Cocos (Keeling) Islands master plan report



v.2 April 2019

Cocos (Keeling) Islands master plan

In January 2019, the Shire of Cocos (Keeling) Islands engaged Mackay Urbandesign to undertake a master planning process that included community consultation, the preparation of a master plan (illustrated over a range of maps because of the geography of the place), that identified a range of potential projects across Home Island and West Island, being the two habitable islands, and the development of a tool to assist in the prioritisation of projects.

The process involved in-situ site analysis on both islands; a preliminary community workshop (held on Home Island on the 23rd February 2019 with approximately 110 people in attendance); evaluation of the community responses; preparation of draft master plan maps and diagrams; preparation of a project prioritisation tool; and, two community feedback workshops (held on both Home Island and West Island on the 27th February with attendances of between 20 and 32 people respectively).

The draft master plan documents and diagrams were then updated in response to the feedback received for inclusion in this report.

The preliminary workshop presentations, the community thinking, and the project prioritisation tool have been underpinned with a focus on liveability and sustainability. Whilst these two themes should be important to all communities, they are particularly relevant to an isolated island community.

It should be noted up front that the delivery of the identified projects are not all the responsibility of the Shire. A number of the projects would need to be delivered by the Commonwealth government or the private sector. However, all of the identified projects have been included and have been recommended for evaluation of priority, regardless of who is the delivery agency, because they all form part of the complex jigsaw of infrastructure that makes a liveable and sustainable place.

Furthermore, given the governance structure of the Indian Ocean Territories, it is essential that there is collaboration between the Shire and the various delivery agencies/service providers at State and Commonwealth levels if the community's needs are to be met effectively and efficiently. This master plan document has, therefore, an important role in identifying and sharing what those needs are, so each relevant organisation can consider the community's needs in their forward planning.

Preliminary consultation

Many of the comments received from the participants at the first community workshop (Saturday 23rd February 2019) have been incorporated into the master plan. There were other comments received that have not been integrated into the master plan because they are not place-specific (cannot be drawn on a map); are too small to be a master plan issue; relate to other islands; would be undertaken by the private sector; or were not considered practical or feasible enough to be included and their inclusion in the master plan may unreasonably raise community expectations. However, all of these comments have been recorded for the Shire's notice, with the smaller suggestions potentially being addressed through the the Shire's normal processes.

Future aspirations (all included in the Strategic Plan)

- Employment
- · Protecting safe community and culture
- DI resort / resort generally
- · Sustainable tourism with employment
- Keep safe community, no crime
- Protect natural environment, natural resources, marine life
- Help small business
- Keep sense of community
- Unique cultural identity
- No pollution
- Activities & special days.

General issues: not place specific but noted for further consideration

- Taxi service
- Pest eradication
- Waste management initiatives including banning single use plastics, recycling facility on HI
- · Ferry timetable reviewed and extended
- Noise from plane on WI
- Promote traditional Malay cooking
- Create events between IOTs shires
- · Inter Island sports and activities

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- · Inter Island sports and activities
- Cocos Malay language lessons
- More shipping container space / affordable shipping
- Asbestos removal
- · Rent to buy scheme
- · House for VIP visits
- Preserve culture.

Small-scale place-based issues: noted for further consideration

- Parking at school
- · Depot risk with big machinery
- · Fix trip hazards
- · Gym facilities and all ages access (including seniors)
- Radio for emergencies at key spots
- · First aid equipment at Jetty
- Bike racks
- Use of natural materials for shelter and community areas
- Charity bins for clothing.

Initiatives and ideas for other islands

- Opportunity to hire out Pondoks South Island, Pulu Belan
- Jetty at Horsborough
- · Pontoons on other non-inhabited Islands
- Storage lockers on Direction Island
- Storage lockers for visitors on HI.

Private sector/ third party initiatives

- Pop up cafes
- Laundromat
- Amenities at Mosque & also upgrade of WI Mosque
- Expand Home Island Health Care Dialysis Centre
- Hardware store
- Accommodation for tourists HI
- Hydroponic/aquaponics
- Research centre for marine life / climate change
- Fresh food market
- Tuna fishing and manufacturing plant.

Issues raised but not considered practical or feasible

- Nursing home / aged care / retirement village
- · Recreational centres with pools (both islands)
- Wave pool
- Ice Rink
- Bridge connection between the island.



Community workshop at Home Island: Saturday 23rd February 2019

General initiatives (apply to various places on both islands)

