

GUIDELINES

For the preparation of an

ENVIRONMENTAL IMPACT STATEMENT

**Deep water port facility at Smith Bay, Kangaroo
Island**

Proposal by Kangaroo Island Plantation Timbers Ltd

Updated October 2019

www.saplanningcommission.sa.gov.au

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1. BACKGROUND

On 16 February 2017, the Minister for Planning ('the Minister') declared the deep water port facility at Smith Bay on Kangaroo Island to be assessed as a Major Development pursuant to Section 46 of the *Development Act 1993* (the Act) (published in the Government Gazette on 23 February 2017).

Section 46 of the Act ensures that matters affecting the environment, the community or the economy to a significant extent, are fully examined and taken into account in the assessment of this proposal.

Following consideration of the potential implications of the proposal, the then Development Assessment Commission (DAC) determined that the proposal will be subject to the processes of an **Environmental Impact Statement** (EIS), as set out in Section 46B of the Act, provided Guidelines for the preparation of the EIS.

The proponent, Kangaroo Island Plantation Timbers (KIPT) prepared an EIS that responded to the Guidelines. The EIS was publically exhibited from 28 March -28 May 2019, with three (3) public meetings held during this period.

As a result of public and agency comment received during this period KIPT is proposing to amend the in-water components of the proposal.

On 27 September 2019, the Minister for Planning amended the Major Development gazette notice to incorporate the proposed changes (published in the Government Gazette on 3 October 2019)

The State Planning Commission, with Agency input, has undertaken a review of the Guidelines and considered the potential issues that may be associated with the proposed changes to the proposal. The State Planning Commission has determined that the Guidelines are still relevant, subject to minor editorial changes (outlined in Appendix 2).

KIPT is to prepare an Addendum to the EIS in accordance with these Guidelines that is to describe what the proponent intends to do, what the environmental effects will be and how the proponent intends to manage the impacts.

The Addendum to the EIS should cover both the construction and ongoing operation of the new development works and, where possible, should outline opportunities to incorporate best practice design and management.

For the purposes of environmental impact assessment under the *Development Act 1993*, the meaning of 'environment' is taken to include an assessment of environmental (biological and physical), social and economic effects associated with the development and the means by which those effects can be managed.

2. DESCRIPTION OF THE AMENDED PROPOSAL

The proponent of the proposed development, Kangaroo Island Plantation Timbers Ltd (KIPT) proposes to amend the previously consulted on design for the in water components of the proposed development at Smith Bay, Kangaroo Island.

KIPT proposes the following changes to the in water elements of the proposal:

- replace the solid causeway with an open-piled jetty; and
- extend the open-piled jetty out to the 14m depth contour (estimated at up to 640m from the coast)

As a result of these changes, dredging will not be undertaken during the construction or operation of the proposed development, and the on-land settling ponds of dredging material are to be removed from the proposal.

All other aspects of the proposal remain as outlined and presented in the EIS (dated January 2019).

3. MAJOR DEVELOPMENT PROCESS AND ROLE OF THESE GUIDELINES

The Major Development assessment process enables the Minister for Planning to utilise impact assessment as a strategic tool.

Impact assessment enables the holistic consideration of proposals that might otherwise be of a nature or scale that is not expected through the regular development assessment process and/or Councils Development Plan(s).

The Major Development assessment process has several steps:



An EIS was previously prepared by the proponent that underwent public and agency consultation. KIPT is proposing changes to the development, prior to a decision being made. This warrants review of the Guidelines and an Addendum to the EIS being prepared.

Current process:

- The Addendum to the EIS must be prepared by the proponent in accordance with these Guidelines.
- The Addendum to the EIS should detail any expected environmental, social and economic effects of the proposal.
- Once submitted to the Minister for Planning, the Minister will release the Addendum to the EIS for public and Agency comment.

- An opportunity for public comment will occur when the Addendum to the EIS is released. Public exhibition is undertaken for 30 business days. An advertisement will be placed in the *Advertiser* and local newspaper (*The Islander*) inviting submissions.
- **It should be noted that Submissions made on the previously released EIS remain valid and will be considered in the assessment process. This consultation is specific to the changes proposed to the in-water elements of the proposal, and as such, only comments relevant to this will be accepted during this consultation period.**
- Copies of all the submissions from the public, relevant Council and government agencies will be provided to the proponent (noting that all previous public and agency submissions have already been provided to the proponent).
- The proponent must then prepare a consolidated 'Response Document' to address the matters raised during the public exhibition periods for both the EIS and Addendum to the EIS.
- The Minister then prepares an Assessment Report. The Assessment Report and the Response Document will be available for inspection and purchase at a place determined by the Minister for a period determined by the Minister.
- Availability of each of these documents will be notified by advertisements in *The Advertiser* and local newspaper (*The Islander*). A copy of the EIS, Response Document and the Assessment Report will be provided to the Council.
- In deciding whether the proposal will be approved and any conditions that will apply, regard must be made to:
 - provisions of the appropriate Development Plan / Planning and Design Code
 - the Development Act and Regulations
 - if relevant, the Building Code of Australia
 - the South Australian Planning Strategy, including the Integrated Land Use and Transport Plan
 - the EIS, the Addendum to the EIS, the Response Document and the Assessment Report
 - any other relevant government policy and/or legislation, including the *Environment Protection Act 1993*

Australian Government Involvement in the Assessment Process

On 8 November 2016, the proponent submitted a Referral Notice for the proposal (i.e. proposed action) to the Australian Government Department of the Environment and Energy, in accordance with the Commonwealth EPBC Act.

On 14 December 2016, a delegate of the Commonwealth Minister for the Environment and Energy made a decision that the Smith Bay Port (and associated wharf and facilities) proposal requires assessment and approval under the EPBC Act (EPBC no.2016/7814). This was because the proposed action is likely to have, a significant impact on the following matters protected by the EPBC Act:

- Listed threatened species and communities (sections 18 & 18A)
- Listed migratory species (sections 20 & 20A)
- Commonwealth marine areas (sections 23 & 24A)

The Commonwealth of Australia has a Bilateral Agreement (assessment) with the State of South Australia, under Section 45 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), accrediting the South Australian Major Development environmental impact assessment process.

It has been determined that the proposal can be assessed through the South Australian assessment process under the requirements of the State/Commonwealth Bilateral Agreement.

In accordance with the Bilateral Agreement (*Development Act 1993* provisions), the proposal will undergo a streamlined assessment process in co-ordination with the Australian Government Department of the Environment and Energy. This means there will only be one environmental impact assessment document (EIS) prepared, one period of public consultation undertaken and one Response/Supplementary document prepared to satisfy the legislative requirements of each jurisdiction.

Following assessment, the State of South Australia will provide an Assessment Report to the Commonwealth Minister for the Environment and Energy, who will then make a (separate) decision whether or not to approve the proposed action under Part 9 of the EPBC Act.

4. ENVIRONMENTAL IMPACT STATEMENT (EIS)

The EIS (and Addendum) should be presented in terms that are readily understood by the general reader. Technical details should be included in the appendices.

THE REPORT MUST INCLUDE THE FOLLOWING:

Assessment of expected environmental, social and economic effects

The assessment of effects should include all issues identified in these Guidelines and cross referenced to supporting technical references.

Consistency with Government policy

The *Development Act 1993* requires the EIS to state the consistency of the expected effects of the proposed development with the relevant Development Plan and Planning Strategy

Avoidance, Mitigation, Management and Control of adverse effects

The proponent's commitment to meet conditions proposed to avoid, mitigate, satisfactorily manage and/or control any potentially adverse impacts of the development on the physical, social or economic environment, must be clearly stated as part of the EIS.

The design of the proposal should be flexible enough to incorporate changes to minimise any impacts highlighted by this evaluation or post-operation monitoring programs.

THE REPORT SHOULD INCLUDE THE FOLLOWING:

Summary

The EIS should include a concise summary of the matters set out in Section 46B of the *Development Act 1993* and include all aspects covered under the headings set out in the Guidelines, in order for the reader to obtain a quick but thorough understanding of the proposal and the resulting environmental impacts.

Introduction

The introduction to the EIS should briefly cover the following:

- background to, and objectives of, the proposed development
- details of the proponent
- staging and timing of the proposal, including expected dates for construction and operation
- relevant legislative requirements and approval processes
- purpose and description of the EIS process

Need for the Proposal

A statement of the objectives and justification for the proposal, including:

- the specific objectives that the proposal is intended to meet, including market requirements
- arrangements for other users to gain access to port facilities and/or to establish additional facilities on site
- expected local, regional and state benefits and costs, including those that cannot be adequately described in monetary or physical terms (e.g. effects on aesthetic amenity)
- a summary of environmental, economic and social arguments to support the proposal, including the consequences of not proceeding with the proposal.

Description of the Proposal

The description of the proposal should include the following information:

- the nature of the proposal and location
- a project plan to outline objectives, constraints, key activity schedule and quality assurance
- site layout plans (including indicative land division plan if relevant)
- the construction and commissioning timeframes (including staging)
- details of the proposed process, mechanisms, equipment and infrastructure that will be used to transport and load the timber products
- details of the estimated time that will be required to load each shipment and the proposed working hours of the port
- a description of the existing environment (including the immediate and broader location)
- a description of the current commercial activities occurring in the area and marine environment (including aquaculture and fisheries activities)
- details of all buildings and structures associated with the proposed development
- details of any other infrastructure requirements and availability
- details on the operation of the proposed development, including proposed operating hours
- the relevant Development Plan zones
- management arrangements for the construction and operational phases (including Environmental Management and Monitoring Plans)
- a contingency plan for delays in construction

The proposal should also include information on alternative locations investigated and justification provided as to their potential suitability/unsuitability.

