



**MAJOR PROJECT ASSESSMENT**  
***Nords Wharf Concept Plan***  
***(MP10\_0088)***



**Director-General's Environmental  
Assessment Report**  
**Section 75I of the *Environmental Planning and  
Assessment Act 1979***

**April 2012**

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Published April 2012  
NSW Department of Planning and Infrastructure  
[www.planning.nsw.gov.au](http://www.planning.nsw.gov.au)

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## EXECUTIVE SUMMARY

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This is a report for a concept plan application for a site at Nords Wharf, in the Lower Hunter region, pursuant to Part 3A of the *Environmental Planning and Assessment Act, 1979* ("the Act").

### Current Proposal

Coal & Allied (the proponent) is seeking concept plan approval for the development of a 127 hectare site to provide for the following:

- approximately 90 residential dwellings across approximately 10.18 hectares;
- conservation of environmentally significant lands (116.6 hectares); and
- conceptual lot layout, urban design and access arrangements.

The proponent also submitted a State significant site (SSS) study in support of rezoning of site for residential and environmental protection. The site was rezoned by way of an amendment to the *Lake Macquarie Local Environmental Plan 2004* on 13 April 2012.

The project cost of the total development is approximately \$27 million.

### Previous Applications and Independent Hearing and Assessment Panel

The proponent lodged concept plan, project and SSS rezoning applications for the same site in February 2007. These applications were withdrawn on 11 June 2010 in light of decisions by the Land and Environment Court invalidating the former Minister for Planning's approvals relating to Catherine Hill Bay/ Gwandalan (Rose Property Group), and Huntlee. As a result, the 2007 Part 3A order was revoked.

The previous concept plan application was subject to an Independent Hearing and Assessment Panel (IHAP) which was established on 19 June 2007 at the direction of the then Minister. The current concept plan incorporates recommendations made by the IHAP in respect of the former 2007 concept plan proposal. Recommendations made by the IHAP have been considered by the Department in its assessment of the current application.

### Consultation

The proposal was placed on public exhibition for a period of 30 days from 17 November 2010 until 17 December 2010. The proposal for Nords Wharf was exhibited concurrently with proposals for Gwandalan and Middle Camp. These sites are also owned by Coal & Allied and are part of the land known as the Southern Estates. The Department received a total of 12 letters from public authorities, and 43 submissions from the public (all in objection to the proposal) in relation to Nords Wharf.

Key issues raised by public authorities and in submissions from the general public in relation to Nords Wharf include:

- the geotechnical stability of the site;
- impacts on regional infrastructure, especially the regional road network;
- flooding and water quality management both on and off the site;
- ecological impacts, especially vegetation loss, riparian corridors and flora and fauna linkages; and
- provision of local infrastructure and community facilities for future residents.

### Preferred Project Report

On 15 March 2011 the proponent amended details of the concept plan via a preferred project report and response to submissions, to address issues raised in agency and public submissions and by the Department. The only substantial change to the concept plan involved the extension of

the proposed cul-de-sac to provide continuous access to Government Road. This was in response to issues raised by the Rural Fire Service (RFS) regarding emergency access. The proponent also provided a revised statement of commitments and an updated land transfer plan. Details of further consultation with Aboriginal stakeholders were also subsequently provided to the Department on 16 June 2011.

### **Voluntary Planning Agreement**

A voluntary planning agreement (VPA) was prepared to facilitate the transfer of conservation lands to the NSW Government and make arrangements for the payment of contributions towards designated State infrastructure. The draft VPA was exhibited concurrently with the concept plan and SSS proposal. The draft VPA was subsequently amended to include provision of security in the form of bank guarantees, and re-notified from 17 August 2011 to 16 September 2011. The VPA was executed by the Minister for Planning and Infrastructure, the Minister for the Environment and the proponent on 12 March 2012.

### **Assessment and determination**

The Department has assessed the merits of the proposal and is satisfied that the impacts of the proposed development have been addressed via the proponent's environmental assessment, preferred project report and response to submissions, the Statement of Commitments and the Department's recommendations. The concept plan, with recommended modifications, is supported because it is generally consistent with the objectives of the *Lower Hunter Regional Strategy*, is an identified urban release area and contributes to the growth and dwelling targets for the subregion.