1. Beach facility upgrades (shelters, BBQs, lighting, water, toilets, etc)

2. Disability access review and improvement program

3. Improved street lighting

4. Street tree planting program – perhaps tied into the school to get support from the next generation of residents.

5. Public toilet upgrades (and disability access).

6. Coastal protection for vulnerable areas – study currently being undertaken.

7. In-home aged-care program to keep old people on islands for longer.



Indicative sketch of street planting opportunity

8. Shade equipment over play equipment.

9. Re-introduction of native vegetation, with priority at activity nodes.

10. Construct fire pits at the more popular beaches to enable managed camp fires.

11. Identify public art opportunities to show-case local artists and establish a public art budget.

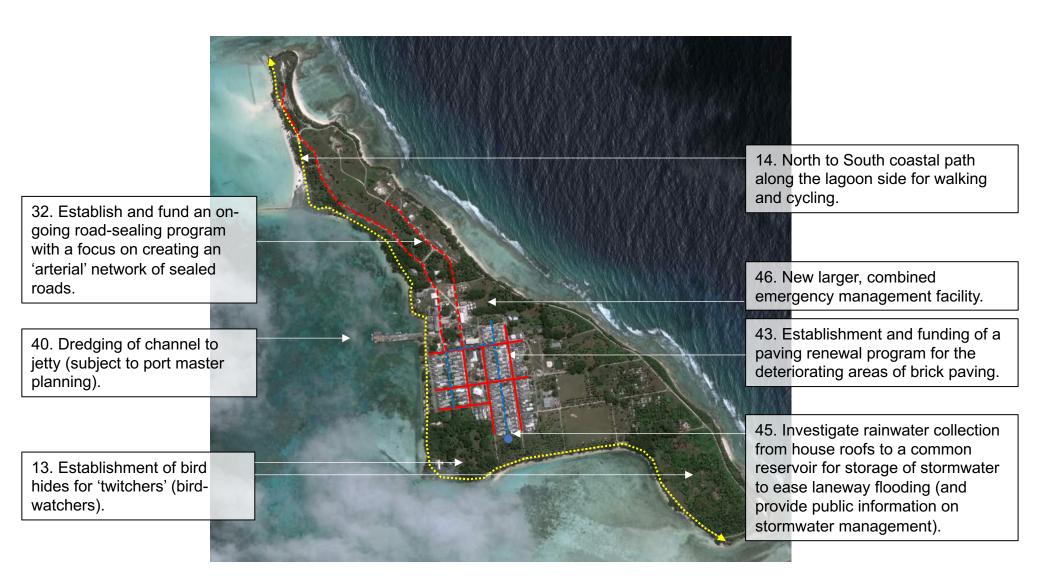
12. More separate picnic spots at the beaches to enable greater privacy for family groups, with better facilities.

13. Establishment of bird hides for bird-watchers.

A range of master plan opportunities for Home Island were identified from the comments received during the first community workshop (Saturday 23rd February 2019) and site analysis undertaken beforehand. The following 'Home Island' section identifies where those opportunities are located.

The master plan opportunities identified in this section have been modified after taking into account the comments received from the participants at the feedback workshops (Wednesday 27th February 2019).





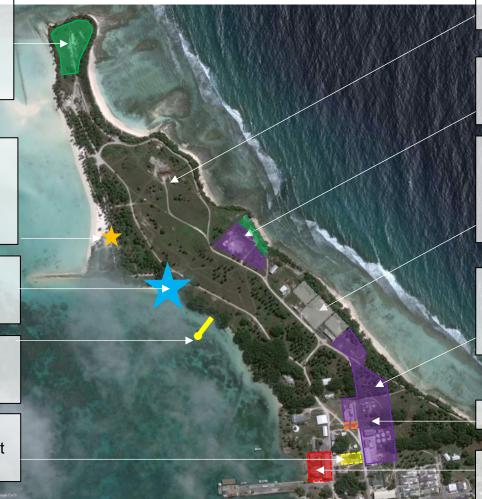
37. Protect and establish interpretive material for the cemetery and investigate land availability for cemetery expansion.

15. Prioritisation of Turtle Beach/Sandy Point for facility upgrades (shelters, BBQs, lighting, water, toilets, etc) and disabled access.

26a.Alternative location for an in-water playground off the foreshore.

27.Establishment of an overwater Pondok with glass floor for viewing lagoon life.

30. Establishment of a secure compound/shed for rented boat storage.



47. Retain some unsealed tracks/ add new ones for off-road cycling (BMX).

22.Reconfiguration of the waste centre to avoid ocean impact, and inclusion of recycling and composting.

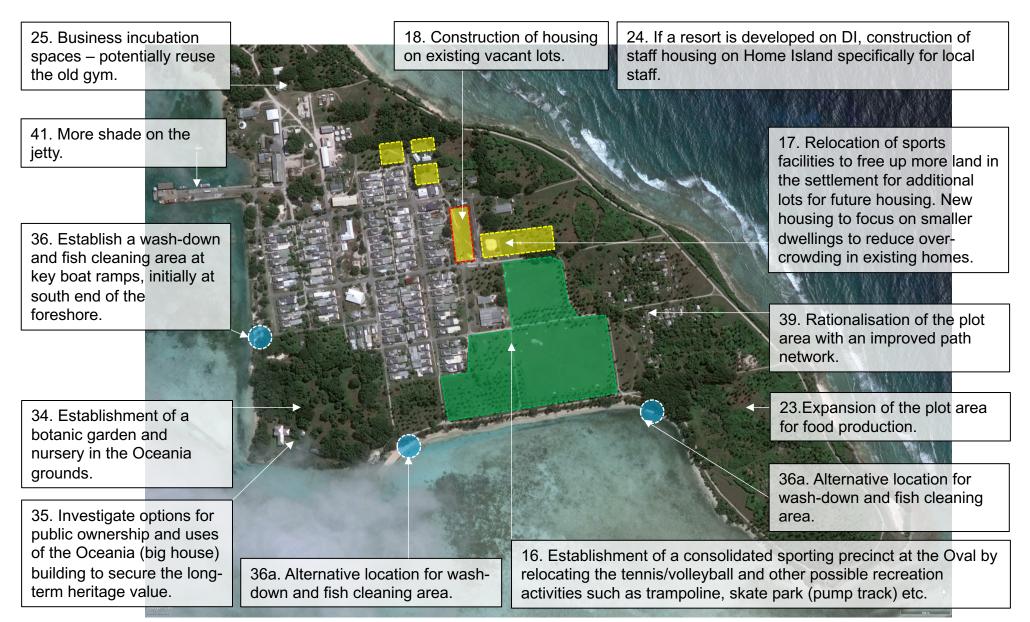
20. Establishment of an energy precinct – solar farm, and reconfiguring infrastructure precinct, and use of private rooftop solar as a 'virtual solar power station'.

