

PORT OF AIRLIE MARINA DEVELOPMENT

**Appendix A Terms of Reference Cross Check
List**

This page intentionally left blank.

Item	Location
2.1 Executive Summary Include a brief summary (about 5 pages) which follows the format of the Supplementary EIS.	Executive Summary
2.2 Introduction Provide a broad statement of objectives that have led to the proposal, including the rationale behind the project application and the project program.	1.4
2.2.1 Project Title	1.1
2.2.2 Name and Address of the Proponent	1.1
2.2.3 Brief Project Outline	1.2
2.2.4 Project Alternatives Review the prudent and feasible alternatives to the proposal, particularly in terms of options to locations for such a development, sources of materials and transport routes. Alternative layouts and sizes of development will be examined in sufficient detail to determine and compare the various major environmental impacts of each alternative. Particular reference will be made to other development proposals, including Able Point Marina Extensions, Vision Airlie, Shute Harbour etc to examine and compare alternative development sites.	3.3
The "no project" alternative option will be assessed in relation to: <input type="checkbox"/> impacts on tourism; <input type="checkbox"/> environmental impacts on the marine environment; <input type="checkbox"/> impacts on boating and maritime transportation in the Whitsunday region; and <input type="checkbox"/> need (given the proximity of marina developments at nearby locations). This should be based on the Whitsunday Marina Demand Analysis (January 2001) commissioned by the former Whitsunday Inter-departmental Committee.	3.3.9
The Proponent has advised that studies undertaken as part of the EIS are to address Stage 1 of the development only. Therefore, the Supplementary EIS should address the project's suitability as a "stand-alone" development (i.e. on the basis that any possible future stages do not proceed).	1.8
2.2.5 Project Justification Provide a summary analysis of the financial, economic, social and environmental impacts of the project and the suitability of the project for the area.	3.1
The analysis will include the project's conformity with local government, State Government and Commonwealth Government plans and policies for the area including the Whitsunday Shire Council Strategic Plan and Planning Scheme;	4.3, 4.4
and the Whitsunday Marina Demand Analysis.	3.1.2
Provide information on compliance with the principles and policies of the State Coastal Management Plan, giving particular consideration to components of the development that are coastal dependant, demonstration of 'public need' and development within the erosion prone area.	4.3.6
Provide advice of anticipated capital expenditure, together with peak construction and operational jobs on a Full Time Equivalent basis.	2.9, 2.10
2.2.6 Scope of the Proposal Describe the approvals process including impact assessment under State and Commonwealth legislation.	4.1, 4.2
Provide timeframes for approvals, planning, construction and operation.	4.1, 4.2
Describe how the proposal fits into regional and town/shire plans.	4.3, 4.4
Detail how and when the proposed development will be included in the local government area and regulated by the planning scheme for the Whitsunday Shire.	4.2.2.1
Demonstrate how the proposed development, when regulated by the planning scheme, will accord with relevant provision of the scheme for this type of development, e.g. building heights, access, parking, landscaping.	4.4
Describe the final land tenure and leasehold requirements.	2.3
2.3 Description of the Revised Proposal Describe all components of the revised proposal.	2.2
Describe significant changes from the original proposal in the Draft IAS.	1.3