Plans and Forms

- **Current Certificate(s) of Title**
- **Context and locality plans** should illustrate and analyse the existing environment and site conditions and the relationship of the proposal to surrounding land and buildings. The plan should be drawn to a large scale to allow presentation on a single sheet and be readily legible. The plan should indicate:
 - any neighbouring buildings, infrastructure or facilities, including identification of all nearest sensitive receptors and the likely use of existing or proposed neighbouring buildings (e.g. dwelling, farm outbuildings, shop, office)
 - location of any watercourse, dams, underground wells and/or any other environmentally sensitive areas
 - location of any state heritage in relation to the site
 - existing native vegetation, regulated or significant trees
 - known sites for protected, threatened or vulnerable species, including migratory species, on the site, the adjoining land and marine environment
 - existing roads (public & private)
 - any other information that would help to set the context for the locality

- **Site plan** (drawn at a scale of 1:100 or 1:200) clearly indicating all proposed buildings, structures and works. Including location and scale of wood stockpiles in relation to the site buildings and port site and wharf structures (including causeway and/or jetty, link span bridge, tug mooring facilities, berthing pocket, retaining structures and mooring dolphins)
- **Elevations** (drawn at a scale of 1:100 or 1:200) showing all sides of the buildings, structures and works with levels and height dimensions provided in Australian Height Datum.
- **Cross sections** of the buildings, structures and works, including stockpile and storage facilities showing ground levels, floor levels, ceiling heights and maximum height in Australian Height Datum.
- **Floor plans** (drawn at a scale of 1:100 or 1:200) for each building or structure demonstrating what is proposed at each floor, with indicative internal layouts.
- **Site survey plan** demonstrating the development will be contained within the allotment boundaries.
- A schedule of **materials and finishes and colours**.
- Location and dimensions of any external **advertising displays**. If signs are to be illuminated or contain a moving display this should to be included.

Specialist Reports and Details

- A **design statement** that provides an understanding of the evolution of the proposal (including options explored and discounted) from the concept to the final design.
- A **transport and access impact assessment** prepared by a suitably qualified traffic and access planner/engineer. The assessment should evaluate current and proposed access arrangements and car parking, as well as vehicle interface with the local road network.
- A **waste management and minimization plan (for demolition, construction and operation)** demonstrating the location of waste storage (including separation of recyclables hard waste and e-waste) and disposal facilities on the site and provide details of how these facilities will be serviced.
- An **acoustic report** prepared by a suitably experienced, professional acoustic engineering consultant¹ which demonstrates that noise from the proposed development is predicted to meet the 'relevant indicative noise levels' applicable to the proposed development under Clause 20 of the *Environment Protection (Noise) Policy 2007 (Noise Policy)* at all existing or future noise affected premises The noise assessment should include vehicles entering, leaving and moving on site and predictions should include worst case acoustic and meteorological conditions for the transmission of noise from source to receivers (including CONCAWE meteorological category 5 day and CONCAWE meteorological category 6 night) and at maximum operating potential. The report should also consider the impacts of construction noise on marine organisms, especially marine mammals.
- Details of proposed **wastewater management**, including segregation, collection, treatment, storage, spill containment, reuse and disposal of any wastewater

¹ An acoustic engineer is defined as a person eligible for full Member status of both Engineers Australia and the Australian Acoustical Society

- Details of proposed **stormwater management**, as well as any retention and reuse as part of the development, inclusive of details for connecting into any street drainage channel or council drain and the method of drainage and services proposed to be used.
- Assessment of the **marine environment**, including sediment structure corresponding to the proposed dredging depth, biogeographical and hydrodynamic modelling which encompasses suspended sediment (both during construction and operation) and biogeographical report of the benthic environment that will be impacted by the dredging and marine infrastructure.
- A **sustainability assessment** that outlines the environmental sustainability measures (energy efficiency, water sensitive design etc) incorporated into the proposal.
- A **biosecurity risk analysis** that outlines the potential risk of exotic organisms and disease (e.g. through vessel ballast water and/or biofouling) and measures proposed to eliminate this risk
- A **site history assessment** - if development is to occur on land that has the potential to be contaminated (through previous land uses) a site history assessment is required.
- Details of **site services and infrastructure** including utility services (water, gas, electricity, sewerage disposal, waste water, drainage, trenches or conduits); location of ground and roof plant and equipment (fire booster; electricity transformer; air conditioning; solar panels etc).
- A **fire hazard management plan** that considers requirements both during the construction and operational phases - including measures to minimise fire risk at and to/from the site, resources and training required, sources of water to fight fires (and how this water will be accessed), options to utilise and coordinate with other operations in the region/area, and cost recovery.
- An **air quality assessment report** that identifies and assesses all potential pollutants, pollutant sources (for all materials proposed to use the wharf), including operational pollutants (such as combustion products, transport emissions (i.e. dust)), and sensitive receivers, and describes the management strategies to manage, minimise and mitigate potential pollutants (and risks of emission of such pollutants) during construction and operations.

Sources of Information

- All sources of information (e.g. reference documents, literature services, research projects, authorities consulted) should be fully referenced, and reference should be made to any uncertainties in knowledge. Where judgements are made, or opinions given, these need to be clearly identified as such, and the basis on which these judgements or opinions are made need to be justified. The expertise of those making the judgements including the qualifications of consultants and authorities should also be provided.
- Any technical and additional information relevant to the EIS (and Addendum) that is not included in the text should be included in appendices.

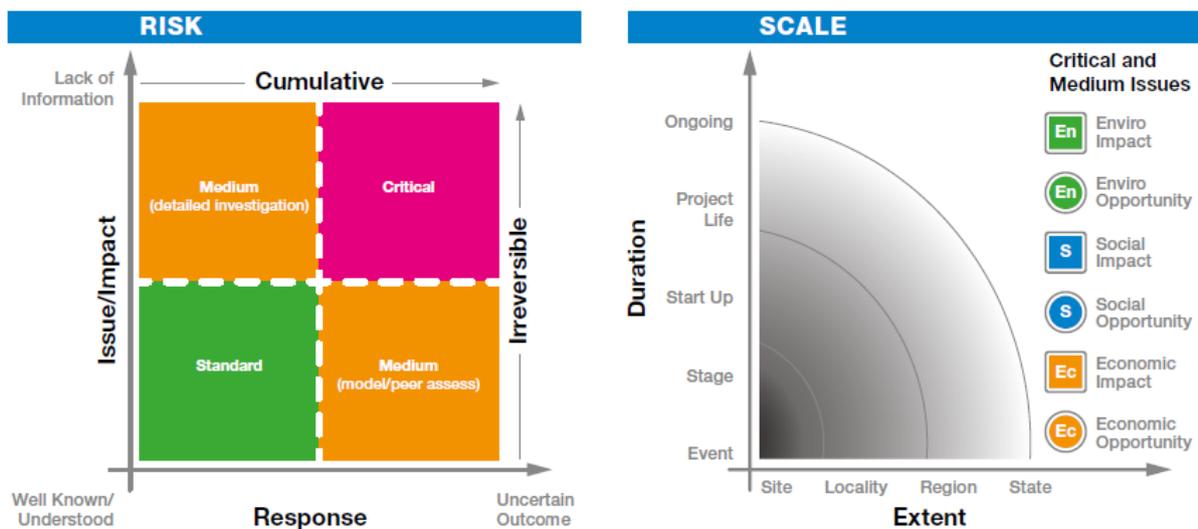
It is **RECOMMENDED** that the EIS (and Addendum) consider issues that may generate concerns based on inaccurate or outdated perceptions. The information provided should explain key concepts in a factual manner. This can help to provide base level information to assist with community understanding of the proposal.

5. ASSESSMENT

Impact assessment is an important tool that enables the consideration of projects that might otherwise struggle to be addressed properly or fairly under the 'normal' assessment system.

In setting these Guidelines, the Development Assessment Commission has considered the scale of issues associated with the project and determined whether they represent issues or opportunities. The potential impacts and issues have then been organised according to the level of work and type of attention required by the Applicant: either standard, medium or critical:

- Where the issue is well known and the response is well understood then the risk assessment is classed as 'standard'
- Where work is required to address the issue but the risk is likely to be manageable with additional information then the risk assessment is classed as 'medium'.
- Where information about the issue is lacking and the response is unclear, the issue is classed as 'critical'.



The issues and impacts identified by the Commission as requiring standard, medium or critical level assessment are listed below.

Each guideline includes a description of the issue/impact and a description of the action or investigation needed.

To assist with the assessment of the EIS the proponent is requested to provide a table (as an appendix) that cross references each Guideline requirement (action or investigation needed) with the relevant section and page of the EIS.

NOTE: The investigative requirements of the EIS do not negate the need for the proponent to obtain all necessary licences, permits and/or management plans prior to undertaking any investigations or works in relation to this EIS. It also does not negate the need for the proponent to comply with any legislative obligations or duty of care under the relevant legislation.

