



30 April 2013

Mr Darren Holloway
Monteath & Powys Pty Ltd
PO Box 726
NEWCASTLE NSW 2300

Contact: Brent Devine
Phone: 02 9228 6328
Fax: 02 9228 6455
Email: brent.devine@planning.nsw.gov.au

Our ref: SSD 13_5916

Dear Mr Holloway

Subject: Director-Generals Environmental Assessment Requirements (DGRs) for Proposed Tourist Facility – 4177 Nelson Bay Road, Anna Bay (SSD 13_5916)

The Department has received your request for Director General's environmental assessment requirements (DGRs) for the above development.

I have attached a copy of the DGRs for the preparation of an Environmental Impact Statement (EIS) for the development. These requirements have been prepared in consultation with relevant government authorities. I have also attached a copy of the government authorities' comments for your information.

The DGRs have been prepared based on the information you have provided to date. Please note that under Clause 3(5) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation), the Director-General may alter these requirements at any time. If you do not lodge a DA and EIS for the development within 2 years, the DGRs will expire.

The Department re-iterates its concerns regarding the proposal outlined in previous correspondence. By issuing the DGRs, the Department is not endorsing the likelihood of future development on this site. The Department recommends you carefully consider all issues and associated impacts of the proposal prior to proceeding with preparation of an EIS.

Prior to exhibiting the EIS that you submit for the development, the Department will review the document to determine if it addresses the requirements in Schedule 2 of the EP&A Regulation. The Department may consult with other relevant government authorities in making this decision. Please provide one hard copy and one electronic copy of the EIS to assist this review.

If the Department considers that the EIS does not address the requirements in Schedule 2 of the EP&A Regulation, you may be required to submit an amended EIS. Once the Department is satisfied that the requirements have been addressed, you will be contacted regarding arrangements for public exhibition.

If your development is likely to have a significant impact on matters of National Environmental Significance, it will require an approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This approval would be in addition to any approvals required under NSW legislation and it is your responsibility to contact the Department of Sustainability, Environment, Water, Population and Communities to determine if an approval under the EPBC Act is required for your development (<http://www.environment.gov.au> or 6274 1111).

Your contact officer for this proposal, Mr Brent Devine, can be contacted on (02) 9228 6328 or via email at brent.devine@planning.nsw.gov.au. Please mark all correspondence regarding the proposal to the attention of the contact officer.

Yours sincerely

Heather Warton
Director,
Metropolitan and Regional Projects North

Director General's Environmental Assessment Requirements

Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

Application Number	SSD 13_5916
Proposal Name	Anna Bay Tourist Facility
Location	4177 Nelson Bay Road, Anna Bay – Port Stephens LGA
Applicant	Spacecon Pty Ltd
Date of Issue	30 April 2013
General Requirements	The Environmental Impact Statement (EIS) must meet the minimum requirements in Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>, specifically: • form specifications under Part 3, clause 6; and • content specifications under Part 3, clause 7(1) and (4).
Key issues	The EIS must address the following specific matters: 1. Environmental Planning Instruments (EPIs) Address the relevant statutory provisions applying to the site contained in all relevant EPIs, including: • State Environmental Planning Policy (State and Regional Development) 2011 • State Environmental Planning Policy No. 14 – Coastal Wetlands • State Environmental Planning Policy No. 44 – Koala Habitat Protection • State Environmental Planning Policy No. 55 – Remediation of Land • State Environmental Planning Policy No. 71 – Coastal Protection • State Environmental Planning Policy (Infrastructure) 2007 • State Environmental Planning Policy (Rural Lands) 2008 • Port Stephens Local Environmental Plan 2000 • Draft Port Stephens Local Environmental Plan 2013 2. Policies and Guidelines Address the relevant planning provisions, goals and strategic planning objectives in the following: • NSW 2021 • Lower Hunter Regional Strategy 2006–31 • Lower Hunter Regional Conservation Plan • NSW Coastal Policy 1997 • Coastal Design Guidelines for NSW • Port Stephens Development Control Plan (DCP) 2007 • Port Stephens Section 94A Development Contributions Plan 2006 Detail how the development promotes or is consistent with the following provisions and strategic objectives: 3. Site Layout, Urban Design and Strategic Requirements • A suitable urban design response having regard to the site constraints should be developed. • Provide details regarding any proposed staging of the proposed development. • Demonstrate suitability of the proposal with the surrounding area in relation to bulk, scale, amenity (including noise) and visual amenity having

	regard to the Coastal Design Guidelines of NSW (2003) and the NSW Coastal Policy 1997. - Describe each of the individual elements that make up the proposal (eg: hotel, conference facility, café, restaurant etc.) and detail the nature and extent of any inconsistencies of these elements with the aims and objectives of the Rural 1(A) zone under the Port Stephens Local Environmental Plan 2000. - Identify the development standards applying to the site. Provide justification for any development standards not being met. 4. Ecological Impact - A detailed ecological assessment is to be prepared incorporating the following: - identification of any threatened species that are known or likely to occur on the site. - identification of any known or potentially occurring Endangered Ecological Communities (EECs) on the site. - an assessment of any potential direct or indirect impacts on threatened biodiversity, native vegetation and existing habitat. - an assessment of any potential direct or indirect impacts on areas of State Environmental Planning Policy No. 14 – Coastal Wetlands, including impacts of surface water flows to wetland areas. - Outline measures for the conservation of existing wildlife corridor values and/or connective importance of any vegetation on the subject land. - Identify any watercourses on the site and provide scaled plans showing the location of the top of bank, riparian land, and any remnant vegetation surrounding the watercourses. - Address any ecological impacts of surface water flows from the site on aquatic flora and fauna within Wallis Creek or other nearby waterways and estuaries. - Provide a description of any design features and measures to be incorporated as part of the proposal to prevent environmental disturbances (short and long term), particularly in respect of maintaining the natural hydrological regime and identification of riparian and SEPP 14 Coastal Wetland buffers. - Outline the long-term management and maintenance of any conservation areas including ownership and control, management and maintenance funding, public access, revegetation and rehabilitation works and bushfire management. - Address any potential direct or indirect impacts on the Port Stephens-Great Lakes Marine Park. - Address any potential direct or indirect impacts on the Tilligerry Nature Reserve. - Address any potential direct or indirect impacts on groundwater dependant ecosystems. → <i>Relevant Policies and Guidelines:</i> <i>Threatened Biodiversity Survey and Assessment: Guidelines for Development and Activities – Working Draft</i> (DEC, 2004) <i>Guidelines for Threatened Species Assessment</i> (DoP, 2005) <i>Port Stephens Council Comprehensive Koala Plan of Management</i> 5. Ecologically Sustainable Development (ESD) - Detail how ESD principles (as defined under Part 3, clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) will be incorporated as part of the proposal. - Include a description of the measures that would be implemented to minimise consumption of resources, water and energy, including an Integrated Water Management Plan which details any proposed alternative water supplies, proposed end uses of potable and non-potable
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	water, and demonstrates water sensitive urban design and any water conservation measures. • Demonstrate any on site stormwater retention measures to ensure a reduction in stream flows and maximise rainwater and stormwater reuse. 6. Flooding Impacts A detailed hydrological and hydraulic assessment should be undertaken and is required to include the following: • A comprehensive assessment of the impact of flooding on the proposed development for the full range of flood events up to the probable maximum flood. This assessment should address any relevant provisions of the NSW Floodplain Development Manual (2005) including the potential effects of climate change, sea level rise and an increase in rainfall intensity. • Assessment of the impact of the proposed development on the flood behaviour (i.e. levels, velocities and duration of flooding) and the impact of the proposed development on adjacent, downstream and upstream areas. • Detail proposed floor levels for all proposed habitable structures on the site having considered the full range of flood events up to the probable maximum flood. • Detail an emergency response plan for the site. This plan should include consideration of a flood free access to or from the development site in extreme flood events. 7. Stormwater Management A detailed stormwater management plan for the site should be prepared and is required to include the following: • Details of drainage associated with the proposal, including the proposed design of stormwater and drainage infrastructure to avoid any adverse impacts on downstream properties. • The application should address stormwater drainage within and surrounding the site, supported by detailed catchment modelling. A catchment analysis which identifies the upstream, downstream and internal catchment boundaries, characteristics and regimes in undeveloped and fully developed conditions. The analysis should include existing overland flow paths and contours, streams and flood liable areas present on the site, as well as any existing drainage structures/systems. → <i>Relevant Policies and Guidelines:</i> • <i>NSW Floodplain Development Manual (2005)</i> • <i>Practical Consideration of Climate Change (DECC, 2007)</i> 8. Economic Impact Assess the supply and demand for potential future land uses facilitated by the proposal and identify any negative economic impacts (if relevant) and appropriate mitigation measures. 9. Transport and Accessibility • Estimate the total daily vehicle trips anticipated to be generated by the proposal. • Assess the impacts of the traffic generated on local road networks, including intersection capacity and the potential need for any funding for upgrading or road works, having regard to the planning controls applicable to the site. The assessment needs to be supported by appropriate modelling and analysis to the satisfaction of the relevant roads authority. • Details of the intersection layout/configuration, supported by detailed traffic analysis at the intersection of Nelson Bay Road and the Crown Road. • Assess any likely impacts of the proposal on the partially formed Crown Road located between the northern and southern land parcels. Detail any
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	proposed arrangements to transfer ownership of the Crown Road to Port Stephens Council. • Detail access and parking provisions (including proposed number of car parks) associated with the proposed development including compliance with the requirements of the relevant Australian Standards. • Detail any proposed cycleways proposed as part of the development. <i>Relevant Policies and Guidelines:</i> → <i>Relevant Policies and Guidelines:</i> • <i>Guide to Traffic Generating Developments (RTA);</i> • <i>EIS Guidelines – Road and Related Facilities (DoPI).</i> 10. Amenity Visual impacts of the proposal should be considered particularly upon view from Nelson Bay Road and immediately adjoining rural residential areas. The use of visual aids such as photomontages should be used to demonstrate visual impacts of the proposal. 11. Sediment, Erosion and Dust controls (Construction and Excavation) Detail the management of bulk earthworks across the site including measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles. → <i>Relevant Policies and Guidelines:</i> • <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)</i> 12. Acid Sulphate Soils The EIS shall include an Acid Sulphate Soils (ASS) management plan to manage any potential exposure of ASS during construction of services and infrastructure. The ASS management plan should ensure subsurface works are designed and constructed so that trenches do not act as a conduit for acid water potentially generated by the works. Fisheries NSW should be consulted in preparing the ASS management plan. 13. Contamination The EIS shall be accompanied by a Phase 1 and Phase 2 site contamination assessment, and consideration of a remediation plan (if applicable), which is to demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. → <i>Relevant Policies and Guidelines:</i> • <i>Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP)</i> 14. Infrastructure Requirements • Provide a detailed written and geographical description of the infrastructure required on-site. • Address existing capacity and requirements of the development for sewerage, water, electricity, waste disposal, telecommunications and gas in consultation with the relevant service providers. Identify and describe staging, if any, of infrastructure works. • Identify any infrastructure upgrades that are required off-site to facilitate the orderly and economic development of the site, and a description of the arrangements that would be put in place to ensure that these upgrades are implemented in a timely manner and maintained. 15. Bushfire • Demonstrate that the proposal complies with the requirements of Planning for Bush Fire Protection 2006, particularly in regards to public road access; internal road access; water, electricity and gas; and landscaping.
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	• Prepare an Emergency Evacuation Plan having regard to the document Guidelines for the Preparation of an Emergency / Evacuation Plan (RFS). • Outline any proposed bushfire mitigation measures. → <i>Relevant Policies and Guidelines:</i> • <i>Planning for Bushfire Protection</i> (RFS, 2006) 16. Noise • Identify the main noise generating sources and activities at all stages of construction and operation. Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land. • Investigate the impact of noise and vibration both during construction and operation of the project on residents in the immediate vicinity of the site. → <i>Relevant Policies and Guidelines:</i> • <i>NSW Industrial Noise Policy</i> (EPA) • <i>Interim Construction Noise Guideline</i> (OEH) 17. European Heritage • A Statement of Significance and an assessment of the impact on the heritage significance of any heritage items and / or conservation areas should be undertaken in accordance with the guidelines in the NSW Heritage Manual. The assessment should include a consideration of wider heritage impacts in the area surrounding the site. • Consult any relative heritage lists maintained by the Office of Environment and Heritage, the National Trust of Australia, the Australian Government under the <i>Environment Protection and Biodiversity Conservation Act 1999</i>, and Port Stephens Council in order to identify any items of heritage significance that may be affected by the proposal. 18. Aboriginal Cultural Heritage • Address Aboriginal Cultural Heritage in accordance with the Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (2005) and Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010). Any impacts to Aboriginal cultural heritage as a result of the proposal must be adequately mitigated. • Where it is likely that the project will impact on Aboriginal heritage, adequate community consultation should take place regarding the assessment of significance, likely impacts, and management/mitigation measures. • Describe any actions that will be taken in order to avoid or mitigate impacts the proposal may have on Aboriginal cultural heritage values. → <i>Relevant Policies and Guidelines:</i> • <i>Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales</i> (EPA, 2010) 19. Waste Identify, quantify and classify the likely waste streams to be generated during construction and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. 20. Mosquito Management Mosquitoes are a potential health risk due to the sites proximity to saltmarsh areas. A comprehensive mosquito plan of management for the site shall be prepared as part of the EIS.
Plans and Documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents.