Item	Location
Include the following:	
<input type="checkbox"/> location of all facilities – master plan and land use plan;	2.2
<input type="checkbox"/> location of the proposal in relation to marine protected areas and the Great Barrier Reef World Heritage Area;	2.1.2
<input type="checkbox"/> details of the site and reclamation of the bay;	2.7.1
<input type="checkbox"/> marina infrastructure;	2.7.2
<input type="checkbox"/> land reclamation dredging requirements;	2.7.1
<input type="checkbox"/> site for dredge disposal area;	2.7.1
<input type="checkbox"/> land tenure;	2.3
<input type="checkbox"/> areas of land and water and reclamation;	2.7.1
<input type="checkbox"/> design and location of reclaimed areas;	2.7.1
<input type="checkbox"/> source of materials for construction such as rock and sand and the intended haulage routes;	2.7.1
<input type="checkbox"/> siting of hotels and residential areas;	2.2
<input type="checkbox"/> proposed landscaping;	17.3
<input type="checkbox"/> plans for public access;	2.6.6
<input type="checkbox"/> services and activities;	2.6
<input type="checkbox"/> transportation requirements;	2.6, 13
<input type="checkbox"/> total site population for each component;	14.2.2
<input type="checkbox"/> water and wastewater management;	2.6.2, 2.6.3, 14.2, 14.3
<input type="checkbox"/> landscaping;	17.3
<input type="checkbox"/> coastal management;	2.7.1
<input type="checkbox"/> construction methods and schedule; and	2.7
<input type="checkbox"/> maintenance Requirements.	2.8
2.3.1 Services and Activities	2.5, 2.6
Describe all services and activities which are proposed to occur on the site.	
Where relevant include details of volume and physical, biological and chemical composition of solid, liquid and gaseous waste products. Particular consideration should be given to:	
<input type="checkbox"/> ferry terminal (include details of ownership proposals and disabled access);	2.5.3
<input type="checkbox"/> facilities for disposal of waste engine oil and other liquid waste from slipway activities;	2.5, 12
<input type="checkbox"/> boat maintenance and repair;	2.5.2
<input type="checkbox"/> sewage pump outs;	2.5.2
<input type="checkbox"/> refuelling facilities; and	2.5.2
<input type="checkbox"/> solid waste disposal.	2.5.2, 12
2.3.2 Transportation Requirements	
Provide traffic predictions for construction period and operation.	
Describe:	
<input type="checkbox"/> site specific roadworks;	2.6.6
<input type="checkbox"/> road access to the development;	2.6.6
<input type="checkbox"/> method of providing for pedestrian/cyclist access to and from the development along the Proserpine-Shute Harbour Road (both directions);	2.6.6.4, 13.11
<input type="checkbox"/> boat ramps and facilities, include:	
– parking (for vehicle and trailers);	2.5.5
– road tenure arrangements;	2.4
– quequing beach;	2.5.5
– ramp all-tide status;	2.5.5
– wave climate;	2.5.5, 5.1.5
– impact from adjacent ferry terminal and fueling stations); and	2.5.2, 14.1.2
– access road;	2.2
<input type="checkbox"/> management and control of boat ramps (include ownership proposals);	2.5.5
<input type="checkbox"/> hazardous goods transportation (include details of emergency response/management and the relevant Government and industry legislation and Codes);	2.5.2, 2.7.8

Item	Location
<input type="checkbox"/> large loads; and	2.6.6
<input type="checkbox"/> navigational aids.	2.5.2
Provide a summary table of the transport of materials (including quarry materials) required for the proposal (inputs and outputs) on a daily or weekly basis (specifying the number of operating days per year and operating hours per day) for both construction and operational phases including:	2.7.5, 13.4
<input type="checkbox"/> type of material; <input type="checkbox"/> quantities (including peak demands); <input type="checkbox"/> frequency (including peak demands); <input type="checkbox"/> origin and destination; <input type="checkbox"/> mode/method of transport; and <input type="checkbox"/> proposed transport route/s.	
Provide a summary of people movements associated with the proposal on a daily or weekly basis for both construction and operational phases including:	2.6.6, 2.5.6
<input type="checkbox"/> number of guests, visitors, employees and service personnel (including peak demands); <input type="checkbox"/> origin of destination; <input type="checkbox"/> routes and method of transport to, from and around the project site (including private transport, long distance coach, local buses, taxis, ferries, cycling, walking etc) (refer 2.4.6); and <input type="checkbox"/> frequency of transport operations/services, including ferry services to nearby islands (including peak demands).	
2.3.3 Water and Wastewater Management	
Provide details of:	
<input type="checkbox"/> water supply needs;	2.6.3, 14.2
<input type="checkbox"/> sewage collection and treatment;	2.6.2, 14.3
<input type="checkbox"/> existing sewage outfall;	2.6.2, 14.3
<input type="checkbox"/> sewage pump out and effluent management;	2.6.2, 14.3
<input type="checkbox"/> control of erosion and runoff during construction;	2.7.1, 6.2
<input type="checkbox"/> effects of propeller wash;	6.2.2
<input type="checkbox"/> stormwater system; and	2.6.1
<input type="checkbox"/> control of pollution from boats.	2.5.2
Describe the impact of the proposal on the capacity of existing sewage treatment plants to maintain discharge within current and proposed quality limits for both marine and land based sewage.	14.2
2.3.4 Marina Facilities	
Describe:	
<input type="checkbox"/> activities and services;	2.5, 2.6
<input type="checkbox"/> details of market demand;	3.1
<input type="checkbox"/> management and tenure;	2.4
<input type="checkbox"/> wastes disposal;	12
<input type="checkbox"/> fuel storage and handling; and	2.5.2
<input type="checkbox"/> emergency response plans and equipment.	2.6.8
2.3.5 Coastal Management	2.7.1.4,
Calculate and analyse design waves and storm surges for breakwaters and revetments.	5.4.2
Investigate erosion prone areas of the new development.	5, 4.4
Describe the probable implications of the "greenhouse effect" on sea level and climatic conditions and variability in the project area and provide details of provisions for heights of reclamation and building levels.	5.1.3
Describe the proposed location and depth of capital works dredging required in relation to the proposal and how impacts are to be managed (including any access channel).	2.7.1.2
Describe the methods of disposal of dredged material from capital works dredging.	2.7.1.5
Describe all feasible alternatives to the proposed methods of dredged spoil disposal.	3.3.4
Describe maintenance provisions for coastal structures and dredging work.	2.8
Provide a Wet Season Dredge Management Plan.	7.3.1