The proposal adequately addresses the Director-General Requirements for the project. On these grounds, the Department is satisfied that the site is suitable for the proposed development and that the project will provide environmental, social and economic benefits to the region, subject to modifications to the concept plan. All statutory requirements have been met.

In determining the concept plan, the Department recommends that all future development is subject to Part 4 of the Act, with Council as the consent authority. The Department also recommends that the Torrens title subdivision to enable the transfer to conservation lands requires no further assessment and that the Minister grants project approval in conjunction with the concept plan.



# 1. BACKGROUND

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## 1.1 Site Location and Context

The Nords Wharf site (the site) is part of the Coal & Allied Southern Estates, comprising land holdings at Nords Wharf, Gwandalan and Middle Camp (Figure 1). The Middle Camp and Gwandalan sites are the subject of separate State Significant Site (SSS) rezoning and concept plan proposals. The Coal & Allied Southern Estates are located on the South Wallarah Peninsula, and within the Lower Hunter Region.

The site is located in Lake Macquarie local government area, approximately 90 kilometres north of Sydney and 30 kilometres south of Newcastle. The main access is from the Pacific Highway along Awabakal Road. The site is located adjacent to the existing township of Nords Wharf and situated on the eastern shore of Lake Macquarie, and to the west of the Pacific Highway (Figure 2).

The site area is approximately 127 hectares comprising:

- The proposed development area (10.18 hectares); and
- The proposed conservation lands (116.6 hectares).

The proposed development area is located directly to the south of the existing Nords Wharf township.

The registered land titles which make up the site are listed as Part Lot 6 DP 746077, Part Lot 5 DP 736170 and Part Lot 12 DP 854197.

## 1.2 Site Description

The site is well vegetated with the exception of a small area of land in the north western corner occupied by the Kanangra Scout Camp, including a limited number of buildings and walking tracks.

Eleven native vegetation communities have been identified within the site, including 5 Endangered Ecological Communities (EEC's) under the *Threatened Species Conservation Act 1995* (the TSC Act), as set out below:

- Apple – Palm Gully Forest
- Coastal Plains Smooth-barked Apple Woodland
- Coastal Sheltered Apple – Peppermint Forest
- Mangrove – Estuarine Complex
- Narrabeen Foreshore Redgum Ironbark Forest (EEC)
- Redgum Roughbarked Apple Swamp Forest (EEC)
- Narrabeen Snappy Gum Forest
- Riparian Melaleuca Swamp Woodland (EEC)
- Swamp Oak Rushland Forest (EEC)
- Swamp Mahogany – Paperbark Forest (EEC)
- Narrabeen Wallarah Sheltered Grassy Forest

The site is underlain by abandoned coal workings seams, being the Wallarah and the Great Northern Seam. These are now surplus to the business needs of Coal & Allied and the lease for underground and surface mining for the site has been relinquished.



Figure 1 – Coal and Allied Southern Estates





**Figure 2 – Nords Wharf site location**

### 1.3 Surrounding land uses

To the north and west of the site is the existing settlement of Nords Wharf which supports a population of approximately 870 persons and comprises mainly low density detached dwellings. The site is situated between the Wallarah National Park to the north east and Munmorah State Conservation Area to the south, and forms part of the Wallarah Peninsula Conservation Corridor. The F3 Freeway adjoins the Site along its eastern boundary.

### 1.4 History of the Site

The Aboriginal people from the Awabakal clan were the original occupants of the Wallarah Peninsula and Lake Macquarie area. Soon after the founding of the Colony of NSW in 1788, coal was discovered in the Hunter region (1794). Before long, entrepreneurial mining activities were

established in NSW which led to the establishment of collieries across the Hunter region, including the Wallarah Colliery.

Coal & Allied has been operating in the Hunter region for over 150 years and is one of the major coal producers in the region. Settlement at Nords Wharf was originally directly linked to mining operations in the area. Leases pertaining to underground and surface mining of the Site have been relinquished.