	In addition, the EIS must include the following: • Survey Plan of the site as existing • Demolition Plan (if applicable) • Remediation Action Plan (if applicable) • Detailed Earthworks Plan • Stormwater Concept Plan • Landscaping Plans • Construction Management Plan, inclusive of a Construction Traffic Management Plan and construction methodology; • Geotechnical Report and Structural Report
Consultation	During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with: • Port Stephens Council • Office of Environment and Heritage • Department of Primary Industries, including: ◦ Crown Lands ◦ NSW Office of Water ◦ Fisheries NSW ◦ Agriculture • Roads and Maritime Services • NSW Rural Fire Service • Hunter-Central Rivers Catchment Management Authority • Marine Parks Authority NSW (Port Stephens-Great Lakes Marine Park) • Worimi Local Aboriginal Land Council and Maaiangal Elders Group • Hunter Water The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. Further guidelines, policies, and plans that may be relevant to the assessment of this project are listed within the government authority responses (provided at Attachment 1).

ATTACHMENT 1
Government Authority Responses
For information only

ATTACHMENT 2

**LETTER FROM NSW OFFICE OF ENVIRONMENT AND
HERITAGE AS INPUT TO THE DGRs**

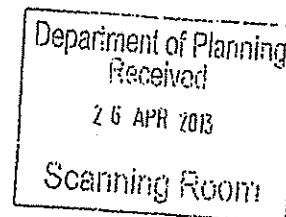


Office of
Environment
& Heritage



Your reference: SSD13_5916
Our reference: DOC13/14514; FIL13/4105
Contact: David Paul; 4908 6837

Mr Brent Devine
Environmental Planner
Department of Planning & Infrastructure
GPO Box 39
SYDNEY NSW 2001



Dear Mr Devine

RE: DIRECTOR GENERAL'S REQUIREMENTS FOR THE DEVELOPMENT OF A TOURIST FACILITY AT 4177 NELSON BAY ROAD, ANNA BAY

I refer to your letter dated 9 April 2013 seeking input into the Department of Planning and Infrastructure Director General's Requirements (DGRs) for the development of a tourist facility, 'The Bay Resort' at Nelson Bay Road, Anna Bay, a proposed State Significant Development (SD13_5916).

It is acknowledged that this project would involve the removal of approximately 11 hectares of largely disturbed native vegetation to facilitate the development.

The attached recommendations to the DGRs are based on the information provided in the Preliminary Environmental Assessment report titled the 'Preliminary Environmental Assessment: The Bay Resort, Nelson Bay Road, Anna Bay' as prepared by Monteath and Powys Pty Ltd (April 2013).

The Office of Environment and Heritage (OEH) has considered the details of the proposal and has identified the information it requires to assess the proposal (see Attachment 1). The proponent should ensure that the EIS is sufficiently comprehensive to enable the OEH to determine the extent of the impact(s) of the proposal.

In carrying out the assessment, the proponent should refer to the relevant guidelines as listed in Attachments 2 and 3 and relevant best practice management guidelines. In particular, it is noted that Aboriginal Heritage and Ecological information provided in the Preliminary Environmental Assessment is more than five years old. OEH maintains a policy that studies need to be undertaken in the last five years so that recent data may be taken into account.

OEH requests two (1) hard and four (2) electronic (CD) copies of the EIS for assessment. These documents should be sent to:

Manager, Planning and Aboriginal Heritage
Office of Environment and Heritage
PO Box 488G
NEWCASTLE NSW 2300.

If you require any further information regarding this matter please contact David Paull, Regional Biodiversity Conservation Officer, on 4908 6837.

Yours sincerely

A handwritten signature in black ink, appearing to read 'R Bath', with a long horizontal flourish extending to the right.

22 APR 2013

RICHARD BATH
Head - Hunter Planning Unit
Regional Operations

ATTACHMENT 1

OEH's Recommended Director General's Requirement's for the 'Bay Resort' Tourist Facility

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1 Environmental impacts of the project

Impacts related to the following environmental issues need to be assessed, quantified and reported on:

- Aboriginal cultural heritage
- Biodiversity

Environmental impact statements (EISs) should address the specific requirements outlined below and assess impacts in accordance with the relevant guidelines mentioned. A full list of guidelines is at Attachment 2.

2 The Proposal

The objectives of the proposal should be clearly stated and refer to:

- the size, scale and type of the activity / development;
- all anticipated environment impacts, both direct and indirect, including level of vegetation / habitat clearing;
- threatened species, populations, ecological communities and / or habitats impacted upon;
- the staging and timing of the proposal; and
- the proposal's relationship to any other proposal and/or developments.

SPECIFIC ISSUES

3 Aboriginal Cultural Heritage

OEH recommends that the following Aboriginal cultural heritage issues be addressed by the proponent in preparing the EIS.

Existing Aboriginal cultural heritage values

OEH acknowledges the existence of numerous registered Aboriginal sites in the associated locality. These include middens, isolated finds, camp sites, artefact scatters, resource and gathering areas, burials, ceremonial places and potential artefact scatters (PADS). It is also acknowledged that the project area contains landforms which have yielded a significant volume of evidence of Aboriginal occupation. It is therefore recommended that the proponent consider any potential impacts of the proposal on these known Aboriginal sites/objects, the sensitivity and significance of these sites to the traditional Aboriginal knowledge holders and any relationship that may exist between these sites and any Aboriginal cultural heritage values of the project area.

Potential impacts of the project on Aboriginal cultural heritage values

Standard requirements:

1. The EIS must address and document the information requirements set out in the draft '*Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation*' (Department of Environment and Conservation 2005). This document is available from Department of Planning and Infrastructure upon request.
2. The EIS must include surveys by suitably qualified archaeological consultants in consultation with all of the local Aboriginal knowledge holders.
3. The EIS should identify the nature and extent of impacts on Aboriginal cultural heritage values across the project area and clearly articulate strategies proposed to avoid/minimise these impacts.

If impacts are proposed as part of the final development, clear justification for such impacts should be provided.

4. The EIS must assess and document the archaeological and Aboriginal significance of the project area's Aboriginal cultural heritage values.
5. Describe the actions that will be taken to avoid or mitigate impacts of the project on Aboriginal cultural heritage values. This must include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented. Any proposed methodology for Aboriginal cultural heritage investigation should reflect best practice standards recommended by OEH in the 'Code of Practice for Archaeological Investigations of Objects in New South Wales (2010)'.
6. The EIS must provide documentary evidence to demonstrate that effective community consultation with Aboriginal communities has been undertaken in assessing impacts, developing protection and mitigation options and making final recommendations. OEH supports broad-based Aboriginal community consultation and as a guide OEH's 'Aboriginal cultural heritage consultation requirements for proponents 2010' provides a useful model to follow. This requirement is available on OEH's website at:
www.environment.nsw.gov.au/licences/consultation.htm.
7. If impacts on Aboriginal cultural heritage values are proposed as part of the final development, an assessment of the proposed impacts in the context of 'inter generational equity' and cumulative impact must be undertaken. This assessment must examine both cultural and archaeological perspectives equally at both the local and regional levels, with consideration given to the site level and broader landscape level.

Note: If the EIS is relying on past surveys it is critical to confirm that the surveys are consistent with the requirements of the above State Significant Development project application guidelines. Further, whilst there may be no requirement for obtaining an Aboriginal Heritage Impact Permit (AHIP) under Part 6 of the *National Parks and Wildlife Act 1974* (NPW Act) for state significant development projects approved under the provisions of the *Environmental Planning and Assessment Act 1979*, there are other sections of the NPW Act which remain valid. This includes the requirement to obtain a Care Agreement for salvaged objects (Section 85) and reporting to OEH on the status of new or impacted Aboriginal sites (Section 89A).