No	Issue/Impact	Risk		Scale		Level of assessment	
		Description	Issue/Impact	Response	Duration		Extent
1	EPBC Act - Matters of National Environment Significance (MNES)	The proposal has been deemed a controlled action due to potential impacts on MNES	The nature and level of impacts are not known. There is a need to undertake investigation to determine and understand the level of impact on the MNES	The current plan does not provide any assessment or assurance regarding avoiding impacts on MNES or options to mitigate impacts	Ongoing	Local Regional International (migratory species)	Lack of information. The receiving environment & MNES are highly sensitive to change = CRITICAL NB – this is a mandatory component of the SA/ Commonwealth Bilateral Agreement
2	Coast and Marine	The construction and operation of the wharf and causeway and/or jetty will have direct and indirect impacts on the coast and marine environment (including tourism and other commercial industries reliant upon it) in which it is located. In particular the proposal will have impacts on the water flows, tidal movements, turbidity, seabed, sedimentary profiles and overall ecology of the Bay.	The nature and level of impacts are not known. There is a need to undertake investigation to identify all potential impacts and undertake baseline monitoring during the life of the project (should it be approved). There exists a sensitive receptor (aquaculture/abalone farm) immediately adjacent to the site that sources it water from the Bay. Sedimentation plumes and disturbance may impact upon this business directly and tolerance of juvenile (> 15mm) abalone to suspended sediment currently is unknown.	The current plan does not provide any information on the potential impacts of construction and operation of the development on the adjacent and surrounding marine environment.	Ongoing	Local Regional	Lack of information. The receiving environment is highly sensitive to change = CRITICAL
3	Biosecurity	The movement of ships from other regions, including from overseas, into Smith Bay will likely have biosecurity impacts for Kangaroo island	The level of impacts are not known. The use of the wharf will increase the likelihood of introduced pest and nuisance species. Due to lack of natural predators introduced pests can spread quickly across the Island.	The current plan does not provide any information in relation to avoiding biosecurity threats, and mitigation measures, in particular it does not provide any information in relation to ballast or bilge water management. The current plan does not contain information on avoidance, mitigation and/or control measures for introduced pests.	Ongoing	Local Regional	Lack of information. The receiving environment is highly sensitive to change = CRITICAL

		Risk		Scale		Level of assessment	
No	Issue/Impact	Description	Issue/Impact	Response	Duration	Extent	
4	Economy	Both the construction and use of the proposed port and wharf will result in increased employment, both on and off the Island, and will have economic flow on effects on the Island. The environmental impacts will also have a flow on effect to the tourism and other commercial industries reliant upon the marine waters of Smith Bay.	The proposal is expected to have a positive impact to the regional KI economy, however it is also likely to have direct impacts on an existing aquaculture business currently operating in Smith Bay	The current plan provides basic information on the economic impacts for the island, in particular employment and multiplier effects, but does not provide any information on the potential economic impacts on the existing aquaculture business at the site.	Ongoing	Local Regional State	More information required on employment opportunities, multiplier/flow on effects, and impact on the prosperity of the region and impacts on the existing aquaculture and other commercial operations in the vicinity of the proposal. = CRITICAL
5	Air Quality	The construction of the proposal involves drilling into the seabed and using earthmoving equipment. The operational phase will involve trucks moving across the island to and from the site and plantations, ship loading machinery, and ships entering and exiting the Bay	The construction and the operation of the wharf and facilities will generate increased air pollution in particular at the Bay and the roads leading into and out of the site. There exists a sensitive receptor (aquaculture/abalone farm) immediately adjacent to the site.	The current plan does not provide any information on sources of, or expected levels of, dust generation. The current plan does not contain sufficient information on avoidance or mitigation measures	Ongoing	Local	Lack of information. The receiving environment is sensitive to change, in particular the sensitive receiver is critically sensitive to dust. = CRITICAL
6	Alternative Locations	The land adjacent to the proposed site at Smith Bay is owned by the proponent, and is one of the reasons it has been selected by the proponent as the appropriate location for this development.	Other sites may also be appropriate for a development of this size, scale, nature and purpose. Community feedback to date has indicated that other sites should be considered. In addition, the proponent also owns other sites that may be suitable for a development of this nature.	The current plan does not provide any information on alternative locations or their merits. No justification has been provided, besides ownership of the land, for the proposal to be at Smith Bay.	Ongoing	Local Regional	Lack of information and justification provided for proposed site. Further information required to enable a comparative basis for assessment = CRITICAL
7	Alternative Structures (in water)	The proposal includes the construction of a causeway that may impact on the tidal and natural water flow within Smith Bay.	The nature and level of impacts of the causeway on the marine environment, and the recreational and commercial operations reliant upon the waters of Smith Bay, have not been detailed. Merits of alternative in water structures should be investigated to determine the most appropriate structure for the area and operation.	The current plan does not provide any information on the impacts of the causeway or any alternative structure options – e.g. a jetty.	Ongoing	Local	Lack on information on the impacts of the causeway or merits of alternative structures. Further information required to enable a comparative basis for assessment = CRITICAL

No	Issue/Impact	Description	Risk		Scale		Level of assessment
			Issue/Impact	Response	Duration	Extent	
8	Community	The proposal will generate extra employment with potential increase in Island population both during construction and operation. The magnitude of which is dependent on any displacement of other employment opportunities.	Increased population will likely have positive impacts for regional community groups and sporting clubs, however there will be impacts on the demand for housing and service provision.	The current plan provides limited information on the likely impacts and effects on housing and service provision requirements	Ongoing	Local Regional	Issue of housing demand is not well known. More information required on housing and services requirements = CRITICAL
9	Native Vegetation and Fauna	Kangaroo island remoteness has led to it having a truly unique environment. The proposal includes the construction of on land and in sea infrastructure which will have a footprint on the native vegetation (both terrestrial and marine) and may impact on local fauna.	The level of impacts are not known. Baseline information on the existing flora and fauna is needed to enable ongoing monitoring during the life of the project (should it be approved).	The current plan does not provide any information on existing marine and terrestrial flora and fauna (extent and condition). The current plan does not contain information on the amount of native vegetation (including marine) that may need to be cleared and options for offsetting any clearance.	Ongoing	Local Regional	More information on vegetation and fauna in the region (both terrestrial and marine) and its condition is required. = MEDIUM
10	Traffic & Transport	The proposal will result in increased truck traffic to and from the port/wharf specifically for the movement of timber products, and potentially from other non-forestry related ventures.	Increased traffic is expected to result in wear and tear on the existing road network, and increased interactions with other road users.	The current plan does not provide any existing/baseline traffic data or information on proposed route between plantations and the port/wharf. The current plan does not provide information related to funding road upgrading/maintenance.	Ongoing	Local Regional	Issue re existing traffic & movements is reasonable understood, however traffic studies and an assessment of increased traffic impacts required. = MEDIUM
11	Water	The proposal includes several storage & administrative buildings and sealed roads & a causeway and/or jetty that result in increased stormwater runoff.	Increased stormwater, if uncaptured or treated will have impacts on the surrounding ecology. In addition, potable water will need to be supplied to the site for human consumption and use.	The current plan provides limited information on the capture and treatment of stormwater. It is silent on re-use and recycling of this water. The plan is silent on projected potable water requirements.	Ongoing	Local Regional	Issue of stormwater capture and re-use is well known. More information re WSUD on site is required. Water supply to the Island is limited – information is required as to how water requirements, will be sourced. = MEDIUM

		Risk			Scale		Level of assessment
No	Issue/Impact	Description	Issue/Impact	Response	Duration	Extent	
12	Noise & Light	The construction of the proposal involves drilling into the seabed and using earthmoving equipment. The operational phase will involve trucks moving across the island to and from the site and plantations, ship loading machinery, and ships entering and exiting the Bay	The construction and the operation of the wharf and facilities will generate increased noise and light pollution in particular at the Bay and the roads leading into and out of the site. There exists a sensitive receptor (aquaculture/abalone farm) immediately adjacent to the site	The current plan does not provide any information on sources of, or expected levels of, noise generation. The current plan does not contain sufficient information on avoidance or mitigation measures.	Ongoing	Local	Issue of dust and noise generation associated with wharfs is well known. Lack of information re impacts & mitigation measures on existing aquaculture operation. = MEDIUM
13	Climate Change & Sustainability	The built structures of the proposed development are located in and adjacent to the coast.	Climate change impacts are expected on coastal developments. Construction & operation of the wharf may lead to increase an in GHG emissions.	The current plan does not provide information in relation to climate change risk, adaptation or mitigation measures. No information is provided on expected GHG production from the proposal or minimisation strategies.	Ongoing	Local Regional	Issues of climate change & sea level rise is well understood however more information is required on adaptation measures and expected GHG emissions = MEDIUM
14	Risks & Hazards	The proposal will involve the storage and movement of combustible material (timber) and the movement of large trucks and ships that are likely to contain large supplies of fuel and may contain or have exposure to chemical or other hazardous chemical	There is potential for the following hazards: oil spills, fire (including bushfire), site contamination, and storage of hazardous materials.	The current plan does not provide information on the potential risks or the avoidance, mitigation or management of these risks	Ongoing	Local Regional	Issues related to risk and minimisation practices are well known, but the response requires more information and for an adequate assessment to be undertaken = MEDIUM
15	Infrastructure	The construction and operation of the port and wharf requires specific infrastructure and utility needs.	Impacts on existing supply, and users of, the Islands gas, water, electricity, sewerage networks.	The current plan does not provide information on how utility needs will be sourced and supplied.	Ongoing	Local Regional	Issues related to utility and Infrastructure needs are understood, but the response requires more information, in particular in relation to continuous and uninterrupted supply. = MEDIUM.
16	Aboriginal & Other Heritage	All development should consider impacts it may have upon native title, Aboriginal and other heritage matters	The proposed development may have impacts on Aboriginal or other European heritage (land & marine). No Native Title claims are known for Kangaroo Island.	The current plan does not provide information on existing Aboriginal and other heritage matters, or management of such heritage matters that may arise during the construction phase.	Construction	Local	Lack of information and knowledge re local aboriginal heritage. Issue of state, local and maritime heritage is well understood, but more information is required = MEDIUM

