
Grant Reference No:	2014/MG/0005
Maximum Funding Amount:	\$483,946
Expenditure	\$ 191,875 (to date)
Funding Term:	1 July 2015 to 30 June 2017
Brief Description of Project:	This project aims to scope new and improved weed surveillance
	and treatment methods and apply adaptive management to improve
	the weed eradication program on Lord Howe Island.
	Key outputs from this project include:
	Reduced impact of invasive weeds across 350 hectares of
	accessible terrain.
	Surveillance and detection of invasive weeds from 300
	hectares of rugged inaccessible terrain on LHI.
	Independent expert review of the LHI Weed Eradication
	Program
	Trial of Unmanned Automated Vehicle (UAV), Aero Robot
	(AR) and Herbicide Ballistic Technology (HBT) technology for
	weed surveillance and control on LHI.
	Control of known infestations of weeds in remote terrain
	through helicopter winch access in conjunction with UAV/HBT.
	Release of Crofton Weed bio-control Baeodromus eupatorii on
	LHI.
	 Maintain and raise community awareness and participation in achieving the eradication of weeds from LHI.
	Build and maintain networks with restoration / weed experts
	and island conservation programs using LHI project outcomes
	as a case study.
Activities completed during	Continuation of weed grid search effort with recent focus on
the reporting period:	treating areas prior to the return of breeding seabirds -
	Malabar.
	Crofton Rust released on the 7 th July 2016 - already showing
	signs of localised spread.
	Progress and yearly reports submitted.
	Presentation of LHI Weed Eradication Program results and the
	Decade of Opportunity at the Australian Association of Bush
	Regenerators (AABR) Society for Ecological Restoration
	Australia (SERA) Symposium in Sydney in July 2016.
	Contribution of funding to a few operational hours of the heli
	lance spray program.

Program Name:	Green Army		
Project Name:	Accelerating the demise of the five worst weeds on LHI Project 1		
Project Manager	Sue Bower		
Grant Reference No:	B0340031501G		
Maximum Funding Amount:	\$42,000 (materials and supervisor)		
_	Skillset is the broker of the grant.		
	\$27,000 provided by Skillset for LHIB to employ supervisor, which		
	includes \$3,000 for materials/tools		
	\$15,000 provided through LHIB to top up supervisor wage to meet		
	award.		
Expenditure	\$8,000		
Funding Term:	25 th July 2013 to 31 st December 2017		
Brief Description of Project:	The Green Army program aims to train and up-skill young people aged between 17 to 24 in meaningful environmental programs.		
	The program aims to accelerate the eradication of high priority invasive weeds including an identified five worse weeds (asparagus weeds and woody weed species).		
	Project activities include:		
	weed treatment (across 80 ha)		
	weed survey and assessment		
	community engagement and participation		
	seed collection		
Activities completed during	Key outputs from this project include:		
the reporting period:	Green Army supervisor engaged		
	5 local participants engaged		
	Training in first aid, Work Health Safety, weed control		
	techniques, botany and weed plant recognition.		
	Commencement of weed search at priority sites.		

Board Meeting: September 2016 Agenda Number: 12 (iv) File Ref: PL0043

LORD HOWE ISLAND BOARD Business Paper

ITEM

Communication and Community Engagement Survey Results

RECOMMENDATION

It is recommended that the Board:

- a) note the Communications & Community Engagement Survey Results, and
- b) agree to the use of the report as a foundation for the completion of a Communication and Community Engagement Strategy.

BACKGROUND

The Lord Howe Island Board is preparing a Communication and Community Engagement Strategy as a framework to improve and strengthen communications with the Island community.

The strategy will be based on community feedback which will provide the Board with a clear understanding of the community's expectations as well as insights into the community's desired relationship with the Board in relation to communication and community engagement.

CURRENT POSITION

The Board through a contract with communications graduate Lena Thompson, prepared a questionnaire / survey, in order to gauge the level of community satisfaction and expectations of the Board in the areas of communication and community engagement.

A key objective of the survey was to gain community feedback in order to understand community perceptions and opinions of the Board's current communication processes and how they could be improved.

The survey was circulated in December 2015 and January 2016, to all members of the Island community permanent residents, temporary residents and those living off the island for educational purposes etc.

A total of 101 respondents participated in the survey by the advertised closing date. Five surveys were made void due to incomplete data sets, meaning there were 96 valid responses. 68 surveys were filled in manually and handed in either at the Administration Office or the Post Office. 28 surveys were completed online. This represents approximately 25% of people within the community with a wide cross-section of people including a range of age and residency groups validating the data sets.

Results from these responses can be seen within this report segmented by age, residency status and level of community engagement. The report makes a number of recommendations including:

Improving communication and access to information through:

- Developing a register of interested people and their contact details
- Increased use of email for announcements, newsletters etc
- Consideration of public online forums
- Regular updates to the Board website

Improving customer service through:

- Review of Board policy and procedures aimed at improving response times;
- Extended public exhibition periods on important issues
- Communication and customer service training for Board staff
- Targeted consultation with Senior members of the community and those living off Island
- Employment of a Community Liaison Officer
- Greater presence at community events and increased number of information sessions

These recommendations are to be used as the foundation for the development of a Communication and Community Engagement Strategy which is scheduled for completion in June 2017.

RECOMMENDATION

It is recommended that the Board:

- a) note the Communications & Community Engagement Survey Results, and
- b) agree to the use of the report as a foundation for the completion of a Communication and Community Engagement Strategy.

Prepared	David Kelly	Manager Environment & Community Services
Endorsed	Penny Holloway	Chief Executive Officer



Report for the Lord Howe Island Board
Prepared by Lena Thompson

Date: 5th April 2016

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1 LHI Community Survey Feedback

1.1 Overview of Communications and Community Engagement Survey

This survey was prepared for the Lord Howe Island Board in order to gauge the level of community satisfaction and expectations of the Board in the areas of communication and community engagement. From this survey, it is proposed that a Communications and Community Engagement Strategy be prepared as a framework to improve and strengthen communications with the Island community.

A key objective of the survey was to gain community feedback in order to understand community perceptions and opinions of the Board's current communication processes and how they could be improved.

Between Friday 18 December 2015 and Monday 18 January 2016, all members of the Island community permanent residents, temporary residents and those living off the island for educational purposes etc., were asked to participate in the survey.

400 householders were printed, with two copies of the survey going to every household as the average number of people per household on the island is 2.3 according to the listed 2011/12 Census Data (see Appendix One). An online version of the survey was also provided through Survey Monkey to help disseminate it to offisland residents, as well as people with serviceable Internet on the island.

A total of 101 respondents participated in the survey by the advertised closing date. Five surveys were made void due to incomplete data sets, meaning there were 96 valid responses. 68 surveys were filled in manually and handed in either at the Administration Office or the Post Office. 28 surveys were completed online. This represents approximately 25% of people within the community participating in the survey (see Appendix One). This is a reasonable level of participation with a wide cross-section of people including a range of age and residency groups validating the

data sets. Results from these responses can be seen within this report segmented by age, residency status and level of community engagement.

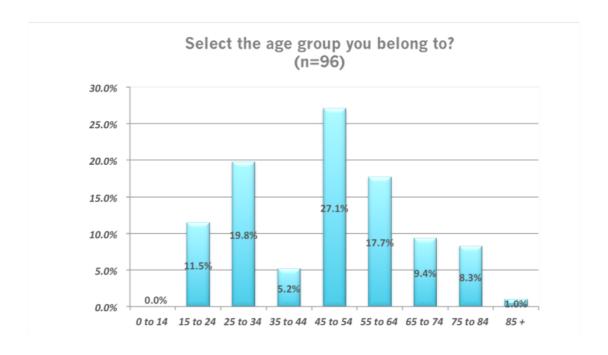
Of the 96 valid responses, the number who responded to each question is indicated by "n=" (sample size).

A copy of the Communications and Community Engagement Survey (Appendix Two), as well as open-ended question comments (see Appendix Three) and all 30 written comments are attached (see Appendix Four).

2. Overall Participant Feedback

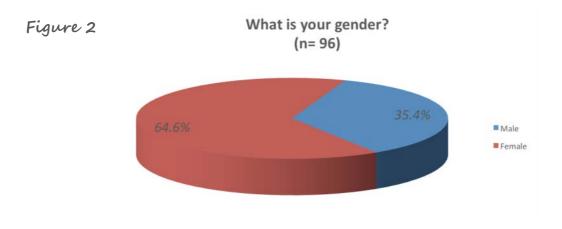
Q1: Select the age group you belong to:

Figure 1



This figure shows that most age groups participated in the survey, excluding the 0 to 14 group. The largest group of respondents was the 45 to 54 age bracket with 26 respondents. The second largest group of respondents was the 25 to 34 age group with 19 participants, then 17 participants from the 55 to 64 age group.

Q2: What is your gender?



Almost two thirds of the respondents (65) were female with only 34 males participating.

Q3 and Q4: Are you a permanent or temporary resident? How long have you been living on Lord Howe Island?

Figure 3

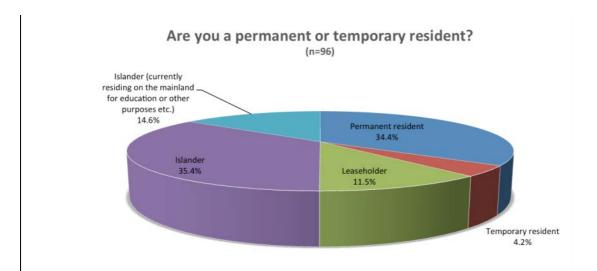
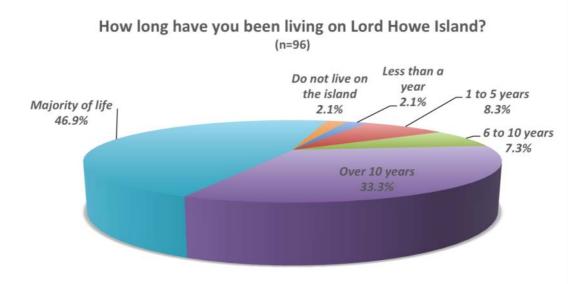


Figure 4

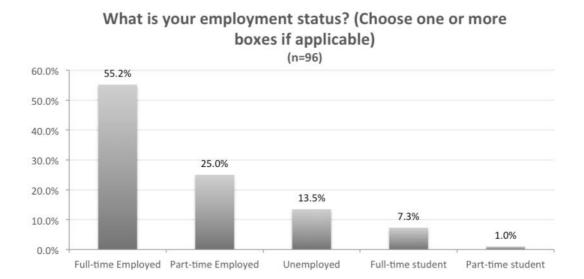


Q3 and Q4 were important in order to gain an idea of the demographics of the Island community, and how the different types of residents would prefer to be communicated with by the Board. This will be examined further in the discussion section of this report.

Responses to Q3 and Q4 are both relative to residency, and therefore somewhat resemble each other. The vast majority of participants classified themselves as either Islander (34 people) or Permanent Resident (33 people). This correlates with majority of people stating that they have lived on the Island for majority of their life or over 10 years in Figure 4. The third largest group of the community is Islanders currently residing on the mainland (14 people).

Q5: What is your employment status?

Figure 5

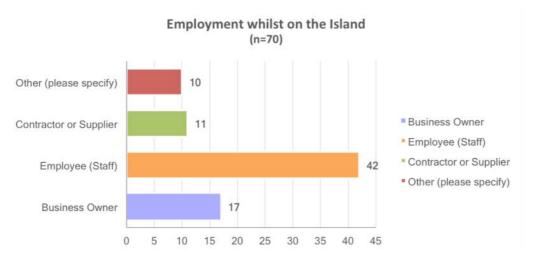


Participants were able to choose more than one option for this question as many people may have a combination of employment statuses. Over half of the respondents are employed full-time (55.2%), suggesting that it is important to make communication accessible to them. This will be considered further in the Discussion section of this report.

Ten comments were also made within this question; five respondents commented that they are 'Retired', which has been marked as 'Unemployed' within the data set. Two respondents referred to themselves as working off the island part-time, as well as being business owners part-time on the island.

Q6: If employed, please indicate your occupation on the island?

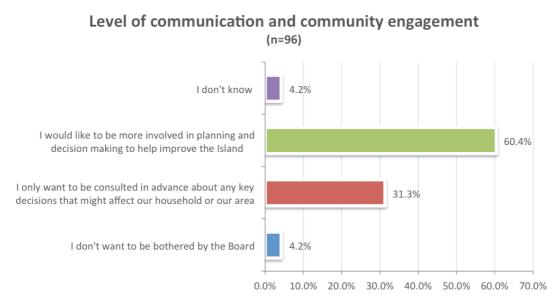
Figure 6



It was found amongst respondents (n-=70), that the majority are employees on the island (42 people), with 17 business owners, 11 contractors or suppliers, and 10 respondents choosing 'Other'.

Q7: What level of communication and community engagement do you want with the Board?

Figure 7

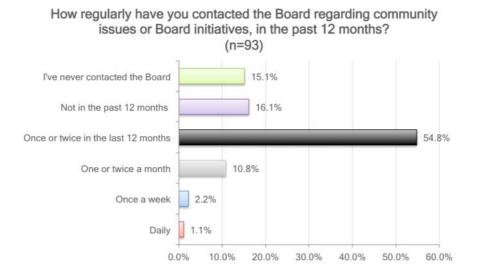


Very importantly within the results, Q7 provided insight into the preferred relationship of communication and community engagement between the respondents and the Board. At one end of the spectrum there were those who did not want to be bothered by the Board (4.2%) and those who didn't know (4.2%).

