

The Coordinator-General
C/- EIS Project Manager – Great Keppel Island Resort Project
Significant Projects Coordination
Department of Infrastructure and Planning
PO Box 15009 City East Qld 4002 Australia

fax: +61 7 3225 8282

email: GKIR@dip.qld.gov.au

Submission on the draft terms of reference for the Great Keppel Island Resort Project

Capricorn Conservation Council Inc.

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Name

Michael McCabe

Address

PO Box 4011 ROCKHAMPTON QLD 4700
Environment Centre, Haigh Park
Livermore Street, Rockhampton

Capricorn Conservation Council Inc.

Contact details

Tel/Fax: (07) 4927 8644 Email: ccc@cqnet.com.au

Mob: Web: www.cccqld.org.au

<i>Section</i>	<i>Describe the issue</i>	<i>Suggested solution</i>
Part A – Project Summary	<p>The project description identifies the number of rooms, villas, retail village, berths at the marina, a sports oval etc., but fails to put a common denominator or number (such as hectares occupied or metres squared occupied) on each of the proposed development and infrastructure areas (or itemised dot points). The current numbers provided in the project description does not allow for effective comparison between each of the development areas and their direct potential impact size.</p>	<p>Provide the number of hectares or metres squared (m²) that each development area (itemised in dot points) will cover to allow for effective comparison of the impact area/size. For example, how many hectares of land is proposed to be occupied by eco-villas? How many hectares of land are proposed to be occupied by the sports oval? How many hectares of land are proposed to be occupied by the golf course and the marine and terrestrial land areas for the marina?</p>
	<p>A list of the key economic benefits of the proposed project are provided, however the key environmental and social benefits are not listed.</p>	<p>The key environmental benefits and social benefits of the project should be listed to provide a true triple bottom line analysis. For example a study and statement about how will the proposal <i>increase</i> protection of biodiversity; This should include descriptions of a range of human populations, (e.g. <500, >1000, >2000, etc.; the rate of growth as the various project stages roll-out.</p>
	<p>It is stated that a ‘significant component of the project (villas and golf course) is located on Lot 21’, however the statement fails to inform exactly how much (e.g. area of hectares) of Lot 21 is proposed for the development of either the villas or the golf course.</p>	<p>The ‘significant component’ should be identified in hectares or m2 for both the villas and golf course, and also represented as a percentage of the total area of Lot 21.</p>
	<p>It is stated that the ‘most appropriate use’ evaluation for Lot 21 was conservation under the Land Act, however there is no general information or statement provided here after in the project summary as to how GKIR will provide for conservation use of Lot 21 if the lease is to be renewed by DERM in the future.</p>	<p>GKIR need to provide a summary as to how they propose to manage for conservation use of Lot 21. This statement/summary should include a description of the hectares and % of the existing (conservation) lease area of Lot 21 that will be lost to the proposed golf course (recreation) and villas (residential/accommodation).</p>

Part B – Executive summary	The Executive Summary does not request for change of land tenure and respective lease arrangement, details which are relevant to the proposed development of this project; for example, GKIR are proposing to build villas and a 18 hole golf course on Lot 21 which is leased for recreational purposes. Nor does it ask for a summary of the economic, environmental and social impacts (quantitative and qualitative) relevant to the proposed development for each different lease purpose.	The Executive summary should request for a <i>‘a description of land tenure and lease arrangements associated with the development proposal, and a summary of the economic, environmental and social impacts (quantitative and qualitative) relevant to the proposed development for each different lease purpose.’</i>
1. Introduction - nature and extent of business activities, experience and qualifications, and environmental record, including the proponent’s environmental, health, safety and community policies.		
1.1 Project Proponent	The environmental record should also include the record of environmental management (and actions) of currently held leases in relation to lease purposes, terms and conditions. For example, the project proponent (GKIR) currently holds a lease for recreation purposes on Great Keppel Island.	Include a request for a record of environmental management and actions from the proponent in relation to their currently held leases, specifically requesting for a brief description of the lease purposes, terms and conditions, and what actions and management has been undertaken to adhere to terms and conditions.
1.3 Project rationale	The project’s compatibility with regulatory frame works should be broadened to ensure it includes compatibility with lease arrangements and lease conditions.	Include the request for a description of the project’s lease arrangements and conditions and the compatibility of the proposed project actions/activities with these arrangements and conditions.
1.4 Relationship to other projects	The region and the Keppel Bay and Port Curtis areas are subject to significant industrial and port development proposals and forward plans; e.g. Balaclava Island Coal Port, Curtis Island LNG plants, future port and heavy industry on the northern end of Curtis Island, greatly increased shipping. A number of these projects will be in direct line-of-sight to the GKIR, or are likely to impact on the tourism value aesthetics, (industrial lighting, shipping traffic).	The proponent should be required to conduct a study into the cumulative impacts and interaction between the currently approved and the possible industrial developments during the next 5-20 years, with the significantly increased tourism use of GKI, Keppel Bay and GBR Marine Park.