No	Issue/Impact	Description	Risk		Scale		Level of assessment
			Issue/Impact	Response	Duration	Extent	
17	Geology & Soils	The proposal involves construction on, and adjacent to, coastal geological formations	There is a potential for the structures to have impacts on the soils, coastal formations and erosion processes of the Bay area	The current plan does not provide any information on the underlying geology of the region, soil and coastal structures and the existing erosion processes of the coast line at the site.	Ongoing	Local	Issue re geology & coastal processes is well understood but response requires more information re impacts & mitigation measures = STANDARD
18	Built Form & Design	The development is in a remote coastal area.	Visual impacts.	The current plan does not provide information on visual impacts or mitigation measures.	Ongoing	Local	Issue and response measures, are well understood, but more work is required, including landscaping designs. = STANDARD
19	Construction & Operation	Development of a port & wharf will be subject to construction and operational environmental management and monitoring plans.	Construction and operation of projects such as this, had a range of standard impacts that can occur. These can be adequately managed with approved plans.	The current plan provide limited information on the proposed construction and operational management techniques and measures.	Ongoing	Local Regional	Issue is well understood but response requires further work = STANDARD

CRITICAL ASSESSMENT

Commonwealth Assessment Requirements

Environment Protection and Biodiversity Conservation Act 1999 - Matters of National Environmental Significance

Guideline 1: The Commonwealth Minister for the Environment and Energy has determined (EPBC no.2016/7814) that the proposed action is likely to, or may have, a significant impact on the following controlling provisions (matters of national environmental significance (MNES)):

- Listed threatened species and communities (sections 18 & 18A) including but not limited to:
 - o the endangered and migratory Southern Right Whale (*Eubalaena australis*)
 - o the endangered Kangaroo Island Echidna (*Tachyglossus aculeatus multiaculeatus*)
 - o the vulnerable Hooded Plover (eastern) (*Thinornis rubricollis rubricollis*)
 - o the Southern Brown Bandicoot (eastern) (*Isodon obesulus obesulus*)
- Listed migratory species (sections 20 & 20A) including but not limited to:
 - o the endangered and migratory Southern Right Whale (*Eubalaena australis*)
- Commonwealth marine areas (sections 23 & 24A) – while it is understood the action is proposed to be taken outside a Commonwealth marine area, the assessment documentation must consider if there is a real chance or possibility that the action will impact a Commonwealth marine area, for example, because the action will have a substantial adverse effect on a population of a marine species such as a cetacean including its life cycle (e.g. breeding, feeding, migration behaviours, life expectancy) and spatial distribution.

To enable the proposal to be assessed through the South Australian assessment process under the State/Commonwealth Bilateral Agreement, consistent with the requirements of Schedule 4 of the *Environment Protection and Biodiversity Conservation Regulations 2000*, **the following matters addressing the assessment requirements under the EPBC Act MUST be included in the EIS**. This will provide the Commonwealth Minister for the Environment and Energy, or his delegate, with sufficient information to make an informed decision whether or not to approve the proposed action under Part 9 of the EPBC Act.

1.1 Describe the background of the proposal including the title of the action, the full name and postal address of the designated proponent and a clear outline of the objective of the action.

1.2 Describe how the proposal relates to any other actions under the EPBC Act (that the proponent is reasonably aware) that have been, or are being, taken or that have been approved in the region.

1.3 Describe the environment and management practices of the proposal site and the surrounding areas and other areas that may be affected by the proposal.

1.4 Describe the scope, timing/effort (survey season/s) and methodology for studies or surveys used to provide information on the above listed species/communities/habitat at the site (and in areas that may be impacted by the proposal). Include details of:

- best practice survey guidelines applied; and
- how they are consistent with (or a justification for divergence from) published Australian Government guidelines and policy statements

1.5 Describe in detail all components of the proposal (including the background to the proposal, construction, operation and, if relevant, the decommissioning). Include the precise location of all works to be undertaken (including associated offsite works and infrastructure), structures to be built or elements of the proposal that may have impacts in the above listed MNES. Include details on how the works are to be undertaken and design parameters for those aspects of the structures or elements the proposal that may have relevant impacts.

1.6 Describe all the relevant impacts the proposal may have on the above listed MNES, include impacts during the construction (e.g. noise, habitat clearing or modification), operation (e.g. potential vehicle/vessel strike during road/shipping transport of timber product) and (if relevant) decommissioning phases of the project. Include information on:

- the nature and extent of the likely direct, indirect and consequential impacts (short-term and long-term) (refer to the Significant Impact Guidelines 1.1 – Matters of National Environmental Significance, Commonwealth of Australia, 2013)
- whether any relevant impacts are likely to be unknown, unpredictable or irreversible
- technical data and/or other information used to make a detailed assessment of the relevant impacts
- how Indigenous stakeholders views of the proposals impacts to biodiversity and cultural heritage have been sought and considered

1.7 Identify and address cumulative impacts, where potential impacts are in addition to existing impacts of other activities (including known potential future expansions or developments by the proponent and other proponents in the region and vicinity).

1.8 Provide information (substantiated, specific and detailed descriptions) on proposed avoidance and mitigation measures, based upon best available practices, to avoid and manage the relevant impacts of the proposal on the above listed MNES. Include a description of the outcomes that the avoidance and mitigation measures will achieve and an assessment of the expected or predicted effectiveness of the avoidance and mitigation measures (including the scale and intensity of impacts of the proposal and the on-ground benefits to be gained through each of these measures).

1.9 Provide a consolidated list of mitigation measures proposed to be undertaken to prevent, minimise or compensate for the relevant impacts of the action, including mitigation measures proposed to be undertaken by State governments, local governments or the proponent.

1.10 Provide information of any statutory or policy basis for, the mitigation measures.

1.11 Provide a detailed outline of a plan for the continuing management, mitigation and monitoring of the impacts on the above listed MNES. Include provisions for any independent environmental auditing. Include the name of the agency responsible for endorsing or approving each mitigation measure of monitoring program.

1.12 Provide details of the likely residual impacts on the above listed MNES that are likely to occur after the proposed measures to avoid and mitigate all impacts are taken into account. Include reasons as to why the avoidance or mitigation of impacts is not reasonably achieved and identify the significant residual impacts on the above listed MNES. If residual impacts are likely, include details of the proposed offset package to be implemented and an analysis of how the proposed offset meets the requirements of the Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy (2012).

1.13 Describe how the proposal is consistent with any relevant EPBC Act guidelines, recovery plans, management plans, threat abatement plans, Marine Bioregional Plans and conservation advice for the above listed MNES (species and communities).

1.14 Provide information on feasible alternatives to the proposal including:

- taking no action
- a comparative description of the impacts of each alternative on the above listed MNES
- sufficient detail to make clear why any alternative is preferred to another (short, medium and long-term advantages and dis-advantages of each alternative are to be discussed)

1.15 Provide details on the current status of the proposal and the consequences of not proceeding with the proposal.

1.16 Describe any consultation about the action, including any consultation that has already taken place, proposed consultation about relevant impacts of the action and – if there has been consultation about the proposed action – any documented response to, or result of, the consultation. Identify any affected parties, including a statement mentioning any communities that may be affected and describing their views.

1.17 Provide an overall conclusion as to the environmental acceptability of the proposal on each of the above listed MNES, including:

- discussion on the considerations with the requirements of the EPBC Act (including the objects of the Act, the principles of ecological sustainable development and the precautionary principle)
- reasons justifying undertaking the proposal in the manner proposed, including the acceptability of the avoidance and mitigation measures; and
- if relevant, a discussion of residual impacts and any offsets and compensatory measures proposed or required, and the relative degree of acceptability. Include the reasons why residual impacts are not avoidable.

1.18 Provide further detail on the social and economic costs and/or benefits of undertaking the proposed action, including basis for any estimations of costs and/or benefits, potential employment opportunities expected to be generated at each phase of the proposed action and details of any public and stakeholder consultation activities, including the outcomes.

1.19 Provide an environmental record of the person(s) proposing to take the action. Include details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment of the conservation and sustainable use of natural resources against: the person proposing to take the action; and if the person proposing to take the action is a corporation – details of the corporation’s environmental policy and planning framework.

State Assessment Requirements

CRITICAL ASSESSMENT

Coast and Marine

Guideline 2: As the proposed development is within, and directly adjacent to, the coastal waters of Smith Bay, there will be direct impacts to this particular environment. The ecology of the area must be investigated and understood to accurately identify the impacts from the construction and operation of the development, and to determine appropriate measures to manage, offset or mitigate these impacts. Although the area is not within a Marine Park (State), the construction and operation of the proposal, including the passageway of ships to and from the port and wharf may still have impacts on the neighbouring Marine Parks (i.e. Encounter and Southern Spencer Gulf Marine Parks).

2.1 Provide baseline information on, and undertake a comprehensive risk analysis that identifies, the key ecological assets of the site (including, but not limited to, any communities and species of conservation significance, migratory species, seagrasses, macro algae and other reef habitat).

2.2 Identify how the major aspects of construction and operation might impact upon the identified ecological assets (as identified from 2.1 above). Outline mitigation strategies associated with the process and identify any residual risks that will need to be managed.