### **1.5 Previous Applications**

The proponent previously submitted concurrent concept plan, project and State significant site (SSS) applications in 2007 for each of the Southern Estates sites at Nords Wharf, Middle Camp and Gwandalan. This followed a Memorandum of Understanding (MOU) which was entered into in 2006 between the NSW Government and the proponent, providing for the dedication of land within the Lower Hunter for conservation, and development of other land including land at Gwandalan, Nords Wharf and Middle Camp.

The applications were, however, subsequently withdrawn by the proponent on 11 June 2010. This was in light of NSW Land and Environment Court proceedings which resulted in the invalidation of the former Minister's approvals relating to Catherine Hill Bay/ Gwandalan (Rose Property Group) and Huntlee, which were also subject to MoUs. The Department advised Coal & Allied that following a review of the court proceedings it considered that the former Minister could not determine the applications. The MoU was subsequently rescinded by way of a Deed of Termination.

Coal & Allied's previous applications were subject to review by an Independent Hearing and Assessment Panel (IHAP) which was appointed by the Director-General on 24 July 2007, at the direction of the former Minister. The recommendations of the IHAP are considered relevant in making an assessment of the current application. This is discussed further in Section 5.

## 2. PROPOSED DEVELOPMENT

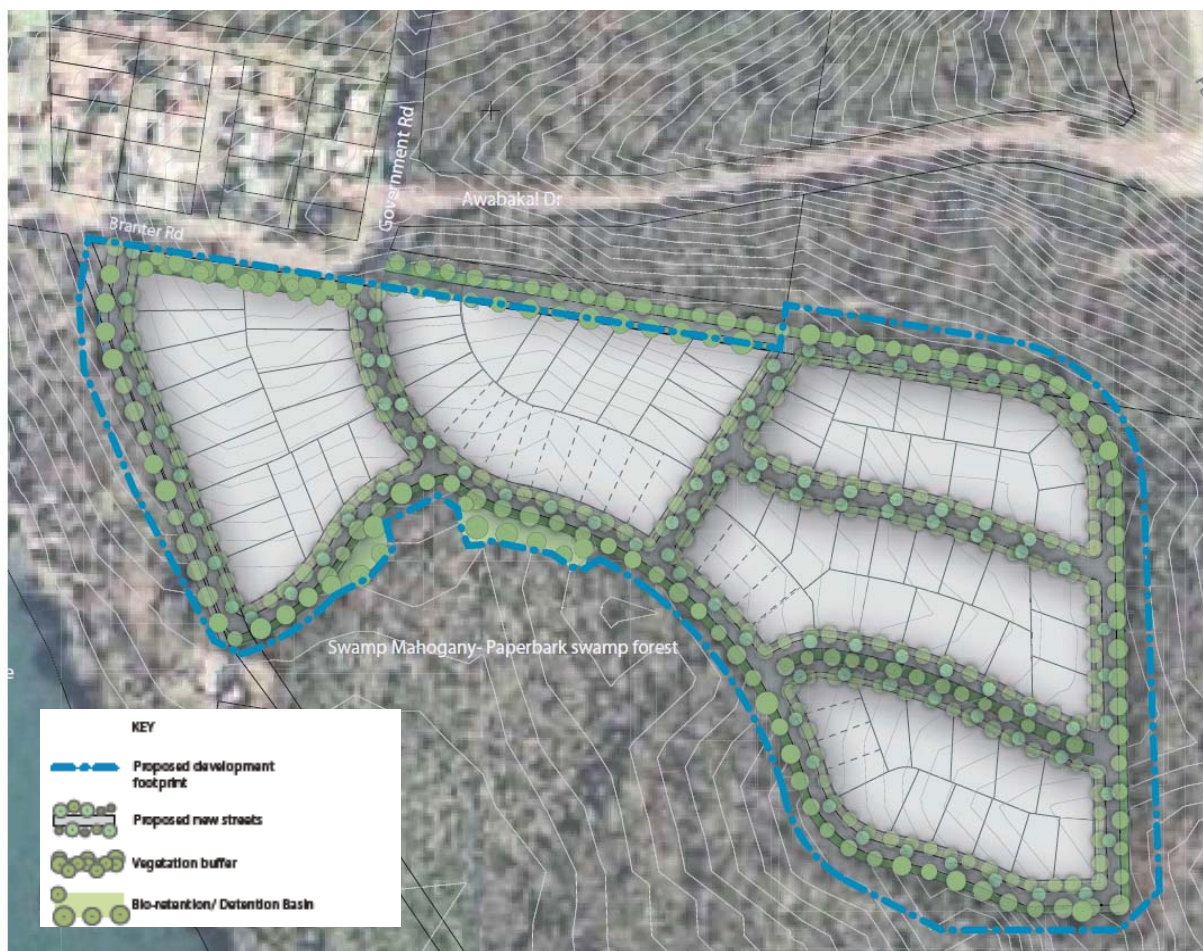
### 2.1 Concept Plan

The concept plan submitted by the proponent seeks approval for a new residential development adjacent to the existing village at Nords Wharf, comprising:

- residential development of up to 90 dwellings across 10.18ha of the site (Figure 2 & 3);
- the dedication of 116.6 ha (92%) of conservation lands (Figure 2);
- conceptual road design and access arrangements as included at Appendix A of the concept plan;
- concept plan principles as included at Appendix A of the concept plan; and
- urban design guidelines as included at Appendix B of the concept plan.

Approval is not sought for a specific lot layout, however an indicative lot layout has been provided showing how the maximum yield of 90 dwellings could be achieved across the Site (Figure 3). The indicative lot layout proposes varied lot sizes to accommodate a mix of housing types with lots ranging from 450sqm to 930sqm.