1.5 Alternatives to the project	GKIR proposal if based on creating 1550 accommodation units (hotel rooms, villas, apartments, marina berths). Even at low occupancy rates, this would massively increase the human population on GKI. The concept proposed suggests 860,000 visitors per year and the appears to require interaction of all of the large scale elements (e.g. Marina, Golf Course, Apartments, Resort) and does not consider lower usage rates and	There needs to be a more detailed study into alternative options for establishing and maintaining a viable tourist operation and public facilities. This should include the feasibility of a stand- alone resort complex which does not require a large marina for transporting guests; Alternative locations and types of marine transit facilities vs. current marina proposal; Alternatives to other forms of public recreational facilities to co-located golf course and apartments;
1.7 Public consultation	GKIR proposes 'significant consultation' with CQ residents and stakeholders.	GKIR should provide more specific detail about consultative mechanisms i.e. range and types of groups such as technical reference group(s), residents, visitor groups, peak bodies, scientific research & review forums,
1.8.2 Relevant plans	Regional plans are under review and development; e.g. the Infrastructure & Planning "CQ New Millennium" forum is anticipating that CQ will be nominated as a region due for a comprehensive regional plan in 2011-2012, The Rockhampton Regional Council is developing its Community Plan and Pest management Plan, (previous plans covering GKI were prior to council amalgamation.); Fitzroy Water Resource plans (CQ Regional water Supply Strategy-2005), are overdue for a review. All of these plans have implications for the GKIR proposal particularly regarding the proposals for water and waste pipelines to the mainland.	GKIR should demonstrate how they will interact with these plans and the ongoing reviews including the means by which they will participate in their development and in their accompanying accountability mechanisms.
2 Description of the project		
2.1 Location	The real property description and mapping information requested does not include the area/size of each project area (e.g. Hectares). It would be very helpful to have quantitative sizes of project areas displayed on the map and in a table format.	Real property descriptions of the project should be provided. Maps should show the precise location of the project area, in particular: Real property descriptions of the project should be provided. Maps should show the precise location of the project area, in particular:

2.2.2 Tourism apartments/villas	Tourism apartments/villas are suggested for areas removed from the main resort hub (east of airstrip) and transport facilities. There is no indication of the stages of development in which the more remote facilities would be viable, economically and in regard to higher levels of infrastructure (particularly transport corridors, water and power use). The steep terrain and climate reduced the likelihood of a large segment of the community being willing or physically able to walk the distance between the resort/transport hub and the proposed eastern-most facilities.	GKIR should provide clearer plans which show projected stages, supported by 'triple bottom line' estimates to show the viability of locating accommodation facilities distant (> 20 minutes walking distance) from the main hub; the consequences of the additional infrastructure (roads, drainage, transport).
2.2.3 Hotel	Regional Councils are progressing to medium-high density residential models because of the costs, social and other problems of peri-urban sprawl. A compact hotel and associated villas and apartment within or adjacent to the existing facilities would fit with this paradigm.	GKIR should be able to demonstrate the feasibility of operating a viable and ecosystem enhancing compact tourism facility within the western watershed of GKI; the study should include options for the remainder of available land on GKI to be protected as a nature reserve/passive recreational area managed by GKIR, community or government (e.g. National Park)
2.2.4 Golf course	A golf course creates a major environmental change of the landscape; vegetation and habitat change, water use, storm water, irrigation run-off and limits currently available public access.	GKIR should provide a study into alternative community recreational options with relative studies into landscape aesthetics, vegetation and fauna impacts, water usage, stormwater run-off, achieving 0% irrigation and fertilizer supplementation, demands on sub-surface water or supplementation from mainland treated water. The study should consider options to maintain natural topography, use of or enhancement of regional native grasses and other vegetation; proposals for 3:1 of greater ratios for replacement offsets for and habitat altered; options for artificial surfaces for high use recreational and associated motorised transport paths; limitation in size of landscaped areas for any such community recreational areas. The study should define appropriate setbacks from shorelines,