2.3 Describe the impacts of the port and wharf construction (including causeway and/or jetty and associated berthing pocket, rock wall, retaining structures and mooring dolphins) on the foreshore, intertidal, seabed and benthic communities (especially any nursery/spawning areas). Describe measures that will be undertaken to mitigate these impacts.

- 2.4** Describe coastal engineering requirements for the location, orientation and type of causeway and/or jetty and wharf structures.
- 2.5** Outline the materials that will be used to construct the causeway and/or jetty, including any treatment that the materials may have been subject to, prior to immersion in the water.
- 2.6** Describe the impacts of drilling or piling activities on marine communities, in particular turbidity, disturbance (including of any harmful soil types or contaminants), vibration and underwater noise on vulnerable or sensitive receptors and any mitigating measures that may be used.
- 2.7** Describe any dredging activity that will be undertaken during the construction phase. Outline impacts that dredging may have on sediment loads and the neighbouring commercial aquaculture operation. Detail measures for managing these impacts, including management of dredge spoil, noting that all dredging should be undertaken in accordance with the Environment Protection Authority's Dredging and Earthworks Drainage Guideline – June 2010.
- 2.8** Describe the design and operational measures to protect water quality and prevent stormwater and other run-off from the site, and in particular harmful contaminants, entering the coastal and marine environment, during both construction and operation.
- 2.9** Describe the contaminants and toxicants that may accumulate on the property and the risks during stormwater events (where not managed) to the adjacent aquatic environments and commercial industries (e.g. fisheries and aquaculture) that rely on those environments.
- 2.10** Detail measures for managing solid waste, black water and grey water from ships.
- 2.11** Describe how ship loading operations will minimise incidental timber spillage and dust emissions (point source and fugitive) during loading operations to avoid causing harm to marine and coastal flora and/or fauna species, including migratory species.
- 2.12** Describe the impact of any incidental timber spillage and dust emissions (point source and fugitive) during ship loading operations on the marine environment, in particular on water quality and marine and coastal flora and/or fauna species, including migratory species. Outline the measures that will be taken in the event of a spillage.
- 2.13** Describe the impact of dust emissions on the nearby aquaculture industry and identify mitigating measures that will be used to manage these impacts.
- 2.14** Describe the potential impacts of increased shipping traffic and activities in Smith Bay from offshore anchoring, transshipment or pilotage (especially on marine fauna, water quality, recreational activities and amenity), including effects on commercial aquaculture activities in the region.
- 2.15** Describe the potential impacts that construction and operation, in particular the shipping traffic and activities, may have on the neighbouring Marine Parks (State).
- 2.16** Outline measures to protect water quality and the marine environment from shipping activities, especially turbulence during docking and manoeuvring. Include turbidity impacts on any identified shell fish or other filter feeders and on macro algal habitats in the region.
- 2.17** Detail measures to protect foreshore areas during and after construction, including potential marine and terrestrial protection areas and associated buffers.
- 2.18** Describe, and provide baseline information on, the existing seabed profile, bathymetry, sedimentary profiles (including particle sizes), sand movement, water flow and tidal movement patterns through and around the proposed causeway and/or jetty and wharf structure area.

2.19 Identify any possible changes to the seabed, bathymetry, sedimentary profiles (including particle sizes), and sand movement water flow and tidal movement patterns as a result of the development during both the construction and operational phases. Identify the impacts this may have on sensitive marine flora and fauna (including seagrasses, macro algae and other reef habitat), and commercial aquaculture activities in the region, and outline mitigation strategies.

2.20 Identify the risks from the exposure of fine sediments or clays that would impact adversely on water quality (turbidity and light penetration) and contribute to the production of sediment plumes in the region during both construction and operation phases. Outline the impacts this may have on commercial aquaculture activities in the region.

2.21 Describe, and provide baseline information on, the level of oceanic connectivity between the proposed development site and the intake areas used by commercial aquaculture ventures in the region (include observed information from hydrodynamic and coastal process modelling undertaken for a minimum of 6 months) and identify the impacts that the construction and use (including ship movements) of the proposed in-sea components of the proposal will have on this connectivity.

2.22 In addition to the above, outline all other potential impacts on the nearby commercial aquaculture ventures, their likelihood and severity, and identify mitigation measures that will be used and their effectiveness (include efficiency reports on silt curtains and sand filters if proposed).

Biosecurity

Guideline 3: Kangaroo Island's remoteness and isolation has created a unique environment, free from many of the pests and diseases found on mainland Australia. The development of a port will increase the potential for the introduction of pest and nuisance species (both terrestrial and marine) which are a major threat to, and can have devastating impacts on, the Island's environment and agricultural industries. Details on strategies to prevent and manage potential pest species is required to ensure the proposal will not impact upon the Island's biosecurity.

3.1 Provide information on the proposed management techniques for incoming ship ballast and bilge waters.

3.2 Describe how the introduction of exotic marine organisms or notifiable pathogens (disease) will be avoided or managed.

3.3 Outline strategies to monitor for the early detection of marine exotic organisms at or near the site, especially on and around the causeway and/or jetty and wharf

3.4 Outline strategies to prevent the introduction of exotic marine organisms and disease (including from incoming ship ballast and bilge waters or biofouling).

3.5 Detail the response procedure that will be followed in the event of a new exotic organism being detected

3.6 Outline measures to ensure consistency with the Australian Ballast Water Management Requirements (Version 6) (Cth) and national biofouling management guidelines (http://marinepests.gov.au/marine_pests/publications/Pages/default.aspx).

3.7 Outline strategies to monitor and prevent the introduction of vermin and other nuisance species that can be attracted to port facilities, and measures to manage and monitor such species.

3.8 Outline strategies to prevent, monitor and manage invasive weed species (including terrestrial, coastal and marine species).

3.9 Outline strategies to monitor, control and manage biofouling of wetted surfaces.

3.10 Describe how the proposal is consistent with the Biosecurity Strategy for Kangaroo Island 2016-2021.

Economy

Guideline 4: The proposal is likely to generate jobs on Kangaroo Island, directly and indirectly, during both the construction and operational phases of the proposed development. Given the proximity to the nearby existing aquaculture operation, consideration needs to be given to how the proposed development and use of the port and wharf may impact on the operation of this established business, and how any such impacts will be managed.

As the facility is proposed to be multi-user facility, this may have potential positive impacts on other components of the Kangaroo Island economy.

4.1 Provide a full economic analysis of the proposal including the long term economic viability and efficiency of the operational aspects of the development, incorporating the cost-benefit (risk return) analysis.

4.2 Identify employment and investment opportunities, including the 'multiplier effect' for Kangaroo Island and South Australia. Include an analysis of existing supply chain and prospective suppliers, as well as any gaps in the supply chain on the Island.

4.3 Identify how the proposal will promote Kangaroo Island, grow regional prosperity and not be in conflict with "Brand Kangaroo Island".

4.4 Provide information on local and indigenous employment and training opportunities associated with the proposal.

4.5 Outline the skill level requirements of the new workforce, the component of the workforce that is expected to be hired locally, and the type of employment this would entail (e.g. full time, permanent, sub-contractors, casual, skilled labour, truck drivers etc) and identify if this employment would be continuous/year round.

4.6 Identify and analyse the economic benefits for further investment in the area arising from the proposal for other potential users of the wharf & port facilities (e.g. agriculture, tourism). Include the anticipated demand and sustainability of each use and discussions had with the relevant sectors.

4.7 Provide information on the ability to use the wharf/port facility to be used as a base for tourist and/or cruise ships. Outline what other facilities would be required at the site for this purpose, and the capacity of the site to accommodate these facilities. Include details of discussions had with tourist and/or cruise industry operators in relation the likelihood and viability of using the proposed facilities for this purpose. Outline, where possible, the potential economic benefits of this to the Island.

4.8 Identify the economic effect the construction and on-going workforce would have regionally.

4.9 Identify the potential economic impacts on the existing aquaculture operation in the vicinity of the proposed development. Include the multiplier effects on the broader Kangaroo Island economy and community as a result of these impacts.

4.10 Identify the existing tourism, commercial and recreational fishing activities and facilities in the project area (and any adjacent spawning areas). Identify and evaluate the economic impacts the project will have on these existing activities and facilities, and outline methods to mitigate these impacts.

4.11 Describe the impact on existing local and regional land and marine uses, including primary production, conservation and tourism operators. In relation to primary productions, include potential impacts on fences, water supply and stock watering points, movement of agricultural machinery and trucks and power requirements.

4.12 Identify adequate separation distances (land and sea) from adjoining land and marine uses and the effects of access loss due to shipping traffic and anchorages.

4.13 Describe the impacts (economic, social & environmental) of use of the upgraded public boat ramp. Outline potential users, the impacts expected from increased public access to and use of Smith Bay (including on the water quality in relation to the existing aquaculture operation in the vicinity). Describe measures that will be undertaken to mitigate these impacts.

4.14 Outline the expected consequences of not proceeding with the development (ie 'do nothing' option).

Air Quality

Guideline 5: It is expected that air pollution (in particular dust) will occur during the construction phase as a result of the use of earthmoving equipment and the physical construction of the structures. Post construction, the movement of vehicles to and from the proposed site, stockpiling and ship loading operations onsite at Smith Bay will generate air pollution (in particular dust). There exists a sensitive receptor (aquaculture/abalone farm) immediately adjacent to the site that is critically sensitive to dust.