The estimated capital investment value for the proposal at Nords Wharf is \$27 million.



**Figure 3 – Proposed concept plan and indicative lot layout (preferred project report)**

### 2.2 Preferred Project Report

On 15 March 2011 the proponent submitted its preferred project report. The only substantial change to the concept plan made by the preferred project report was the extension of a proposed cul-de-sac to provide continuous access to Government Road. This was in response to issues



raised by the Rural Fire Service (RFS) regarding emergency access, and is discussed further in section 6.6 of this report. In addition the proponent provided the following:

- an updated land transfer plan to clarify the width of the foreshore conservation lands; and
- a revised Statement of Commitments.

Details of further consultation with Aboriginal stakeholders were also subsequently submitted to the Department on 16 June 2011.

The Department's assessment is based on the proposal outlined in the proponent's environmental assessment for the proposal and as modified by the response to submissions and preferred project report.

### **2.3 Staging**

The proponent intends to carry out the proposed development and connect all servicing in one single stage, comprising Torrens title subdivision and boundary realignment, earthworks, construction of roads and infrastructure, and landscaping.

Any subdivision and development on the site would be subject to separate approvals.

### **2.4 Voluntary Planning Agreement**

A voluntary planning agreement (VPA) was prepared to facilitate the transfer of 116.6 hectares of land to the NSW Government for conservation purposes and associated remediation and reserve establishment works. The VPA will also ensure that appropriate mechanisms are in place to make satisfactory arrangements towards designated State infrastructure prior to any subdivision approval. The State infrastructure contributions are discussed further in Section 6.2.

The draft VPA was publicly notified with the concept plan and SSS study. However, the VPA was subsequently amended to include provisions for further security in the form of bank guarantees. There were no changes from the previously notified draft VPA to the level or nature of the contributions sought to be provided. The amended draft VPA was notified from 17 August 2011 to 16 September 2011.

The VPA was executed by the proponent, the Minister for the Environment and the Minister for Planning and Infrastructure on 12 March 2012.