		riparian and intertidal areas and options for spelling areas for remediation of for seasonal requirements such as nesting.
2.2.5 Conservation area	The proposal appears to limit conservation areas to steeper slope and some fringing coastal areas.	GKIR study should consider the overall project feasibility if the whole of the available land east of the Mt Wyndham –Leekes Creek catchment is retained as a conservation area, will scope for low impact human use involving minimal infrastructure i.e. tracks, rest spots, lookouts, bush camping and picnic areas.
2.3.4 Dredging	GKIR has not submitted alternatives to a marina requiring dredging.	GKIR should propose alternative site for a range of landing facilities e.g. fixed or floating jetties, including alternative locations.
2.4 Operation	Proposal depicts a Marina at mouth of Putney Creek in close proximity with offshore reefs and islets	GKIR should provide a study of potential tidal, storm surge, major creek flow events and potential for constant dredging to maintain facility; alternative sites and landing facilities should be addressed.
2.5 Associated infrastructure	Marina location will require all transits though already closely settled and occupied areas.	Study should consider the positives and negatives of increasing the impact to the limited area, or the options of spreading the transit corridor between landing facilities and major resort hubs
2.5.1 Shipping/waterborne transport	The projected daily use will see a significant increase in ferry and other large craft. There is likely to also be a major escalation of small powered recreational vessels.	GKIR should research the likely anticipated rate of increase in motorised vessel numbers, their impacts on marine life, overfishing and illegal spearfishing possibilities, (whales numbers are increasing rapidly and are now being sighted near the Keppels), noise levels, turtle strike, human safety (e.g. jet-skis have historically presented a major hazard to fauna and people on GKI); the study should look at options to restrict the growth or limit the impacts of the hundreds of possible extra vessel movement per day.
2.5.2 Road Transport	The proposal to significantly use and occupy areas > 1 km from the transport and main resort hub will require greatly improved road construction and maintenance. Roads would need to traverse steep erodible slopes.	GKIR should study options establishing a viable facility within 1.5 km radius of main transit and resort hubs to minimise need for extensive hard surface road construction and motorised transport vehicles. Study should include assessment of availability of suitable road base materials on the island (subject) to appropriate extraction controls to limit the reliance on transported materials from the mainland. Transport infrastructure and means should be assessed for 'whole of life' greenhouse gas emission and suitable offsets included in the overall resort proposal.