4 Biodiversity

OEH acknowledges that the proposal will directly impact upon approximately 11 ha of largely disturbed vegetation though is located adjacent to SEPP 14 Wetland, is on flood-prone land and land that contains acid-sulphate soils and threatened ecological communities. This may provide habitat to threatened species and populations, and as such, where applicable, an appropriate assessment (including relevant surveys) must be conducted in accordance with the following recommendations.

While the extent of the proposed development is not extensive, the PEA identifies a Level 2 risk if mitigating actions are not implemented. OEH is of the opinion that a Level 3 risk to ecological systems is more likely given "Medium term environmental impacts affecting local environmental systems" due to an unplanned and catastrophic event. Given the extent of impact and the level of potential threat to surrounding ecosystems, it is anticipated that a compensatory habitat (offset) package would be required.

Biodiversity impacts can be assessed using the BioBanking Assessment Methodology (scenario 1) or a detailed biodiversity assessment (scenario 2). The requirements for each of these approaches are detailed below.

Scenario 1 - Where a proposal is assessed using the BioBanking Assessment Methodology (BBAM DECC 2008):

1. Where a BioBanking Statement is being sought under Part 7A of the TSC Act, the assessment must be undertaken by an accredited BioBanking assessor (as specified under Section 142B (1)(c) of the TSC Act) and done in accordance with the BioBanking Assessment Methodology and Credit Calculator Operational Manual (OEH 2011a). To qualify for a BioBanking Statement a proposal must meet the improve or maintain standard.
2. The EIS should include a specific Statement of Commitments that reflects all requirements of the BioBanking Statement including the number of credits required and any DG approved variations to impact on Red Flags.
3. The EIS should include a specific Statement of Commitments which:
 - is informed by the outcomes of the proposed BioBanking assessment offset package;
 - sets out the ecosystem and species credits required by the BioBanking Assessment Methodology and how these ecosystem and/or species credits will be secured and obtained;
 - if the ecosystem or species credits cannot be obtained, provides appropriate alternative options to offset expected impacts, noting that an appropriate alternative option may be developed in consultation with OEH officers and in accordance with OEH policy;
 - demonstrates how all options have been explored to avoid red flag areas;
 - submission of credit calculator files for both the development and biobank sites as outlined in Attachment 3,
 - all appropriate BioBanking assessment files (including all reports, underlying assumptions [particularly in the selection of vegetation types from the vegetation types database, placement of assessment circles, connectivity assessment etc], associated maps, field sheets etc), and any relevant expert reports (if applicable). Attachment 3 is a checklist of information required when utilising the BioBanking Assessment Methodology and can be used as a guide to the relevant information required,
 - all appropriate GIS shape files (e.g. maps, plots and transects, assessment circles, species polygons, vegetation communities),
 - geo-referenced map(s) showing the locality of the offset lands, relevant vegetation zones and management areas (if applicable),
 - legible copies of all field plot / transect data sheets for all plots entered into the credit calculator. This is the primary source of information OEH utilises to assess biometric vegetation types chosen, habitat preferences and site condition, and
 - with respect to the use of the offset policy, the level or tier of offset achieved must be clearly stated and explained, and any credit variation rules which have been applied must be justified.
4. Where the 'NSW OEH interim policy on assessing and offsetting biodiversity impacts, State significant development (SSD) and State significant infrastructure (SSI) projects' (OEH 2011) is being used then the proponent must stipulate which level(s) of offset is being offered. In accordance with the interim policy, justification must be provided as to why it is appropriate to apply the Tier 2 ('no net loss') or Tier 3 ('mitigated net loss') outcomes. In considering whether the mitigated net loss standard is appropriate, justification must be provided on: (i) whether the credits required by the calculator are available on the market; (ii) whether alternative offset sites (other than credits) are available on the market; and (iii) the overall cost of the offsets and whether these costs are reasonable given the circumstances. This must be to satisfaction of and in consultation with OEH. Tier 2 and Tier 3 offset proposals will likely require a larger area of remnant vegetation to be offered in the offset package than if Tier 1 ('improve or maintain') had been met.
5. Where appropriate, likely impacts (both direct and indirect) on any adjoining and/or nearby OEH estate reserved under the NPW Act or any marine and estuarine protected areas under the *Fisheries Management Act 1994* or the *Marine Parks Act 1997* should be considered. Please refer to the Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW 2010).

6. With regard to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, the assessment should identify and assess any relevant Matters of National Environmental Significance and whether the proposal has been referred to the Commonwealth or already determined to be a controlled action.

Scenario 2 - Where a proposal is assessed outside the BioBanking Assessment Methodology:

1. The EIS should include a detailed biodiversity assessment, including assessment of impacts on threatened biodiversity, native vegetation and habitat. This assessment should address the matters included in the following sections.
2. A field survey of the site should be conducted and documented in accordance with relevant guidelines, including:
 - the Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna - Amphibians (DECCW, 2009a)
 - Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft (DEC, 2004), and
 - Threatened species survey and assessment guideline information on www.environment.nsw.gov.au/threatenedspecies/surveyassessmentqdlns.htm.

If a proposed survey methodology is likely to vary significantly from the above methods, the proponent should discuss the proposed methodology with OEH prior to undertaking the EIS, to determine whether OEH considers that it is appropriate.

Recent (less than five years old) surveys and assessments may be used. However, previous surveys should not be used if they have:

- been undertaken in seasons, weather conditions or following extensive disturbance events when the subject species are unlikely to be detected or present, or
- utilised methodologies, survey sampling intensities, timeframes or baits that are not the most appropriate for detecting the target subject species,

unless these differences can be clearly demonstrated to have had an insignificant impact upon the outcomes of the surveys. If a previous survey is used, any additional species listed under the TSC Act since the previous survey took place, must be surveyed for.

Determining the list of potential threatened species for the site must be done in accordance with the Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft (DEC, 2004) and the Guidelines for Threatened Species Assessment (Department of Planning, July 2005). The OEH Threatened Species website www.environment.nsw.gov.au/threatenedspecies/ and the *Atlas of NSW Wildlife* database must be the primary information sources for the list of threatened species present. The BioBanking Threatened Species Database, the Vegetation Types databases (available on DECCW website at www.environment.nsw.gov.au/biobanking/biobankingtspd.htm and www.environment.nsw.gov.au/biobanking/vegtypedatabase.htm, respectively) and other data sources (e.g. PlantNET, Online Zoological Collections of Australian Museums (www.ozcam.org/), previous or nearby surveys etc.) may also be used to compile the list.

3. OEH notes the following known and/or predicted threatened species, populations and ecological communities (based on OEH *Atlas of NSW Wildlife* database, vegetation mapping and potential habitat) which have broad habitat matches to that of the site occur on or areas nearby (approx. 10km radius) to the proposal. These should be targeted during surveying (but not be limited to just these):

(a) Potentially occurring Threatened Fauna and populations

Class	Family	Scientific Name	Common Name	NSW status	Comm status
Amphibia	Myobatrachidae	<i>Crinia tinnula</i>	Wallum Froglet	V	
Amphibia	Hylidae	<i>Litoria aurea</i>	Green and Golden Bell Frog	E1	V
Aves	Anseranatidae	<i>Anseranas semipalmata</i>	Magpie Goose	V	
Aves	Columbidae	<i>Ptilinopus magnificus</i>	Wompoo Fruit-Dove	V	
Aves	Columbidae	<i>Ptilinopus regina</i>	Rose-crowned Fruit-Dove	V	
Aves	Columbidae	<i>Ptilinopus superbus</i>	Superb Fruit-Dove	V	
Aves	Ciconiidae	<i>Ephippiorhynchus asiaticus</i>	Black-necked Stork	E1	
Aves	Ardeidae	<i>Botaurus poiciloptilus</i>	Australasian Bittern	E1	E
Aves	Ardeidae	<i>Ixobrychus flavicollis</i>	Black Bittern	V	
Aves	Accipitridae	<i>Circus assimilis</i>	Spotted Harrier	V	
Aves	Accipitridae	<i>Hieraaetus morphnoides</i>	Little Eagle	V	
Aves	Accipitridae	<i>Lophoiclinia isura</i>	Square-tailed Kite	V	
Aves	Accipitridae	<i>Pandion cristatus</i>	Eastern Osprey	V	
Aves	Burhinidae	<i>Burhinus grallarius</i>	Bush Stone-curlew	E1	
Aves	Haematopodidae	<i>Haematopus fuliginosus</i>	Sooty Oystercatcher	V	
Aves	Haematopodidae	<i>Haematopus longirostris</i>	Pied Oystercatcher	E1	
Aves	Charadriidae	<i>Charadrius leschenaultii</i>	Greater Sand-plover	V	M
Aves	Charadriidae	<i>Charadrius mongolus</i>	Lesser Sand-plover	V	M
Aves	Jacanidae	<i>Irediparra gallinacea</i>	Comb-crested Jacana	V	
Aves	Rostratulidae	<i>Rostratula australis</i>	Australian Painted Snipe	E1	V
Aves	Scolopacidae	<i>Calidris alba</i>	Sanderling	V	M
Aves	Scolopacidae	<i>Calidris ferruginea</i>	Curlew Sandpiper	E1	M
Aves	Scolopacidae	<i>Calidris tenuirostris</i>	Great Knot	V	M
Aves	Scolopacidae	<i>Limicola falcinellus</i>	Broad-billed Sandpiper	V	M
Aves	Scolopacidae	<i>Limosa limosa</i>	Black-tailed Godwit	V	M
Aves	Scolopacidae	<i>Xenus cinereus</i>	Terek Sandpiper	V	M
Aves	Turnicidae	<i>Tumix maculosus</i>	Red-backed Button-quail	V	
Aves	Cacatuidae	<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	V	
Aves	Cacatuidae	<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	V	
Aves	Psittacidae	<i>Glossopsitta pusilla</i>	Little Lorikeet	V	
Aves	Psittacidae	<i>Lathamus discolor</i>	Swift Parrot	E1	E
Aves	Strigidae	<i>Ninox connivens</i>	Barking Owl	V	
Aves	Strigidae	<i>Ninox strenua</i>	Powerful Owl	V	
Aves	Tytonidae	<i>Tyto longimembris</i>	Eastern Grass Owl	V	
Aves	Tytonidae	<i>Tyto novaehollandiae</i>	Masked Owl	V	
Aves	Meliphagidae	<i>Epthianura albifrons</i>	White-fronted Chat	V	
Aves	Neosittidae	<i>Daphoenositta chrysoptera</i>	Varied Sittella	V	
Mammalia	Dasyuridae	<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V	E
Mammalia	Dasyuridae	<i>Phascogale tapoatafa</i>	Brush-tailed Phascogale	V	
Mammalia	Phascolarctidae	<i>Phascolarctos cinereus</i>	Koala	V	V
Mammalia	Petauridae	<i>Petaurus norfolcensis</i>	Squirrel Glider	V	
Mammalia	Pteropodidae	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V	V
Mammalia	Emballonuridae	<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail-bat	V	
Mammalia	Molossidae	<i>Mormopterus norfolkensis</i>	Eastern Freetail-bat	V	
Mammalia	Vespertilionidae	<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	V	
Mammalia	Vespertilionidae	<i>Miniopterus australis</i>	Little Bentwing-bat	V	
Mammalia	Vespertilionidae	<i>Miniopterus schreibersii oceanensis</i>	Eastern Bentwing-bat	V	