Item	Location
2.3.6 Maintenance Dredging Assess maintenance dredging requirements and the methods of disposal. Describe access to the disposal area.	2.8
Describe the dredging methods and the methods of minimising dredging plumes.	2.7, 1.2
Quantify the information and data from which the 20 year dredging figure has been derived including comparison of the frequency that maintenance dredging has been required for similar marina development in the regional area.	5.4.1
Examine the potential and rate of sedimentation of the marina basin from tidal activity (given the high tidal range in the area) and	5.4.1
water quality impacts from inadequate flushing of the basin.	7.2.2
Quantify the expected amount of maintenance dredge spoil generated by the basin and access channel over time and whether the proposed 2 ha site is of sufficient size to cater for expected maintenance spoil volumes.	2.8, 5.4.1
Describe arrangements to be put in place for long term management of maintenance dredging operations and how the dredge spoil site is to be managed.	2.8
Provide an assessment of all alternatives to the proposed spoil disposal option.	3.3.4
Describe provisions for maintenance dredging in the event of a major cyclone/extreme conditions.	5.4.1
Identify dredging requirements to maintain an all-tide boat ramp.	2.8
Provide a Wet Season Dredge Management Plan.	7.3.1
2.3.7 Construction Methods and Program Provide a detailed discussion of alternative construction methodologies and recommended methodologies justified in terms of minimising adverse impacts on water quality, marine and terrestrial biodiversity and the community. If blasting is to be used, provide a detailed management plan.	
Describe the methods of construction of: <input type="checkbox"/> breakwaters, bunds and revetments; <input type="checkbox"/> excavation and dredging; disposal, runoff water quality, silt curtains; <input type="checkbox"/> reclamation and the stabilisation methods for reclamation using dredge spoil and the chemical and physical properties of any stabilisation chemical or method; <input type="checkbox"/> floating pontoons; and	2.7
<input type="checkbox"/> marina dredging and maintenance.	2.8
Describe the following details regarding the artificial beach:	2.7.1.6, 5.3
<input type="checkbox"/> proposed width of the beach;	2.7.1.6, 5.3
<input type="checkbox"/> location of the beach in relation to the revetment wall;	2.7.1.6, 5.3
<input type="checkbox"/> location where quarry material for the beach is to be sourced from and how it is to be transported;	2.7.1.6
<input type="checkbox"/> a prediction and modelling of the effect of coastal processes on the beach (e.g. scouring of the beach as a result of the position of the breakwater;	5.3
<input type="checkbox"/> management and maintenance arrangements to retain the beach in the long term that preclude the need for stabilisation through engineering works.	5.3
Provide a detailed construction schedule. (As well as usual items, the schedule should also address any restrictions on other uses and users and any dangers to other users.)	2.7.4
Describe methods for sediment containment during any vegetation clearing or excavation activities.	2.7.1
Provide details of structure design with regard to storms (1 in 100 years recommended).	2.7.1.4
Provide details of the construction workforce with particular reference to the source of skilled tradesmen and labour in terms of FTE jobs and labour force peak. Outline possible opportunities for training and local recruitment.	2.7.9, 15.2.3
Outline workers' accommodation requirements and supporting services and how, when and by whom they are to be provided.	15.2.3
Summarise key elements of construction transportation outlined in 2.3.2 Transportation Requirements.	2, 2.6.6, 13.4
2.4 Environmental Issues 2.4.1 Existing Environment Identify and document the location and number of existing and threatened marine, terrestrial species and migratory birds impacted by the revised proposal including:	
<input type="checkbox"/> tidal lands;	8.1