<p>2.5.3 Energy</p> <p>Energy (cont.)</p>	<p>GKIR propose to seek carbon neutral energy use.</p>	<p>The external carbon emission factors such as guest air and other travel needs to be assessed; The assessment should also provide projections of the energy use options over each stage of the proposed 15 year development, plus forward replacement costs for energy infrastructure due to age deterioration, storm damage etc. Estimates should be made about the stages at which the resort energy requirements and self-sustaining; the stage when external power would be required from the mainland; the application of 'precautionary principles' if there is loss of external power etc.</p>
<p>2.5.4 Water supply and storage</p>	<p>Surface water supplies are seasonal, variable and are currently in a projected 30% decline in the coming decades. Underground waste supply currently provides a re-charge to the intertidal zones in the major creek catchments. Mainland supplies via undersea pipeline may have sufficient capacity but are also expected to come under increasing usage regimes and potential climate change pressures. (Regional population is projected to grow from 114,000 to ~250,000 by 2050, accelerated Fitzroy Basin mining is expected to greatly increase available water use)</p>	<p>GKIR should provide studies on carrying capacity of GKI utilising local water only; the impacts of each stage of development on natural creek flows, natural overland run-off and ground water re-charge. The study should as a minimal benchmark assume* a progressive decline in the regions average rainfall; increased storm events, higher average temperatures and rates of evaporation.</p> <p>*Ref DERM projections</p>
<p>2.5.5 Stormwater drainage</p>	<p>The majority current GKI infrastructure exists on the moderately sloping land in the western most island drainage area. Extending human impacts (over the steep slopes and into the potentially fragile Leekes Creek catchment will significantly increase the hard run-off surfaces and coupled with storm events will significantly increase the pressure flows of stormwater run-off and associated erosion into the GBR Marine Park.</p>	<p>Options for maintaining a viable resort facility within the western most drainage area of GKI should be fully explored. Any increased activity human activity and infrastructure east of this must assess stormwater runoff impacts. Any stormwater harvesting must include an assessment into maintaining natural flows and ground water recharge.</p>
<p>2.5.6 Waste.</p>	<p>The GKIR proposal could at maximum occupancy, plus day-trippers, other residents and the smaller resorts could result in up to 5000 people on GKI.</p>	<p>Waste management planning should include management of highest use days/weeks.</p>
<p>2.5.6.1 Liquid Waste</p>	<p>The GKIR proposal could at maximum occupancy, plus day-trippers, other residents and the smaller resorts</p>	<p>Blackwater and grey water management options must be studied with assessments of each stage. Alternatives to mainland</p>

	could result in up to 5000 people on GKI.	connection must be fully assessed as should 'worst case scenario pipeline failure.
3 Environmental values and management of impacts		
	The objectives outlined do not specifically request for environmental, social and economic data/studies undertaken.	<p>Include a new objective or reword the objectives to include a request to;</p> <ul style="list-style-type: none"> • Present new and existing data, including research methods, outcomes and conclusions, for new and existing studies undertaken or relevant to the project for environmental, social and economic issues/impacts/benefits.
3.1 Climate, natural hazards and climate change	This section only focuses on climate information and how the project will adapt to climate change. It does not request information for on how the project will contribute to climate change (i.e. through fossil fuel emissions for construction and operation activities, clearing of vegetation) or how the proponent will mitigate for direct climate change impacts associated with project construction and operation.	Include a request in this section on how the project will contribute to climate change, specifically in relation to greenhouse gas emissions for both construction and operation phases and what measures a being made to reduce the carbon footprint and greenhouse gas emissions directly associated with the project. Reference could be made to the relevant section on Greenhouse gas emissions in the EIS (and any other relevant sections of the EIS) for more detail about emission management.
3.1.1 Natural hazards and climate change adaptation	Projections are for reduced average rainfall, more storm/cyclone events (including storm surges), higher temperatures and evaporation. GKI and the surrounding the habitats of GBR and the surrounding Marine Park will come under increasing pressure, even without massively increasing the human footprint.	GKIR should undertake studies to include lengthy dry and wet spells, higher average temperatures (e.g. days >35%), increased storm events, number of days when flights and possible ferry transit is difficult or dangerous. The study should consider the range of resort sizes which might be sustainable across the possible range of variables.;
3.1.1.1 Description of environmental situation	GKI represents a unique example of a large terrestrial island in the southern GBR.	Ecological studies should be conducted over a minimum period of one year and extensive consultation should be included with residents, flora and fauna study groups (e.g. SGAP, Remnant Vegetation Study Group, Birds Australia)
3.1.1.2 Potential impacts and mitigation measures		GKIR should propose in details the means by which the results of studies are to be made public, scrutinised, and commented on before commencement and before resumption of each project stage. Groups such as those listed in 3.1.1.1 should be integral to the review of impacts and decisions about appropriate remediation.