Mammalia	Vespertilionidae	<i>Myotis macropus</i>	Southern Myotis	V	
Mammalia	Vespertilionidae	<i>Scoteanax rueppellii</i>	Greater Broad-nosed Bat	V	
Mammalia	Vespertilionidae	<i>Vespadelus troughtoni</i>	Eastern Cave Bat	V	
Mammalia	Muridae	<i>Pseudomys gracilicaudatus</i>	Eastern Chestnut Mouse	V	
Insecta	Petaluridae	<i>Petalura gigantea</i>	Giant Dragonfly	E1	
Flora	Asteraceae	<i>Senecio spathulatus</i>	Coast Groundsel	E1	
Flora	Euphorbiaceae	<i>Chamaesyce psammogeton</i>	Sand Spurge	E1	
Flora	Fabaceae (Faboideae)	<i>Pultenaea maritima</i>	Coast Headland Pea	V	
Flora	Juncaginaceae	<i>Maundia triglochoides</i>		V	
Flora	Lamiaceae	<i>Prostanthera densa</i>	Villous Mint-bush	V	V
Flora	Myrtaceae	<i>Callistemon linearifolius</i>	Netted Bottle Brush	V	
Flora	Myrtaceae	<i>Eucalyptus parramattensis</i> subsp. <i>decadens</i>		V	V
Flora	Orchidaceae	<i>Corybas dowlingii</i>	Red Helmet Orchid	E1	
Flora	Orchidaceae	<i>Cryptostylis hunteriana</i>	Leafless Tongue Orchid	V	V
Flora	Orchidaceae	<i>Diuris arenaria</i>	Sand Doubletail	E1	
Flora	Orchidaceae	<i>Diuris flavescens</i>	Pale Yellow Doubletail	CE	
Flora	Orchidaceae	<i>Diuris praecox</i>	Rough Doubletail	V	V
Flora	Polygonaceae	<i>Persicaria elatior</i>	Tall Knotweed	V	V
Flora	Rubiaceae	<i>Asperula asthenes</i>	Trailing Woodruff	V	V
Flora	Scrophulariaceae	<i>Lindernia alsinoides</i>	Noah's False Chickweed	E1	
Flora	Zannichelliaceae	<i>Zannichellia palustris</i>		E1	

Key: V=Vulnerable; E(1)=Endangered; E2=Endangered Population; CE= Critically Endangered

(b) Potentially occurring Threatened Ecological Communities

- Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions
- Freshwater Wetlands on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions
- Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions
- Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions
- Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions
- Sydney Freshwater Wetlands in the Sydney Basin Bioregion

4. The EIS should contain the following information as a minimum:

- The requirements set out in the *Guidelines for Threatened Species Assessment* (Department of Planning, July 2005).
- Description and geo-referenced mapping of study area (and spatial data files), e.g. overlays on topographic maps, satellite images and /or aerial photos, including details of map datum, projection and zone, all survey locations, all vegetation communities, key habitat features and reported locations of threatened species, populations and ecological communities present in the subject site and study area.
- Description of survey methodologies used, including timing, location and weather conditions.
- Details, including qualifications and experience of all staff undertaking the surveys, mapping and assessment of impacts as part of the EIS.
- Detailed description of all vegetation communities (both forested and non-woody [e.g. derived grasslands], including classification and methodology used to classify) and including all plot data. Plot data should be supplied to the OEH in electronic format (e.g. MS-Excel) and organised by vegetation community.

- f. Identification of national and state listed threatened biota known or likely to occur in the study area and their conservation status.
 - g. Description of the likely impacts of the proposal on biodiversity and wildlife corridors, including direct and indirect and construction and operation impacts. Wherever possible, quantify these impacts such as the amount of each vegetation community or species habitat to be cleared or impacted, or any fragmentation of a wildlife corridor. The proposal should provide an assessment of the cumulative impacts of the proposal in relation to other nearby developments.
 - h. Identification of the avoidance, mitigation and management measures that will be put in place as part of the proposal to avoid or minimise impacts, including details about alternative options considered and how long term management arrangements will be guaranteed.
 - i. Description of the residual impacts of the proposal. If the proposal cannot adequately avoid or mitigate impacts on biodiversity, then a biodiversity offset package is expected (see the requirements for this at point 6 below).
 - j. Provision of specific Statement of Commitments relating to biodiversity.
5. An assessment of the significance of direct and indirect impacts of the proposal must be undertaken for threatened biodiversity known or considered likely to occur in the study area based on the presence of suitable habitat. This assessment must take into account:
- a. the factors identified in s.5A of the EP&A Act, and
 - b. the guidance provided by *The Threatened Species Assessment Guideline – The Assessment of Significance* (DECC 2007) which is available at:
www.environment.nsw.gov.au/resources/threatenedspecies/tsaguide07393.pdf
6. Where an offsets package is proposed by a proponent for impacts to biodiversity (and a BioBanking Statement has not been sought) this package should:
- a. Meet OEH's *Principles for the use of biodiversity offsets in NSW*, which are available at: www.environment.nsw.gov.au/biocertification/offsets.htm or (b) the BioBanking Assessment Methodology (OEH 2012) *BioBanking Assessment Methodology and Credit Calculator Operational Manual*.
 - b. Identify the conservation mechanisms to be used to ensure the long term protection and management of the offset sites.
 - c. Include an appropriate Management Plan (such as vegetation or habitat) that has been developed as a key amelioration measure to ensure any proposed compensatory offsets, retained habitat enhancement features within the development footprint and/or impact mitigation measures (including proposed rehabilitation and/or monitoring programs) are appropriately managed and funded.

Where the BioBanking Assessment Methodology is being used to assess impacts of a proposal and to determine required offsets and a BioBanking Statement is not being obtained, the proponent must provide a detailed biodiversity assessment to OEH and all components of the assessment must be undertaken in accordance with the *BioBanking Assessment Methodology and Credit Calculator Operational Manual*.

With respect to managing and conserving a proposed offset in perpetuity, OEH considers and supports the following as appropriate conservation mechanisms:

- o The establishment of biobanking sites with biobanking agreements under the *Threatened Species Conservation Act 1995*;
- o The dedication of land under the *National Parks and Wildlife Act 1974* (NPW Act);
- o A Conservation Agreement under the NPW Act;
- o A Trust Agreement under the *Nature Conservation Trust Act 2001*; or
- o A Planning Agreement under s 93F of the *Environmental Planning and Assessment Act 1979*.

Note: OEH no longer supports public positive covenant under s88E of the *Conveyancing Act 1919* as an appropriate conservation mechanism to secure and/or manage biodiversity offsets.

7. Where appropriate, likely impacts (both direct and indirect) on any adjoining and/or nearby National Parks and Wildlife Service estate reserved under the *National Parks and Wildlife Act 1974* or any marine and estuarine protected areas under the *Fisheries Management Act 1994* or the *Marine Parks Act 1997* should be considered. Refer to the *Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water* (DECCW 2010). The OEH notes Rawdon Creek Nature Reserve is in the vicinity of the proposal, and as such any direct or indirect impacts to this reserve need to be documented and assessed.
8. With regard to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, the assessment should identify any relevant Matters of National Environmental Significance and whether the proposal has been referred to the Commonwealth or already determined to be a controlled action.

References

- DEC (2004) Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities. Draft, Department of Environment and Conservation, Hurstville; available at: www3.environment.nsw.gov.au/pdfs/lbsa_guidelines_draft.pdf.
- DECC (2007) Threatened Species Assessment Guidelines: The Assessment of Significance. August 2007. Department of Environment and Climate Change (NSW).
- DECC (2009) *Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna – Amphibians*. April 2009. Department of Environment and Climate Change (NSW), Goulburn Street, Sydney.
- DECCW (2010) *Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water*. DECCW, Sydney.
- DoP (2005) *Guidelines for Threatened Species Assessment*. Department of Planning, Sydney, July 2005.
- OEH (2011) NSW OEH interim policy on assessing and offsetting biodiversity impacts of Part 3A, State significant development (SSD) and State significant infrastructure (SSI) projects. NSW Office of Environment and Heritage, Sydney, June 2011.
- OEH (2012) BioBanking Assessment Methodology and Credit Calculator Operational Manual. Office of Environment and Heritage (NSW), Goulburn Street, Sydney. www.environment.nsw.gov.au/biobanking/calculator.htm
- RBG&DT (2013) *PlantNET website*. <http://plantnet.rbgsyd.nsw.gov.au/floraonline.htm> Royal Botanic Gardens and Domain Trust, Sydney.

5 Flooding

The environmental assessment must demonstrate that the proposal is consistent with the Government's Flood Prone Land Policy, the principles of the NSW Floodplain Development Manual 2005 and subsequent guidance, the Minister for Planning's s117 Direction 4.3 Flood Prone Land and Port Stephens Council's Flood Policy and DCP(s).

The subject land is impacted by flooding from various mechanisms. This includes tidal inundation, flooding from elevated ocean levels, local catchment flooding, flooding from Tilligerry Creek and Hunter River (during more extreme flood events). These mechanisms can act singly or in combination with each other.

Assessment of existing flood behaviour and impact of SLR & Climate Change

Provide an assessment of all flood risks on the site (for the full range of floods including events greater than the 1 in 100 year design flood up to the probable maximum flood) from all the flood mechanisms acting singly or in combination and having consideration of any relevant provisions of the NSW Floodplain Development Manual 2005. The assessment should include the flood levels, velocities, the hydraulic categories and flood hazards. Tidal inundation, hazard and hydraulic category mapping should be provided. The assessment should be undertaken under current sea level conditions and with a projected sea level rise (SLR) of 0.90m. A sensitivity assessment to assess the impact of an increase in rainfall intensity of 10%, 20% and 30% due to climate change for the 1 in 100 year event with the projected SLR should be undertaken.