Item	Location
<input type="checkbox"/> corals and marine flora, including salt couch, seagrass, mangroves;	8.1, 9.1
<input type="checkbox"/> fisheries fauna, especially those species reliant on the habitats (including marine plants, mudflats etc) of the area;	9.1
<input type="checkbox"/> other fauna specifically reliant on tidal and sub-tidal habitats,	8.1, 9.1
<input type="checkbox"/> including turtles and dugong;	
<input type="checkbox"/> false water rat; and	8.1, Appendix H
<input type="checkbox"/> migratory birds and waders.	8.1.5
(Specific reference should be made to those threatened species listed under the EPBCA and marine plants defined under the <i>Fisheries Act 1994</i> .)	
Provide information on investigation and sampling methods.	8.1, 9.1
Identify World Heritage values of the Great Barrier Reef Park World Heritage Area (both terrestrial and marine).	9.3.3, 19.3
2.4.1.1 Soils and Geology	6.1.4
Investigate and describe the nature of the material to be excavated.	
Provide a chemical analysis of the sediment to be disturbed including metals, organic compounds, aromatic hydrocarbons and tributyltin. Assess the potential release of biologically active substances using an elutriate test (ANZECC, 1998, Ocean Disposal Guidelines) regardless of the level of contaminants or the ultimate disposal method. Appropriate dilution factors should be applied relative to the method of disposal and the results compared to relevant water quality guidelines.	6.1.4
Discuss the quantities of pollutants potentially released from sediments and implications for the marine environment.	6.2.1
Provide geotechnical details of the strata below the reclaimed lands and the marina basin and confirm the types of foundations and support structures for both the buildings and the marina berths.	6.1.2, 6.1.1
2.4.1.2 Water Quality	7.1
Provide an assessment of the existing water quality in the areas potentially affected by the revised proposal. Indicators of water quality should include physical, chemical and biological characteristics that are linked to environmental values identified for the area, such as aquatic ecosystem, wildlife habitat, cultural heritage, recreation, oysters and seagrasses. The assessment should describe seasonal variation.	
2.4.1.3 Hydrodynamic Processes	5.1
Describe hydrodynamic processes in the bay, including tidal and wave driven currents.	
Describe the sedimentation processes in the bay.	5.1
2.4.1.4 Climate and Meteorology	10.1
Describe the existing climatic conditions including pressure levels and wind strengths.	
Describe cyclonic systems and the effects of cyclones on waves and storm surges.	5.1.5
Potential meteorological conditions in the construction period should be evaluated as to the impacts on the World Heritage property.	5.4.5
2.4.1.5 Cultural and Socio-economic Environment	
Describe the existing cultural and socio-economic environment including:	
<input type="checkbox"/> land tenure;	2.1.2
<input type="checkbox"/> land use;	2.1.2
<input type="checkbox"/> public access to boat ramps and public access to the foreshore and use of Boathaven Bay;	2.5, 2.5.7
<input type="checkbox"/> aesthetic and recreational values;	17.1, 15.1.6
<input type="checkbox"/> cultural values;	5.1
<input type="checkbox"/> indigenous and historic cultural heritage values;	18
<input type="checkbox"/> commercial, recreational and traditional fisheries values;	16.1.2, 18, 9.1.3
<input type="checkbox"/> tourism values;	16.1.3, 15.1.7
<input type="checkbox"/> existing transport infrastructure and operations;	13.1, 13.2
<input type="checkbox"/> existing housing and short-stay accommodation supply with reference to potential to house construction and operation workers; and	15.1.4
<input type="checkbox"/> employment and workforce participation with particular reference to the potential impacts on the construction industry and the tourist and hospitality industry.	15.1.4