### **2.5 Project Need and Justification**

The *Lower Hunter Regional Strategy* (LHRS) was prepared in 2006 by the NSW Government to guide growth in the Lower Hunter to 2031. The strategy identifies future development areas, principle land uses, settlement patterns and conservation outcomes, and has since been re-endorsed by Cabinet in 2009. The Site is identified in the LHRS as part proposed conservation area and proposed urban area. The concept plan proposal is consistent with the LHRS. The development of the Site will contribute to the target set out the strategy for 115,000 additional dwellings to meet expected demand to 2031. The dedication of conservation lands will contribute to the protection and management of conservation corridors, in particular the Wallarah Peninsula Corridor which is a key focus of the *Lower Hunter Regional Strategy* and the companion *Lower Hunter Regional Conservation Plan*.

### 3. STATUTORY CONTEXT

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#### 3.1 Major Project

On 15 July 2010, the former Minister for Planning declared, by way of an order under Section 75B(1) of the *Environmental Planning and Assessment Act 1979* (the Act), that the proposed development is development to which Part 3A of the Act applies (being development of State and regional environmental planning significance), and authorised the submission of a concept plan.

Part 3A of the EP&A Act, as in force immediately before its repeal on 1 October 2011 and as modified by Schedule 6A to the Act, continues to apply to transitional Part 3A projects. Director-General's environmental assessment requirements (DGRs) have been issued in respect of this proposal and the environmental assessment report was lodged prior to 1 October 2011. The project is therefore a transitional Part 3A project.

Consequently, this report has been prepared in accordance with the requirements of Part 3A and associated regulations, and the Minister (or his delegate) may approve or disapprove of the carrying out of the project under section 75P of the Act.

#### 3.2 State Significant Site

On 15 July 2010, the former Minister agreed to commence the process of investigating the inclusion of the Site in Schedule 3 of the *State Environmental Planning Policy (Major Development) 2005* (the Major Development SEPP) to rezone the site for residential and conservation purposes to facilitate the proposed concept plan.

The proponent submitted a State significant site (SSS) study which recommended the listing of Nords Wharf in Schedule 3 of the Major Development SEPP.

The Site was rezoned on 13 April 2012, by way of an amendment to *Lake Macquarie Local Environmental Plan 2004*, to list the site within a standalone part of that instrument. The site was rezoned by way of an amendment to the relevant local environmental plan, rather than by listing the Site in Schedule 3 of the Major Development SEPP, on the basis that the NSW Government is not expected to have an ongoing approval role for future development at Middle Camp.

The *Lake Macquarie Local Environmental Plan 2004* includes a provision which requires a development control plan to be prepared for the site prior to any development approval. It is noted that in accordance with the transitional provisions for Part 3A, under Section 75M of the Act, any concept plan approval would satisfy the obligation to prepare a development control plan.

#### 3.3 Permissibility

Under the *Lake Macquarie Local Environmental Plan 2004* the following zones apply to the site (as illustrated at Figure 3 overleaf): R2 Low Density Residential, E1 National Parks and Nature Reserves, and E2 Environmental Conservation. The proposed concept plan is permissible under the *Lake Macquarie Local Environmental Plan 2004*.