21. Expansion/consolidation of the industrial precinct and establish a small business precinct as an interface with the Kampong.

44. Establishment of a Mens' Shed.

33. Refurbishment and reuse of the old heritage depot (subject to port master planning).

Home Island: master plan opportunities (southern section)



Home Island: master plan opportunities



Establishment of an in-water playground.



Use of the cyclone shelter front steps as a temporary theatre/ outdoor cinema

Use of the community centre steps

floor for viewing lagoon life.

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26. Establishment of an in-water playground off the foreshore.

38. Upgrade of foreshore adjacent to the Shire office – removal of old debris.

19. Reconfiguration of the retail precinct/settlement core to create a focal space and better sense of arrival, with a visitor/interpretive centre visible from the jetty (refer to sketch plan overleaf for further details).

42. Use of under-utilised play group space as a day care centre or creche.

31. Establish self-storage units. 29. Reflooring and use of the community centre undercroft as temporary event space (markets etc). 28. Use of the community centre steps as an occasional outdoor theatre/ performance space.



Sketch design concept for the core area of the Home Island Kampong

Note: The initiatives on the above concept plan are likely to be undertaken in stages over time, therefore, in the event that there is no detailed master plan for the precinct, it is essential to ensure that projects are delivered earlier to not compromise the ability to deliver the other initiatives at a later date.

A range of master plan opportunities for West Island were identified from the comments received during the first community workshop (Saturday 23rd February 2019) and site analysis undertaken beforehand. The following 'West Island' section identifies where those opportunities are located.

The master plan opportunities identified in this section have been modified after taking into account the comments received from the participants at the feedback workshops (Wednesday 27th February 2019).



West Island: master planning opportunities - An island of many places





Cocos (Keeling) Islands master plan

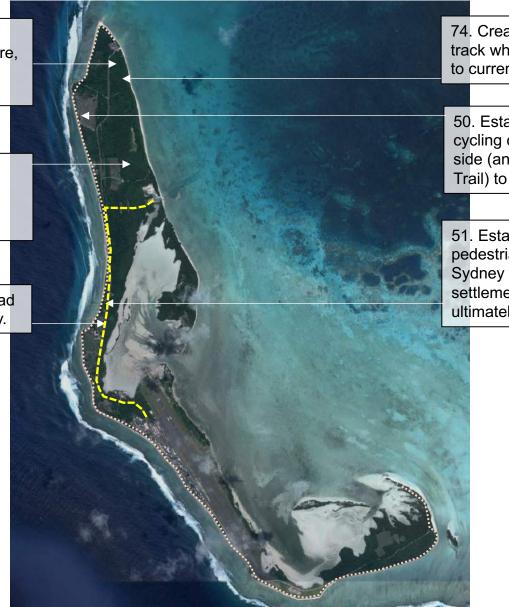
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West Island: master planning opportunities

54. Establishment of a series of camping spots, or eco-tents for hire, along the Island, associated with planting of native vegetation

13. Establishment of bird hides at strategic locations to support the 'twitcher' (bird watcher) tourism market.

52. Widen and reseal the main road (Sydney Highway) to the new jetty.



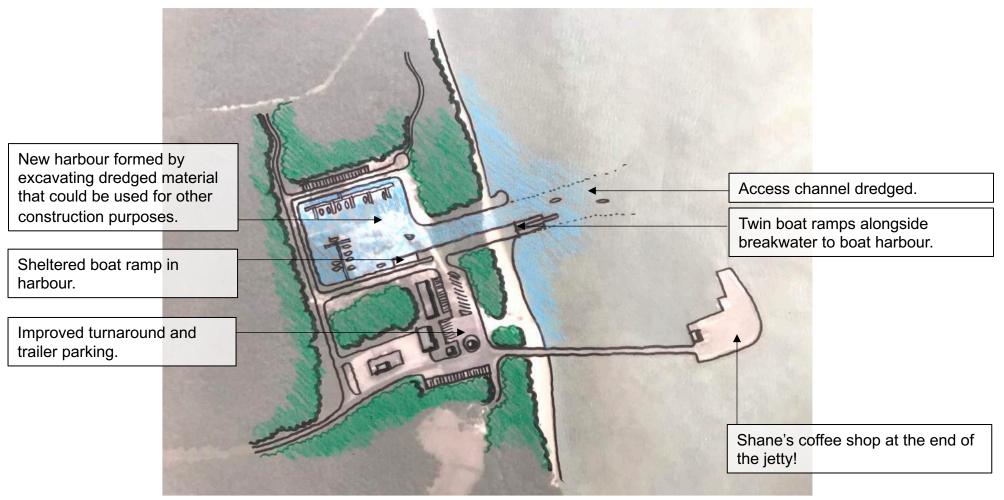
74. Create an 'off-road' adventure track which could double as an access to currently remote areas of the island.

50. Establishment of a walking and cycling coastal path along the ocean side (an extension of the Bicentennial Trail) to the south end of the island.

51. Establish a dedicated pedestrian/cycle path along the Sydney Highway corridor between the settlement and the new jetty and, ultimately, the old jetty.