Item	Location
<p>2.4.2 Environmental Impacts and Protection Measures</p> <p>All potential impacts (direct and indirect) during construction and operational phases must be identified and assessed, relative to the existing environmental values or features identified in Section 2.4. Where possible, impacts are to be quantified. Protection and mitigation measures and proposed commitments are to be described in the Environmental Management Plans.</p>	21.3, 21.4
<p>In particular the following is to be analysed:</p>	
<p><input type="checkbox"/> impacts associated with dredge disposal;</p>	8.2
<p><input type="checkbox"/> loss of tidal flats impacting on juvenile aquatic species leading to loss of productivity in fish, crustaceans etc.;</p>	8.2
<p><input type="checkbox"/> loss of foreshore areas and species and communities associated with these areas (e.g. Beach Thick-knee, False Water Rat etc. and their food supply);</p>	8.2.2
<p><input type="checkbox"/> impact on water quality and related environmental values;</p>	7.2, 7.3
<p><input type="checkbox"/> impact on migratory and wading birds including any migratory waterbirds listed under JAMBA and CAMBA (include loss of feeding areas, nesting habitat and roost sites);</p>	8.2.2
<p><input type="checkbox"/> impact of the creation of 6ha of permanent deep water within the marina and the likely colonisation of the marina and marine structures, which may partially offset the adverse impacts of the development on marine biodiversity;</p>	8.3.3, 9.3.1.1
<p><input type="checkbox"/> loss of mangroves in relation to the extent and regional significance, due to the construction of the marina;</p>	8.2.1
<p><input type="checkbox"/> loss of seagrasses in relation to the extent and regional significance of seagrass communities and associated impact on fisheries, dugongs, turtles etc.;</p>	9.3.1.1
<p><input type="checkbox"/> proposed mitigation measures against possible impacts on seagrass and mangrove habitat important for identified threatened and migratory species under the EPBCA including those listed below:</p> <ul style="list-style-type: none"> – False Water Rat (<i>Xeromys myoides</i>); – Proserpine Rock-wallaby (<i>petrogale persephone</i>); – Loggerhead Turtle (<i>Caretta caretta</i>); – Green Turtle (<i>Chelonia mydas</i>); – Leatherback Turtle (<i>Dermochelys coriacea</i>); – Hawksbill Turtle (<i>Eretmochelys imbricat</i>); – Flatback Turtle (<i>Natator depressus</i>); and – Dugong (<i>Dugong dugon</i>); 	9.3.4
<p><input type="checkbox"/> impacts on turtles and dugongs related to increased recreational use (i.e. boat strike, degraded water quality);</p>	9.3.2.2
<p><input type="checkbox"/> potential effects of the project on the hydrodynamic processes of adjacent coastal environments including Airlie Beach and the mangrove systems on Campbells Creek;</p>	9.3.2.1
<p><input type="checkbox"/> turbid bay coral communities;</p>	9.3.1.3
<p><input type="checkbox"/> siltation, sediment erosion and run-off during construction and operation;</p>	9.3.1.3
<p><input type="checkbox"/> increased turbidity of waters, sediment, contaminant transport, desposition on marine ecosystems and species with particular emphasis on seagrasses and corals;</p>	9.3.1.3
<p><input type="checkbox"/> impacts of the marina development on flushing efficiency of Boathaven Bay and impact of the discharge of effluent from the Jubilee Pocket treatment plant on water quality in the bay and marina;</p>	7.2.2
<p><input type="checkbox"/> impacts of extraction and haulage of fill to the site;</p>	2.7.5
<p><input type="checkbox"/> noise, vibration and light levels in the terrestrial and marine environments;</p>	11.22, 9.3.1.2
<p><input type="checkbox"/> ambient air quality in the project area and surrounds;</p>	10.1.2
<p><input type="checkbox"/> impacts on marine parks through increased marine traffic and visitation; and</p>	9.3.3
<p><input type="checkbox"/> impacts of the development on surrounding land uses.</p>	4.4

Item	Location
Undertake a cumulative impact assessment estimating the cumulative impact of loss of habitat, modification of habitat, altered hydrodynamic, water quality decline, sedimentation and increased recreational use of the area on existing marine ecosystems such as mangroves, tidal flats and coral assemblages and associated significant species. Comparison with similar existing developments in the area may be appropriate to support estimates of change.	19.2
2.4.3 Acid Sulfate Soils Provide details of existing information on Acid Sulfate Soils (ASS) at the site based on previous testing; any relevant information from ASS investigations at nearby sites or similar marine situations in the region and any relevant information from other investigations (eg geotechnical) at the site.	6.1.5
Drill at least four (4) holes to a depth of 6 metres in areas of deepest excavation within the site and conduct field testing every 25cm for pH and field oxidisable pH. The testing analysis and report are to be carried out by a qualified ASS consultant.	6.1.5
Provide the results of this testing to DNRM and EPA during the EIS comment period.	N/A
Provide an assessment of the potential impacts of ASS on the local environment including the impact of acidic runoff on the feeding habitat, (specifically seagrass beds and mangroves), of the following listed threatened species: <input type="checkbox"/> False Water Rat (<i>Xeromys myoides</i>); <input type="checkbox"/> Proserpine Rock-wallaby (<i>Petrogale persephone</i>); <input type="checkbox"/> Loggerhead Turtle (<i>Caretta caretta</i>); <input type="checkbox"/> Green Turtle (<i>Chelonia mydas</i>); <input type="checkbox"/> Leatherback Turtle (<i>Dermochelys coriacea</i>); <input type="checkbox"/> Hawksbill Turtle (<i>Eretmochelys imbricata</i>); <input type="checkbox"/> Flatback Turtle (<i>Natator depressus</i>); and <input type="checkbox"/> Dugong (<i>Dugong dugon</i>).	9.3.1.6
Prepare a detailed ASS Management Plan based on “worst case scenario” and submit this plan to EPA and NR&M for comment and endorsement during the EIS comment period. The Management Plan must address the assumed management conditions outlined in Appendix A of DNMR’s email of 22 October 2002.	Appendix E
The assessment of the potential impacts must be conducted by and the ASS Management Plan prepared by an experienced and appropriately qualified ASS consultant such as a certified professional soil scientist.	N/A
Provide a financial and management capability statement of implementing the ASS Management Plan based on “worst case scenario” conditions.	Confidential
2.4.4 Land Use Impacts Describe the impact of the proposal on the adjacent land use areas; residential, recreational, commercial and retail. Discuss compatibility and constraints in relation to these areas, the Whitsunday Shire Council Town Planning Scheme (including building heights), the Whitsunday Tourism Strategy, Whitsunday Region Marina Demand Analysis - 2001, the State Coastal Management Plan – Queensland’s Coastal Policy and any regional Coastal Management Plan (or draft).	4.3, 4.4
Describe how the various components of the proposal relate to the Vision Airlie strategy for development of Airlie Beach.	4.3.4
Describe impacts from dust, odour, smoke	10.2
noise, etc and propose protection measures during construction and operation.	11.2, 11.3
Describe specific noise sources to be considered during the construction and operational phase including: <input type="checkbox"/> marina construction activities and vessel moorings installation involving periods of heavy truck and dredging operations; <input type="checkbox"/> maintenance dredging operations, operation of diesel engines for propulsion and for powering pumps, generators and hoisting motors; <input type="checkbox"/> hoisting and opening bucket grabs and applying/releasing brakes and clutches; <input type="checkbox"/> traffic, motor and generator and boat maintenance noise; and <input type="checkbox"/> club house functions and marina facility noise.	11.2, 11.3