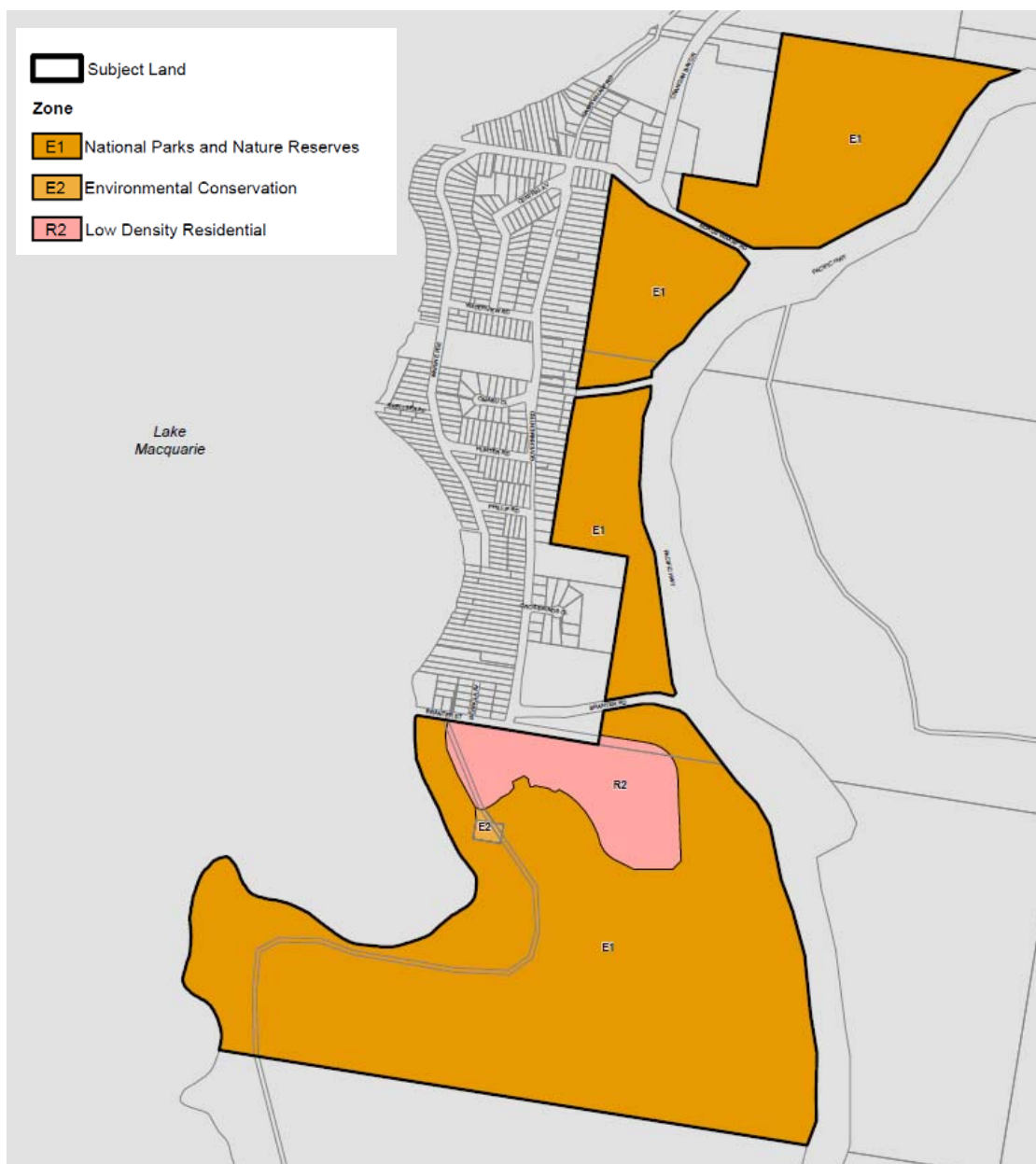
#### 3.4 Environmental Planning Instruments

The Department's consideration of relevant SEPPs and EPIs is provided in Appendix G.

#### 3.5 Objects of the EP&A Act

Decisions made under the EP&A Act must have regard to the objects of the Act, as set out in Section 5 of the Act. The Objects stipulated under section 5(a) of the Act are significant factors in forming the determination of the concept plan. The concept plan does not raise significant issues with regards to the objectives of the Act.

The Department has considered the Objects of the Act in the assessment of the concept plan. The balancing of the proposal in relation to the Objects is provided in Section 6 of this report.



**Figure 3: Zones under the Lake Macquarie Local Environmental Plan 2004**

### 3.6 Ecologically Sustainable Development

The Act adopts the definition of Ecologically Sustainable Development (ESD) found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of the following principles:

#### **Integration Principle**

The proposed development will provide for improved housing choice and contribute positively towards housing affordability in Nords Wharf, and will result in the dedication of substantial areas of land with high ecological value for protection within conservation lands, in accordance with the *Lower Hunter Regional Strategy*. The environmental assessment for the proposed development includes a social infrastructure assessment and details a discretionary allocation of \$5 million for the purposes of social infrastructure. The proponent has committed to ensuring that future residential development will meet BASIX targets for energy and water consumption and to developing a community consultation strategy that will be implemented throughout construction.