3.2 Land		
3.2.1 Land use and tenure		
3.2.1.1 Description of environmental situation	There is no request for the quantitative area or size values for each land tenure, existing or proposed infrastructure and/or proposed actions. This information would be very useful on EIS maps (with a description if required) to identify the comparative impact extent (area in hectares or m2) between existing and proposed infrastructure and actions.	Request the quantitative area (size in hectares or m2) to be provided on EIS maps (with a description or quantitative table of data) for each land tenure, existing and proposed infrastructure and actions.
3.2.2 Scenic amenity	GKI has historically had a few hundred visitors and residents and probably less than a thousand people at any one time.	GKIR will need to provide demonstrate the impact of the progress impact on visual amenity (e.g. beach overcrowding) is the daily numbers climb through the various stages towards the possible 5,000 people.
3.2.5 Topography, geology and soils	Outside the western most areas where the majority of human has occurred, the island consist of steep erodible slopes, vegetated parabolic dunes, intertidal zones and beaches, headlands and cliffs.	GKIR should provide a study into the viability of achieving their resort goals while protecting the naturals systems os the more fragile, and little used areas of GKI
3.3 Nature conservation	Values described in the outline for this section fail to stipulate or identify the importance of, or need for information regarding the existing and potential threats to the conservation value of species, habitats, communities and ecosystems. Threats and threatening processes should be identified and accounted for in relation to nature conservation management.	Include another dot point requesting threats and threatening processes to nature conservation. For example: <i>'The environmental values should be described in terms of:'</i> <ul style="list-style-type: none"> • Threats and threatening processes (existing and potential) currently impacting on the conservation value or environmental value of species, habitats, communities and ecosystems. It should also include a description of the potential threats and threatening processes resulting from the project actions (construction and operation) and the proposed management actions and mitigation measures to reduce or remove threats and threatening processes.
3.3.1.1 Description of environmental values	Areas of special sensitivity have a good range and	Include words such as <i>'wildlife feeding areas and</i>

Environmental values (cont.)	aspect of sensitive areas covered/described, yet the descriptions falls short of including the importance and environmental sensitivity of wildlife feeding areas and significant wildlife habitat and pathways in general, or particularly for threatened, vulnerable, endangered or important species other than migratory birds. For example, the proposed marina location in this project and subsequent areas/routes of boat/marine transport movement to the proposed marina is in the feeding and movement areas of marine turtles.	<i>significant wildlife habitat and pathways</i> ' in the description of areas of special environmental sensitivity, so as to include species other than just migratory birds.
3.3.1.2 Potential impacts and mitigation measures		
3.3.2 Terrestrial flora		
3.3.2.1 Description of environmental values	The description of environmental values should include (but does not) reference to the regional and bioregional aspect of terrestrial flora and vegetation communities/ecosystems that are identified and affected by the project actions.	Use the same or similar wording from the Terrestrial Fauna section to include reference and comparison of affected communities or species. For example; <i>'The EIS should indicate how well any affected communities or species are represented and protected elsewhere in the bio-region where the project occurs.'</i>
3.3.4.1 Description of environmental values	An excellent background and request for describing environmental values for Turtles is provided under the sub-heading "Fauna- turtles" but there is no description for Dugongs or Cetaceans. As the importance is given to the <i>'potential increase in boat traffic closer to feeding grounds than the existing port channel'</i> in the Fauna - Turtle description of the draft ToR, and given that Dugongs and Cetaceans are known to also occur in the region and can be greatly impacted by boat traffic, a section should also be dedicated to these species in the ToR and EIS. Furthermore, the Indo-Pacific Humpback has been sighted around GKI and the Snub-fin Dolphin and Indo-Pacific Dolphin have been sighted & have known population in nearby coastal and estuarine waters of the Fitzroy River.	<ul style="list-style-type: none"> • Add Dugongs in to the existing description of "Fauna – Turtles" to become "Fauna – Turtles and Dugong", or provide their own sub-section titled "Fauna – Dugong", and request the appropriate and relevant description and information requirements in the EIS for the Dugong species. • Create a new sub-heading and sub-section for Cetaceans, titled 'Fauna – Cetaceans' and request the appropriate and relevant description and information requirements in the EIS for Cetacean species. Given that the Indo-Pacific Dolphin is affected by noise pollution, this should be one of (but not limited to) the information requirements.