Item	Location
Assess the potential for land contamination to occur as a result of the development and details of the procedures to prevent the contamination of land. Potential sources of land contamination that need to be addressed include, but are not limited to, construction equipment servicing and refuelling operations, and filling operations including filling with dredge spoil material.	6.2
Details of quality control procedures for ensuring fill material is not contaminated should be provided. Procedures used to assess the quality of the fill must be in accordance with the Environmental Protection Agency document <i>Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland</i> .	6.2.1
Describe the waste management procedures for the proposed development. The procedures must: <ul style="list-style-type: none"> <input type="checkbox"/> show how the waste management principals as set out in the <i>Environmental Protection (Waste Management) Policy 2000</i> are to be addressed; <input type="checkbox"/> include an assessment of the quantity of waste (by type) which are expected to be produced, and estimates of the proportion which will be reused and recycled and that which will require disposal; and <input type="checkbox"/> provide proposed disposal methods for any residual wastes. 	12
2.4.5 Conservation Estate Assess impacts on marine and national parks.	9.3.3
Review the aesthetics of the site when viewed from the sea.	17.2.2
Assess direct and indirect impacts from construction and operation of the project on the World Heritage values of the Great Barrier Reef World Heritage Area.	19.3
2.4.6 Infrastructure Impacts Analyse impacts on:	
<input type="checkbox"/> traffic, roads and parking;	13.6, 13.7
<input type="checkbox"/> drainage;	2.6.1
<input type="checkbox"/> telecommunications;	14.5
<input type="checkbox"/> stormwater and wastewater;	14.3.2
<input type="checkbox"/> boat ramp facilities;	14.1.2
<input type="checkbox"/> water supply;	14.2.2
<input type="checkbox"/> sewerage and sewage disposal; and	14.3.2
<input type="checkbox"/> power supply.	14.4.2
Describe measures to ameliorate any identified impacts.	14.1.3, 14.2.3, 14.3.3, 14.4.3, 13.13
Department of Main Roads " <i>Guidelines for the Assessment of Road Impacts of Development Proposals</i> " should be referred to when assessing road impacts.	N/A
Analysis of traffic, roads and parking should include:	
<input type="checkbox"/> assessment of impacts of the proposed development on the safety and efficiency of existing and future state-controlled road network (including existing and future road links on the approaches to the development and all relevant intersections and accesses). The minimum design horizon for the assessment should be 10 years after the opening of the last stage of the development.	13.6, 13.7
<input type="checkbox"/> detailing and assessment of information including (but not limited to) the number and type of vehicle trips, public transport trips (including long distance and local buses and taxis) and pedestrian/cycle activity generated by the development;	13.4, 13.5
<input type="checkbox"/> assessment of the likely traffic impacts for each stage of the development (including construction). Address safety, noise, transport efficiency, accelerated reduction in pavement life and potential increased road maintenance;	13.6, 13.7, 13.12
<input type="checkbox"/> review of the proposed design of the roundabout on Shute Harbour Road at Coconut Grove and the nearby internal access roundabout (refer Figure 3 of the Supplementary Advice Statement);	13.7.2
<input type="checkbox"/> assessment of potential for adverse road impacts during the wet season and development of alternative options (if required);	13.7
<input type="checkbox"/> identification of measures to ameliorate and identify road impacts and who will be responsible for any costs associated with those measures;	13.13