A large number of respondents wanted to be more involved in planning and decision making, to help improve the Island (60.4%), or only wanted to be consulted in advance about any key decisions that might affect their household or their area (31.3%). These results indicate that most of the community, on some level, would like to be informed, consulted and involved with the Board's planning and decision-making.

Q8: How regularly have you contacted the Board regarding community issues or Board initiatives, in the past 12 months?

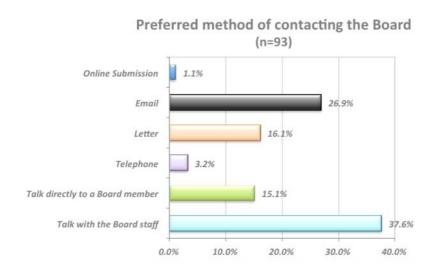
Figure 8



Among respondents, over half (54.8%) have contacted the Board once or twice in the last 12 months, however 15.1% have never contacted the Board or haven't contacted the Board in the past 12 months (16.1%). On the other end, 1.1% of respondents contact the Board daily and 2.2% weekly.

Q9: What is your preferred way of contacting the Board?

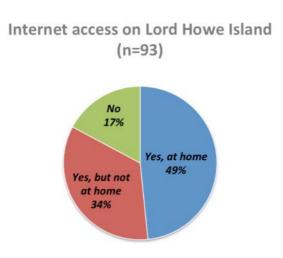
Figure 9



Respondents preferred to contact the Board in a variety of different ways, with 37.6% talking with the Board staff face-to-face, 26.9% preferred email, writing a letter (16.1%), and talking directly to a Board member (15.1%). Five people chose 'Other' and commented. Two people out of the five that chose 'Other' stated that their communication depended on the issue. One stated that their formal communication was via email and informal via talking with a Board member. Q9 indicates that different people, taking context into account, use different methods of communication. It also indicates that email is increasingly replacing letter writing as one of the preferred forms of communication.

Q10: Do you have access to the Internet on Lord Howe Island?

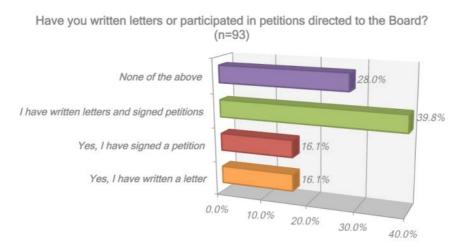
Figure 10



Within the (n=93) respondents, the majority of respondents stated that they either had Internet access at home or somewhere on the Island (77 people). Only 16 people stated that they had no Internet access at all on the Island.

Q11: Have you written letters or participated in petitions directed at the Board?

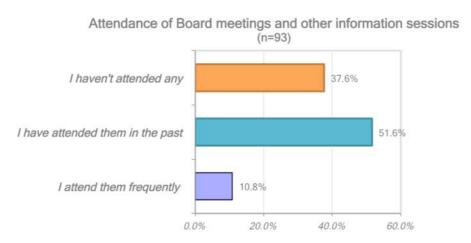
Figure 11



The (n=93) respondents to question 11 were very active in either writing letters (16.1%) or signing petitions (16.1%) or partaking in both activities (39.8%). With only 28% being inactive. These results suggest that majority of people are actively engaging in communication directed to the Board. This will be considered further within the Discussion section.

Q12: Do you attend Board meetings or other information sessions?

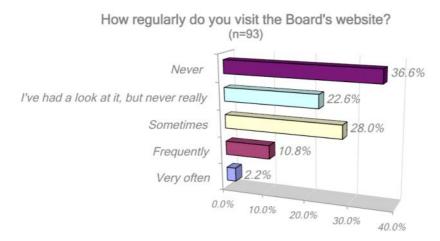
Figure 12



The majority of respondents have attended meetings or information sessions in the past (51.6%). A significant minority hasn't attended any at all (37.6%). Only 10.8% of respondents attending them frequently. This may be an area for further work, which will be considered within the Discussion of this report.

Q13: How regularly do you visit the Board's website?

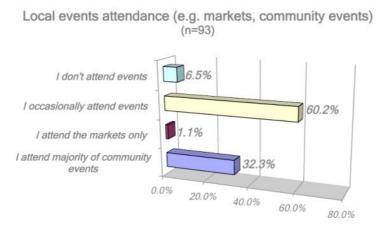
Figure 13



Q13 identifies that the Board's website is rarely used with 87.2% respondents stating that they never viewed, only sometimes, or have only had a look at it once. However, statistics may change with the NBN roll out later this year.

Q14: Do you attend local events? (E.g. markets, community events)

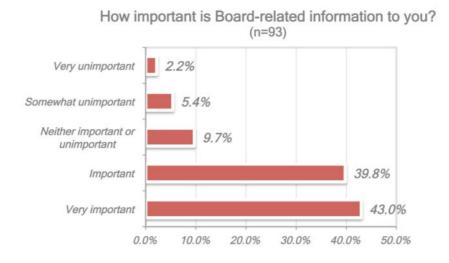
Figure 14



An overwhelming number of respondents occasionally attend (60.2%) or attend the majority (32.3%) of community events.

Q15: How important is Board-related information to you?

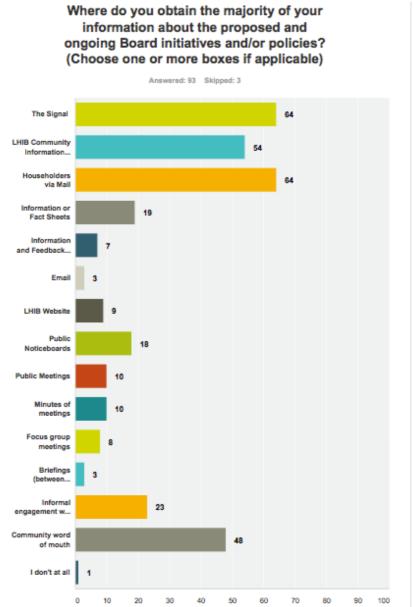
Figure 15



The majority of respondents place importance on Board-related information. 40 people find the information very important, and 37 see it as important to them. The results for Board-related information being unimportant are in the minority.

Q16: Where do you obtain the majority of your information about the proposed and ongoing Board initiatives and/or policies?

Figure 16 a)



6)

Answer Options	Response Count (n = 93)
The Signal	64
LHIB Community Information Bulletin	<i>54</i>
Householders via Mail	64
Information or Fact Sheets	19
Information and Feedback Sessions	7
Email	3

LHIB Website	9
Public Noticeboards	18
Public Meetings	10
Minutes of meetings	10
Focus group meetings	8
Briefings (between internal staff and Board members)	3
Informal engagement with LHIB (face-to-face, phone calls etc.)	23
Community word of mouth	48
I don't at all	1

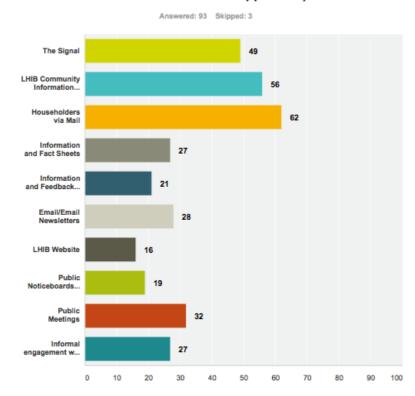
In Q16, respondents (n=93) were encouraged to choose one or more options of where they currently obtain their Board-related information. Results indicated that information was equally obtained through The Signal (64 respondents) and Householders via Mail (64 respondents). Following closely was the LHIB Community Information Bulletin (54 respondents) and community word of mouth (48 respondents). These mediums of communication are quick and easy to access for all age groups.

Three comments were also made under this question stating that these respondents work at the Board or are a part of Board meetings, therefore their information is derived from there.

Q17: Which of the following do you believe is the BEST way for the Board to communicate with the community in the future?

Figure 17 a)

Which of the following do you believe is the BEST way for the Board to communicate with the community in the future? (Choose one or more boxes if applicable)



6)

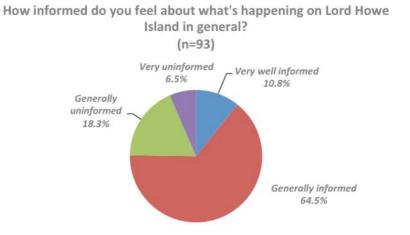
Answer Options	Response Count (n = 93)
The Signal	49
LHIB Community Information Bulletin	<i>56</i>
Householders via Mail	<i>62</i>
Information and Fact Sheets	27
Information and Feedback Sessions	21
Email/Email Newsletters	<i>28</i>
LHIB Website	<i>16</i>
Public Noticeboards/Advertisements	19
Public Meetings	<i>32</i>
Informal engagement with community (face-to-face, phone calls etc.)	27

Results asking respondents (n=93) which method/s they believe are the best way for the Board to communicate with the Island community were slightly different to the mediums from which respondents currently receive information.

Householders via Mail were the most popular with 62 respondents choosing this, closely followed by the LHIB Community Information Bulletin (56 respondents). The Signal response count dropped to 49 respondents, compared to the 64 currently obtaining their information from it. A significant response count can be noted for respondents wanting emails and email newsletters (28 people), information and feedback sessions (21 people), and public meetings (32 people). The increase in the choice of these mediums of communication and the five comments within Q17 will be discussed within the Discussion section of this report.

Q18: How informed do you feel about what's happening on Lord Howe Island in general?

Figure 18

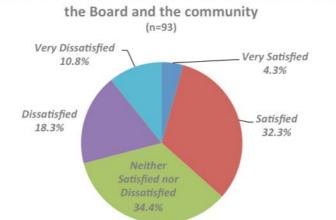


The majority of respondents (60) feel generally informed about what is happening on Lord Howe Island. 10 respondents feel very well informed. 17 feel generally uninformed. 6 feel very uninformed.

Q19: How satisfied are you with the current level of communication between the Board and the community?

Satisfaction with the current level of communication between

Figure 19



Survey results indicated that the community is predominantly satisfied (32.3%), or neither satisfied nor dissatisfied with the current level of communication (34%).

Q20: If you are not satisfied with the current level of communication, what is your reason for this?

Figure 20

If you are not satisfied with the current level of communication, what is your reason for this? (Choose one or more boxes if applicable)

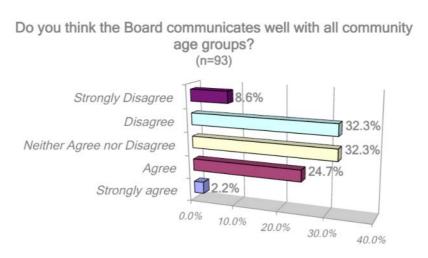
Answer Options	Response Percent	Response Count
There is a lack of communication between the LHIB and community	22.6%	21
Information is not disseminated frequently enough	17.2%	16
Information is not disseminated with enough time for public response	24.7%	23
Information disseminated is not clear or easy to understand	10.8%	10
The methods of communication the Board uses are insufficient or outdated	7.5%	7
I am satisfied with the current level of communication	47.3%	44
Other (please specify)		13
	Answered question Skipped question	n = 93 3

Tabulation of these results shows how the level of current communication satisfaction is a little higher when respondents are allowed to choose one or more boxes (44 respondents). This suggests that respondents are generally satisfied with the current level of communication, however also have chosen a secondary option if they are not entirely pleased with the level of communication.

The predominant reasons for respondents not being satisfied with the communication is due to information not being disseminated with enough time for public response (23) and there is a general lack of communication between the LHIB and the community (21). 16 respondents also stated that information is not disseminated frequently enough, and 10 indicated that the information is not clear or easy to understand. 13 respondents also chose 'Other' as an option specifying their reasons in comments relating to information not filtering down to staff who live on-site at lodges, as well as a dissatisfaction with the amount of Board information available to people living off the Island.

Q21: Do you think the Board communicates well with all community age groups?

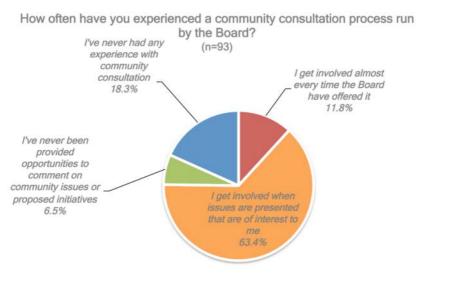




Majority of respondents (n=93) either disagree (32.3%) or neither agree nor disagree (32.3%) that the Board communicates well with all community age groups. 24.8% agree that the Board communicates well with all age groups.

Q22: How often have you experienced a community consultation process run by the Board?

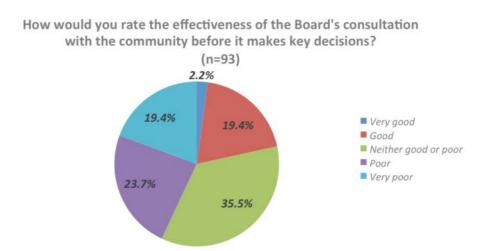
Figure 22



Q22 indicates that community consultation is quite dependent on respondent's interest in certain issues (63.4%). 18.3% have never experienced community consultation, and 11.8% are on the other end of the spectrum getting involved almost every time the Board has offered consultation.

Q23: How would you rate the effectiveness of the Board's consultation with the community before it makes key decisions?