5.1 Provide an air quality impact assessment for all potential sources of dust/particles and gaseous pollutants associated with the construction and ongoing operation of the proposed port, which includes modelling undertaken in accordance with the Environment Protection (Air Quality) Policy 2016 and the Environment Protection Authority's Ambient Air Quality Assessment 2016 guideline.

5.2 Outline the impacts of dust and/or particle generation on the existing commercial operations and any other identified nearby sensitive receivers in the vicinity of the proposed development, in particular the existing abalone farm.

5.3 Describe how all potential sources of air pollution (especially dust and particulates from transport, unloading, storage and ship loading) will be controlled and monitored, including measures for their reduction or elimination.

Alternative Locations

Guideline 6: To enable a thorough assessment, and a comparative basis of the suitability of the location of the proposal, information should be included on alternative locations that have been considered for the development. This information should include investigations that have been undertaken and reasoning behind why the proponent has deemed them less suitable than the proposed location.

6.1 Provide information on alternative locations for the proposal that have been considered, with specific regard for:

- sites nominated for ports
- sites where the proponent owns the adjacent land.

6.2 Identify the operational benefits and constraints for each alternative location.

6.3 Provide evidence and/or justification (social, economic, environmental) as to the potential suitability or unsuitability of each alternative location. Include information on the ability of these sites to accommodate multi-users.

Alternative Structures (in water)

Guideline 7: The proposal includes the construction of a solid causeway that will extend approximately 200m into the ocean for the purpose of loading the timber products onto the ships at the attached floating berth. A solid causeway, as proposed, is likely to inhibit the natural water flow within Smith Bay, and potentially lead to pooling of water upstream. The nature and level of impacts of the proposed causeway on the marine environment (including water temperature), and the ecosystems, recreational and commercial operations reliant upon the waters of Smith Bay, have not been detailed. Merits of alternative in water structures (including a jetty) should be investigated to determine the most appropriate structure for the area and operation.

7.1 Identify alternative structures that could be used for the intended purpose. Include a description of the coastal engineering requirements for each structure.

7.2 Evaluate the merits and the impacts (environmental, economic and social) of each alternative structure. Include information on the long term operational benefits and costs of each alternative structure.

7.3 Outline the measures that could be undertaken to mitigate the impacts/cost identified for each alternative structure.

Community

Guideline 8: The proposal is likely to lead to a change in The Kangaroo Island population (short term and long term) both during the construction and operational phases of the proposed development. This will lead to a change in demand for various services, infrastructure and accommodation needs on the Island at various times.

8.1 Outline the likely size and source of the construction workforce and associated employees, and how accommodation requirements for this workforce will be met.

8.2 Provide information on the time of year that construction is likely to occur and identify the impact this may have on tourist accommodation on the Island, especially if construction will occur during the tourist season.

8.3 Describe the expected effects of the change in population on community infrastructure and services (including recreation, health, education, child care and other local human services) and how these are proposed to be managed.

8.4 Outline the expected impact on the permanent and semi-permanent population of Kangaroo Island during both the construction and operation phases of the project and identify housing needs for the expected increased population. This should include an analysis of existing short and medium term rentals for construction employees, as well as affordable housing options for longer term employees. Include details of discussions had with housing industry/suppliers, Kangaroo Island Council and/or Renewal SA in relation to this issue.

8.5 Provide information on the potential positive and negative social impacts that could result from a change in population as a result of the proposed development and how this is proposed to be managed.

8.6 Describe the impact on the amenity and lifestyle of existing Kangaroo Island residents who use the area for recreation purposes (include information on access to the coast in the vicinity of the port development)

8.7 Describe the consultation strategy adopted in the preparation of the EIS and identify the groups and individuals from whom comments will be sought to make written submissions in relation to the proposal.

MEDIUM ASSESSMENT

Native Vegetation & Fauna (Terrestrial and Marine)

Guideline 9: The proposed site is in an area that is mostly cleared of native vegetation, however patches of vegetation remain, and although fragmented these may provide critical habitat for fauna. Investigation into vegetation on surrounding properties and within the adjacent marine environment should also be undertaken to determine if the proposed development and associated activities will impact upon these habitat areas and the species, including migratory species, that may be reliant upon them.

Vegetation

9.1 Quantify and detail the extent, condition and significance of native vegetation (individual species and communities) that currently exist on site, and within the immediately adjacent sites, including the coastal and marine environment (in particular seagrasses, macro algae and other reef habitat).

9.2 Provide details of any existing Heritage Agreements, if any, to conserve native vegetation on and/or adjacent to the site.

9.3 Quantify and detail the extent, condition and significance of native vegetation (individual species and communities) that may need to be cleared or disturbed during construction and the ability of communities or individual species to recover, regenerate or be rehabilitated.

9.4 Describe measures to deliver any significant environmental benefit that is required by the Native Vegetation Act 1991. Identify measures to minimise and mitigate vegetation clearance, including incorporating any remnant stands in the layout design, and to compensate for any loss of native vegetation and habitat.

9.5 Identify impact avoidance, minimisation and mitigation measures and detail their effectiveness.

9.6 Describe the use of amenity/landscape plantings and potential broad scale revegetation, including the opportunities for the use of locally endemic species.

Fauna

9.7 Quantify and detail the extent, condition and significance of native fauna (individual species and communities) that currently exist on site, and within the immediately adjacent sites, including the coastal and marine environment.

9.8 Quantify and detail the extent, condition and significance of potential native fauna habitat loss or disturbance during the construction and operation phases (both on and around the site) and the ability of communities and individual species to recover, especially for resident or migratory shore birds and threatened or significant species (including those listed under the EPBC Act and the South Australian National Parks & Wildlife Act 1972).

9.9 Describe the measures that will be taken to address displaced native fauna (if any).

9.10 Detail the potential impact, including cumulative impacts, on marine fauna, both during construction and operation, including ecologically and economically important species (e.g. fisheries)

9.11 Detail appropriate buffer distances that would be required between the proposed development and threatened species, including feeding areas, nesting sites and roosting sites.

9.12 Identify all potential sources of noise emissions, vibration and light pollution from the construction and operation of the proposed development. Describe their impacts on native fauna, including nocturnal species, and how these impacts will be managed.

9.13 Identify impact avoidance, minimisation and mitigation measures and detail their effectiveness.

Traffic and Transport

Guideline 10: The proposed port, and associated infrastructure, will generate traffic, in particular for the export of timber. The proponent estimates that there will be approximately 14 shipments of harvested timber per year from KIPT operated land, and that the wharf will be used 50-75 days per annum in total for all Kangaroo Island timber exports (including from other timber operators on the Island). As it is proposed to be a multi-user wharf, traffic will also be generated from a range of potential other uses including, but not limited to, agricultural exports and tourist and/or cruise ships.

10.1 Identify the traffic impacts on the local and arterial road network, in particular North Coast Road, during both construction and operation, include an assessment of impacts during the tourist season and on neighbouring properties.

10.2 Undertake a full Traffic Impact Assessment, taking into consideration existing traffic data, accident statistics and predicted traffic volumes (including proposed vehicle types, number/frequencies and traffic peaks).

10.3 Outline proposed traffic mitigation and management measures for construction and operational phases, particularly the impact on local and arterial roads in terms of road safety, traffic routes and hours of activity.

10.4 Undertake an assessment of expected marine traffic volumes to and from the wharf, including expected boat/ship movements, timing and patterns. Describe marine traffic impacts associated with these movements (including to the existing tourism operators and the ferry services to/from the Island), and measures that will be undertaken to mitigate these impacts.

10.5 Detail the potential increase in public access to Smith Bay. Describe marine traffic impacts associated with increased public access to and use of the Bay and outline safety measures that will be implemented to ensure public safety.

10.6 Identify traffic impacts that may result from the use of the facility from other non-forestry users (e.g. agriculture, tourist and/or cruise ships).

10.7 Describe access and parking arrangements for all vehicles during construction, including any approvals and specific access requirements for over-dimensional vehicles.

10.8 Describe car parking provisions for staff and visitors, including how any potential future expansion that may be required as a result of multi-users of the port and facilities, will be accommodated and managed.

Water

Guideline 11: Water availability and use is a critical issue on Kangaroo Island and is fundamental to the livelihood and sustainability of the community and local industry. SA Water supplies reticulated water to some areas on the island, however Kangaroo Island is heavily reliant on the capture and reuse of surface water. The proponent should indicate how it is intended to source, reuse and treat water for, and at, the proposed site, to minimise impact on existing water resources and quality.

11.1 Identify the sources of water, and estimated volumes required, to provide an adequate water supply for the proposed development. Include information on potable and other water requirements.

11.2 Describe the approach to water sustainability, including ways in which water use can be minimised or supplemented (including the use of rainwater) and opportunities for reducing water use and for recycling water, particularly stormwater and wastewater.

11.3 Describe water sensitive urban design measures and uses of wastewater that will be adopted, include a description of how recycled water will be treated as part of any water sustainability measures

11.4 Outline the measures proposed to manage stormwater runoff from hard surfaces which are not being used for harvesting water supply, especially access roads. Include measures to:

- treat the stormwater
- ensure that pre-development volumes will be maintained
- ensure the removal of any toxicants and nutrients; and
- prevent increases in sediments with associated turbidity in near shore environments.

11.5 Outline the measures proposed to manage stormwater runoff/leachate from the timber product stockpile area. Include measures to:

- capture and contain leachate
- ensure the removal of any toxicants, nutrients, sediment and biochemical oxygen demand (BOD)
- measures to prevent leachate mobilisation to groundwater and the near shore environments

11.6 Describe the known existing groundwater and surface water related environmental conditions, including consideration of any existing site contamination.