Assessment of potential impacts of the proposed development

Provide an assessment to determine the potential impacts of the proposed development (including fill) on the flood behaviour at the site and any impacts on adjacent land (for the full range of floods including events greater than the 1 in 100 year design flood up to the probable maximum flood) based on the current the sea level and with a projected SLR of 0.9m. This shall include any impacts on drainage (at the site and on adjacent land) and redirection of flow, velocities, flood levels, hazards and hydraulic categories. A sensitivity assessment should be undertaken to assess the impact of the development with an increase in rainfall intensity of 10%, 20% and 30% due to climate change and with SLR for the 1 in 100 year flood event.

The potential impacts of the development on flooding should take into consideration any potential ecological changes/ impacts on adjacent areas.

Emergency management measures and evacuation

Address emergency management, evacuation and access, including contingency measures for floods greater than the 1 in 100 year flood event. These matters are to be discussed with and have concurrence of Council and the SES.

Sea Level Rise and Ecosystem Migration

Having regard to the existing and proposed topography of the land, assess the impact of the proposed development on the capacity for ecosystem migration for mean sea levels of up to 0.9m above 1990 levels.

- Copies of completed field data sheets, and updated with correct plant taxonomy in instances where field names have been used.
- Maps (soft copy as A4 jpgs) of:
 - offset site / BioBanking Agreement boundary or development footprint;
 - vegetation zones;
 - management zones;
 - and where required:
 - existing waste;
 - existing erosion; and
 - existing structures (in waterways)
- Separate shape files should be supplied for all the maps mentioned above plus:
 - plots and transects;
 - assessment circles;
 - species polygons;
 - polygons for adjacent remnant area; and
 - the location or habitat area of sensitive species, and the management area related to that sensitive species (as this information cannot be displayed publicly).

All maps must include:

- a title (as per the names above);
- the site's name, location and lot/Deposited Plan (DP) numbers;
- the scale;
- the date it was prepared; and
- a legend.

Boundaries and zones must be confirmed on the site using a GPS. This information should be digitised onto an ortho-rectified aerial photo or SPOT-5 image. Maps must be easily readable and submitted to OEH as a Geographic Information System (GIS) file that is ESRI compatible. Shape files must use GDA94 datum. Name each shape file as: 'biobank site name_descriptor'. For example, 'Hill Farm_photo points' or 'Hill Farm_management zones'.

Photo points should be named A, B, C, D, E, F, G, etc. Photo points should be located in areas where change is expected, i.e. where replanting, natural regeneration, intensive weeding or other active management actions are to be carried out. As a rough guide, include at least one photo point in each management zone where active management actions will be undertaken. Boundaries and zones must be confirmed on the site using a GPS. This information should be digitised onto an ortho-rectified aerial photo or SPOT-5 image. Maps must be easily readable and submitted to OEH as a Geographic Information System (GIS) file that is ESRI compatible.

Shape files must use GDA94 datum. Name each shape file as: 'biobank/development site name_descriptor'. For example, 'Hill Farm_photo points' or 'Hill Farm_management zones'.

Additional requirements for offset sites that may be required (based on liaison with OEH):

- completed biobanking agreement management action template (provided in Word format), and
- Biodiversity Credits Pricing Spreadsheet.

Once the case has been received OEH will review the data entered, and any supporting documentation. For State Significant Development (SSD), State Significant Infrastructure and residual Part 3A (under the *Environmental Planning and Assessment Act 1979*) this review will take place during the assessment of the Environmental Impact Statement or Environmental Assessment report (for Part 3A matters).

ATTACHMENT 2 – GUIDANCE MATERIAL

Title	Web address
Relevant Legislation	
<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>	www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
<i>Environmental Planning and Assessment Act 1979</i>	www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
<i>National Parks and Wildlife Act 1974</i>	www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
<i>Threatened Species Conservation Act 1995</i>	www.legislation.nsw.gov.au/maintop/view/inforce/act+101+1995+cd+0+N
Aboriginal Cultural Heritage	
Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (2005)	Available from DP&I.
Aboriginal Cultural Heritage Consultation Requirements for Proponents (EPA, 2010)	www.environment.nsw.gov.au/licences/consultation.htm
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (EPA, 2010)	www.environment.nsw.gov.au/licences/archinvestigations.htm
Aboriginal Site Impact Recording Form	www.environment.nsw.gov.au/licences/DECCA/HIMSSiteRecordingForm.htm
Aboriginal Heritage Information Management System (AHIMS) Registrar	www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm
Biodiversity	
BioBanking Assessment Methodology (DECC, 2008)	www.environment.nsw.gov.au/resources/biobanking/08385bbasessmethod.pdf
BioBanking Assessment Methodology and Credit Calculator Operation Manual (DECC, 2008b)	www.environment.nsw.gov.au/resources/biobanking/09181bioopsman.pdf
Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna -Amphibians (EPA, 2009)	www.environment.nsw.gov.au/resources/Threatenedspecies/09213amphibians.pdf
Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft (DEC, 2004)	www.environment.nsw.gov.au/resources/nature/TBSAGuidelinesDraft.pdf
OEH Threatened Species website	www.environment.nsw.gov.au/Threatenedspecies/
Atlas of NSW Wildlife	www.bionet.nsw.gov.au/
BioBanking Threatened Species Database	www.environment.nsw.gov.au/resources/biobanking/ThsppcharaCMA.xls

Title	Web address
Vegetation Benchmarks Database	www.environment.nsw.gov.au/resources/biobanking/BioMBenchOct08.xls
Vegetation Types databases	www.environment.nsw.gov.au/resources/nature/BioMetric_Vegetation_Type_CMA.xls
PlantNET	http://plantnet.rbgsyd.nsw.gov.au/
Online Zoological Collections of Australian Museums	www.ozcam.org.au/
Threatened Species Assessment Guideline - The Assessment of Significance (DECC 2007)	www.environment.nsw.gov.au/resources/Threatenedspecies/tsaguide07393.pdf
Principles for the use of biodiversity offsets in NSW	www.environment.nsw.gov.au/biocertification/offsets.htm
<u>OEH Managed Land</u>	
Land reserved or acquired under the NPW Act	
List of national parks	www.environment.nsw.gov.au/NationalParks/parksEISchatoz.aspx
Guidelines for developments adjoining land and water managed by OEH	www.environment.nsw.gov.au/resources/protectedareas/10509devadjdeccw.pdf

ATTACHMENT 3

CHECKLIST OF INFORMATION REQUIRED WHEN UTILISING THE BIOBANKING ASSESSMENT METHODOLOGY & SUBMITTING THE BIOBANKING ASSESSMENT TO OFFICE OF ENVIRONMENT AND HERITAGE (OEH) USING THE BIOBANKING CREDIT CALCULATOR VERSION 2.0

The *Assessors' Guide to Using the BioBanking Credit Calculator v.2* has been finalised and it is now available for download from the Office of Environment and Heritage website. The guide provides information on the operation and use of the web-based BioBanking Credit Calculator v2.0.

To submit your assessment to OEH open your assessment in *Edit* mode. Navigate to the *Assessment details* page and select the *Submit* button in the top right hand corner. A *Submit the assessment for approval* box will appear (Figure 1), where you can confirm submission (*OK* button) or cancel submission (*Cancel* button). Once a case has been submitted to OEH, the status of the case will change in your *My work* tab from *Work in progress (WIP)* to *submitted*. Please note that you cannot make any edits to an assessment that has been submitted, although you will be able to view the assessment.

Submit the assessment for approval

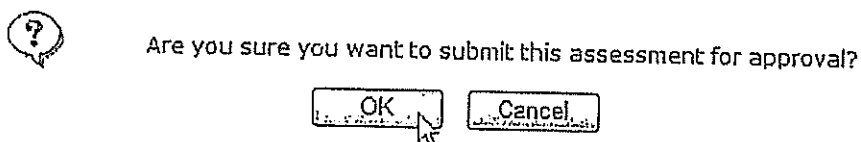


Figure 1: Menu box in the BioBanking Credit calculator v. 2 that enables an assessment to be submitted to OEH.

The following documentation must be submitted with your Environmental Impact Statement or Environmental Assessment report (in hard copy and soft copy):

- BioBanking Assessment Report including a list of dominant indigenous species for overstorey, mid-storey and ground cover for each vegetation type and, where required:
 - local benchmark data;
 - request for increase in gain of site value;
 - a description of the proposed development;
 - measures to avoid and mitigate the impacts of development;
 - an assessment of indirect impacts;
 - a statement of on-site measures;
 - a description of the application of the BioBanking Assessment Methodology, including details of and assumptions made in utilising the methodology, such as (but not limited to) placement of assessment circles, remnant value, connectivity and reasoning behind selection of vegetation types in the Biometric Vegetation Type database;
 - plot and transect values including a list of the indigenous plant species identified in each of the plots; and
 - a description of targeted threatened flora and fauna surveys, and any general baseline surveys (incl. vegetation specific surveys). These should be also be provided schematically.

and

Where required, the BioBanking Assessment Report should also include:

- expert reports;
- an application for a determination on red flag areas;
- more appropriate use of local data for vegetation types, benchmarks or threatened species;
- environmental contributions accompanied by a BioBanking Agreement Credit Report (if applicable); and
- an application for deferred retirement arrangements (if applicable).

ATTACHMENT 3

**LETTER FROM PORT STEPHENS COUNCIL AS INPUT TO
THE DGRs**

Telephone inquiries:
Ms Amanda Gale
File No: 25-2005-5-1
Parcel No: 22161
Your Ref: SSD 13_5916

24 April 2013

Department of Planning & Infrastructure
GPO Box 39
SYDNEY NSW 2001

Attention: Mr Brent Devine

Dear Sir,

Re: Request for DGRs for Proposed Tourist Facility – SSD 13_5916
LOT: 2 DP: 747399, No.4177 Nelson Bay Road ANNA BAY

Reference is made to the Department's correspondence received by Council on 8 April 2013, in relation to the proposed tourist facility at the above mentioned property.

Council notes the economic development opportunity put forward by the proponents and welcomes the opportunity to be involved during Agency engagement through the state significant development process, given Council's role and responsibilities to the Local Government Area community.

Council has considered the documentation forwarded and in terms of adequacy of the Preliminary Environmental Assessment for the Bay Resort, prepared by Monteath & Powys on behalf of Spacecon Pty Ltd the following is provided for the Department's consideration.