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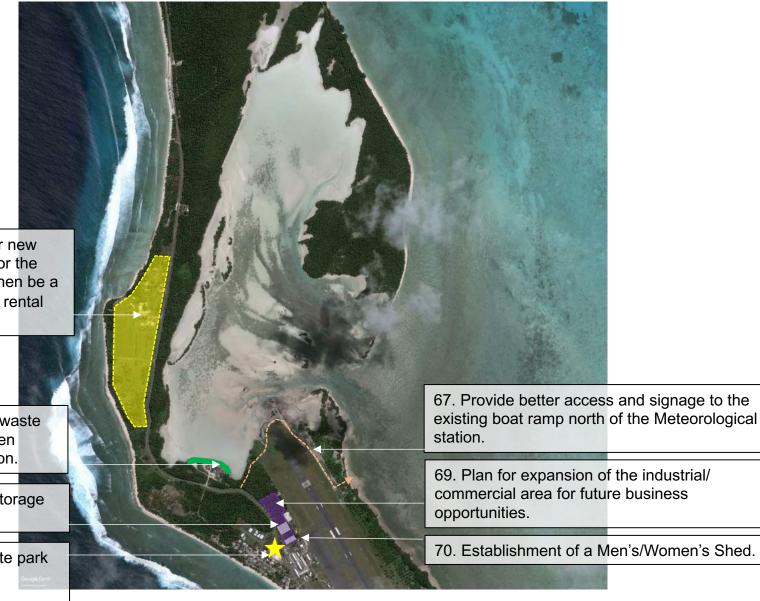
64. Establishment of a new fishing jetty and 63. Encouragement for a resort interpretative platform at the old jetty and development at the northern end of retaining the old jetty as a (non-accessible) the island. heritage element in the landscape. 49. Establishment of a 50m ocean 53. Prioritisation of 'Trannies' for facility pool north of 'Trannies' beach. upgrades (shelters, BBQs, lighting, water, toilets, etc) and disabled access. 55. Establishment of a coastal path and possible camping spots along the lagoon beach (between the two jetties), with a spur 58. Better use/ expansion of the around the freshwater lake. horticultural precinct, including an area for individual allotments. 65. Establishment of a small boat marina for 'wet' boat storage and 71. Establish a better boat ramp that could boat ramp by digging out existing double as a breakwater for the small boat building material and connecting to marina, potentially with a ramp on either the lagoon. side. 57. Establishment of a solar farm 66. Review the layout of the new jetty to near existing sub-station, and improve access and facilities at the end of augment with private rooftop solar the Jetty e.g. shelter, toilets, café, etc. as a 'virtual solar power station'. (subject to ports masterplan).



Sketch design concept for a potential small boat harbour near the new jetty

Note: It was clearly apparent from community comments and on-site observation that whilst the new jetty may be a cost effective solution for access by the ferry and larger vessels, it has disregarded community needs for recreational boat facilities, which are a vital part of island life. In comparison, recreational boating infrastructure on Home Island is far superior than that on West Island, leaving residents of (and visitors to) West Island significantly disadvantaged.

West Island: master planning opportunities (central section)



56. Use of the Q station for new workers' accommodation for the runway upgrade that can then be a legacy that provides future rental housing

72. Reconfiguration of the waste station to allow a tree screen along the edge of the lagoon.

73. Establishment of self-storage units.

68. Establishment of a skate park (pump track) as part of the recreational infrastructure.

Cocos (Keeling) Islands master plan

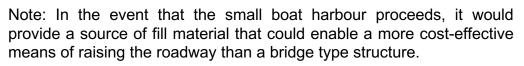
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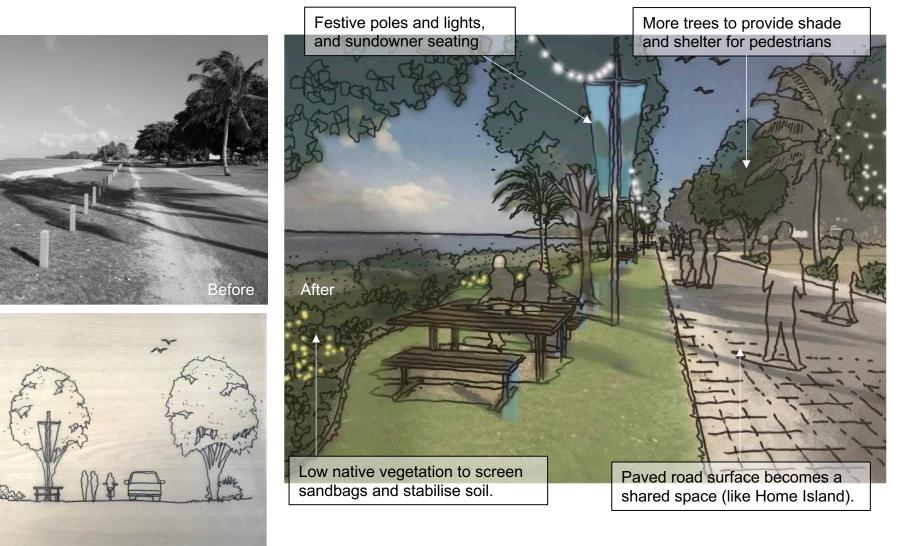
59. Upgrade of the road from the southern end of the runway to the water sports area at the south end of the island – and raise as a 'causeway' at vulnerable locations.



Indicative cross section of road raised on concrete structure where vulnerable to tidal/storm inundation

62. Establishment of a 'Sunset Promenade' – downgrading William Keeling to a shared space, planting trees, lighting, and low plants/rocks in front of the sand bags.