11.7 Detail the measures to be taken to manage and monitor the quality of identified groundwater or surface water resources. Identify impact avoidance, minimisation and mitigation measures and their effectiveness (for any polluting activities).

11.8 Describe any potential changes to hydrology as a result of the proposed development

Noise & Light

Guideline 12: It is expected that both underwater and terrestrial noise pollution will occur during the construction phase as a result of securing the mooring and retaining structures to the seabed, the use of earthmoving equipment and physical construction of the structures. Post construction, the movement of vehicles to and from the proposed site, stockpiling and ship-loading operations onsite at Smith Bay will also generate noise. If construction and/or operations are to occur at night there will also be light pollution impacts on the surrounding area.

12.1 Detail the expected levels of environmental noise associated with the construction and operation of the development, identifying all potential noise sources, and describe the impact upon the immediate and wider locality (include sensitive receivers).

12.2 Identify if the predicted noise from ongoing operational sources associated with the project will meet the noise goals in the Environment Protection (Noise) Policy 2007 (Noise Policy) at the nearest noise sensitive receivers.

12.3 Detail how noise emissions will be reduced and contained (such as via building design/materials, noise barriers and buffers, and/or implementing operational procedures) to meet the requirements of the Noise Policy and minimise impacts upon the immediate and wider locality, including the effects from increased transport.

12.4 Detail how construction noise will meet the mandatory construction noise requirements of Part 6, Division 1 of the Noise Policy.

12.5 Detail what reasonable and practicable measures will be taken pursuant to Clause 23(1)(c) of the Noise Policy to minimise construction noise.

12.6 Identify the sources and expected levels of light pollution associated with the construction and operation of the development. Describe the impact upon the immediate and wider locality (including sensitive receivers), and outline mitigation measures.

Climate Change and Sustainability

Guideline 13: Climate change is of State, National and global importance. This proposal includes elements adjacent to, and within, the coast and seabed. Measures need to be taken to both protect the proposed infrastructure in the longer term from the impacts of a changing climate and reduce any greenhouse gas emissions associated with its construction and use.

13.1 Outline the potential effects of climate change on the proposed development (including predicted sea level rise as per Coast Protection Board allowances) from a risk management perspective, including adaptive management strategies.

13.2 Identify strategies to protect the causeway and/or jetty and wharf structures from extreme weather events, including a 1 in 50 year event. Include mitigation strategies should the structure not withstand such an event.

13.3 Describe measures to minimise, reduce and ameliorate greenhouse gas emissions, particularly the use of alternative or renewable energy sources and off-sets, energy efficiency and energy conservation measures, and identify barriers to implementation.

Risk and Hazards

Guideline 14: The Kangaroo Island Development Plan, and the South Australian Planning Strategy promote development, including infrastructure, to be located away from areas that are vulnerable to the risk of hazards for both the protection of human health and the environment. Given the location of the proposed development, the following hazards include, but are not limited to: spills (including oil), flooding, fire (in particular heavy vehicle, timber yard and bushfire), site contamination, storage and movement of hazardous materials and landslip/coastal erosion. All risks and hazards need to be detailed and consideration given to how these risks and hazards will be avoided and managed.

14.1 Detail procedures to be adopted to confirm whether site contamination exists (such as site history, site audit, and site contamination reporting) and any remedial measures proposed, including for potential acid sulphate soils

14.2 Detail management measures that will be required during construction and operation to prevent site contamination

14.3 Outline fumigation/pesticide methods to be used, if any, on the timber exports, including type, location and method of application. Include information on the disposal of any chemicals that will be used on site. Describe strategies to minimise spray drift onto the adjacent abalone farm and potential for contaminated runoff into the marine environment.

14.4 Identify any potential for Coastal Acid Sulfate Soils (CASS) to be encountered on the site and how this might be mitigated (refer to the Coast Protection Board policy on CASS)

14.5 Describe procedures and strategies to prevent, manage and mitigate ship oil spills, pollution (including toxins and contaminants from ships, such as antifoulant paints) or sewage leaks at both the port and within the Smith Bay area, having regard to the requirements of the South Australian Marine Spill Contingency Action Plan and the Protection of Marine Waters (Prevention of Pollution from Ships) Act 1987.

14.6 Detail measures and strategies for the management of hazardous, flammable or explosive materials, including risk contours

14.7 Outline the proposal for bunding of hazardous materials

14.8 Identify the flooding and erosion risks to the site (including flooding and erosion exacerbated by sea level rise and extreme weather events) and measures to reduce the risks.

14.9 For areas where liquids (other than rainwater) may be stored, describe measures (including bunding) to minimise the risk of environmental harm from spills and leaks.

14.10 Identify the fire and bushfire risks at the site and to/from the site (e.g. from heavy vehicle movements) and details fire measures to reduce risk. Include details of discussions had with SA CFS.

14.11 Outline how timber pile separation will be undertaken in accordance with the South Australian Fire Services Built Environs Section Guideline No.13 - General Guidelines for Rubber Tyre Storage².

14.12 Describe the emergency response plan in the event of an emergency, including evacuation measures

14.13 Describe strategies to ensure public safety during construction and operation

14.14 Outline the associated risks should the proposal not go ahead, or if the proposal is not completed, and identify measures to mitigate these risks.

Infrastructure Requirements

Guideline 15: The construction and operation of a port and wharf, such as that proposed at Smith Bay, will require specific infrastructure, equipment and utility needs. These need to be identified and consideration given to how these requirements will be met, and how any increased demand will impact upon existing users.

15.1 Provide details of the proposed process, mechanisms, equipment and infrastructure that will be used to transport and load the timber products on site (include details of the estimated time that will be required to load each shipment). Outline the risks, benefits and constraints of the proposed process, mechanisms, equipment and infrastructure.

15.2 Outline the requirements for an adequate supply, and the location of distribution networks for: gas, electricity, waste, potable water, sewerage, stormwater and wastewater management, communications systems and local and other roads. Identify the impact this will have on existing users of these networks. Include information of discussions had with existing suppliers and service providers to/on the Island.

15.3 Identify any infrastructure upgrade or augmentation that will be required to the existing distribution networks (as identified above) on the Island to support the development for the life of the project. Include information on how this will be managed and funded.

² SA CFS advises that the same principles are applied the storage and pile separation of timber as apply to rubber tyres

15.4 Detail the ability of existing infrastructure to manage waste (including hard waste and wastewater) and recycling streams that will result from the proposed development.

15.5 Detail any road infrastructure improvements or upgrades that will be required to provide safe and efficient access to the port including any potential junction/intersections on the arterial road network. Include information of discussions had with the Kangaroo Island Council, and identify funding arrangements for any such improvements or upgrades.

15.6 Outline opportunities to incorporate best practice infrastructure design.

15.7 Detail potential emergency services requirements and arrangements. Include information of discussions had with existing emergency service providers on the Island.

Aboriginal and Other Heritage

Guideline 16: Aboriginal and other heritage can include matters such as archaeological sites and Aboriginal remains, Aboriginal sites and objects of significance according to Aboriginal tradition, archaeology, anthropology or history, caves, mines, volcanic features, geological sites, fossils, historical buildings and monuments, relics of agricultural and industrial heritage, shipwrecks, lighthouses, whaling stations, wilderness and coastlines.

Coastal areas in particular are prone to discovery of items of Aboriginal heritage and significance.

All development should consider the impacts it may have upon Aboriginal and other heritage matters (land and marine).

16.1 Describe the measures taken in consultation with the Department of State Development Aboriginal Affairs and Reconciliation (DSD-AAR) to identify the Aboriginal heritage in the project and surrounding area, including the outcomes of:

- a request for a search of the Register of Aboriginal Sites and Objects maintained by DSD-AAR
- discussion with the relevant Traditional Owners, Aboriginal Organisations and interested Aboriginal parties
- where applicable, an on ground archaeological and anthropological heritage survey as determined by an informed risk assessment of the likelihood of surface or sub-surface damage, disturbance or interference to Aboriginal sites, objects of Aboriginal remains.

16.2 Provide information on how the proposal is not in conflict with the distinct beliefs or cultural practices of the relevant Traditional Owners, Aboriginal Organisations or interested Aboriginal parties.

16.3 Describe the measures that will be put in place to manage the risk of damaging, disturbing or interfering with any heritage that has been identified by the consultation undertaken above and any plans to manage the discovery of any Aboriginal heritage during work activities.

16.4 Describe the measures taken in consultation with the Department of Environment, Water and Natural Resources (DEWNR), the South Australian Heritage Council, the Kangaroo Island Council and community groups to identify the non-indigenous cultural and other heritage in the project and surrounding area.

16.5 Identify the impact on the heritage significance of any known non-indigenous heritage places on or in proximity to the project site that have been identified by the consultation undertaken above. Describe the measures that will be put in place to manage the risk of damaging, disturbing or interfering with any heritage that has been identified.

16.6 Identify measures to protect any historic shipwrecks within the port and coastal area during construction, in accordance with the Historic Shipwrecks Act 1981.

STANDARD ASSESSMENT

Geology and Soils

Guideline 17: The proposal will require the construction of structures on and/or adjacent to coastal geological formation, this may have impacts on those formations and their natural processes.