This list is not intended to be all inclusive, as there may be additional matters identified through the assessment process. Council notes there will be a further opportunity through the process, once the final Environmental Assessment is lodged with the Department, to provide Council input into the assessment process as mentioned above.

Furthermore, it is noted that Council's previous advice on this proposal over a number of years and more recently, correspondence of 26 July 2012 also remains relevant to this site and tourist facility proposal, acknowledging that the proposal has seen some modifications and reduction in site footprint and so on.

Town Planning Matters

Acknowledging previous advice provided to the Department essentially remains valid, the main key issues from a planning perspective would certainly relate to key site constraints and how these are proposed to be overcome. Key site constraints (some of which are identified below) would include flooding, sea level rise, ecology, bushfire, acid sulphate soils, aboriginal & archaeological matters, adequate site servicing inclusive of access and public transport provision and visual amenity of such a large scale facility in the context of this site location.

A key concern strategically, continues to relate to fragmentation from Anna Bay Centre, and the incompatibility with the objectives of the Rural 1(A) zone provisions. An integral part of any proposal needs to focus on the retention and enhancement of the environmentally sensitive land within the site residue for conservation.

Natural Resources (Ecology) Matters

Notwithstanding, the Agency of OEH will make their relevant comment and advice provided previously remains relevant, from a local perspective the following is also provided:-

- a) In the Port Stephens Council Local (PSC) Government Area, SEPP 44 is superseded by the Comprehensive Koala Plan of Management (CKPoM), as such the proposal should address the PSC CKPoM, rather than SEPP 44.
- b) Impact on wildlife corridors and fauna movement should be addressed.
- c) Several Ecologically Endangered Communities (EECs) are noted to be on-site, the presence and impacts of the proposal on this EEC should be addressed.
- d) The regular flora and fauna investigations and review against the Threatened Species Conservation Act (TSCA) should be undertaken.
- e) The study area/local area should be defined in the Director Generals Requirements (DGRs), so as to eliminate debate in the Assessment of Significance process.

Engineering (Traffic) Matters:

Not dissimilar to previous traffic advice given only minor changes have occurred to access arrangements the following comments are provided:-

- a) The applicant is required to submit a Traffic Study for the proposal in accordance with the Roads & Maritime Service (RMS) - 'Guide to Traffic Generating Developments', addressing, but not limited to, the issues identified in Section 2.2.
- b) Detailed plans are required to be submitted with the application to demonstrate proposed access arrangements to the property as well as circulation and parking layouts within the property. Note: Roads and Maritime Services (RMS) are the 'roads authority' for Nelson Bay Road and will provide further advice through the consultation process as roads authority.

Development Engineering Matters:

The following comments remain relevant from a Development Engineering perspective as follows:-

Section 5.3.1 - Surface Water

The construction of the Crown Road will need to consider the legal point of discharge for the future road's stormwater. Note: The other comments about deleting part of the Crown Road which will likely require an easement across the subject site.

Section 5.6 - Traffic

The Crown will likely require that the Crown Road is transferred into Council ownership. Whilst Council is willing to take ownership of the road reserve and road if it is constructed to Council specifications, Council does not accept that the whole length as identified on the indicative master plan is warranted.

For this development the Crown Road only needs to be constructed and transferred, to the entry point of the sites proposed driveway. The remainder of the Crown Road from this point to 10m past the Lot 3220 DP 1033004 boundary can remain as Crown Road whilst the remainder of the Crown Road to the north could be closed and sold off to adjoining neighbours.

The subject site should get approval from the Crown through the SSD process to cross over or acquire the portion of Crown Road needed to link the two portions of the lot.

Any public road that is constructed should consider the sea level rise predictions and flood levels to ensure adequate freeboard is provided.

Preliminary Engineering plans should be provided through the SDD prior to the determination for Council's consideration of the future public road construction.

Consideration of Public Transport facilities should be addressed on Nelson Bay Road .

Stormwater and Water Quality

The application should address drainage and water quality. There is little information currently supplied to understand exactly what the applicant is proposing to do. It is suggested that tangible targets should be mentioned and committed to.

The stormwater strategy /concept should include:

- a) catchment analysis which identifies the upstream, downstream and internal catchment boundaries, characteristics and regimes in undeveloped and fully developed conditions. Including existing overland flow paths, valleys, streams and flood liable areas present on the land including any existing drainage structures/systems.
- b) Existing and proposed contours and/or levels, including any levees, location and levels of all discharge points to the Council drainage system or identified legal point of discharge.

Flooding

The subject property is identified as flood prone and a high risk area for sea level rise impacts. Council has undertaken a sea level rise impact assessment for flooding in the Port Stephens estuary and determined the likely 1 % AEP flood level for the site to be RL 2.7 m AHD. Therefore any habitable rooms within the proposal would be required to have a minimum floor level of RL 3.2 m AHD.

Council's topographic data for the site indicates that natural ground levels on the site are less than RL 1.2 m AHD. Given that the future highest astronomical tide levels as a result of sea level rise could reach RL 2.0 m AHD by 2100 this indicates the property is also at risk of increased flooding as a result of future tidal inundation.

This means that flood free access to the site is also an issue that needs to be assessed with the development. Council has identified an Infrastructure Planning Level of RL 2.5 m AHD and would expect all new non habitable buildings and internal roads and driveways on this site to be above this level.

It is noted within the preliminary assessment that a flood study would be carried out on the proposal. I believe this would be better termed as a flood impact assessment which Council agree is required. The flood consultant would be able to access Council flood studies relating to the site and carry out an assessment of the flood impact of the development. This flood impact assessment should at least but not be limited to addressing the following issues:-

- a) The flood prone nature of the site given the 2100 1% AEP flood level for the site is RL 2.7 m AHD.
- b) The need for filling of the site given Council will require a minimum floor level for all habitable buildings of RL 3.2 m AHD and for all non habitable buildings, internal roads and driveways of RL 2.5 m AHD.
- c) The impact of the extent of filling on flood levels in the vicinity of the site.
- d) The impact of any increased flood levels on adjoining properties.
- e) The appropriateness of filling of the property given the flood risk associated with the property. In this respect the report should discuss the hydraulic categories associated with flooding on the site i.e. flood way, flood storage or flood fringe and the flood hazard rating for flooding of the site. It should also be noted that Council would not support filling in a flood way and would need the cumulative impacts of loss of flood storage area to be addressed in this assessment. Council's favoured approach to addressing cumulative impacts of loss of flood storage is to only allow filling of 20 % of any flood storage area on the property.
- f) The development should be consistent with guidelines contained within the NSW Governments Floodplain Development Manual 2005.

Access (Disability) Matters:-

Council's Access Officer comments as previously outlined remain relevant for the revised proposal:

- a) Independent access audit
- b) Premises Standards
- c) DCP C10
- d) Safer by design references
- e) Section 79c EPA

In conclusion, again thank you for providing Council with the opportunity to comment at this preliminary stage. Council looks forward to the Department's further opportunity during the process to provide additional assessment comment

Should you require any further information or clarification regarding this advice, please do not hesitate to contact the undersigned.

Yours faithfully

Amanda Gale
DEVELOPMENT CO-ORDINATOR

Phone: 49800129 or 0417 234885
Amanda.gale@portstephens.nsw.gov.au

ATTACHMENT 4

**LETTER FROM NSW RURAL FIRE SERVICE AS INPUT TO
THE DGRs**

All communications to be addressed to:

Headquarters
15 Carter Street
Lidcombe NSW 2141

Headquarters
Locked Bag 17
Granville NSW 2142

Telephone: 8741 5175
e-mail: csc@rfs.nsw.gov.au

Facsimile: 8741 5433



Director General
NSW Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2000

Your Ref: SSD 13_5916
Our Ref: S13/0013
DA13011086075MS

Attention: Brent Devine

19 April 2013

Dear Sir/Madam

State Significant Development for 4177 Nelson Bay Road Anna Bay

I refer to your letter dated 5 April 2013 seeking advice for Director General's environmental assessment requirements for the above State Significant Development in accordance with Section 89C of the *Environmental Planning and Assessment Act 1979*.

The proposed development is located on Bush Fire Prone Land and therefore requires referral to the Rural Fire Service for the issue of a Bush Fire Safety Authority.

It is noted that the development has been recognised as both a tourist facility and an eco-tourism facility within the documentation provided. You are advised that *Planning for Bush Fire Protection 2006* defines tourist facilities and eco tourism facilities separately and provides different requirements. Clarification is required as to whether the development is to be considered as a tourist facility or an eco-tourism facility.

Both tourist facilities and eco-tourism facilities are recognised as Special Fire Protection Purpose (SFPP) development pursuant to Section 100B of the *Rural Fires Act 1997*. As such any bush fire assessment will need to address the specific requirements of SFPP development under Section 4.2.7 of *Planning for Bushfire Protection 2006*.

Should you have any further enquiries regarding this matter please contact Merryn Spray on 1300 NSW RFS.

Yours sincerely

Mark Hawkins
A/Team Leader, Development Assessment and Planning



Department of Primary Industries

OUT13/9693

- 3 MAY 2013

Mr Brent Devine
Metropolitan and Regional Projects North
NSW Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Brent.Devine@planning.nsw.gov.au

Dear Mr Devine,

**Anna Bay Tourist Facility (SSD 13_5916)
Request for input into Director General Requirements**

I refer to your letter dated 5 April 2013 to the Department of Primary Industries in respect to the above matter.

Comment by Crown Lands

The two parts of the subject site are separated by a partially-formed Crown road. The environmental assessment should establish the likely impact of the proposal on this road, in particular the need to use this road to service construction and accommodate services, and gain on-going access to the northern component of the site, etc. The outcome of this assessment will also indicate whether formal landowner consent from Crown Lands is required for the current application.

It is advised that it is the preferred position of Crown Lands at this stage that the proponent apply to close and purchase this road prior to the commencement of any construction works on site.

For further information please contact Rob Micheli, Group Leader Property Management (Maitland office) on 4937 9343, or at: rob.micheli@lands.nsw.gov.au.

Comment by NSW Office of Water

The NSW Office of Water advise the Environmental Impact Statement should address the following matters, and the detailed requirements in Attachment A:

- (i) assessment of potential general construction and operational impacts relating to hydrology, erosion and sedimentation control, surface and stormwater management, and groundwater (including any dewatering activities),
- (ii) management and mitigation measures for any potential impacts to surface and groundwater resources and dependent ecosystems,

- (iii) water supply and licensing requirements, and
- (iv) compliance with NSW water legislation and the rules in any relevant Water Sharing Plan.