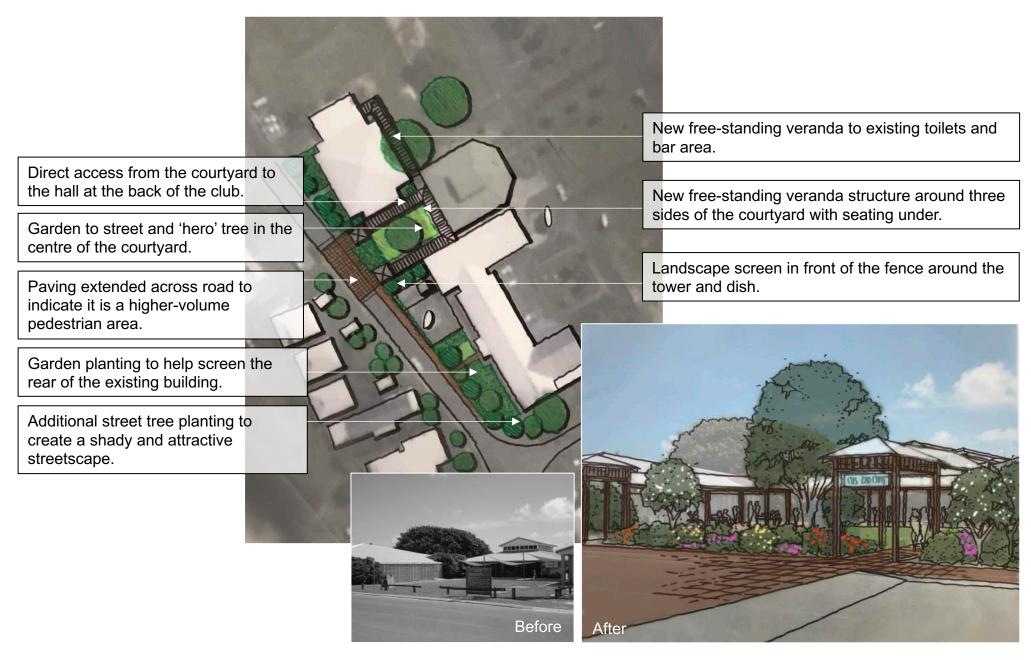
Indicative cross section

West Island: master planning opportunities ('town centre' core)



West Island: master planning opportunities (airport arrival plaza)





Community stakeholder feedback

The draft master plan initiatives were presented to members of the community and other stakeholders at two feedback workshops (Wednesday 27th February 2019). This section summarises the range of comments received. The comments have been grouped into initiatives that were recurring, popular initiatives and initiatives that were supported, along with areas of concern or disagreement, together with suggestions for changes or further inclusions into the masterplan. Most of the place-specific changes have been included in the updated plans.

Popular initiatives

- Reintroduction of native vegetation (both islands)
- Bird hides (both islands)
- Shade over play equipment (both islands)
- Fire pits at beaches (both islands)
- Prioritision of Turtle Beach for improved infrastructure (HI)
- North-south lagoon-side path (HI)
- Reconfiguration of retail and arrival precinct (HI)
- More shade on the jetty (HI)
- Temporary event space under cyclone shelter (HI)
- Temporary auditorium on cyclone shelter steps (HI)
- Botanic garden and nursery at Oceana House (HI)
- Visitor information Pondok (HI)
- In-water playground (HI)
- Over-water Pondok (but at a different location) (HI)
- New housing (HI)
- Expansion of the garden plot area (HI)
- Upgrade of foreshore opposite Shire offices (HI)
- Expansion/consolidation of the sport and recreation precinct (HI)
- 'Sunset Promenade'(WI)
- Skate park (WI)
- Upgrade of the airport entry area (WI)
- Upgrade to Sydney Highway including pedestrian /cycle path (WI)

- Reconfiguration of the waste station to enable tree screening (WI)
- Use of Q station for new housing constructed as part of the runway upgrade program (WI)
- Community and recreation area to the north of the school (WI)
- Prioritisation of 'Trannies' beach for infrastructure upgrade (WI)
- · New fishing/interpretive jetty at old jetty (WI)
- Causeway/road upgrade at southern end of the island (WI)
- Improved boat ramp at the new jetty (WI)
- Men's Shed (WI)
- Ocean pool at 'Trannies' beach (WI)
- Trails and camping spots between the old and new jetties (WI)
- Solar farm (WI)



Home Island Community workshop: Wednesday 27th February 2019

Other supported initiatives

- Public art (both islands)
- Beach facility upgrades (both islands)
- Disability access (both islands)
- Street lighting (both islands)
- Public toilet upgrades (both islands)
- Coastal protection (both islands)
- In-home aged care (both islands)
- More smaller picnic spots at popular beaches (both islands)
- Reconfiguration of the waste centre and upgrade for recycling and composting (HI)
- Refurbishment and reuse of the old heritage depot (HI)
- Up-grading of existing paving (HI)
- Rationalisation of the garden plot area (HI)
- Men's Shed (HI)
- Public ownership or reuse of Oceania House (HI)
- Maintenance and interpretation of the cemetery (HI)
- Wash down and fish-cleaning facility (HI)
- Rainwater collection and reservoir (HI)
- Use of play group as creche/day care (HI)
- Dredging of the channel to the jetty (HI)
- Solar farm (HI)
- Composting initiative and horticultural precinct (WI)
- Self-storage units (WI)
- Extension of Bicentennial Trail to the south of the island (WI)
- Encouragement of a resort at the northern end of the Island (WI)
- Improvement to turnaround area at the new jetty (WI)
- The 'string of pearls' approach to the whole island (WI)

- Small boat harbour (subject to practicality) (WI)
- Review of the functionality and amenity of the new jetty (WI)
- Trails and camping spots between the old and new jetties (WI)
- Camping spots around the island (WI)
- Expansion of the industrial area (WI)