Item	Location
<input type="checkbox"/> an indication of car parks provided as community benefit;	2.6.6.3, 13.10.2
<input type="checkbox"/> identification of costings and responsibility for any proposed transport infrastructure improvements or new infrastructure. Provision of estimated costs for increased maintenance and upgrading of existing transport infrastructure;	13.7
<input type="checkbox"/> assessment of the availability and suitability of existing transport infrastructure; and	13.6, 13.7
<input type="checkbox"/> assessment of impact on existing transport modes and facilities.	13.6, 13.7
Outline consultations with the Regional Harbour Master (Mackay) regarding maritime issues relating to the proposal.	14.1.2
Provide all relevant maps and diagrams to support the above.	N/A
2.4.7 Economic Impacts Provide an economic analysis of the impacts of the proposal on the local, regional, State and national economies, including assessment of employment and changes in property values.	16.3
Discuss potential for impacts on the local and regional development and housing construction industry, during construction.	16.3
Provide an assessment of the impact of the proposal on the tourism industry in the Whitsunday region (both mainland and offshore), including an estimate of the potential demand for full-time, casual and part-time employees.	16.3.4
Provide an assessment of the economic impacts of any loss (temporary and/or permanent) of fish habitats and associated fisheries productivity for local and regional recreational and commercial fisheries.	16.3.3
Include a commentary on the industry opportunities that may arise in the region and State as a result of the proposal. The commentary should provide information on the extent to which local and Australian services and goods will be utilised.	16.3.5
Preparation of an Industry Participation Plan in accordance with the Queensland Government's Local Industry Policy, December 1999 is required.	16.3.1
2.4.8 Social Impacts A social impact assessment process is to be undertaken. Significantly affected communities and interest groups (including human resource service providers, indigenous stakeholders, business interests and conservation groups) should be identified. The process should include the following:	
<input type="checkbox"/> a description of the key features of the existing community that will be affected by the development;	15.1
<input type="checkbox"/> a profile of the existing community including social well-being. Identification and discussion of the factors which determine that profile. It will be necessary to define the notion of social well-being in the context of the community;	15.1
<input type="checkbox"/> a description of the proposed community consultation program, including proposed methodology and strategies and identification of goals and anticipated outcomes;	20
<input type="checkbox"/> a recording and analysis of the results of the community consultation program to identify the major positive and negative social impacts associated with the development and to identify methods to mitigate any diverse impacts;	20, 15.2.3
<input type="checkbox"/> an evaluation of the magnitude of importance of the development on the social well-being of the community, including the inter-relationships of specific impacts; and	15.2.2
<input type="checkbox"/> recommendations to ensure that the identified benefits to the community are maximised and actions to mitigate any adverse impacts can be developed where appropriate. Ensure that the timeframe over which impacts are to be assessed and mitigated is specified.	15.3
An assessment and analysis of the following issues should be covered:	
<input type="checkbox"/> increased road use on the local community;	13.12
<input type="checkbox"/> visual impacts of the development when viewed from the land and the sea;	17.2
<input type="checkbox"/> noise impacts during construction and operation;	11.2, 11.3
<input type="checkbox"/> risk of inundation of the residential and commercial areas under cyclonic conditions;	2.7.1.4
<input type="checkbox"/> extent of damage to the overall development and infrastructure from a storm event at a scale of the 1 in a 100 year storm surge level or greater;	2.7.1.4

Item	Location
<input type="checkbox"/> the potential impacts of catastrophic failure of the breakwater and subsequent impacts on neighbouring properties;	5.4.5
<input type="checkbox"/> changes to tourism and recreational demands;	15.2.4
<input type="checkbox"/> impacts on social/community services as a result of increased population;	15.2.3
<input type="checkbox"/> impacts to Aboriginal and Torres Strait Islander communities;	18
<input type="checkbox"/> impacts on sites significant to Aboriginal people;	18
<input type="checkbox"/> impacts on community character and demography;	15.2.1
<input type="checkbox"/> workforce services and facility requirements during construction and operation;	15.2.1
<input type="checkbox"/> impacts of any demand for worker accommodation during the construction phase of the project;	15.2.3, 15.2.1
<input type="checkbox"/> impacts of any demand for accommodation for the operational workforce; and	15.2.3
<input type="checkbox"/> changes to access for fishing opportunities (e.g. boat ramps/foreshore).	14.1.2
2.5 Financial Feasibility	Provided in confidence
<p>2.6 Environmental Management Plans</p> <p>The proponent is to prepare Environmental Management Plans (EMP) for all significant environmental impacts.</p> <p>The EMP for each impact is to contain the following elements:</p> <ul style="list-style-type: none"> <input type="checkbox"/> environmental standards and legislation (both State and Commonwealth) to be met; <input type="checkbox"/> performance objectives and outcomes; <input type="checkbox"/> protection/mitigation measures; <input type="checkbox"/> monitoring program and ‘trigger’ mechanisms; <input type="checkbox"/> impact avoidance; <input type="checkbox"/> contingency planning; <input type="checkbox"/> responsible parties for the undertaking the EMP and monitoring; <input type="checkbox"/> reporting and auditing requirements; <input type="checkbox"/> corrective actions and responses; <input type="checkbox"/> approving authorities; and <input type="checkbox"/> Referral Agencies. <p>The EMPs should particularly address the following issues:</p> <ul style="list-style-type: none"> <input type="checkbox"/> construction Impacts <ul style="list-style-type: none"> – dredging (including wet season dredging); – reclamation; – acid sulfate soils; – land contamination; – erosion management; – stormwater; – sediment control; – waste minimisation and management; – wastewater; – solid wastes; – water quality; – water supply; – roadworks; – repairs and maintenance; – air quality, and noise and vibration; – wet weather contingency plan; – cyclone contingency plan; 	21