3.3.4.2 Potential impacts	Only short term potential impacts on marine flora and fauna as a result of dredging are requested; long term impacts have not been requested and there is a need for this in relation to long term water quality and habitat provisions and noise pollution.	Request potential long term impacts to flora and fauna as a result of dredging, emphasising importance of (but not limited to) long term water quality parameters, habitat provisions and noise pollution. These impacts could be direct, indirect and cumulative.
	The potential impacts due to any alterations to the long term hydrodynamic processes of the coastal environments need to be broadened to cover marine and terrestrial fauna. Currently the potential impacts focus only on and specifically request terrestrial and marine vegetation community disturbance; however there is always a flow on effect from floral changes to food and habitat provisions for fauna and hence potential changes to faunal distribution and abundance.	Request potential impact (direct and indirect and cumulative) to marine and terrestrial fauna as a result of alterations to long term hydrodynamic processes of coastal environs.
3.3.4.3 Mitigation measures	Mitigation measures for marine fauna impacts are mentioned however no mitigation measures are discussed /requested for impacts to marine flora, estuarine flora and coastal flora. Dredging for example, is an action that will have direct and indirect impacts on both marine fauna and marine flora (such as seagrass beds and fringing coral reef). Thus information on mitigation measures is also warranted.	Add a new dot point under this 'mitigation measures' section, that requests a description such as follows: <ul style="list-style-type: none"> • Describe measures to prevent direct and indirect impacts on marine flora, estuarine flora, coastal flora and fringing reefs by any dredging works.
3.4 Water resources		
3.4.1 Description of environmental values	The context of environmental values being described in relation to relevant documents does not include reference to local or regional marine and freshwater water quality related documents; it only makes reference to state and federal documents such as the ANZECC marine and freshwater quality guidelines. As these documents are very broad and water quality differs greatly between various water catchments and marine environments, reference	Encourage and request environmental values to be described in relation to local and regional marine and fresh water quality guidelines, trigger values, environmental values and other research/information. This could be done by making reference to comment on the context of the project in relation to (but not limited to): <ul style="list-style-type: none"> • the existing document titled <i>Assigning local water quality trigger values to coastal and marine assets</i> and produced by the Fitzroy Basin Association (FBA) in Rockhampton (available for download from their

	<p>and referral to local and regional guidelines need to be encouraged as these will be more relative in relation to quality in the Fitzroy Basin and its marine environments. The Reef Water Quality Protection Plan also fails to get a mention here.</p>	<p>website); and</p> <ul style="list-style-type: none"> the Reef Water Quality Protection Plan. <p>Encouragement and direction should also be given to work with the Fitzroy Water Quality Advisory Group, FBA and DERM in relation to water quality, environmental values and impacts and issues and mitigation measures; local and regional Water Quality Objectives and Environmental Values have/are being established for the region.</p>
	<p>The Ground water review and assessment fails to request qualitative ground water parameters, data and information; it only requests quantitative information. As Great Keppel Island has a long history of salt water intrusion into the fresh ground water aquifer(s), it is essential to request quantitative data and information in the EIS.</p>	<p>Request Ground Water Quantitative assessment and review, particularly emphasising the use of existing Environmental health data (quality) on GKI's ground water that has been obtained and monitored by Rockhampton Regional Council (formerly Livingstone Shire council) for many years.</p>
<p>3.4.2 Potential impacts and mitigation measures</p>	<p>This section fails to make any reference to the potential impacts on the water quality in the Great Barrier Reef Marine Park and the Great Barrier Reef World Heritage Area as a result of the project. This section also fails to make any reference to the <i>Great Barrier Reef Marine Park Act 1975</i>, the <i>Great Barrier Reef Marine Park Regulations 1983</i> and the <i>Great Barrier Reef Marine Park Zoning Plan 2003</i> in relation to potential impacts and mitigation.</p>	<p>Make reference to and request for specific information on the potential impacts and mitigation measures on water quality and water resources in the Great Barrier Reef Marine Park and the Great Barrier Reef World Heritage Area as a result of the project. Also, make reference to the need to address the GBRMP legislation and regulations as listed at left.</p> <p>Encourage and request potential impacts and mitigation measures to be described in relation to local and regional marine and fresh water quality guidelines, trigger values, environmental values and other research/information. This could be done by making reference to comment on the context of the projects potential impacts and mitigation in relation to (but not limited to):</p>