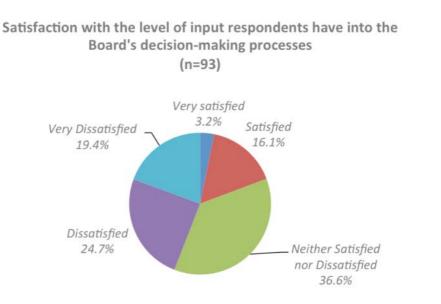
Figure 23



Respondents (n=93) are generally undecided (35.5%) or believe the effectiveness of the Board's consultation with the community before it makes key decisions is poor (23.7%). Therefore work needs to be done in this area. The results also indicated that an equal number of respondents rated the effectiveness as good (19.4%) or very poor (19.4%). The effectiveness was only rated very good by 2.2%.

Q24: How satisfied are you with the level of input you have into the Board's decision-making processes?

Figure 24



Similar to the results of Q23, respondents of Q24 (n=93) were also generally undecided (36.6%) or dissatisfied (24.7%) with the level of input they have into the Board's decision-making processes. Consequently, work needs to be done in this area in order to build more effective two-way communication with the community. 19.4% were very dissatisfied and 16.1% were satisfied. Yet again, a small section of respondents (3.2%) were very satisfied with the level of input.

Q25: How well do you believe the Board stays in touch with community needs and expectations?

Figure 25



Q25 results show that the Board's ability to stay in touch with community needs and expectations is mostly average (44.1%) to good (29%). A slightly smaller amount stated that they believe it is poor (23.7%).

Q26: Comments and Suggestions

Please view discussion about comments and suggestions within the Discussion section. The comments can be viewed within APPENDIX 4.

3. Market Segmentation

3.1 Connecting with the community

3.1.1 Age Group - 15 to 24

Snapshot of 15 to 24 year olds in our community...

Segment Stats

- 11 respondents (9 female, 2 male)
- Majority identified themselves as Islanders currently residing on the mainland for educational purposes etc. (7 people), 2 permanent residents, 1 temporary resident and 1 Islander
- 5 are employees (staff) whilst on the Island, 1 small business owner



Key Communications Characteristics

- Over half (63.6%) have **never** contacted the Board before
- Majority have never attended Board meetings before (72.7%)
- Preference when contacting the Board is to talk with Board staff directly (36.4%), or equal second is via letter, email, or talking directly to a Board member (18.2%).
- Internet can be accessed by 100% of respondents 63.6% at home and 36.4% not at home
- 100% attend community events
- Over half find Board-related information important (54.5%) or very important (18.2%)
- The Signal (7 people), Community Word of Mouth (6 people), and Householders via Mail (5 people) were the three most common ways to obtain Board information for this age group
- Best mediums they believe the Board should use to communicate with in the future: LHIB
 Community Information Bulletin (6 people), Householders via Mail (5), The Signal (4),
 Email/Email Newsletters (3), and Public Meetings (3).
- Half of the 15 to 24 year olds are satisfied with the current level of communication. The
 other half believes there is a general lack of communication between the Board and
 community, and that the current level of communication is insufficient and outdated.
- General feel that the Board doesn't really communicate well with this age group



- 72.7% would like to be more involved in planning and decision-making to help improve the Island
- 27.3% only want to be consulted in advance about any key decisions that might affect our household or area
- Half have never had community consultation experience (54.5%), and over a quarter only get involved when issues are of interest to them (27.3%)
- 8 people rated the effectiveness of the Board's consultation with the community before it makes key decisions as poor or neither good nor poor.
- Majority is neither satisfied nor dissatisfied (45.5%) or dissatisfied (27.3%) with the level of input they have into the Board's decision-making processes.

3.1.2 Age Groups - 25 to 34

Snapshot of 25 to 34 year olds in our community... Segment Stats

- 19 respondents (14 female, 5 male)
- 36.8% identify as permanent residents, 26.3% as Islanders residing on the mainland, 21.1% as Islanders, 15.8% as temporary residents
- Majority are full-time employed 73.7%



Key Communications Characteristics

- More active in contacting the Board than the 15 to 24 group, with half contacting the Board once or twice in the past 12 months
- Predominantly prefer to contact the Board by talking with staff (38.9%), or emailing (33.3%)
- Over half have Internet connection at home (55.6%)
- Equal amount of respondents either have written letters or petitions to the Board (9 people), or haven't written anything at all directed to the Board (9 people)
- 50/50 on Board meeting attendance more involved than the 15-24 year old group
- Website is used infrequently by majority of people
- Island events are a good opportunity for information 100% of people attend events either occasionally or all the time
- Board-related information is important to this age group
- The Signal (13), Community Word of Mouth (13), and Householders via Mail (5) are the current main ways to obtain Board information
- Future mediums this age group would like to use to communicate: Householders via Mail (10), Email/Email Newsletters (9), The Signal (9), and Information and Feedback sessions (6)
- Majority of respondents are either very dissatisfied (11.1%), dissatisfied (22.2%), or undecided (38.9%) on the current level of communication between the Board and community
- Information is not disseminated frequently enough (6 people), or with enough time for public response (27.8%) for this age group



- 61.1% get involved in community consultation when issues are presented that are of interest to them
- 68.4% would like to be more involved in Board planning and decision-making
- Majority rate the effectiveness of the Board's consultation with community before it makes key decisions as poor (38.9%) or are undecided (33.3%)
- This age group is not satisfied or undecided with the level of input they have into the Board's decision-making
- 44.4% of people believe the Board adequatelystays in touch with community needs and expectations, 33.3% believe the Board is good, and 22.2% believe it is poor.

3.1.3 Age Groups - 35 to 44

Snapshot of 35 to 44 year olds in our community... Segment Stats

- 5 respondents, (all female)
- 3 permanent residents, 1 identified as Islander and 1 identified as leaseholder
- 3 people are employed part-time, 2 people are employed full-time



Key Communications Characteristics

- Over half of respondents haven't contacted the Board in over 12 months
- The preferred way to contact the Board is via Email (4 people)
- 100% have Internet access either at home (4 people) or elsewhere on the Island (1 persons)
- Over half of this group (3 people) have never attended Board meetings, with the other 2 having attended them in the past
- The Board's website is visited **sometimes** by over half of this age group (3 people)
- 100% of this age group attends community events regularly or occasionally
- Majority place Board information as important to them
- **Current ways** of obtaining Board information: Community Word of Mouth (4), LHIB Community Information Bulletin (4), Householders via Mail (4)
- Future mediums this age group believes are the best: Public Meetings (4), Householders via Mail (4), and LHIB Community Information Bulletin (4)
- 3 people feel generally informed about what's happening on LHI, 2 people feel generally uninformed almost split
- Majority of this age group was undecided on their satisfaction with the Board's communication, however their dissatisfaction was majorly attributed to a general lack of communication and information not being clear enough to understand (2) and outdated methods (2).
- This group was split again, with 3 people disagreeing that the Board communicates well with all age groups and 2 people agreeing.



- Majority of this age group want to be more involved in planning and decision-making
- 3 people are undecided on their satisfaction with the level of input they have into Board decision-making, and 2 people are dissatisfied.
- This age group prefer to get involved when issues are presented that are of interest to them
- All respondents believe that the Board stays in touch adequately (3) or poorly (2) with community needs and expectations

Snapshot of 45 to 54 year olds in our community...

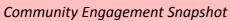
Segment Stats

- 26 respondents (13 females, 13 males)
- 10 Islanders, 10 permanent residents, 5 leaseholders, 1 Islander currently living off island
- 100% are employed 20 full-time, 6 part-time
- Half are employees (staff), 8 own businesses on the island, 5 are contractors or suppliers



Key Communications Characteristics

- 45 to 54 year olds are the most active in contacting the Board regarding community issues or Board initiatives: 15 people have contacted once in the past 12 months, 4 people once or twice in the last month, 1 person contacts weekly, and 1 person daily. The other 5 haven't contacted the Board in the past 12 months, or ever.
- **Top 3 preferred ways of contacting the Board:** talking to Board staff (11), Email (5), talking directly to a Board member (4)
- Majority have access to the Internet, however 5 do not have access at all
- Almost all respondents have directed petitions or letters to the Board (23 people)
- Almost two thirds of respondents have attended a Board meeting in the past
- The Board's website is rarely used by majority of this age group, however 3 people use it frequently
- Events are attended by majority of this group, with only 2 people not attending any
- 45 to 54 year olds place the highest importance on Board-related information than any other age (with 15 selecting 'very important' and 8 selecting 'important')
- Most popular ways of obtaining information currently: Householders via Mail (20), Community Info Bulletin (18), and The Signal (15)
- Best ways for future communication with this group: Householders via Mail (19), Community Information Bulletin (16), The Signal (15), Informal engagement (face-to-face, phone calls) (11), Information and Fact Sheet (9)
- Email/Email Newsletters were chosen by 8 people also as a future communication medium, which currently only 1 person stated they were using it
- Almost all respondents feel either generally informed or very well informed about what's happening on LHI in general
- 50% of respondents are satisfied with the current communication between the Board and the community, however the most prevalent answers for dissatisfaction were that there is a general lack of communication or that information is not disseminated with enough time for public response



- Majority of respondents get involved in community consultation when issues are presented of interest to them
- Almost two thirds (17 people) would like to be more involved in planning and decisionmaking to help improve the Island
- Respondents were majorly undecided (10 people), dissatisfied (2), or very dissatisfied (5) with the level of input they have into the Board's decision-making processes
- 18 respondents believed that the LHIB stays in touch with community needs and expectations

3.1.5 Age Groups - 55 to 64

Snapshot of 55 to 64 year olds in our community...

Segment Stats

- 17 respondents (9 female, 8 male)
- 9 Islander, 5 permanent resident, 2 leaseholders, 1 Islander living off island
- Majority have lived on the island there whole life or over 10 years



Key Communications Characteristics

- Three quarters of respondents have contacted the Board once or twice in the past 12 months
- **Preferred ways of contacting the Board:** talking with Board staff directly (7 people), letter (6), and email (4)
- 14 out of 17 respondents have Internet access
- Almost all respondents (16) are active in writing letters or signing petitions directed to the Board
- Majority of this group have never looked at the Board website, or have looked once but never use it
- 10 people occasionally attend events, 5 attend majority and 2 don't attend any
- 12 out of 17 respondents place importance on Board-related information
- Most common current ways of obtaining Board information: Householders via Mail (12), The Signal (10), LHIB Community Information Bulletin (9), and Community Word of Mouth (7)
- Best way to communicate in the future with this age group: Householders via Mail (11), LHIB Community Information Bulletin (9), Public Meetings (7), and The Signal (7)
- 52.9% feel generally informed about what's happening on LHI
- Two thirds are satisfied or neither satisfied nor dissatisfied with the current level of communication between the LHIB and community
- Main dissatisfaction factors of the level of communication: info is not disseminated with enough time for public response (5 people), and general lack of communication (4)



- 70.6% get involved in community consultation when issues are presented that are of
 interest
- Over half rate the effectiveness of Board's consultation with the community as either good or neither good nor poor
- 76.5% would like to get more involved with planning and decision-making to help improve the island
- According to this age group, the Board is average (41.2%) or good (35.3%) at staying in touch with community needs and expectations

3.1.6 Age Group - 65 to 74

Snapshot of 65 to 74 year olds in our community... Segment Stats

- 9 people (6 female, 3 male)
- 4 Islander, 3 permanent residents, 2 leaseholders
- 100% have lived on the island for over 10 years or for majority of their life
- 4 full-time employees, 1 part-time employee, 4 are unemployed/retired



Key Communications Characteristics

- Over half of the group have only contacted the Board once or twice in the past 12 months, 3 have never contacted the Board
- Preferred methods of contacting the Board: talking with Board staff (3), email (3) and letters (2)
- 6 out of the 9 respondents have Internet access at home or elsewhere
- Majority have written letters or signed a petition (8)
- Over half have attended Board meetings in the past
- The Board's website is never used by almost half of this age group (44.4%), with the other half only using it sporadically
- Half of the 65 to 74 year olds occasionally attend events, with only one person not attending events at all
- Board-related information is very important to majority of this group (77.8%) and important (22.2%)
 to the remainder
- Current Board information is obtained from: The Signal (8 people), Householders via Mail (8), LHIb Community Info Bulletin (7), Community Word of Mouth (7)
- Best ways for future communication with this group: LHIB Community Info Bulletin (8), Householders via Mail (7), The Signal (7) the selection was spread for the choice of future communication methods, compared to the current ways this group is obtaining information
- 8 out of 9 respondents feel generally informed about LHI in general
- Current level of satisfaction with the communication between the Board and community: satisfied (4), very dissatisfied (3), neither satisfied nor dissatisfied (2)
- Dissatisfaction with the current level of communication results from these issues: information is not disseminated with enough time for public response (4), and information is not disseminated frequently enough (3)

- 65 to 74 year olds were split with the level of communication was wanted with the Board: wants to be consulted in advance about key decisions affecting the household (3), I don't want to be bothered by the Board (2), I would like to be more involved in planning and decision-making (2), I don't know (2)
- Over half (55.6%) rate the effectiveness of the Board's community consultation as very poor
- 55.6% of respondents are very dissatisfied with level of input they have into the Board's decision-making processes
- Majority of respondents believe the Board is average or poor at staying in touch with community needs and expectations

3.1.7 Age Group - 75 to 84

Snapshot of 75 to 84 year olds in our community... Segment Stats

- 8 respondents (5 female, 3 male)
- 5 Islander, 2 permanent residents, 1 leaseholder
- 100% have lived on the island for over 10 years or majority of their life
- Majority are unemployed/retired, with only 2 full-time employed