For further information please contact Rohan Macdonald, Planning and Assessment Coordinator (Newcastle) on 4904 2642, or at: rohan.macdonald@water.nsw.gov.au.

Comment by Fisheries NSW

The advices of Fisheries NSW are detailed at Attachment B.

For further information please contact Scott Carter, Senior Conservation Manager (Port Stephens office) on 4916 3931, or at: scott.carter@dpi.nsw.gov.au.

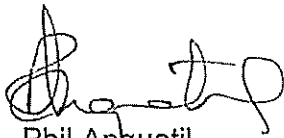
Comment by the Marine Parks Authority

The Marine Parks Authority is a separate agency within Fisheries NSW. The advices of Fisheries NSW detailed in Attachment A address matters of interest in respect to potential impact of the proposal on the Port Stephens-Great Lakes Marine Park. However in addition it is requested that the Director General Requirements include specific reference to the need to consult with both Fisheries NSW and relevant officers of the Port Stephens-Great Lakes Marine Park during preparation of the environmental assessment.

It is also noted that Section 20 (Development affecting marine park-application of EPA Act) of the *Marine Parks Act 1997* is applicable to this application, and as such should also be specifically addressed in the environmental assessment.

For further information please contact Luke Erskine, Manager Port Stephens-Great Lakes Marine Park (Nelson Bay office) on 4984 8226, or at: luke.erskine@dpi.nsw.gov.au.

Yours sincerely



Phil Anquetil
Executive Director Business Services

Attachment A

Anna Bay Tourist Facility (SSD 13_5916) Request for Input into Director General Requirements Comment by NSW Office of Water

1. Legislation

The Environmental Impact Statement (EIS) is required to demonstrate that the proposed project complies with the relevant requirements of the *Water Management Act 2000* (WMA 2000) and *Water Act 1912*, and takes into account the objects and water management principles of the WMA 2000. Refer: <http://www.water.nsw.gov.au/Water-management/Law-and-Policy/default.aspx>.

2. Water Sharing Plans

Water sharing plans are legally enforceable statutory plans under the WMA 2000. Water sharing plans provide rules for the sharing of water between the environment and water users, and also between different types of water users such as town water supply, rural domestic supply, stock watering, industry and irrigation.

The proposed project is located within the Karuah Water Source under the *Water Sharing Plan for the Karuah River Water Sources 2003* (surface water) and the Stockton and Tomaree Water Sources under the *Water Sharing Plan for the Tomago Tomaree Stockton Groundwater Sources 2004* (groundwater). The EIS is required to demonstrate how the proposed project is consistent with the rules in these plans.

3. Policies and Guidelines

The EIS is required to identify water management policies and guidelines that are relevant to the proposed project. The EIS should detail the extent to which the proposed project is consistent with relevant policies and guidelines, and justify any inconsistencies.

The following water management policies and guidelines may be relevant to the proposal:

- *The NSW State Groundwater Policy Framework Document* (1997) and its component policies, consisting of:
 - *The NSW Groundwater Quality Protection Policy* (1998), and
 - *The NSW State Groundwater Dependent Ecosystems Policy* (2002),
- *NSW Aquifer Interference Policy* (2012),
- *NSW Wetlands Policy* (2010),
- *NSW State Rivers and Estuaries Policy* (1993),
- *NSW Acid Sulfate Soils Assessment Guidelines* (1998),
- *NSW Water Extraction Monitoring Policy* (2007),
- *NSW Guidelines for Controlled Activities*, consisting of:
 - *Guidelines for in-stream works on waterfront land* (2012),
 - *Guidelines for laying pipes and cables in watercourses on waterfront land* (2012),
 - *Guidelines for outlet structures on waterfront land* (2012),
 - *Guidelines for riparian corridors on waterfront land* (2012),
 - *Guidelines for vegetation management plans on waterfront land* (2012), and
 - *Guidelines for water crossings on waterfront land* (2012),
- *NSW Water Conservation Strategy* (2000),
- *NSW Salinity Strategy* (2000),
- *National Water Quality Management Strategy*, including:
 - *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (2000),
 - *Australian and New Zealand Guidelines for Water Quality Monitoring and Reporting* (2000), and
 - *Guidelines for Groundwater Protection in Australia* (1995).

These policies and guidelines are available at:

<http://www.water.nsw.gov.au/Water-Management/Law-and-Policy/Key-policies/default.aspx>, and
<http://www.water.nsw.gov.au/Water-Licensing/Approvals/Controlled-activities/default.aspx>.

4. Water requirements and water licences

The EIS should include a detailed assessment of water requirements for the proposed project, and demonstrate:

- an adequate and secure water supply is available for the life of the proposed project.
- that water supplies will be taken from an appropriately authorised and reliable supply.
- any incidental take of water will be appropriately authorised.
- any water licences required to authorise the taking of water can be obtained through application and/or trade.

To demonstrate the above, the following information is essential for inclusion in the EIS:

- identification of water requirements for the life of the proposed project in terms of both volume and timing.
- for all proposed surface and groundwater extraction, details of: extraction location, method of extraction, expected annual extraction volumes, and identification of the water source(s) from which the water will be taken.
- identification of any proposed use of new or existing dams, and calculation of the maximum harvestable right dam capacity for the site - see <http://www.water.nsw.gov.au/Water-licensing/Basic-water-rights/Harvesting-runoff/default.aspx>.
- identification of any requirements (including potential requirements) to intercept groundwater and details of predicted dewatering volumes.
- analysis of the proposed water supply arrangements against the rules for access licences and other applicable requirements of the *Water Sharing Plan for the Karuah River Water Source 2003* and the *Water Sharing Plan for the Tomago Tomaree Stockton Groundwater Sources 2004*.

5. Impacts on water sources

The EIS should include a detailed assessment of the potential impact of the proposed project on the water sources of the State. This assessment should include:

- description of the surrounding environment including surface water catchments, groundwater systems, dependent ecosystems and existing water users.
- identification of all existing and proposed works to take or manage water (i.e. water management works¹) including monitoring bores, and details of consistency with approval requirements.
- identification of all proposed controlled activities and aquifer interference activities, and details of consistency with relevant policies and guidelines.
- predictive assessment of the impact of the proposed project on:
 - surface water sources, floodplains, surface water dependent ecosystems and existing surface water users – see section 5.1 below,
 - groundwater sources, groundwater dependent ecosystems and existing groundwater users – see sections 5.2 and 5.3 below.
- details of critical thresholds for negligible impacts to surface and groundwater sources and dependent ecosystems.
- a commitment to adequate ongoing monitoring of surface and groundwater sources and dependent ecosystems within and adjacent to the proposed project area to verify predictive assessments.
- analysis of options for the proposed project in terms of avoiding impacts on surface and groundwater sources, floodplains, dependent ecosystems, basic landholder rights to water

¹ As defined in the *Water Management Act 2000*, Dictionary section.

and adjacent/downstream licensed water users. If the options analysis cannot demonstrate avoidance, then mitigation, remediation and rehabilitation options should be examined.

- contingency strategies linked to monitoring results and rehabilitation programs, including:
 - reporting procedures for ongoing monitoring programs, including mechanism for transfer of information to the Office of Water,
 - identification of any nominal thresholds as to the level of impact beyond which contingency strategies would be initiated,
 - detailed description of the contingency strategies proposed, and
 - any funding assurances covering the anticipated post development maintenance cost, for example, rehabilitation maintenance, ongoing monitoring.
- a commitment to restore any land, water sources and dependent ecosystems which are degraded by the proposed project.

5.1 Surface water assessment

The predictive assessment of the impact of the proposed project on surface water sources should include:

- identification of all surface water sources including watercourses and wetlands transected by or adjacent to the proposed project.
- detailed description of dependent ecosystems and existing surface water users within the area, including basic landholder rights to water and adjacent/downstream licensed water users.
- assessment of predicted impacts on:
 - flow of surface water, sediment movement, channel stability, and hydraulic regimes,
 - water quality,
 - dependent ecosystems, and
 - existing surface water users.

5.2 Groundwater assessment

The predictive assessment of the impact of the proposed project on groundwater sources should include:

- identification of groundwater sources which will be intersected or connected with as part of the proposed project.
- detailed description of groundwater dependent ecosystems and existing groundwater users within the area, including basic landholder rights to water and adjacent licensed water users.
- description of groundwater flow directions and rates, physical and chemical characteristics, and highest predicted groundwater level at the site.
- details of any potential works likely to result in pollutants infiltrating into the groundwater.
- details of proposed methods of waste water disposal and approval from the relevant authority.
- assessment of predicted impacts on:
 - connectivity between groundwater and surface water sources,
 - yield of groundwater,
 - water quality,
 - groundwater dependent ecosystems – see section 5.3 below, and
 - existing groundwater users.
- identification of any groundwater source or aquifer that may be sterilised as a consequence of the proposed project.
- details of the predicted impacts of the final landform on the groundwater regime.

5.3 Groundwater Dependent Ecosystems

Groundwater dependent ecosystems (GDEs) rely on groundwater for their species composition and their natural ecological processes. Examples of ecosystems which depend on groundwater are wetlands, terrestrial vegetation such as red gum forests, ecosystems in streams fed by groundwater (gaining streams), aquifer and cave ecosystems, springs, and hanging valleys and swamps.

For GDEs (including potential GDEs) identified within the area, the EIS is to provide:

- details of current GDE condition, and groundwater quality and quantity requirements.
- assessment of predicted impacts on GDEs.
- detailed description of any measures to be incorporated into the proposed project to avoid or minimise long-term actual and potential impacts on GDEs, including measures to:
 - maintain natural patterns of groundwater flow,
 - avoid disrupting groundwater levels that are critical for ecosystems,
 - avoid pollution or causing adverse changes in groundwater quality, and
 - rehabilitate degraded groundwater systems where practical.

End Attachment A

Attachment B

Anna Bay Tourist Facility (SSD 13_5916) Request for Input into Director General Requirements Comment by Fisheries NSW

Fisheries NSW is responsible for ensuring that fish stocks are conserved and that there is no net loss of key fish habitats upon which they depend. To achieve this, Fisheries NSW ensures that developments comply with the requirements of the *Fisheries Management Act 1994* (namely the aquatic habitat protection and threatened species provisions in Parts 7 and 7A of the Act, respectively), and the associated *Policy and Guidelines for Aquatic habitat Management and Fish Conservation (1999)*. In addition, Fisheries NSW is responsible for ensuring the sustainable management of commercial and recreational fishing in NSW.