Areas of concern or disagreement

- Important to identify demand for facilities/infrastructure before committing to them (both islands)
- Technical challenges associated with solar power (both islands)
- Roof top solar may not have high uptake because of the low levels of owner-occupiers (both islands)
- In-water playground not a priority/not supported (HI)
- · Liability issues associated with the in-water playground (HI)
- In-water playground will require supervision (HI)
- Access to boat ramp near runway not an issue (HI)
- Practicality of rainwater collection and reservoir (HI)
- Public ownership or reuse of Oceania House (HI)
- Cost of renovating and reusing the old depot (HI)
- Jetty is a working port and functionality cannot be compromised (HI)
- Location of secure boat storage area (HI)
- Oval prone to flooding (HI)
- Sand tracks for off-road adventuring not supported (HI)
- Location of the in-water playground (HI)
- Wind and weather impacts on tennis courts if moved south (HI)
- Retain large trees (HI)
- Concern about where the sand for the bricks comes from (HI)
- Over-water Pondok not supported (HI)

Areas of concern or disagreement (continued)

- Technical challenges associated with the Causeway/road upgrade at southern end of the island (WI)
- Technical challenges associated with the Ocean pool at Trannies (WI)
- Boat facilities at the new jetty (WI)
- Too much pedestrian infrastructure (WI)
- Technical challenges associated with the small boat harbour (WI)
- Small boat harbour not supported (WI)
- Improved boat ramp at new jetty not supported (WI)
- Jetty is a working port and functionality cannot be compromised (WI)
- Airport requires improvement /expansion internally (WI)
- Ocean pool not supported (WI)
- Suggested changes/inclusions
- BMX tracks (both islands)
- Use of 'edible' trees for street trees and parks (both islands)
- Practicality and location of over-water Pondok better to be between doctor's house and Turtle Beach /Sandy Point (HI)
- Lighting to be included with wash-down and fish-cleaning area (HI)
- Labelling of trees in streets and parks with tree names (HI)
- A small boat jetty at the Kampong foreshore (HI)
- Include boat storage and Men's Shed in a single facility (Hi)
- Move wash-down and fish cleaning to southern foreshore area, either near yacht club or at eastern end (HI)
- In-water playground should be moved further north around the bay (HI)]

- Better signage (HI)
- Scooter hire for tourists (HI)
- Composting facility better at existing waste centre (WI)
- Swimming pool in the settlement (WI)
- Add drinking fountains along the walking/cycling tracks (WI)
- Small boat harbour at north end of runway near waste station (WI)
- More public toilets generally, but especially around the settlement (WI)
- Coffee shop on new jetty (WI)
- Emergency radios at northern and southern beaches (WI)
- Don't allow motor bike on trails safety and amenity issue (WI)
- Ocean pool would be more convenient at the settlement (WI)
- Men's Shed could include a Women's Shed too (WI)



West Island Community workshop: Wednesday 27th February

Project prioritisation criteria

With so many potential projects identified in the master plan, and with limited budgets on the part of the delivery agencies (predominantly the Shire and the Commonwealth) the major challenge will be to determine which projects should be prioritised. As such, a project prioritisation tool was developed to assist in assessing the potential projects in regard to their value to the community and their ease of implementation.

Whilst not all of the projects would be the responsibility of the Shire to deliver, it was felt that all of the potential projects should be assessed so other delivery agencies could also benefit from the insight and review their budgeting accordingly, noting that collaboration between different levels of government is essential to delivering good, timely results for their communities.

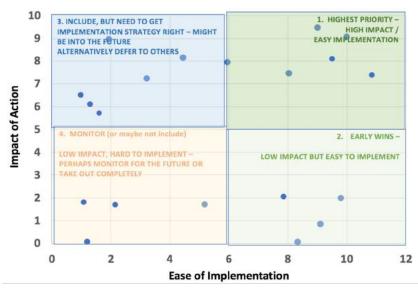
The project prioritisation tool has been divided into four main sections that assess regulatory requirement, liveability and sustainability (the two main focus areas of the workshop), and the degree of ease or difficulty in implementation.

The liveability and sustainability sections are further divided into a range of categories that include health, comfort and happiness (the key aspects to quality of life); and economic sustainability, environmental sustainability, and social sustainability (the 'triple bottom line' considerations).

For each of the sections and categories, a range of criteria has been developed and expressed as questions to make the project prioritisation tool user-friendly. The full range of criteria is listed overleaf.

Once the criteria have been assessed and scored, the scores can be used to plot the potential projects on a graph of impact and implementability, with the most effective projects (high value and easy to implement) closest to the top right hand corner.





REQUIREMENT TO MEET REGULATIONS

- Is the project essential to meet legislative requirements? (Yes, 5: No, 0)
- What is the risk of NOT doing this project to Council or Government? (Risk: 5: No risk=0)

LIVEABILITY

Category: Health

• To what extent does the project contribute to a healthier community and/or enhance health outcomes in the community? (e.g. access to good quality food, assisting ability for physical movement, more recreational opportunities)

Category: Comfort

- To what extent does the project contribute to a more comfortable community?
- To what extent does the project contribute to a safer community?

Category: Happiness

- To what extent does the project contribute to a happier community?
- To what extent does the project contribute to inter-Island interaction?
- To what extent has community support been recorded for the project?