Key Communications Characteristics

- This age group is quite active in contacting the Board, majority having contacted the Board in the past 12 months
- Half of this group prefer to talk directly to a Board member, with the other 4 choosing telephone, letter, email and talking with Board staff
- 5 respondents have Internet access, 3 do not
- 50% have attended Board meetings in the past, 25% attend them frequently, 25% haven't
- Visiting the Board's website was split between half never using it, and half using it sometimes
- 75% occasionally attend community events
- Board information is important to this age group with 100% placing it as very important/important
- Current Board information is obtained from: The Signal (7), LHIB Community Info Bulletin (7) and Householders via Mail (6)
- Best ways for future communication with this group: the main difference is the drop in the preference of The Signal as a way of obtaining information: LHIB Community Info Bulletin (7), Householders via Mail (5), The Signal (4), and Information and Fact Sheets (4)
- 100% felt generally informed on what's happening on Lord Howe
- . 62.5% are satisfied with the current level of communication between the Board and community
- Reasoning why some respondents were dissatisfied with the communication was due to the information not being disseminated with enough time for public response
- Majority of respondents disagree or are undecided whether the Board communicates well with all age groups



- 75% get involved in community consultation when issues are presented that are of interest
- 62.5% poorly rate the effectiveness of the Board's consultation before it makes key decisions
- 75% only want to be consulted in advance about any key decisions that might affect their household or area
- 50% are satisfied with the level of input they have into Board's decision-making processes, whilst the other 50% are dissatisfied, very dissatisfied or undecided
- 62.5% believe the Board is average at staying in touch with community needs and expectations

3.1.8 Age Group - 85+

Snapshot of 85+ year olds in our community... Segment Stats

*Please note that only 1 person responded to the survey within this age group, therefore this respondent would indicate the average idea of this age group

- Female
- Permanent resident who has lived on the island for over 10 years
- Unemployed/retired



Key Communications Characteristics

- Hasn't contacted the Board in the past 12 months
- Prefers to contact the Board via talking directly to staff
- Has no Internet access
- Participates in petitions directed to the Board
- Has never attended a Board meeting
- Never visited the Board's website
- Occasionally attends events
- Board-related information is important to this respondent
- Currently obtains majority of Board information from: The Signal, LHIB Community Info Bulletin, Householders via Mail, Information and Fact Sheets; and believes this is the best way for future communication with this age group
- Feels generally uninformed about what's happening on Lord Howe Island in general
- Neither satisfied nor dissatisfied with the level of communication between the Board and community



- Likes to get involved in community consultation when issues are presented that are of interest
- Rates the effectiveness of the Board's consultation with community before it makes key decisions as neither good nor poor
- Neither satisfied nor dissatisfied with the level of input they have into the Board's decision-making processes
- Believes the Board is good at staying in touch with the communities needs and expectations

3.2 Market Segmentation - Residential Status

3.2.1 Key communication and engagement differences between residents living on the island and residents living off the island

Note: For the purposes of this section of the report, leaseholders will not be included within this section as their residential status of living on or off the island is unknown.

KEY DIFFERENCES IN COMMUNICATION

Residents living on the island (incl. people who classified themselves as permanent resident, temporary residents or Islanders living on the island) (n= 71)



Residents living off the island (incl. people who classified themselves as Islanders living off the island) (n = 14)

- More contact the Board regularly than residents off island (58.8% in the past 12 months)
- Preferred ways to contact the Board Residents living on the Island:
 - Talk with Board staff directly
 - Email
 - o Talk to a Board member
 - Writing letters (more face-to-face contact)
- Preferred ways to contact the Board Residents living off the Island:
 - o Emai
 - Talk with Board staff directly
 - Talk directly with a Board member
- Majority have Internet access, with only 1 person off the Island not having Internet and 15 on the island. This
 may change with the future NBN rollout.
- Residents on the island are more active in writing letters and petitions directed at the Board
- Board meeting attendance is greater from residents living on the Island rather than residents off the Island due to the locality of the meetings
- The Board's website is utilised by more residents living off island, but not very frequently
- Almost all residents living on the island attend events either majority of the time or occasionally, most residents living off island only attend island events occasionally
- Over three quarters of residents living on the island place Board-related information as very important or important more place it as very important than residents living off island
- Larger percentage of residents on the Island are feeling generally informed (67.6%), compared to off island
- Greater satisfaction of communication between the Board and the community residents living on the island
- Greatest concern for the current level of communication for residents on the island, is that information is not disseminated with enough time for public response
- Residents living off the Island feel that there is a general lack of communication between the Board and themselves
- Residents living on island were split as to whether the Board communicates well with all age groups (22
 Disagree, 20 Agree, 20 Neither agree or disagree)
- Majority of residents living off island believe the Board does not communicate well with all age groups

CURRENT WAYS RESIDENTS LIVING ON THE ISLAND OBTAIN BOARD INFORMATION:

- Householders via mail
- The Signal
- Community Info Bulletin
- Community Word of Mouth

FUTURE WAYS TO COMMUNICATE WITH RESIDENTS LIVING ON THE ISLAND:

- Householders via Mail (response count virtually stayed the same)
- Community Info Bulletin (response count down slightly)
- Information and Fact Sheets (response count increased by double)
- Email/Email Newsletters (response count increased by 5 times the amount)
- CURRENT WAYS RESIDENTS LIVING OFF THE ISLAND OBTAIN BOARD INFORMATION:
 - The Signal
 - Community Word of Mouth
- FUTURE WAYS TO COMMUNICATE WITH RESIDENTS LIVING OFF THE ISLAND:
 - Email/Email Newsletters (response count increased from 0 to 7)
 - The Signal (response count decreased slightly)
 - Community Info Rulletin (increased slightly)

KEY DIFFERENCES IN COMMUNITY ENGAGEMENT

- Majority of both residents living on and off the island would like to be more involved in planning and decision-making, however a larger percentage of residents off island wanted to be more involved 78.6%
- 32.4% of residents living on the island only want to be consulted in advance about any key decisions that might affect their household
- <u>Community Consultation</u> zero residents living off the island regularly get involved in community consultation, compared to 13.2% of residents living on the island (as they get more of an opportunity to regularly attend). This is indicative within the response percentage of residents living off island never having had experience with community consultation or been given the opportunity (50%).
- Majority of residents living on the island get involved in community consultation when issues are presented that are of interest
- The effectiveness of the Board's community consultation was rated majorly as poor or neither good or poor by both types of residents
- 50% of residents off the island are dissatisfied with the level of input they have in the Board's decision-making processes
- Majority of residents living on the island were dissatisfied or undecided with the level of input they have in the Board's decision-making processes
- Community Needs and Expectations
 - O Majority of residents living off the island believe that the Board is *average* or poor at staying in touch with community needs and expectations
 - o Majority of residents living on the island believe that the Board is *good* or *average* at staying in touch with community needs and expectations
- It is difficult for the Board to stay in contact with people living off the Island, unless a database can be maintained

4. Discussion

Response Age

The largest age group to participate in the survey was the 45 to 54 year olds, with 26 respondents. This is illustrative of the Census Data provided by the ABS in Appendix One, as this age group makes up the largest percentage of the Island's population at 18.5%. This indicates that the majority of the population is in the 45 to 54 age bracket, and that they are also active in participating in Board surveys. In order to gain more results, more encouragement could have been given to the 0 to 14 bracket to participate, as there were no responses made by this age group. This could be facilitated through possible discussion with parents of older children or the school.

Residential Status

Q3 was created in order to gain an idea of the demographics of the community, and how the different types of residents would prefer to communicate with the LHIB. There were comments (numbers 7 & 18) made that can be seen within Appendix Four, suggesting that the survey itself contributes to the division of residents, and questions asking what residency has to do with community engagement. These distinctions were put in the survey in order to gain a deeper understanding into the different types of communication that residents on and off the Island would like. These categories did overlap however; therefore the wording of the answer options could have been improved to be less ambiguous.

In Appendix Four, comment 24 was made in relation to the Rodent Eradication issue. The comment stated that temporary residents (i.e. lodge employees) were "allowed/desperately encouraged to vote" in the community poll, and that "they should never have been entitled to vote...as they are not long-term stakeholders" in the community. Considering the strong participant survey responses from Islanders and Permanent Residents, it is suggested that the results from this survey will demonstrate the attitudes and opinions of the long-term community members, as well as incorporating the short-term and temporary residents' preferences.

Employment Status

Within Q5, over half of the respondents stated that they work full-time, therefore important Board meetings or other information sessions may not be held within the hours when people can attend. The Board needs to consider all residents with different employment statuses when scheduling Board-related information sessions. Comments 2, 16 and 30 within Appendix Four all address the issue of Board meetings not being held at suitable times for all. Therefore the Board could consider holding meetings after hours, or another option could be to film or audio record each Board meeting, and have the recording and minutes available online a few days after the meeting has taken place. This would reduce misunderstanding of

discussions at Board meetings within the community, and make meetings more open and transparent.

Q6 shows that the majority of respondents stated they were employees (staff). Due to the existence of staff accommodation on the island, respondents commented in Appendix Three, Q17, stating that even though they are interested in Board-related information, it may not be passed down to them from lodge owners as they only have one mailbox. It is important that the Board has a means of communication with these people, as they are an important part of this hospitality and tourism-based island. It is suggested that an email announcement service be created in order to communicate with employees/staff working on the island as well as others who prefer information by email.

Levels of community engagement

Overall it can be said that over half of the community would like to be more involved in planning and decision-making to help improve the Board and the island, with 60.4% of respondents stating this. The Board needs to harness this positive feedback, and facilitate two-way communication by providing more ways for the community to engage with the Board. Within Appendix Four, comments were made that the Board has hidden agendas, and that the Board makes decisions without consulting the community often. The Board needs to change this outlook, which could be done in various ways including a suggestion given by one respondent saying that there needs to be more 'community-led' rather than 'government-led' projects happening (comment 29). A suggestion made in Appendix Four under Q17, number 3 recommended the use of a public forum online whereby the Board can collect email addresses and whenever an issue arises, the mailing list is sent out a link to the public forum where the issue can be discussed publicly or anonymously. While this could lead to some negative comment, there could be an agreement that criticism can only be constructive and only the issue at hand is to be discussed.

31.3% of respondents only wanted to be consulted in advance about any key issues that might affect their household or area. This level of community engagement should be addressed with a different approach i.e. householders or mail outs when issues are specific to their area, or phone calls at least 48 hours prior to the issue affecting their area.

It is recommended that the Board provides different community engagement options for all levels of engagement that are required. People living on and off the island could nominate what level of community engagement they would like through on-line registration, then the Board can communicate effectively with all residents on and off the island.

Preferred methods of contacting the Board

Feedback from the survey showed that email is taking over letter writing as a preferred method of contact, therefore this should be taken into account. Comments in Appendix Four suggest that letters and emails are not necessarily being responded to in a timely fashion. The Board's current procedure is for a response within 20 days. This seems too long. To address the feedback about no or tardy responses to emails, the Board could put in place an auto-response email. It is

recommended that the Board review its policy and procedures about the methods of contact with the community, and the time frames for response.

It can also be noted that 37.6% of respondents preferred to contact the Board staff directly. It is suggested, once the policy and procedures are reviewed, that all Board staff are briefed on the policy. The comments section indicates that the public are told to email or write letters. This causes frustration within the community if the email and letters are then not answered in a timely fashion.

Specific methods of how each age group prefers to contact the Board will be discussed later within the discussion.

Internet access

The majority of people in the community can access Internet, either at home or elsewhere; therefore Board information should be regularly disseminated via Internet options such as email. Survey feedback and comments suggest that emails and email newsletters are desired by residents living on and off the island, with links to issues and photographs provided. The rollout of the NBN will also improve the Internet

Board meetings and information sessions

37.6% of respondents have never attended a Board meeting or other information session. The percentage of people attending Board meetings could be increased so that the community is more informed on Board-related matters. As well as people working full-time on the island, people living off the island are unable to attend the meetings. This is an argument for audio/video recording of Board meetings, with the information being put onto the Board website after each meeting. Dates and times of Board meetings should not only be put on the public noticeboard, they should also be sent via email to people who are interested.

Letters and petitions directed at the Board

Petitions tend to indicate a level of opposition to a current practice or a proposal, and are an important gauge of the level of community support, and a means of including public views into decision making. The petitions that the Board receives are usually after a decision has been made where there is disagreement. It does not necessarily indicate that a proposal has not been communicated or the community has not been engaged adequately. However with 72% of respondents either writing a letter or signing a petition directed at the Board, or both, this indicates that the majority of community members has opposed a Board decision at some time. This statistic could potentially be lowered by involving the community more in decision-making through more open consultation, online forums to discuss issues, and more open two-way communication.

Board website

Survey feedback indicates that the Board website is infrequently used by the majority of respondents. This should slightly change with the NBN rollout. However there is also a question as to whether the minimal activity presence that the Board has on the website, is the issue, or whether the community just does not want to use the website. It is suggested that the Board take more of an active role in

communicating via the website including weekly updates in the News section, links to recorded meetings/content, social media presence, leading more community "traffic" to the forms online by uploading more documents etc. onto the website for the public to access and use. By the Board increasing the activity, it should encourage the community to access the website also.

Community Events

Survey feedback shows that over half of respondents occasionally attend events and 32.3% attend the majority of events, indicating that community events have the potential to be a part of the Board's strategic communication with the community living on the island, as well as visitors. There is a question as to whether the community would like the Board to provide information at these events. However, pop-ups such as the sustainable energy stall at the community market have been quite successful, and have provided an opportunity to communicate directly with the public.

Current level of communication

The satisfaction with the current level of communication by the Board was generally split. In order to change this perspective, the recommendations of the Communication and Community Engagement Strategy should be followed. The recommendation to extend the public response time for serious issues impacting the community such as rodent eradication, sustainable energy, and the Handley Report. Appendix 4, comment 5 suggests the employment of a Community Liaison Officer would be beneficial for the island as the officer could be responsible for coordinating many communicative tasks which are spread over different departments.