Generally the Preliminary Environmental Assessment submitted with the application gives a reasonable précis of the information required for the environmental assessment.

In addition, Fisheries NSW lists the following concerns in relation to the proposal that must be assessed as part of the approval process due to potential impacts both on-site and in adjacent lands and waters in this ecologically sensitive area:

- (i) Impacts on the estuary (and its wetlands downstream of the site, including the Port Stephens-Great Lakes Marine Park). There is the potential for the development to impact the saltmarsh areas of the downstream Nature Reserve through discharging significant amounts of fresh water. During high tides, this would inundate the Endangered Ecological Community of Coastal Saltmarsh (listed under the *Threatened Species Conservation Act 1995*) and reduce the salinity in the soils, leading to soil shrinkage and settlement, weed incursion and long term damage to the community. Contamination of discharge water with inappropriate chemical contamination may have unintended impacts on receiving waters. Consequently, offsite discharge of freshwater (stormwater) must be assessed in relation to potential increase in levels in the downstream receiving areas.
- (ii) Impacts of land heave on nearby wetlands. The weight of the required fill and construction of the resort on these soils may cause land heave to affect the neighbouring wetlands. This increase in landform height may have a significant impact on the wetting cycle of the adjacent SEPP 14 wetlands. The potential for impacts and mitigation of these effects must be addressed in the geomorphological assessment of the site.
- (iii) Flooding issues are of concern to Fisheries NSW in the area upstream of the development considering the proposal to increase population and urban densities in the Anna Bay catchment. This is of concern as the previous proposal identified that flood increase will be 30-60mm +/- 100mm.
- (iv) Compensatory habitat - has a policy of compensatory habitat being implemented if wetlands or other aquatic habitat is destroyed. Impacts noted include 1.6 ha of saltmarsh and 2.5 ha of disturbed saltmarsh. These areas would require a 2:1 offset for all the area. Any discussions relating to offsetting must include Fisheries NSW.
- (v) The potential exposure of Acid Sulphate Soil (ASS) during construction of services and infrastructure is of significant concern to Fisheries NSW. The ASS management of the site should ensure that subsurface works are designed and constructed so that trenches do not act as a conduit for acid water potentially generated by the works.
- (vi) Fisheries NSW is well aware that mosquitoes are a potential health issue due to the proximity of the development to saltmarsh areas. An adequate and comprehensive mosquito management plan is required for the site as Fisheries NSW has serious concerns about some control methods proposed in plans elsewhere that include inappropriate drainage works in saltmarsh areas and /or inappropriate use of insecticides that may have a deleterious effect on non target invertebrate species in the neighbouring aquatic habitats.

End Attachment B



Mr Raphael Shin
Director
Raphael Shin Enterprises Pty Ltd
101 Bowden Street
RYDE NSW 2112

Our ref: SSD 5916

Dear Mr Shin,

Anna Bay Eco-Tourist Resort (SSD 5916)

I refer to your request dated 26 March 2019 seeking the Minister's agreement to submit an amended State significant development application (SSD 5916) for the proposed eco-tourist resort at 4177 Nelson Bay Road, Anna Bay. The Minister agrees to the submission of an amended application under clause 55(1) of the *Environmental Planning and Assessment Regulation 2000* (**Regulation**).

Under clause 54(1) of the Regulation, the Minister requests that the Applicant provide detailed site plans and an amended Environmental Impact Statement (**EIS**). This information is necessary to enable a proper consideration of the amended application and to enable the amended application to be re-notified.

The amended EIS should include new or updated reports which assess the impacts of the proposed development as amended. The amended EIS should also include the information outlined in **Attachment 1** to this letter.

Time to provide information

The information in this request is to be provided within eight weeks of the date of this request, being **19 June 2019** (cl 54(2)(b) of the Regulation).

If the information is not provided within this period, the Applicant will be taken to have notified the Minister that the information will not be provided, and the amended application will be dealt with accordingly (cl 54(6) of the Regulation).

The days occurring between the date of this request and the date the information is provided (or the date the Minister is notified or taken to be notified that the information will not be provided) will not be taken into consideration in calculating the number of days in any assessment period (cl 109 of the Regulation).

Should you have any questions regarding the content of this letter, please contact Sally Munk on 02 9274 6431 or sally.munk@planning.nsw.gov.au.

Yours sincerely

Chris Ritchie
Director
Industry Assessments
as delegate of the Secretary

24/4/19

ATTACHMENT 1

1. Environmental Planning Instruments

Address the relevant statutory provisions applying to the site contained in all relevant EPIs, including:

- (a) State Environmental Planning Policy (Coastal Management) 2018
- (b) *Port Stephens Local Environmental Plan 2013*.

2. Policies and Guidelines

Address the relevant planning provisions, goals and strategic planning objectives in the following:

- (a) Port Stephens Development Control Plan 23 August 2018, Amendment No.7
- (b) Port Stephens Fixed Development Contributions Plan 2006.

3. Site Layout, Urban Design and Strategic Requirements

- (a) A detailed design report demonstrating a suitable urban design response having regard to the site constraints, including justification for the proposed site planning, built form and design approach.
- (b) A visual impact assessment including photomontages / perspectives of the proposed development from key vantage points.
- (c) Demonstrate suitability of the proposal with the surrounding area in relation to bulk, scale, amenity (including noise) and visual amenity having regard to the Coastal Design Guidelines of NSW (2003) and the NSW Coastal Policy 1997.
- (d) Details regarding any proposed staging of the proposed development.
- (e) Describe each of the individual elements that make up the proposal and detail the nature and extent of any inconsistencies of these elements with the aims and objectives of the RU2 Rural Landscape zone under the *Port Stephens Local Environmental Plan 2013*.

4. Ecology and biodiversity impacts

Additional information regarding ecological impacts of the proposed development, namely:

- (a) An assessment of any potential direct or indirect impacts on threatened biodiversity, native vegetation and existing habitat.
- (b) An assessment of any potential direct or indirect impacts on areas of State Environmental Planning Policy (Coastal Management 2018) coastal wetlands, including impacts of surface water flows to wetland areas.
- (c) A description of any design features and measures to be incorporated as part of the proposal to prevent environmental disturbances (short and long term), particularly in respect of maintaining the natural hydrological regime and identification of riparian and State Environmental Planning Policy (Coastal Management) 2018 coastal wetland buffers.
- (d) Field survey datasheets/spreadsheets pertaining to the data collected by RPS for flora, fauna and vegetation community surveys.
- (e) Assessment of likely impacts on Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland EEC listed under the EPBC Act; and
- (f) Assessment of the impacts (and appropriate offsets) of the project on vegetation to be removed (Swamp Sclerophyll Forest) through the development of the Crown road.
- (g) Assessment of potential hydrological (tidal) impacts and water quality impacts on sensitive wetland vegetation, including threatened ecological communities, downstream of the site.
- (h) Assessment of potential hydrological (tidal) impacts and water quality impacts on Tilligerry Nature Reserve.
- (i) Assessment of potential hydrological (tidal) impacts and water quality impacts on the proposed Biobank (offset) sites.
- (j) Assessment of the potential hydrological (tidal) impacts and water quality impacts on the Port Stephens – Great Lakes Marine Park, in particular the Wallis and Fenninghams Creeks Sanctuary Zone.
- (k) Assessment of the impacts of acid sulfate soils disturbance and groundwater movement in relation to ecological features on the site, in adjoining proposed Biobank (offset) sites, in the Tilligerry Nature Reserve, Marine Park and Coastal Wetlands mapped by the Coastal Management SEPP, or any other adjoining areas, including impacts on threatened species and ecological communities.
- (l) Outline the long-term management and maintenance of any conservation areas including ownership and control, management and maintenance funding, public access, revegetation and rehabilitation works and bushfire management.

ATTACHMENT 1

5. Hydrology impacts

Additional information regarding hydrology impacts of the proposed development, namely:

- (a) A detailed hydrological and hydraulic assessment which includes:
 - i. a comprehensive assessment of the impact of flooding on the development for the full range of flood events up to the probable maximum flood (PMF). This assessment should address any relevant provisions of the NSW Floodplain Development Manual (2005) including the potential effects of climate change and an increase in rainfall intensity
 - ii. assessment of the impact of the development on flood behaviour (i.e., levels, velocities and duration of flooding) on adjacent, downstream and upstream areas
 - iii. detail proposed floor levels for all proposed habitable structures on the site having considered the full range of flood events up to the PMF
 - iv. detail an emergency response plan for the site, which includes consideration of a flood-free access to or from the development site in extreme flood events
 - v. consideration to both existing and future hydrologic and rehabilitated riparian conditions over the full range of flood events.
- (b) All hydrologic, hydraulic and water quality files relating to the hydrological and hydraulic assessment, the data files which have been used in each model in particular, the Digital Elevation Model (DEM) which represents the topography over the catchment.

6. Traffic impacts

Additional information regarding traffic and parking impacts of the proposed development, namely:

- (a) A traffic impact assessment using traffic data collected post the upgrade of Nelson Bay Road. No intersection count of Nelson Bay Road and the crown road has been completed. Weekday afternoon and Saturday afternoon/evening surveys will be required.
- (b) Surveys demonstrating that the proposed development will not impact the operation of the surrounding road network.
- (c) A detailed assessment of parking demand for the proposed uses. An assessment of the likely parking demand on a Saturday afternoon/evening when the resort would be at capacity.
- (d) Assessment of applicable parking rates and required car parks.
- (e) Detail with respect to service vehicles and on-site loading facilities.
- (f) An assessment of the internal site layout, including swept paths.
- (g) Details of the proposed intersection treatment at the intersection of the proposed access road and Nelson Bay Road.

7. Noise impacts

An assessment of noise impacts including a plan of management. The acoustic report needs to be reviewed in the light of any additional traffic modelling to ensure the findings remain consistent. The report should be updated to reflect the current acoustic environment which may have changed with the upgrade of Nelson Bay Road.

8. Mosquito management

Information to demonstrate that the proposed mosquito management approach is appropriate, namely, whether buffer areas are an appropriate mitigation measure.

9. Power and water

Information to demonstrate that power and water to the site will be provided through the use of passive heating and cooling, renewable energy sources and water efficient design, to comply with clause 5.13 of Port Stephen LEP subclause (3)(i).

10. Community and stakeholder engagement

- (a) A detailed community and stakeholder engagement strategy identifying who in the community has been consulted and a justification for the selection, other stakeholders consulted and the form/s of the consultation
- (b) Details of proposed future community and stakeholder engagement activities throughout the construction and operation of the development.