17.1 Describe the underlying geology and the nature of the soils with special reference to coastal landforms

17.2 Outline the interaction between surface erosions processes and the proposed development

17.3 Investigate, describe and illustrate the impact of the proposal on the landscape quality of the coastal environment and on any significant geological features

17.4 Identify measures to stabilise disturbed areas and areas susceptible to soil erosion

17.5 Identify geological, seabed and substrate impacts that may occur as a result of any dredging activity that will be undertaken during the construction phase. Detail measures for managing these impacts.

17.6 Identify the total 'in water' footprint of the proposed development (including all areas to be dredged and/or altered).

Built Form and Design

Guideline 18: The development is proposed in an area that is a relatively remote coastal landscape that is natural in appearance. There are no other developments of this scale or type situated along this portion of coastline. The proposed development will establish a prominent visual feature along the coastline. Kangaroo Island is internationally known for its natural beauty and this must be considered in the built form and design of the proposed development.

18.1 Provide details of construction materials, colours and landscaping for all buildings and structures

18.2 Describe and illustrate the visual effect of the proposed development on the locality when viewed from important viewing points, including from the land and sea.

18.3 Describe the rationale for the major design elements of the proposed development and measures to mitigate their visual impact

18.4 Describe the use of amenity/landscape plantings and potential broad scale revegetation, including the opportunities for the use of locally endemic species

18.5 Describe how the design and construction of all buildings and structures will be controlled to ensure environmental sustainability and cohesive visual amenity

18.6 Provide details of the shelter, shading and screening treatments for car parking areas

Construction and Operation

Guideline 19: During the construction and operation of a large infrastructure project, such as what is proposed at Smith Bay, there will be a range of standard impacts that can occur. Many of these can be adequately managed through construction and operational environmental management plans. As the wharf

is proposed to be multi-user, information is needed on who the other potential users may be and how often it is anticipated to be used for other purposes.

19.1 *Provide draft environmental management plans, for both construction and operational activities, for all components of the development*

19.2 *Detail the measures and the management responsibilities to contend with sand management and seagrass wrack accumulation*

19.3 *Outline the timing of construction and the time of year it is likely to occur*

19.4 *For each component, provide a site construction plan and outline strategies to minimise effects on the local environment*

19.5 *Assess the requirement for any hazardous exclusion zones around the proposed causeway and/or jetty and wharf during ship loading activities, including the tug harbour.*

19.6 *Identify all sources of waste during construction and operation and describe how the State Waste Strategy will be implemented.*

19.7 *Describe measures proposed for the disposal of excavated material.*

19.8 *Outline measures to minimise or reduce materials and construction resources used during the construction and operational phases.*

19.9 *Describe the level of cut and fill required and the effect on the natural topography of the site, including the access and the storage areas*

19.10 *Where possible, identify the source and origin of construction materials for buildings and infrastructure (including roads) and the opportunity for the use of recycled materials*

19.11 *Provide information about the transport and storage of construction materials to minimise effects on the local environment.*

19.12 *Describe the implementation of environmentally acceptable work practices and monitoring programs*

19.13 *Describe the proposed monitoring of impacts during and after construction, including reporting and auditing measures*

19.14 *Describe the management agreements between the Kangaroo Island Council and the proponent during and after construction, including ongoing road maintenance and management.*

19.15 *Provide details of potential other users of the wharf and/or port facilities. Describe likely timing of when these users are anticipated to use these facilities, and responsibilities for the management of this use.*

19.16 *Detail long-term management/maintenance arrangements for the operation and decommissioning of the facility, including the ownership of land and infrastructure, sand management and any coastal protection measures*

19.17 *Describe the rehabilitation strategy to be adopted if the development ceases prior to completion, during any stage of the development or during its operational phase. Include details on funding for any rehabilitation that may be required.*

APPENDIX 1 – SECTION 46B OF THE *DEVELOPMENT ACT 1993*

46B—EIS process—Specific provisions

- (1) This section applies if an EIS must be prepared for a proposed development or project.
- (2) The Minister will, after consultation with the proponent—
 - (a) require the proponent to prepare the EIS; or
 - (b) determine that the Minister will arrange for the preparation of the EIS.
- (3) The EIS must be prepared in accordance with guidelines determined by the Development Assessment Commission under this Subdivision.
- (4) The EIS must include a statement of—
 - (a) the expected environmental, social and economic effects of the development or project;
 - (b) the extent to which the expected effects of the development or project are consistent with the provisions of—
 - (i) any relevant Development Plan; and
 - (ii) the Planning Strategy; and
 - (iii) any matters prescribed by the regulations;
 - (c) if the development or project involves, or is for the purposes of, a prescribed activity of environmental significance as defined by the *Environment Protection Act 1993*, the extent to which the expected effects of the development or project are consistent with—
 - (i) the objects of the *Environment Protection Act 1993*; and
 - (ii) the general environmental duty under that Act; and
 - (iii) relevant environment protection policies under that Act;
 - (ca) if the development or project is to be undertaken within the Murray-Darling Basin, the extent to which the expected effects of the development or project are consistent with—
 - (i) the objects of the *River Murray Act 2003*; and
 - (ii) the *Objectives for a Healthy River Murray* under that Act; and
 - (iii) the general duty of care under that Act;
 - (cb) if the development or project is to be undertaken within, or is likely to have a direct impact on, the Adelaide Dolphin Sanctuary, the extent to which the expected effects of the development or project are consistent with—
 - (i) the objects and objectives of the *Adelaide Dolphin Sanctuary Act 2005*; and
 - (ii) the general duty of care under that Act;
 - (cc) if the development or project is to be undertaken within, or is likely to have a direct impact on, a marine park, the extent to which the expected effects of the development or project are consistent with—
 - (i) the prohibitions and restrictions applying within the marine park under the *Marine Parks Act 2007*; and
 - (ii) the general duty of care under that Act;
 - (d) the proponent's commitments to meet conditions (if any) that should be observed in order to avoid, mitigate or satisfactorily manage and control any potentially adverse effects of the development or project on the environment;

- (e) other particulars in relation to the development or project required—
 - (i) by the regulations; or
 - (ii) by the Minister.
- (5) After the EIS has been prepared, the Minister—
- (a) —
 - (i) must, if the EIS relates to a development or project that involves, or is for the purposes of, a prescribed activity of environmental significance as defined by the *Environment Protection Act 1993*, refer the EIS to the Environment Protection Authority; and
 - (ia) must, if the EIS relates to a development or project that is to be undertaken within the Murray-Darling Basin, refer the EIS to the Minister for the River Murray; and
 - (ib) must, if the EIS relates to a development or project that is to be undertaken within, or is likely to have a direct impact on, the Adelaide Dolphin Sanctuary, refer the PER to the Minister for the Adelaide Dolphin Sanctuary; and
 - (ic) must, if the EIS relates to a development or project that is to be undertaken within, or is likely to have a direct impact on, a marine park, refer the PER to the Minister for Marine Parks; and
 - (ii) must refer the EIS to the relevant council (or councils), and to any prescribed authority or body; and
 - (iii) may refer the EIS to such other authorities or bodies as the Minister thinks fit, for comment and report within the time prescribed by the regulations; and
 - (b) must ensure that copies of the EIS are available for public inspection and purchase (during normal office hours) for at least 30 business days at a place or places determined by the Minister and, by public advertisement, give notice of the availability of copies of the EIS and invite interested persons to make written submissions to the Minister on the EIS within the time determined by the Minister for the purposes of this paragraph.
- (6) The Minister must appoint a suitable person to conduct a public meeting during the period that applies under subsection (5)(b) in accordance with the requirements of the regulations.
- (7) The Minister must, after the expiration of the time period that applies under subsection (5)(b), give to the proponent copies of all submissions made within time under that subsection.
- (8) The proponent must then prepare a written response to—
- (a) matters raised by a Minister, the Environment Protection Authority, any council or any prescribed or specified authority or body, for consideration by the proponent; and
 - (b) all submissions referred to the proponent under subsection (7),
- and provide a copy of that response to the Minister.
- (9) The Minister must then prepare a report (an **Assessment Report**) that sets out or includes—
- (a) the Minister's assessment of the development or project; and
 - (b) the Minister's comments (if any) on—
 - (i) the EIS; and
 - (ii) any submissions made under subsection (5); and
 - (iii) the proponent's response under subsection (8); and
 - (c) comments provided by the Environment Protection Authority, a council or other authority or body for inclusion in the report; and

- (d) other comments or matter as the Minister thinks fit.
- (10) The Minister must –
- (a) notify a person who made a written submission under subsection (5) of the availability of the Assessment Report in the manner prescribed by the regulations; and
 - (b) by public advertisement, give notice of the place or places at which copies of the Assessment Report are available for inspection and purchase.
- (11) Copies of the EIS, the proponent's response under subsection (8), and the Assessment Report must be kept available for inspection and purchase at a place determined by the Minister for a period determined by the Minister.
- (12) If a proposed development or project to which an EIS relates will, if the development or project proceeds, be situated wholly or partly within the area of a council, the Minister must give a copy of the EIS, the proponent's response under subsection (8), and the Assessment Report to the council.

APPENDIX 2 – EDITORIAL CHANGES

Summary of editorial changes to accommodate proposed change:

- Updated Introduction section
- References to causeway have been changed to 'causeway and/or jetty' where necessary
Note - the word 'causeway' has been left in relation to Alternative Structures – Guideline 7 as this Guideline was relevant for original proposal which included a causeway.
- Guideline 2.6 – removal of word 'screw'
- Guidelines 2.7 & 17.5 remain unchanged in relation to dredging as these were relevant for the original proposal which included dredging