Community Consultation

The very low number of people, who say that they have never had an opportunity to comment on community issues, shows that the Board regularly undertakes some level of consultation. However, survey feedback indicates that over half of respondents only want to get involved when issues are presented that are of interest to them.

Only a small proportion of the community rates the effectiveness of consultation as being above average or poor. The level of community consultation could be improved by training staff in communication and consultation, or outsourcing the consultation, as well as combining the consultation with vigorous advertising beforehand to prevent any miscommunication.

A suggestion made in Appendix 4, comment 20 pointed out that people living on the island where English is their second language, may not understand the Board's structure and processes. This respondent did not care about the Board, because they did not understand. It is recommended that the Board look into holding informative meetings possibly for those with language difficulties or younger teenagers in order to educate them on how the Board functions. If these people are informed, they will become more involved.

Level of input into Board's decision-making

Survey feedback suggested that the many respondents were undecided or dissatisfied with the level of input they have into the Board's decision-making processes. It is recommended that the Board look at how the community would like to be involved in decision-making processes to better understand this. Within Appendix 4, comment 5 a respondent suggested that an Elders Council Representative be created "to give voice to cultural identity and history of decision making for settlement of infrastructure and environment which can assist current and future planning." This suggestion would address other comments that were made regarding the Board not listening to older generations about the historical importance of certain parts of the land and environment, and would help the Board understand better the significance it has to older generations.

Age Groups

0-14 years old

No responses were collected within this age group. This could have been addressed by attending the LHICS and discussing communication and community engagement with the children. However it is questionable as to whether this age group would have opinions on the matter.

15-24 years old

The majority of respondents within this age group live off the island for educational purposes or other reasons, and 100% had Internet access, therefore emails/email newsletters would be a great way to disseminate Board information to them. Comment 27 in Appendix Four suggests that the Board needs to invite the younger generation into the conversation and give them greater opportunities at contributing to decision-making with the rest of the community. Feedback shows that this age group want to be more involved in decision-making, however are not active themselves in contacting the Board or attending Board meetings. It is therefore important for the Board to reach out to them, in order to facilitate two-way communication for the future generations. Feedback shows that there is also the opportunity to communicate with this age group when school or university holidays are on, at community events/markets. Best ways for communicating with this age group will be discussed in the recommendation section.

25 to 34 years old

This age group was mixed with residents living on and off the island, with the majority being employed full-time; therefore meaning they most likely could not attend Board meetings. This age group has participated in consultations and meetings more frequently than the 15 to 24 year group and the majority want to be involved more in the Board's decision-making. Feedback suggests this age group likes to be up-to-date with what is happening on the Island and believe that information is not disseminated frequently enough.

35 to 44 years old

Within this age group, only females responded to the survey, which means both genders are not represented for the survey. This age group is not as active in contacting the Board as other age groups, and when they do, they prefer email. 100% have access to the Internet in some form, however are not frequently using the Board's website. Therefore email links to the website should facilitate the usage of it given that more content is uploaded. 35 to 44 year olds want to be more involved in planning and decision-making when it comes to the Board, however the majority only get involved when issues are presented that are of interest to them.

45 to 54 years old

As discussed, this age group had the largest amount of respondents, with 13 males and 13 females. The majority work full-time and therefore may find it hard to get to Board or other informational meetings. This age group is also the most active in letter and petition writing than any other age group, therefore they are more likely to be in opposition with the Board on issues. tBoard and informational meetings should be made more accessible to this group, as well as frequent emails sent outlining the Board's policies, projects and procedures. Emails are a great option for this group, as feedback indicated a huge increase in people wanting emails/email newsletters. The main difference between this age group and others is that feedback suggests they feel generally informed about what is happening on the island. This can be attributed to the fact that this age group wants to be more involved and is also actively engaging in two-way communication in the form of letter/email writing more frequently in comparison to other age groups. Dissatisfaction with the current level of communication related to the view that the Board does not give enough time for public response. It is suggested this should change to cater for the needs of the community.

55 to 64 years old

The employment status of this age group represents a slight change over all age groups with more respondents selecting part-time employment. This age group is active in contacting and writing to the Board, and also has a similar amount of interest regarding community engagement to the 45 to 54 age group. This shows that these age groups are of an age where they want to take on Board issues and policies, and also communicate via written and verbal communication. Majority of this age group have lived on the island their whole life, so therefore are more committed to the community.

65 to 74 years old

100% of this age group has lived on the island for over 10 years or the majority of their life, so therefore have a long-term commitment to the community. Board information is very important to almost three quarters of this group, however over half of respondents are very dissatisfied with the level of input they have into decisions. Respondents in this age group are mostly retired in comparison to other groups, meaning that these respondents should have more time to attend meetings, which is evident in the feedback, as over half have attended meetings in the past. This reflects why 8 out of 9 people in this group feel generally informed about what is happening on the island. The dissatisfaction with the level of communication in

this group is to do with response times and frequency of information being disseminated.

75 to 84 years old

Again, 100% of the 75 to 84 year olds have lived on the island for over 10 years or the majority of their life. The feedback indicates that they are an active group with 50% attending Board meetings in the past, and 25% attending them frequently. They are actively involved in contacting the Board, as well as actively directing letters and petitions to the Board. Board information is very important to them, however 75% only want to be involved in consultation when the issues affect their household or area directly.. One thing to note is that this group does not access the Internet as easily as the other age groups; this may have to do with the fact that they were not brought up with Internet technology.

85+ years old

Only one person responded from the community in this age group, which therefore does not provide the feedback with enough accuracy to make pivotal resolutions, however it does give the Board an indication of this age group. Feedback indicates that this person is not very active in attending meetings, or contacting the Board at all, and when they do contact the Board it is via face-to-face contact by directly talking to staff. This respondent places Board-related information as important to them, however feels generally uninformed about what's happening on the island, and only wants to be involved when issues are of interest to them. In Appendix 4, comment 10, this respondent made a comment stating that the mental perplexes of the 85+ age group need longer periods of time as well as face-to-face contact (from the Board), in order to absorb the information, therefore this is recommended for future communication.

5 Recommendations

5.1 Structural Recommendations

- In the future, in order to gain more accurate representations of the 0 to 14 and 85+ age groups, it is recommended to speak to these groups face-to-face to help them understand the nature of the survey etc. If the budget was larger, this could have been undertaken with focus group research.
- Wording of residential status questions could have been less ambiguous and definitions spelt out to the participants

5.2 Overall Recommendations

*Note: it is important that all recommendations align with each other to build an integrated communication strategy

- Board meeting times and online recordings -The Board should ensure that meetings are accessible to all residents either by holding meetings after hours for full-time employees, or another option could be to film or audio record each Board meeting, and have the recording and minutes available online at least a couple of days after the meeting has taken place for residents off the island. This would reduce misunderstanding of discussion at Board meetings within the community, and make meetings more transparent. Dates and times of these meetings should not only be put on the public noticeboard, they should also be sent via email to people who are interested.
- Registering the desired level of community engagement residents on and
 off the island should be given the option to register the level of community
 engagement they would like with the Board. It is recommended this
 information should be compiled from a website link where people can
 register if they only want householders, or enter their email for newsletters
 etc., and this data can be put into a database for future communication with
 those residents. The island is quite small; therefore this would not be a
 difficult task.
- **Email/Email Newsletter services** in order to provide more up-to-date and efficient communication to residents on and off the island, it is recommended that the Board create several different email services
 - Email newsletter for staff and anyone else who wants to be communicated with via email – it is recommended that the Board create and compile an online database of email addresses for staff in lodge accommodation and any other residents who are wanting to be updated with an email newsletter. This should include similar things to the Community Information Bulletin, with clickable links to current issues/projects, and photographs.
 - Email announcements it is also recommended that email announcements be sent out to the community email database when there are upcoming surveys, consultations, or decision-making projects that the community may want to participate in.

- Automated email response for Board staff an automated response email should be implemented for all Board staff members indicating how long it will take the staff to get back to the email etc.
- Public online forum it is recommended that the Board facilitate more
 means for two-way communication, such as a public online forum which can
 be linked within email newsletters to issues that are upcoming. The Board
 can then obtain the attitudes and perceptions of the community
 automatically, and understand what may be contentious topics/questions
 during community consultation
- Board Website the Board should take a more active role at communicating
 via the website including weekly updates in the News section, links to
 recorded meetings/content, social media presence, encouraging the Board
 Administration staff to lead community "traffic" onto the forms online by
 uploading more documents etc. onto the website for the public to access and
 use. By the Board increasing the activity, it should encourage the community
 to access the website also
- **New policy procedure for communication methods** it is recommended that the Board reviews policy and procedures for communicating with residents, and ensure that all emails/letters receive a replywithin a 14-day period.
- Extend the public response time for community feedback for serious issues impacting the community
- Communication at community events event pop-ups such as the sustainable energy market stall have been quite successful, and have provided an opportunity to communicate directly with the public
- Community Liaison Officer It is strongly recommended that the Board create a position of Community Liaison Officer - with communications expertise and experience. The officer would be responsible for a number of communications tasks that are currently spread between different departments and ensuring a good level of communication between the Board and residents and visitors.
- Community Consultation Training It is recommended that training be
 provided in communication and consultation to make consultation more
 effective Alternatively consultation could be outsourced. Good advertising
 should be undertaken before any consultation to ensure a good level of
 community understanding and involvement.
- Communication training for Board Administration staff Training should be provided to staff, in particular front-line staff, in communication and how to deal with difficult people etc.
- Informative educational meetings It is recommended that the Board hold
 informative meetings for people for whom English is not their first language
 or younger teenagers in order to educate them on how the Board functions.
 If these people are informed, they will become more involved in decisionmaking in regard to Board policies etc.
- Consultation on decision-making processes it is recommended that the Board consult on the level of input into decision-making processes that the community would like. It is important to involve the community and that the community is engaged.
- **Elders Council Representative** it is important to the residents living on and off the island, that the island's historical importance remains a concern on

the Board's agenda. It is recommended that consultation with a representative group of the older generation of residents would be of benefit to the Board in order to gain historical background when land and infrastructure are issues.

5.3 Age Group Recommendations

15 to 24 years old

- Important that the Board reaches out to this age group to facilitate twoway communication
- Emails/email newsletters and social media should be used to communicate as 100% have Internet access
- Opportunity to communicate with this group on school holidays via community event pop-ups
- Targeted communication in the future with this age group should be via:
 - LHIB Community Information Bulletin, Householders via Mail, The Signal, Email/Email Newsletters, and Public Meetings

25 to 34 years old

- Important to make Board meetings accessible to this age group as majority work full-time
- Information should be disseminated more frequently to satisfy this age group
- Targeted communication in the future with this age group should be via:
 - Householders via Mail, Email/Email Newsletters, The Signal, and Information and Feedback sessions

35 to 44 years old

- Important that the Board reaches out to this age group to facilitate twoway communication
- Emails are a great way to contact this age group as 100% have access, and they prefer to contact the Board using this method
- Targeted communication in the future with this age group should be via:
 - Public Meetings, Householders via Mail, and LHIB Community Information Bulletin

45 to 54 years old

- Board and informational meetings should be made more accessible to this group as they are the largest demographic – majority work full-time
- Emails are a great communication method for this group, as feedback indicated a huge increase in people wanting emails/email newsletters.
 Frequent emails should be sent outlining the Board's policies, projects and procedures
- Board needs to give more time for public response feedback from this age group
- Targeted communication in the future with this group should be via:
 - Householders via Mail, Community Information Bulletin, The Signal, Informal engagement (face-to-face, phone calls), Information and Fact Sheet

55 to 64 years old

- Board should make an effort to respond to this age group as they communicate face to face or via letter usually – this age group likes to communicate directly
- Targeted communication in the future with this group should be via:
 - Householders via Mail, LHIB Community Information Bulletin, Public Meetings, and The Signal

65 to 74 years old

- This age group and older would be suitable for the recommended Elders
 Representative as 100% have lived on the island at least over 10 years or
 majority of their life, and they are wanting more input into Board decisionmaking
- Response time for feedback and frequency of information being disseminated is an issue for this age group – it is recommended this be improved to help facilitate communication with this age group
- Targeted communication in the future with this group should be via:
 - LHIB Community Info Bulletin, Householders via Mail, The Signal the selection was spread for the choice of future communication methods, compared to the current ways this group is obtaining information

75 to 84 years old

- This age group and older would be suitable for the recommended Elders
 Representative 100% of the 75 to 84 year olds have lived on the island for
 over 10 years or majority of their life
- Internet and email communication is not best suited to this age group as feedback suggested many didn't have the technology, or didn't use it
- Targeted communication in the future with this group should be via:
 - LHIB Community Info Bulletin, Householders via Mail, The Signal, and Information and Fact Sheets

85+ years old

- Recommended that the Board spend face-to-face time with this age group
 discussing Board issues, policies, projects etc. possibly at Seniors Week
 events or even in a meeting this age group stated that there is not enough
 time or mental capacity at their age to absorb the policies etc.
- Targeted communication in the future with this group should be via:
 - The Signal, LHIB Community Info Bulletin, Householders via Mail, Information and Fact Sheets

5.4 Residential Recommendations

Residents living off the Island

- Targeted communication in the future with this group should be via:
 - o Email/Email Newsletters
 - The Signal
- Social media presence by the Board is also recommended for the future in order to keep residents off island informed easier (i.e. Facebook page)

Residents living on the Island

- Targeted communication in the future with this group should be via:
 - o Householders via Mail
 - o Community Info Bulletin
 - Information and Fact Sheets
 - o Email/Email Newsletters

Appendix One: Snapshot of the 2011/12 Census Data

394 people	91 families	136 households
198 male and 196 female Average age 46.3 Average in Australia 37.3	Average children per family 1.7 152 people (50%) are married	Average people per household 2.3 106.2 households with internet access

Data Analysis

People

The median age is 46.3, which is almost 10 years older than the average age in Australia. This means that the island has an ageing/older population. This age group (45 to 54) is the largest at 18.5% and made up of the Baby Boomers and Generation X. The largest group of people was born between 1960 and 1970 on LHI. The second largest percentage was tied between 0 to 14 years and 55 to 64 years group, who are also Baby Boomers. These generations are of importance for the research and strategy.