SUSTAINABILITY

Category: Economic sustainability

- To what extent will the project support existing businesses and jobs?
- To what extent will the project create new jobs for local people?
- To what extent will the project bring new residents/investment to the islands?
- To what extent will the project assist training and work experience opportunities?
- To what extent will the project add to the skills capability of the Islanders?
- To what extent does the project contribute to positive tourism outcomes?

Category: Environmental sustainability

- To what extent will the project protect/enhance the natural environment generally?
- To what extent will the project protect/enhance the flora and fauna of the Islands?
- To what extent will the project reduce waste generation and/or encourage better waste management initiatives?
- To what extent will the project encourage renewable energy?

Category: Social sustainability

- To what extent does the project contribute to cultural identity?
- To what extent does the project contribute to protecting and enhancing heritage and history?
- To what extent will the project encourage sense of belonging/sense of community?
- To what extent will the project alleviate disadvantage/enhance inclusion?

IMPLEMENTABILITY

- Is the project already funded? (by Shire or others?) Or can it be accommodated using municipal funds in future Shire budgets (Yes,5; No,0)
- To what extent will the project assist the Islands' self-sufficiency?
- To what extent will the project's life-cycle and maintenance costs impact on the Shire's budget? (high impact, -5; low impact,+5)
- To what extent will the duration of the project have an impact on available resources? (high impact,-5; low impact, +5)
- Is there an available external funding source/grant for the project? (Yes,5: No, 0)
- Does the Shire have control of all the land involved in the project? (Yes,5; No- 5)

Scoring (unless stated otherwise)

- -5 Significantly negative
- -3 Moderately negative
- -1 Marginally negative
- 0 Not applicable/neutral
- 1 Marginally positive
- 3 Moderately positive
- 5 Significantly positive

Planning implications

From the list of potential projects, approximately about a quarter have some implications in terms of statutory town planning. Probable planning actions range from, but are not limited to, the following:

- drafting, adoption and application of local planning policies to guide specific matters related to orderly and proper planning (e.g. rationalisation of the plot area with an improved path network)
- release of technical factsheets/guidelines to guide distinct building structures (e.g. provide Kampong stormwater management information)
- assessment of development applications in accordance with the Shire of Cocos (Keeling) Islands Local Planning Scheme No.1 (e.g. resort development at the northern end of West Island)
- further technical studies to inform town planning responses (e.g. investigate options for public ownership and uses of the Oceania building to secure the long-term heritage value)
- leasing of land held in trust for the benefit of the Cocos Malay people (e.g. establishment of a Men's Shed)
- sustainable subdivision of land in conformity with the WA State planning framework (e.g. freeing up more land in the settlement for additional lots for future housing)
- rezoning to applicable and appropriate forms in accordance with the local planning framework including a future, local planning strategy
 prepared on the guidance of this Master Plan document and the future Strategic Plan Indian Ocean Territories (e.g. expansion/consolidation of
 the Home Island industrial precinct).

These precise workings will be undertaken by the Shire's administration when each project is tasked for implementation. Key stakeholders including the local community and other relevant government authorities and representatives will be further consulted where required or deemed necessary by the Shire at the time.

The recommendation from this report is that the Shire of Cocos (Keeling) Islands undertake an evaluation of all of the projects annotated on the master plan maps (and as listed in Appendix A) and using the project prioritisation tool. In doing so, it is also recommended that the evaluation be undertaken with the assistance of a community reference group of between 10 to 12 community members that includes broad community input with representation from elected members; residents of both Home Island and West Island; members of the local business community; youth representation; and older members of the community.

It is recommended that the community reference group undertake the evaluation of the Liveability and Sustainability categories, whilst the Regulatory Requirement and Implementability categories are undertaken by Shire officers who have a much better understanding of the Shire's budget, available grant opportunities, relevant regulations, costs and technical issues associated with the various projects.

The Shire should then compile the evaluation scores and plot them on the graph to provide a clear graphic representation of where the various projects sit in relation to their value to the community and their ease of implementation.

Finally it is recommended that the evaluation of the project prioritisation should be undertaken in a timely manner so that the Shire (and other delivery agencies) has an opportunity to review the outcomes prior to finalising capital works budgets for the 2019/2020 financial year so that 'quick wins' can be implemented, and medium-term projects can be agreed for inclusion in forward works programs.

In regard to 'quick wins', it is noted that these are essential to establishing community trust in the ability of the Shire (and other delivery agencies) to serve it's community.

General projects common to both islands

- 1. Beach facility upgrades (such as shelters, BBQs, lighting, water and toilets).
- 2. Disability access review and improvement program.
- 3. Improved street lighting.
- 4. Street tree planting program perhaps tied into the school to get support from the next generation of residents.
- 5. Public toilet upgrades (and disability access).
- 6. Coastal protection for vulnerable areas study currently being undertaken.
- 7. In-home aged-care program to keep old people on islands for longer.
- 8. Shade equipment over play equipment.
- 9. Re-introduction of native vegetation, with priority at activity nodes.
- 10. Construct fire pits at the more popular beaches to enable managed camp fires.
- 11. Identify public art opportunities to show case local artists and establish a public art budget.
- 12. More separate picnic spots at the beaches to enable greater privacy for family groups, with better facilities.
- 13. Establishment of bird hides for bird-watchers.

Home Island

- 14. North to South coastal path along the lagoon side restricted to walking and cycling because the road network is already nearby.
- 15. Prioritisation of Turtle Beach/Sandy Point for facility upgrades (such as shelters, BBQs, lighting, water and toilets) and disabled access.
- 16. Establishment of a consolidated sporting precinct at the Oval by relocating the tennis/volleyball and other possible recreation activities such as trampoline, skate park (pump track) etc.