Item	Location
<ul style="list-style-type: none"> — impacts on flora and fauna; — socio-economics; — construction workforce; — housing and accommodation for workers; — impact on World Heritage values; and — Cultural Heritage. <p>□ operational Impacts</p> <ul style="list-style-type: none"> — change in coastal processes; — marina management and safety; — maintenance dredging; — fuel storage and berth; — boat maintenance and repairs; — waste minimisation; — solid wastes; — water quality; — waste water; — water supply; — urban and industrial wastes; — erosion management; — sediment control; — stormwater; — air noise and vibration; — impacts on flora and fauna; — emergency contingency plan; — traffic; — socio-economics; — visual amenity; — impact of World heritage values; and — cyclone contingency plan. 	
<p>2.7 Ecologically Sustainable Development Prepare a brief summary of the proposal's compatibility with ESD principles giving:</p> <ul style="list-style-type: none"> □ principles; □ criteria; and □ strategies to achieve ESD. 	19.1
<p>2.8 Cultural Heritage The Supplementary EIS will review the cultural heritage survey carried out by Northern Archaeology Consultancies (in consultation with Traditional Owners and any other Aboriginal and Torres Strait Islander peoples with cultural heritage values in the site) and should:</p> <ul style="list-style-type: none"> □ re-assess impacts; □ evaluate strategies to minimise impacts; and □ prepare an EMP for cultural heritage issues in consultation with Traditional Owners and the Environmental Protection Agency. 	18

Item	Location
<p>2.9 Approvals and Licensing</p> <p>The EIS should identify all the approvals and licences that will need to be obtained for the construction and operation of the proposed Port of Airlie Marina development. This should include necessary licences, planning and environmental approvals including approval requirements of the IPA, EPBCA and other legislation. Approval and licence requirements will need to cover all aspects of the construction and operation process, including all “environmentally relevant activities” as defined for the purposes of the <i>Environmental Protection Act 1994</i>.</p> <p>Provide a clear sequential listing (e.g. flowchart) of all relevant approvals, licences, permits, agreements etc. required and estimated timetable when these will be obtained. Also list the relevant Assessment Manager for each approval.</p>	4.2
<p>2.10 Health and Community Safety</p> <p>The purpose of this section is to discuss safety management strategies and control measures to be used to minimise the risks of incidents and to minimise the consequences of any incident which occurs during construction or when the marina development is operational. An all hazard risk management approach based on AS/NZS 4360:1999 should be used to determine risks, including all natural hazards, to the marina development.</p> <p>In particular, the following issues should be included:</p> <ul style="list-style-type: none"> <input type="checkbox"/> prevention and handling of fires; <input type="checkbox"/> containment of hazardous materials; <input type="checkbox"/> maintenance of critical items of equipment; <input type="checkbox"/> training of operatives; and <input type="checkbox"/> emergency procedures, with a description of the linkage between the on-site emergency procedures and the local government counter disaster plan. <p>Relevant issues should be investigated in collaboration with local emergency service providers, especially the Department of Emergency Services and the local fire brigade.</p>	2.6.8
<p>2.11 Proponent’s Environmental Record</p> <p>Pursuant to the <i>State Development and Public Works Organisation Regulation 1999</i>, the Proponent needs to provide details of any Australian proceedings relating to an Australian environmental law against it or any applicants for permits under an environmental law for the project. Furthermore, details of the Proponent’s environmental policy and planning framework must be incorporated into the Supplementary EIS.</p>	3.4