Three largest generation populations on LHI

Baby Boomers - 1946 - 64

Half of this generation was born a while after World War 2. "They grew up in an age of prosperity and continue to have few qualms about spending on consumer goods instead of saving for retirement" (Wilcox & Cameron 2012). They share many concerns with their immediate elders, the seniors. "Austerity was taken over by technological advancement and increasing freedom (McCrindle 2012).

Generation X - 1965 - 1979

"Gen X is building on what they have already achieved and are searching for meaning. Potentialism, opportunity, changing, is moving in new directions" (McCrindle Research).

Generation Z - 1995 - 2009

Fast-moving, complex, digitally engaged, globally focused, educationally transformed, network influences them socially. Need to possibly engage digitally with them in order to communicate.

Source: ABS,

2016 http://stat.abs.gov.au/itt/r.jsp?RegionSummary®ion=10803&dataset=ABS_REGIONAL_ASGS &geoconcept=REGION&datasetASGS=ABS_REGIONAL_ASGS&datasetLGA=ABS_REGIONAL_LGA®ionLGA=REGION®ionASGS=REGION

Appendix Two: Communication and Community Engagement Survey



The Lord Howe Island Board is seeking feedback about how it communicates and engages with the Island community.

The survey results will be used to develop a Communications and Community Engagement Strategy to facilitate two-way communication with the Island community and other key stakeholders.

The Board is very interested in your views and encourages everyone to participate in the

survey, in order to help inform, consult, and actively engage our community

Two surveys have been provided per household. Additional copies are available from the Board Administration Office or Board website www.lhib.nsw.gov.au.

For further information please contact David Kelly (Manager Environment & Community Development) on (02) 6563 2066 – extension 18 or by email dave lethy@hito.nsw.gov.au

Complete the survey and return to the Post Office or Administration Office OR

Complete it online via the following link https://www.surveymonkey.com/r/lhibcommunicationssurvey

Please submit before January 18, 2015



C	Section Two: W RELATIONSHIP WIT		IS YOUR PREFERRED HE BOARD?
C	Section Three: (Сом	MUNICATION

LOVA	Howe ISLAND BEARD Com	munications and Commun	ity Engagement Survey, December, 2015	4
Q12	Do you attend Board me	etings or other i	nformation sessions?	
	I attend them frequently		I haven't attended any	
	I have attended them in the p	ast		
Q13	How regularly do you visit	the Board's web :	site?	
	Very often		I've had a look at it, but never really used	it
	Frequently		Never	
	Sometimes			
Q14	Do you attend local ev	ents? (e.g. marke	ts, community events)	
	I attend majority of communit	y events	I occasionally attend events	
	I attend the markets only		I don't attend events	
Q15	How important is Board	-related info	rmation to you?	
	Very Important		Somewhat Unimportant	
	Important		Very Unimportant	
	Neither important or unimpor	tant		
Q16			information about proposed and oose one or more boxes if applicable)	

Q17	Which of the following do you believe communicate with the community in the				
= y60	applicable)	\Box	LHIB Website		
	The Signal	ŏ.	Public Noticeboards/Advertisements		
	LHIB Community Information Bulletin	$\bar{\Box}$	Public Meetings		
	Householders via Mail	$\overline{\Box}$	Informal engagement with community		
	Information and Fact Sheets	_	(face-to-face, phone calls etc.)		
	Information and Feedback Sessions		Other, please specify		
	Email/Email Newsletters				
1	What are we doing well in terms of engagement and wha				
	ENGAGEMENT AND WHA	AT CA	IN WE IMPROVE?		
Q18	How informed do you feel about w general?	vhat'	s happening on Lord Howe Island in		
	Very well informed		Generally uniformed		
	Generally informed		Very uninformed		
Q19	19 How satisfied are you with the current level of communication between the Board and the community?				
	Very Satisfied		Dissatisfied		
	Satisfied		Very Dissatisfied		
	Neither Satisfied nor Dissatisfied				
Q20	If you are not satisfied with the current le reason for this? (Choose one or more		s if applicable)		
	There is a general lack of communication		easy to understand The methods of communication the Board		
	between the LHIB and community	_	uses are insufficient or outdated		
_	Information is not disseminated frequently enough		I am satisfied with the current level of communication		
Ш	Information is not disseminated with enough time for public response		Other, please specify		
	Information disseminated is not clear or				
Q21	Do you think the Board communica	tes	well with all community age groups?		
	Strongly Agree		Disagree		
$\overline{\Box}$	Agree		Strongly Disagree		
$\bar{\Box}$	Neither Agree nor Disagree				

Lord	Section Four: Co	ty Engagement Survey, December, 2015 6
	COMMUNITY ENGAGEM COMMUNITY THROUGH A RANGE OF AND CONCERNS ARE UNDESTOOD DECREON-MARK	ANISMS TO ENSURE THAY ISSUES CONSIDERED AS PART OF THE

THANK YOU FOR COMPLETING THIS SURVEY AND GIVING THE BOARD INSIGHT INTO YOUR NEEDS AND EXPECTATIONS.

If you have any other comments/suggestions regarding communication and community engagement within the Lord Howe Island community, please leave it in the comment box below.

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Aller Comments

Appendix Three: Open-ended questions and answers throughout survey

Question #	Comment	& Comment #	Suggested change/improvement to communication and community engagement
Q6: If employed, please indicate your occupation on the island?	1 Pe 2 Se 3 Re 4 Re 5 Re 6 Re 7 Ny Er 8 ov 9 ar	ermanent Part time NSW elf-employed etired etired etired etired //A nployed off the Island and also business co- vner on Lord Howe Island. ad small business owner	Q6 should have included a "retired" answer option
Q9: What is your preferred way of contacting the Board?	2 3 4	Responses it depends on the issue. Sometimes personal discussion and letters are needed. Depends on the issue. N/A Formal communication - email. Informal - Board Member talk to executive officer directly	Communication should be contextualized – different communication methods for different issues
Q16: Where do you obtain the majority of your informatio n about the proposed and ongoing Board initiatives and/or policies?	Number 1 2	Responses Board meeting At work at the Board haha. I work at the board so I am aware of	Q16 should have been clearer with the option of "Briefings (between internal staff and Board members). This was the option the people who are employed by the Board should have chosen instead of making the comments in the "Other" section
Q17: Which of the following do you believe is the BEST way for the Board to communica te with the community in the future?	Number 1 2 3 3	Other (please specify) I don't think people really look at noticeboards phone calls if they think that the matter may be related to me or of interest to me. Householders for extra-ordinary matters The LHIB should actively and passionately be collating a mailing list of ALL Islanders/Residents both on and off the Island. Emails can be sent regarding issues and each issue discussed can have a BOLD link that takes them immediately to a public forum where direct/open messages can be made publicly or anonymously. The conversation can be followed and that way the entire community can be discussing issues together. Instead of one person with/against the Board, it can be a conversation between many Email Newsletters including those residing off the	Phone calls should be made for matters that directly affect a person or their property directly. LHIB should collate a mailing list of residents who wish to be contacted via email. Create a public forum on the Board website to help facilitate two-way communication on particular issues

		island who still take an active interest.	
Q20:	Number	Other (please specify)	Board information should be more
If you are	Number	Other (please specify)	transparent.
not		I don't feel the information contains all of the facts	
satisfied	1	about issues. Often agendas are hidden!	Important reports should be
with the	2	Important government reports (Gleeson, Handley) are not communicated.	communicated better.
current	3	On occasion the Board has hidden agendas	
level of	J	Given the amount of information being disseminated	Email communication for off-island
communica		by the Board or readily available	residents.
tion, what		from the Board (or website etc) the community as a	
is your	4	whole does not seem to be well informed. Other than the signal, there is a lack of	Board should listen to resident opinion.
reason for		communication for off island islanders. e.g. emails	
this?	5	would be good etc.	Lack of communication with staff
	6	The opinions of the residents counts for nothing	members living in staff accommodation
	7	The Board is not interested in resident opinion	is an issue. Lodge owners need to pass
		I am a staff member living in staff accommodation for	information on.
	8	10 years and the board have no way of contacting me.	
	0	The lodge owners don't pass on the information The set out of this is very indicative. Information is not	New policies and procedures need to be
		disseminated, not discussed or consultative –	discussed before they are implemented.
	9	this goes back to base residents/islanders.	Community should be informed.
		New policies and procedures need to be discussed	community should be informed.
	10	BEFORE they are implemented. Inform the community immediately.	Communication database online to
	11	Outdated.	communicate with Islanders off-island
		There is no communication at all to those Islanders	and younger generation. Decreasing
		who are off the Island,	misinformation, barriers and increasing
		we need to rely on our families to inform us which is	transparency.
		some cases is bias/not all the facts are presented . To establish a database to communicate regularly with	transparency.
		those islanders is critical, as many of them will	
		eventually	
		reside back on the Island. I believe the Board would	
		reach the younger generation with much more ease	
		and would significantly decrease many communication	
		barriers and misinformation being circulated.	
		I personally rely on an informed Board Member to	
		obtain my information,	
		I believe that I should be able to access the information much more transparently,	
		with the Board taking a proactive role in making	
	12	information more accessible.	
		the methods of dissemination don't filter down to	
	13	'staffies' like me even though I'm interested	

Appendix 4: Q26 Open-ended comments/suggestions

Comment #	Response	Suggested change/improvement to communication and community engagement
1	In the past, The Board has done things like; planting trees/shrubs in places that are inappropriate without the community having a say. Things like this affect everybody, everyday. Other examples are constructing signage, traffic area, removing bbq areas and placing more and more restrictions on just about everything we do here. We actually LIVE in a settlement, not a national park. This clearly needs to be treated as separate areas. When complaints/suggestions are made directly to the Board, they don't listen/act upon them. People who do bother to questions what the Board does are looked upon as being "radical" and not taken seriously. This causes discontent in the community.	Request for further information and greater levels of consultation even for day to day matters such as signs, BBQs, planting trees
2	Board meetings: - Should be held at night only so more members of the Community can attend after working hours if they choose to. The Board does not update the community frequently enough on issues such as the Handley Report progress and how it will affect the Island. The Board often asks for community engagement and input on issues such as the Slipway the takes no notice of what the Community is and saying then makes seriously worrying and wrong decisions.	Change the Board meeting times. Update the community more frequently on important issues.
3	1) Overall it seems that new Board members have their hands tied somehow as soon as they step into office. They just seem to stop representing issues you voted them in for Too much paperwork and bulldust surrounding every little thing. Just get stuck in and blooming well fix it! 2) The community just isn't being looked after in general. Public toilets are not being consistently and thoroughly kept clean. Board buildings not maintained properly. It took one kind local husband to get in and fix the holes properly at the Co-Op to stop the mouse problem. The elderly are not being taken care of - Ken and Dorothy Ryan's driveway an outstandingly obvious example. They can't leave their home after heavy rain, how is an ambulance going to be able to get to them. Big rutts in the public access driveway of Joys Shop. Broken glass dumped in the grass from last roadworks there. The old bottle dump in the sand bank near Pinetrees took too many years to be attended to properly by the Board. It was a public health risk all of that time. Walking tracks are not being maintained unless a grant is issued for that area. Scotch thistle on public access areas. Poisons being used everywhere degenerating the good soil. Board planted bush blocking the view everywhere. The loo watertank and picnic area has still not been restored at Blinky, however Thankyou finally for the viewing platform at Intermediate! Unfortunately the Signal has turned into a boring woman's magazine, so I don't buy it anymore.	Raises operational matters including those on private land, and the Signal, which is not owned or operated by the Board. Comments shall be passed onto operational and infrastructure managers.
4	History has shown that the LHIB have little interest in community sentiment. Householders/The Signal are propaganda sheets for the LHIB with vague info. The	Extensive community consultation required before
	current Rat Eradication Plan is a perfect example. Decisions are made and then the community is told to	decisions are made i.e. rodent