- 17. Relocation of sports facilities to free up more land in the settlement for additional lots for future housing. New housing to focus on smaller dwellings to reduce over-crowding in existing homes.
- 18. Construction of housing on existing vacant lots.
- 19. Reconfiguration of the retail precinct/settlement core to create a focal space and better sense of arrival, with a visitor/interpretive centre as the first thing that visitors reach from the jetty.
- 20. Establishment of an energy precinct solar farm, and reconfiguring infrastructure precinct, and use of private rooftop solar as a 'virtual solar power station'.
- 21. Expansion/consolidation of the industrial precinct and establish a small business precinct as an interface with the Kampong.
- 22. Reconfiguration of the waste centre to avoid ocean impact, and inclusion of recycling.
- 23. Expansion of the allotment area for food production.
- 24. If a resort is developed on DI, construction of staff housing on Home Island specifically for local staff.
- 25. Business incubation spaces potentially reuse the old gym.
- 26. Establishment of an in-water playground.
- 27. Establishment of an over-water Pondok with glass floor for viewing lagoon life.
- 28. Use of the community centre steps as an occasional outdoor theatre/performance space.
- 29. Reflooring and use of the community centre undercroft as temporary event space (markets etc)
- 30. Establishment of a secure compound/shed for rented boat storage.
- 31. Establishment of self-storage units.
- 32. Establishment and funding of an on-going road-sealing program with a focus on creating an 'arterial' network of sealed roads.

Home Island (continued)

- 33. Refurbishment and reuse of the old heritage depot (subject to port master planning).
- 34. Establishment of a botanic garden and nursery in the Oceania grounds.
- 35. Investigate options for public ownership and uses of the Oceania (big house) building to retain heritage value.
- 36. Establishment of a wash-down and fish cleaning area at key boat ramps initially at the southern end of the foreshore.
- 37. Protection and establishment of an interpretive material for the cemetery and investigate land availability for cemetery expansion.
- 38. Upgrade of foreshore adjacent to the Shire office removal of old debris.
- 39. Rationalisation of allotment area with an improved path network.
- 40. Dredging of channel to jetty.
- 41. More shade on the jetty.
- 42. Use of under-utilised play group space as a day care centre or creche.
- 43. Establishment and funding of a paving renewal program for the deteriorating areas of brick paving.
- 44. Establishment of a Mens' Shed.
- 45. Investigation of rainwater collection from house roofs to a common reservoir for storage of stormwater to ease laneway flooding (and provide public information on stormwater management).
- 46. Construction of a new larger, combined emergency management facility.
- 47. Retention of some unsealed tracks/add new ones for off-road cycling (BMX).

West Island

- 48. Plan for a series of activity nodes along the island with each one a walkable/cyclable distance to the next.
- 49. Establishment of a 50m ocean pool at 'Trannies' beach.
- 50. Establishment of a walking and cycling coastal path along the ocean side (an extension of the Bicentennial Trail) to the south end of the island.
- 51. Establishment of a dedicated pedestrian/cycle path along the Sydney Highway corridor between the settlement and the new jetty and ultimately, the old jetty.
- 52. Widening and resealing of the main road (Sydney Highway).
- 53. Prioritisation of 'Trannies' for facility upgrades (such as shelters, BBQs, lighting, water, toilets) and disabled access.
- 54. Establishment of a series of camping spots, or eco-tents for hire, along the Island, associated with planting of native vegetation.
- 55. Establishment of a coastal path and possible camping spots along the lagoon beach (between the two jetties), with a spur around the freshwater lake.
- 56. Use of the Q station for new workers' accommodation for the runway upgrade that can then be a legacy that provides future rental housing.
- 57. Establishment of a solar farm, and augment with private rooftop solar as a 'virtual solar power station'.
- 58. Establishment of a composting facility (at the waste centre) and better use/expansion of the horticultural precinct, including an area for individual allotments.
- 59. Upgrade of the road from the southern end of the runway to the watersports area at the southern end of the island and raise as a 'causeway' at vulnerable locations.
- 60. Establishment of a community and recreation precinct around the school (day care, gym, etc) and integrated exiting facilities (tennis courts).

West Island (continued)

- 61. Reconfiguration of the arrival area outside the airport with an attractive space, public toilets and seating, including making better use of, and providing direct access to, the club as a waiting area.
- 62. Establishment of a 'Sunset Promenade' downgrading William Keeling to a shared space, planting trees, lighting, and low plants/rocks in front of the sand bags.
- 63. Encouragement for a resort development at the northern end of the island.
- 64. Establishment of a new fishing jetty and interpretative platform at the old jetty and retaining the old jetty as a heritage element in the landscape.
- 65. Establishment of a small boat marina for 'wet' boat storage and boat ramp by digging out existing building material and connecting to the lagoon.
- 66. Review of the new jetty layout to improve access and facilities at the end of the Jetty, such as a shelter, toilets and café.
- 67. Provision of better access and signage to the existing boat ramp north of the Meteorological station.
- 68. Establishment of a skate park (pump track) as part of the recreational infrastructure.
- 69. Plan for expansion of the industrial/ commercial area for future business opportunities.
- 70. Establishment of a Men's/Women's Shed.
- 71. Establish a better boat ramp that could double as a breakwater for the small boat marina, potentially with a ramp on either side.
- 72. Reconfiguration of the waste station to allow a tree screen along the edge of the lagoon.
- 73. Establishment of self-storage units.
- 74. Creation of an 'off-road' adventure track/dirt bike track which could double as an access to currently remote areas of the island.