Impacts and mitigation (cont.)		<ul style="list-style-type: none"> • Trigger values and recommendations set out in the existing document titled <i>Assigning local water quality trigger values to coastal and marine assets</i> and produced by the Fitzroy Basin Association (FBA) in Rockhampton (available for download from their website); and • the Reef Water Quality Protection Plan.
3.5 Coastal environment	<p>This section (and each subsequent subsection of 3.5) of the draft TOR fails to make reference to describe the values, objectives and plans of some documents relevant to the EIS and project, such as those associated with the Great Barrier Reef and water quality of local, regional and state or federal significance, in this section. It also fails to reference the need to identify potential impacts or mitigation that should consider the plans, values, objectives and legislation in the coastal environment and any conflicts with these documents.</p>	<p>In this section and all subsequent subsections of 3.5, request reference to, and a description of, the project and environment in relation to plans, values and objectives and relevant legislation such as:</p> <ul style="list-style-type: none"> • Reef Water Quality Protection Plan; • GBR Zoning plans and areas; • The existing document titled <i>Assigning local water quality trigger values to coastal and marine assets</i>; and • The Great Barrier Reef Marine Park and World Heritage Area and relevant marine park legislation and regulation. <p>The context and potential conflicts of the project's impacts and mitigation measures should also be described in relation to the documents and law outlined above (in dot points).</p>
3.5.1 Hydrodynamics and sedimentation to 3.6.2 Potential impacts and mitigation measures	<p>The considerable expanded footprint of the GKIR proposal will impact on the need for assess and mitigation of GKI hydrodynamics and sedimentation</p>	<p>GKIR should study and report on options for limiting the resort and associated footprint to minimise negative hydrological changes and potential for increased run-off.</p>
3.7.2 Potential impacts and mitigation measures	<p>The draft ToR fails to encourage environmental stewardship from the proponent in relation to the</p>	<p>Encourage environmental stewardship for the reduction of greenhouse gases in construction and operational</p>

	reduction of greenhouse gas emissions through research and comparison of alternative and renewable sources of energy for both construction and operation phases. Substantial gains could be made in relation to greenhouse gas reductions with such things as building design for efficient cooling/heating and the use of wind and solar energy instead of coal generated electricity from 'mains power'.	phases of the project by researching, describing, comparing and making decisions/taking actions that lend towards alternative energies with zero or low greenhouse gas emissions (such as solar or wind power).
3.10.5.2 Shipping	There is no specific reference made to the potential impacts and mitigation measures to marine flora and fauna and coastal vegetation, in relation to increased shipping and shipping routes and increased shipping or boat wake wave motions/movement.	Request specific information and a description in relation to the potential impacts and mitigation measures to marine flora and fauna and coastal vegetation. Request for information on the options of 'no action' (i.e. no marina built and lower shipping or boat traffic)

Signature: _____

Submissions must be received by 5pm on Monday 29 November 2010 and be addressed to: fax +61 7 3225 8282 Email GKIR@dip.qld.gov.au

This form is the preferred format for a submission. Please use additional pages if there is insufficient space. Submissions will be treated as public documents and copies will be provided to the project's proponent. For further information please contact the Project Assessment and Attraction Group on (07) 3224 4736