	'tow the line'.	eradication
5	I feel there should be a Community Liaison Officer that screens/vets/or assess the enquiry/complaint/or proposal assist the resident in correct procedure i.e. application or set up a meeting with correct dept in LHIB or Local Board members to advance or validate their enquiry. Their should be an elders counsel representative to give voice to cultural identity and history of decision making for settlement of infrastructure and environment which can assist current and future planning.	Employ a Community Liaison Officer, form Elders Council
6	There should be individual discussion with households, before being told you have to go ahead with some new idea. The Board can't take it for granted that the leaseholder can afford what they (The Board) expect us to pay for these different things e.g. wastewater, when the one you already have is working very well). People don't just have a spare \$50,000+ in their top drawer.	Discussion should be held with individual leaseholders before decisions are made i.e. wastewater
7	I am puzzled by Q3. I am perplexed as to how such divisions could possibly be necessary in formulating a community. Communication Strategy - An active community is not a spontaneous creation. An active community is a product of careful planning and nurturing and engagement. A LHIB survey reflecting and duplicating the subtle Islander apartheid apparent in the wider community is not conducive to an integrated, healthy and vibrant community. Divisions, such as those demonstrated in Q3 are exactly that - divisions! Community engagement is not dependent upon being an "Islander", an "Islander currently residing on the mainland", a "leaseholder" etc!!!	Related to survey questions/structuring. Answers to questions could have been less ambiguous, however these definitions reflect the Lord Howe Island Act. These definitions were not used as community divisions; they were used to categorize the communication used by all different types of community members.
8	It would be good to see the Board implement its code of conduct with regard to responding to letters. LHIB does not even acknowledge receipt of a letter let alone answer one. Letters I've written all have been relevant to issues that affect our community, they are not time-wasters yet you (The Board) choose to ignore, so why should I waste my time and knowledge trying to help you?	Respond and acknowledge receipt of letters
9	I would love to see a little more engagement with the Board and community in terms of informing the community with an overview and objectives of projects. E.g. sharing research findings and incentives for protection/research initiatives Informal events/gatherings which inspire initiative with engagement of projects or provide information, e.g. documentaries, visiting researcher's presentations. Better understanding of Board decisions translates to more support, less conflicting information and confusion.	Share information and research findings with the community through more inspiring and engaging ways
10	I believe that because sometimes the mental perplexes of the 85+ are slower there are times when they take longer to process (and sometimes to store) information and therefore this group may need more face-to-face (another) means of communication or longer to absorb it.	Face to face communication with 85+ age bracket
11	In general I am happy with the Board's outgoing communication. However, the response to letters made to the Board is not always happening. The community have always been encouraged to 'put it in writing' so therefore one does expect an answer in return.	Respond and acknowledge receipt of letters
12	Too often the board pretends to listen to community input but makes decision's that have already been decide. The slipway debacle is a good example. More questions than answers. At times the Board's communication with the community is good and above board. However at other	More regular updates on projects (note Handley review being conducted by NSW Government not the Board)

	times it appears the board is quite happy to keep the community in the dark on certain issues. Example: - Handley Report and the recent "Shallows" movie	and increased transparency
13	production on the island. I feel the LHIB does not have a good grasp of community needs. The community and social health of the island are often overlooked or not well considered with most LHIB projects.	Raises issue of social / community health and NSW Health being responsible agency not the Board
14	There is currently a lot of information being disseminated and readily available but there is always room for improvement so hopefully those community members who feel they are not being reached can offer some proactive feedback to this survey. I think it is important to differentiate between lack of/inefficient communication and communication of things that people may not like or disagree with which may also be a source of general dissatisfaction. There is also the issue of misinformation (both unintentional and deliberate), which causes confusion within the community - eg when people hear something second or third hand on the grapevine and take it as gospel instead of properly informing themselves.	Factual information to be disseminated to counter misinformation; good point regarding disagreement on an issue is not necessarily poor communication
15	I appreciate that the board has a job to do and cannot second-guess or second check every single decision. However I feel it is wise to have an open level of communication, not unlike an ombudsman. The local board members do NOT do this. The local board members end up representing the Board to us and not being an impartial ear for any matters of concern about issues. I would like to see someone that acts as an impartial neutral person that can help older residents with matters without being judged etc.	Role of Elected Board members to be clarified
16	I would like to attend Board meetings, but cannot due to having a child and there is no childcare on the island. I feel that the Board will make decisions, regardless of community feedback.	Make Board meetings more accessible for everyone/ Perception that the Board makes decisions without any consideration of community input
17	Would appreciate emails/alerts etc. whilst off island.	Email of information to persons off island
18	I find this survey repetitive. I found Q3 ridiculous what is or how does the compiler and designer of the survey think a permanent/temporary and islander/ presumably non islander is - so many different variables, depending on what is believed or what is true. Hard to contact the staff when off island. Typical example of lack of communication: closure of Hall Sheds notice received in letter box the day it should have reopened! i.e. Not before the closure.	Community consultation required before decisions are made, more notice for planned works (note this was an emergency, public health issue); availability of Board staff
19	I strongly believe that before any major decisions regarding Island heritage issues are made Islanders, particularly "Senior" Islanders, should be consulted. For example, when discussing the problem of soil erosion on the bank of the creek which forms part of our boundary, I became aware of the fact that the LHIB Environmental staff did not know that this creek is a man made drainage system established by a work party of Island men led by Ned King, in order to make available more fertile land of crops and animals. The original creek line followed the base of Mt Lidgbird and can still be recognised today by	Listen and respect local knowledge regarding heritage (note these have been captured as part of Community based Heritage Study in 2012)

	the rushes and other water plants growing along its path. There have been other examples of LHIB Environmental staff removing or destroying remnants of Island history. The bush lemon trees - planted by the palm seeders	
	generations ago in order to provide refreshment for those Islanders who spent long hours seeding. Those trees marked the routes the men took to reach their seeding areas. The island gardens - still today Islanders refer to various areas on the island as "Uncle	
	Jim's garden" or "Uncle Norm's garden"*. These gardens were important in the lives of Island families a generation or more in the past and should have been recognised as part of the Island's history of settlement. *"Uncle Eddy's garden"	
20	As a foreigner I have a little idea about the life here, I get the info more likely on a rumour level. The language barrier makes me maybe 60-70% aware of things. If there was a person who kind of introduces me the backgrounds I would be more interested in the community stuff. Also feel like I am needing help to find my development possibilities here other than doing what I can. Some kind of integration or consultation would be helpful for me to feel as I am part of the community. At the moment I feel I do not care about the Board stuff because I do not understand it.	Language barrier for people with English as second language. Possible consultation about Board information to people with English as a second language
21	I strongly believe that before any major decisions regarding Island heritage issues are made, Islanders, particularly "Senior" Islanders, should be consulted. There have been decisions made by LHIB Staff in the past that have not respected the views or recognised the local knowledge the Island Seniors have. For example; Agapanthus was "found" growing on the slopes of Mt Lidgbird and the Environmental Staff began removing and destroying agapanthas in the southern settlement area. It was completely removed from Lil Wilson (nee King)'s childhood garden. Had any Environmental Staff member cared to talk to an Island Senior they would have been made aware of the fact that the Agapanthus growing (not spreading) on Mt Lidgbird was deliberately planted on the site of an accident in which Norman Ziska lost his life. His friends chose to plant the Agapanthus there as a memorial.	Listen and respect local knowledge regarding heritage (note these have been captured as part of Community based Heritage Study in 2012)
22	I believe the board should inform all the community members about all issues and concerns about public area management	Request for further information and greater levels of consultation for public area management
23	"The Board" has two connotations. 1) The Board = the elected and appointed members 2) The Board = The Administration. This should not have the title "The Board" which leads often to wrong conclusions. The Admin should be called just that.	Clarification needed between the 'Board' and the 'Administration'
24	A clear example of the way in which the Board decides something and then communicates - note, not consults – after the decision is made is the rat poison drop. Some decisions do not radically affect the island as a whole, and clearly no need for wide consultation here. But the rat poison drop is an excellent example of the way "The Board" makes a decision and persists with it, willy-nilly. Temporary residents (lodge employees) and especially public servants, under employment by Board, and here only for a couple of years) should never have been entitled to vote. They are not long-term stakeholders, but mercenaries. Had they not been allowed/desperately	Extensive community consultation required before decisions are made i.e. rodent eradication

	encouraged by "The Board" to "vote" the result would have been very different. As it stands, the entire rationale of the "drop" in the first place, the eradication will replace the (up till now effective, if properly supervised by the Board) rat control is rendered null and void by the overwhelming genuine resident vote against it. Experience of rat eradications have demonstrated, unequivocally, that where even 10% of an island populations is against it, it can't work as eradication per se. The Board knows this, yet intends to proceed with a possible "compromise" position, without acknowledging that non-compliance of even a few people doesn't just "undermine" the total eradication idea, it renders the concept null and void. "Eradication" is	
	total or vitiated.	
25	It is very important that the LHIB supplies the community with clear, concise, accurate and unbias information to not only fully inform the community but to reduce the 'rumour mill' credibility.	Factual information to be disseminated to counter misinformation
26	The Board decision makers need to: 1) listen to the community because these are the people who will have to live with the decision 2) Inform the community if there are new policies and procedures or if any are amended (immediately). 3) Listen to the local knowledge 4) Regard history and cultural aspects of the island 5) Respect local knowledge and use this when making decisions instead of placating the community with consultations which are generally not used when decisions are made 6) Involve the community in decision making - we have to live with the result 7) Be sympathetic to unique needs of the community living in an isolated location	Listen and respect local knowledge; involve the community in decision making
27	Our younger generation will one day be the Grandfathers/Grandmothers of this Island. We need to invite the younger generation into the conversation and respect their opinions. Many of us will have unique, differing and interesting insights outside of what the older generations may have, and I believe they are just as valid, important and necessary to come to wholesome and positive decisions for the greater good of the Island and its people. PS. Lena is a legend.	Involve greater opportunities for younger generations in decision making
28	You can lead a horse to water, but you can't make it drink. If everyone bothered to read/listen/react to the various communication avenues the Board uses (and as detailed in this survey) the level of community satisfaction/understanding with/of the Board's communication strategy would be higher. Alas, I don't know how to address this aspect.	
29	I think it is a such a pity that the anti-administration sentiment on this island has gotten so out of control that now many conservation initiatives face vitriolic opposition - simply because they are put forward by the board not because there is community opposition to the conservation of this wonderful island itself. I believe the key is a sense of ownership - i.e. islanders need to feel like the idea and initiative to protect this wonderful place has come from them, a sense of ownership and pride for the conservation of this island will ensure it's continuation and success long in to the future. Even though the world heritage listing means the whole world also wants to see this place preserved, islanders need to feel like the initiative was theirs, first and foremost, and a sense of pride for the pristine state of the natural environment will follow. Currently the opposite situation exists where many islanders see the conservation initiatives here as someone else's idea forced on them, and this leads to natural psychological resistance. In order to give the community a	'community led' rather than 'government led' projects, e.g.marine parks discussion

	sense of power over conservation, consultation has to be undertaken long before plans are even formulated - the community needs to feel like the scientists and specialists are working for THEM to deliver what they want (at the end of the day I do believe most people truly want pristine ecosystems). The new system of Marine protection being trialled in NSW is taking this approach - eliciting community priorities first and building on those (which are usually along the lines of 'cleaner water, more fish, more biodiversity, healthy marine life' - the same principals marine parks are currently based on anyway). maybe the board could keep an eye on their progress and see what does/doesn't work in the new 'marine estate' system	
30	1. Email needs to be used for regular (at least monthly) communication. This also allows for photographs and images to included of relevance to the articles. The website can be used for people to sign up. When there are large amounts of detailed photos or images, then links can put in the email to the images/photographs. 2. The LHIB currently consists of elected officials and non elected officials, and employed staff. There needs to be a segregation between the staff arm, and the elected/non elected officials. This can be done as simply as having the LHIB and LHI Administration - the method of separation is not important, but in this age of communication, it is vital that segregation is clear, and unambiguous. This survey is a great example of a failure in communication due to the current ambiguity – when questions are asked about the LHIB, do you mean the officials, or the administration? 3. Public meetings can be and consultation can be webcast and recorded for later download for those who cant attend either due to employment, short notice, medical appointments etc.	Greater use of email and video conferencing for communication; clarification needed between the 'Board' and the 'Administration'

Board Meeting: September 2016 Agenda Number: 12(v) File Ref: AC0152

LORD HOWE ISLAND BOARD

Business Paper

OPEN SESSION

ITEM

Airport Terminal Upgrade Project Update.

RECOMMENDATION

It is recommended that the Board note the report.

BACKGROUND

The \$1,981,604 project has been underway since March 2016. The Project has been split into two distinct components being:

- 1. Project and Construction Management, and Design Services; and
- 2. Construction.

Infrastructure NSW has funded \$1.8M of the cost of the project through its Restart NSW fund. The Board is contributing \$181,604 through in-kind funding.

CURRENT POSITION

STEA Astute Architecture P/L were the successful tenderers for the Project and Construction Management, and Design Services Contract and commenced work on the project at the beginning of July 2016.

The Constructability Report on refurbishment compared to a new building was delivered by STEA in late July 2016. The report has stated that refurbishing the existing building is exceedingly problematic and economically imprudent. A functional area analysis demonstrated that the modifications required to the existing building fabric and structure to achieve International Air Transport Association (IATA) standards for regional airports meant that very little of the existing terminal could be usefully retained.

Further, a refurbishment of the existing terminal would not alleviate the operational dysfunction as was the desired outcome, and further upgrades would be necessary in the not too distant future.

The Project Team has therefore elected to pursue the option of a new terminal building. The new building will be built on the site of the existing terminal.

Concept plans have been prepared and are included as Attachment A. These plans address the relevant standards, codes of practice for buildings and services, and in particular regional airport terminals catering for Lord Howe's expected passenger numbers.

Steve Turner, principal architect of STEA, presented the plans to the Airport Terminal Consultation Group on Monday 22 August 2016 for review and comment. The plans were well received with little alteration required.

Preliminary discussions have been held with Andrew Wilson regarding the use of his hangar building as a temporary terminal during demolition and construction.

The demolition of the existing terminal, construction of the new terminal and provision of temporary terminal facilities will not be possible within the current project budget.

To manage the budget shortfall, in August the Board applied for a \$750,000 grant from the NSW Department of Premier and Cabinet through the Tourism Demand – Driver Infrastructure (TDDI) Program. The outcome of the application should be known before the end of the year.

In addition to seeking additional funding through the TDDI Program, the Project Team is:

- Considering alternative procurement options such as early work packages for the temporary terminal facilities and terminal demolition, utilising majority local labour.
- Preparing a more detailed Quantity Surveyor cost estimate.
- Reducing the cost of the building through cheaper building materials, until funding can be sourced / made available.
- Deferring proposed work in the carpark until funding can be sourced/made available.
- Utilising some of the existing furniture until funding can be sourced/made available.
- Funding of the biosecurity screening capabilities through the Rodent Eradication project.
- Utilising the Board's capital program funding for 2016/17 for appropriate elements of the project.

The design and documentation for the terminal building is expected to be finalised by 26 September 2016.

RECOMMENDATION

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Prepared	_Andrew Logan	Manager Infrastructure	& Engineering Services
Endorsed	Penny Hollowa	y Chief Executive Office	er





Síte Plan

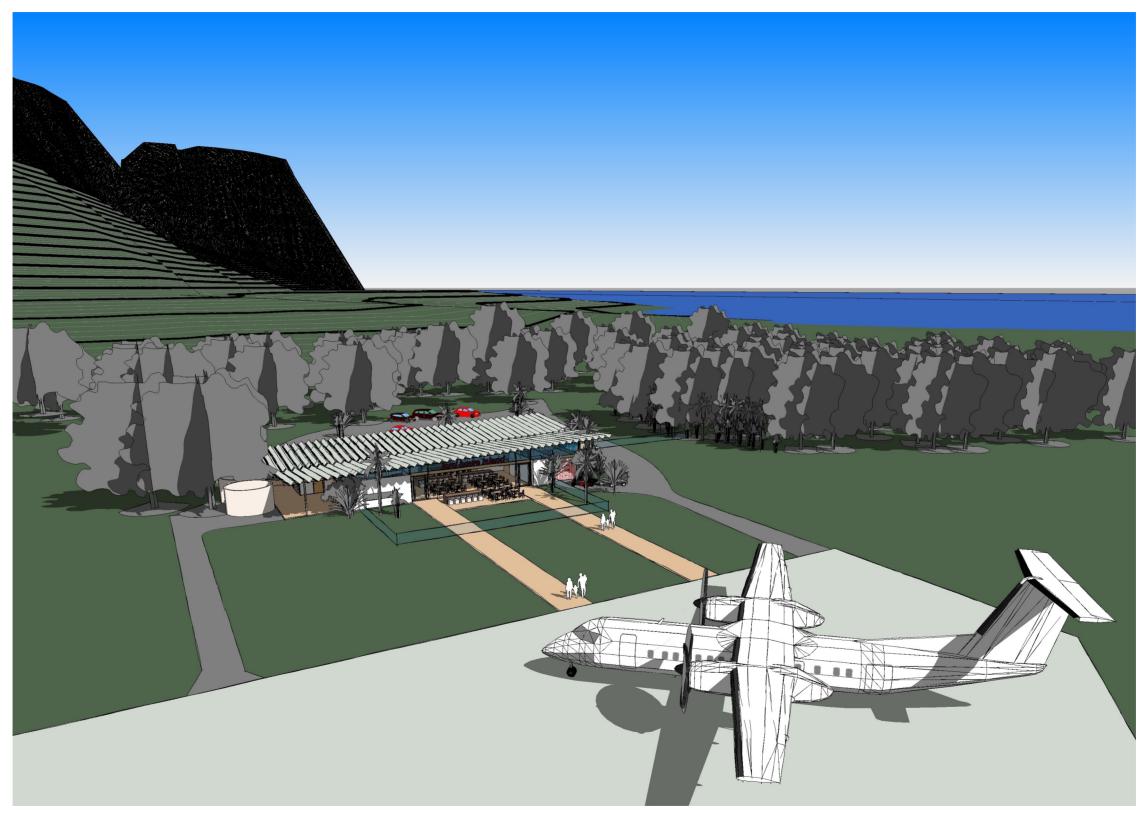






LORD HOWE ISLAND AIRPORT TERMINAL REDEVELOPMENT

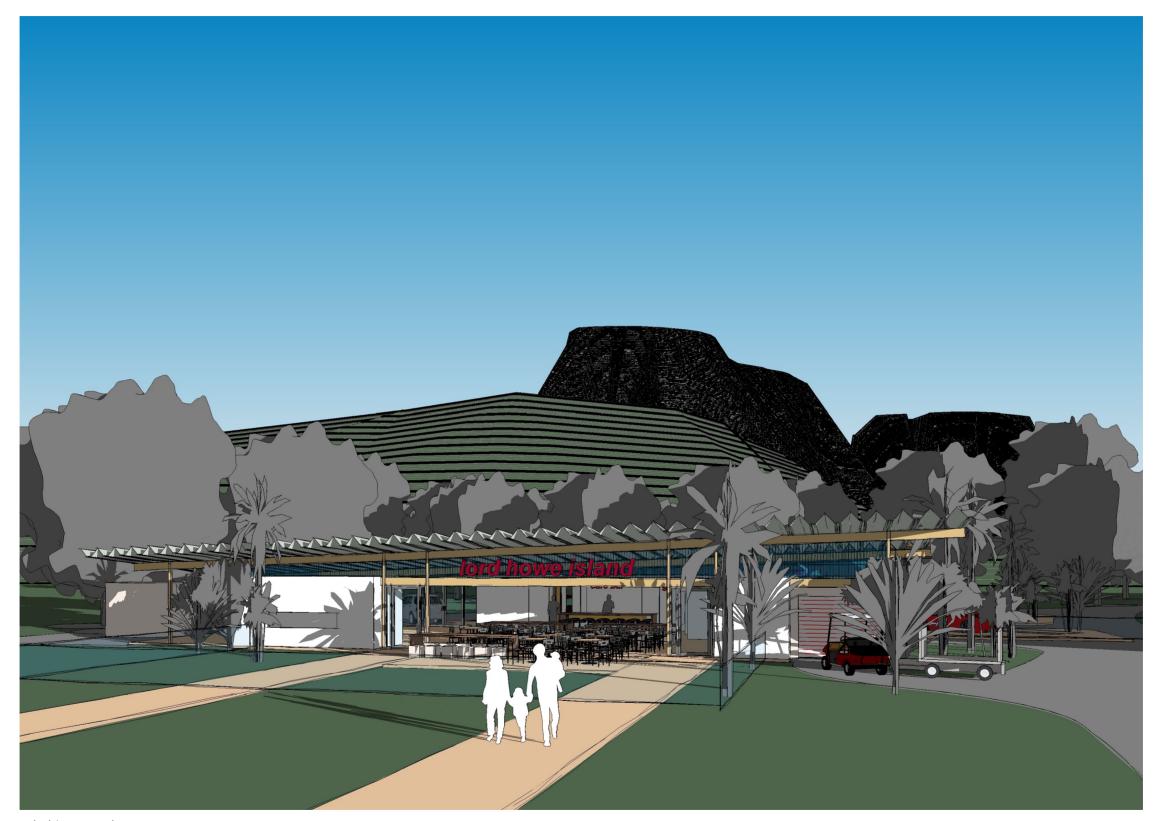




Airside Aerial Perspective

LORD HOWE ISLAND AIRPORT TERMINAL REDEVELOPMENT

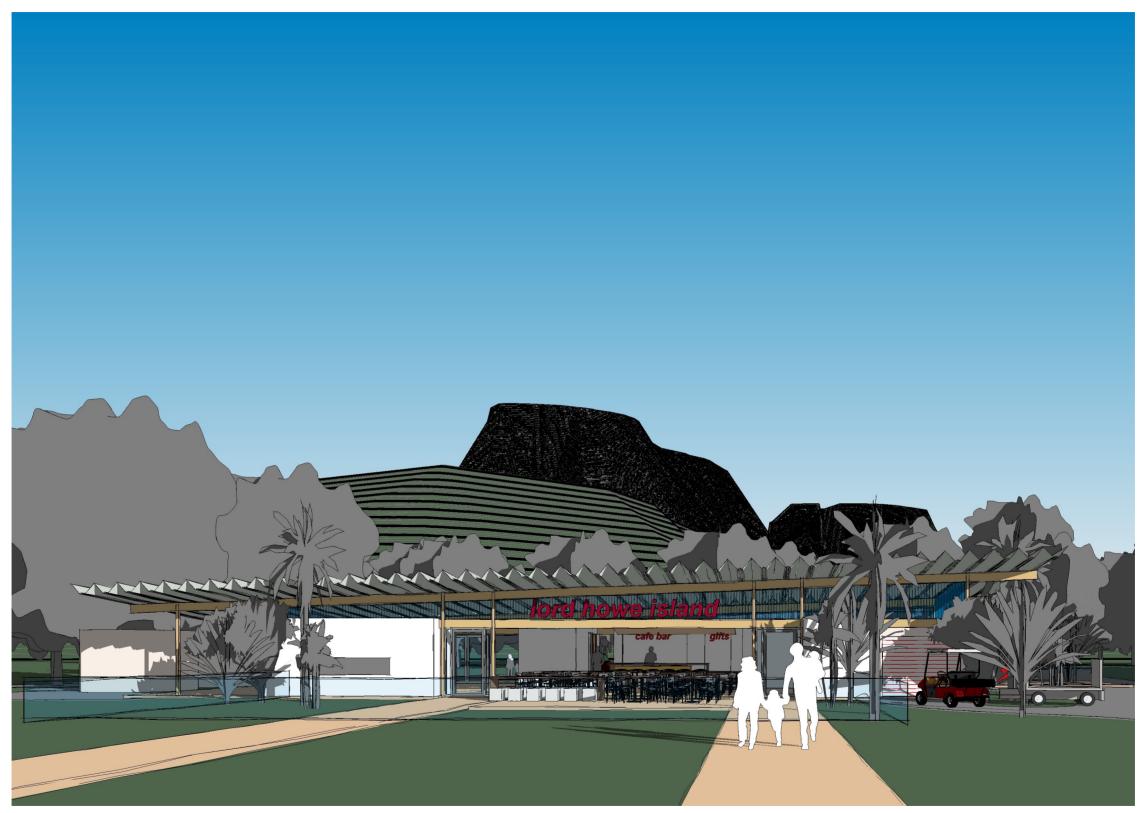




Airside Perspective

LORD HOWE ISLAND AIRPORT TERMINAL REDEVELOPMENT





Arrivals Perspective





Arrivals Perspective





Perspective Section





Departing passenger Perspec-





Landside Perspective





Landside Aerial Perspective

LORD HOWE ISLAND AIRPORT TERMINAL REDEVELOPMENT





Internal Perspective

Board Meeting: September 2016 Agenda Number: 13 (i) File Ref: PE0042

LORD HOWE ISLAND BOARD

Business Paper

OPEN SESSION

ITEM

Work Health and Safety (WH&S) and Public Risk Management Update.

RECOMMENDATION

It is recommended that the Board note the information provided on WH&S and Public Risk matters.

BACKGROUND

The Board has requested information on WH&S and Public Risk matters be presented on a quarterly basis.

CURRENT POSITION

Workplace Health and Safety

The following reports period ending 30/07/2016, as compiled by NSW SICorp, are attached:

- Claim Statistics by Policy (by date claim Reported and date claim Occurred)
- Mechanism of Injury

As at end August 2016 seven new claims had been lodged taking the final total for financial year 2015/16 to nine claims.

	2015/16				
No	Date of Injury	Type of Injury	Cause of Injury	Hours lost	
1	01/07/2015	Burn L wrist	Contact with generator exhaust pipe	Medical expenses only	
2	10/09/2015	Foreign body R eye	Chain sawing palm tree	Medical expenses only	
3	14/09/2015	Laceration/bruising R forearm	Fell against rock – backpack caught in vine	Medical expenses only	
4	14/10/2015	Deep laceration to L hand	Stuck hand with axe splitting timber	TBC	
5	23/10/2015	Trochanteric bursitis and muscle strain L buttock	Used leg for leverage while sawing	Medical expenses only	

6	28/10/2015	Minor tear R medial collateral ligt of the knee	Twisted knee weeding	7.6
7	04/12/2015	Skin reaction to rodent bait	Skin contact with rodenticide	Medical expenses only
8	06/05/2016	Mild tear L lateral hamstring	Slip	Medical expenses only
9	24/06/2016	Foreign body R eye	Angle grinding corrugated iron	38

As at end August 2016 six new claims had been lodged for financial year 2016/17 to date.

	2016/17				
No	Date of Injury	Type of Injury	Cause of Injury	Hours lost	
1	07/07/2016	Bruising R arm and R shoulder	Stuck by reversing vehicle	Medical expenses only	
2	23/07/2016	Foreign body R eye	Hosing logs	Medical expenses only	
3	23/07/2016	Head laceration	Stuck by windborne piece of timber	Medical expenses only	
4	27/07/2016	Muscle sprain L shoulder	Lifting	Medical expenses only	
5	08/08/2016	Severe sprain L knee	Twisted knee weeding	TBC	
6	11/08/2016	Trauma to R ear canal/foreign body in R ear canal	Stick entered ear while weeding	Medical expenses only	

Actions taken to address the incidence of injury include Workplace WH&S matters being discussed and addressed at monthly staff meetings, including reviews of Job Safety Analysis and Hazard Identification.

RECOMMENDATION

It is recommended that the Board note the information provided on WH&S and Public Risk matters.

Prepared	Bill Monks	Manager Business & Corporate Services
Endorsed	_ Penny Holloway	Chief Executive Officer