### ***The Precautionary Principle***

The environmental assessment is supported by technical and environmental reports which conclude that the proposal's potential impacts can be successfully mitigated. No irreversible or serious environmental impacts have been identified. The concept plan approval requires additional information at each stage of development to ensure the proposal's extent and nature is fully documented and opportunities are provided for proposed mitigation and management measures to minimise the impact of the development.

### ***Inter-Generational Equity***

Through implementation of the concept plan and associated environmental management practices, the environment will be protected for future generations. The benefits of the proposal include the dedication of approximately 117 hectares of land to the State Government for conservation purposes, securing regionally significant wildlife corridors and public foreshore access.

### ***Conservation of Biological Diversity and Ecological Integrity***

It is considered that the proposed protection of native vegetation within land to be dedicated as conservation land will maintain or improve biodiversity values and the long-term viability of a local species, populations and ecological communities and their habitat. It will also contribute to the protection of locally occurring endangered ecological communities.

### ***Improved Valuation, Pricing and Incentive Mechanisms***

The cost of measures to mitigate and manage, on an ongoing basis, any potential impact of the proposed development of the site, has been incorporated into the CIV. Thus, the developer will bear the cost of these measures. It is difficult to assign a monetary value to environmental assets that have not been commodified for commercial use.

Further assessment of ESD principles is also provided in subsequent sections of the report.

## **3.7 Statement of Compliance**

The Director General's report to the Minister for the proposed concept plan satisfies the relevant criteria under Section 75I of the Act and Clause 8B of the Regulation as detailed in Table 1.

**Table 1 – Section 75I(2) and Clause 8B Criteria**

<b>Section 75I(2) criteria</b>	<b>Response</b>
Copy of the proponent's environmental assessment and any preferred project report.	The proponent's environmental assessment and preferred project report are located in the Report Appendices.
Any advice provided by public authorities on the project.	Copies of the submissions provided by public authorities on the project for the Minister's consideration are located in the Report Appendices.
Copy of any report of a Planning Assessment Commission in respect of the project.	No review has been conducted by the Planning Assessment Commission. Reports of the IHAP which considered the previous proposal relating to the site are provided at Appendix D.
Copy of or reference to the provisions of any State Environmental Planning Policy (SEPP) that substantially govern the carrying out of the project.	Each relevant SEPP that substantially governs the carrying out of the project is identified in the report appendices.
Except in the case of a critical infrastructure project – a copy of or reference to the provisions of any environmental planning instrument that would (but for this Part) substantially govern the carrying out of the	An assessment of the development relative to the prevailing environmental planning instrument is identified in Section 3.3.

<b>Section 75I(2) criteria</b>	<b>Response</b>
project and that have been taken into consideration in the environmental assessment of the project under this Division,	
Any environmental assessment undertaken by the Director General or other matter the Director General considers appropriate;	This report represents the environmental assessment undertaken by the Director-General.
A statement relating to compliance with the environmental assessment requirements under this Division with respect to the project.	The environmental assessment for the concept plan complied with the Director General's requirements and the proponent was notified of its compliance on 12 November 2010.
<b>Clause 8B criteria</b>	<b>Response</b>
An assessment of the environmental impact of the project.	An assessment of the environmental impact of the proposal is discussed in Section 6 of this report.
Any aspect of the public interest that the Director General considers relevant to the project.	The public interest is considered in Section 6 of this report, and addressed by the Statement of Commitments and conditions of consent.
The suitability of the site for the project.	The site is considered suitable for the development as discussed in Section 6 of the report.
Copies of submissions received by the Director-General in connection with public consultation under Section 75H or a summary of the issues raised in those submissions.	A summary of the issues raised in the submissions is provided in Section 4, and copies of public submission are provided at Appendix F of this report.

### 3.8 Commonwealth Legislation

On 20 August 2008 the development proposals for Nords Wharf, Gwandalan and Middle Camp were referred to the Commonwealth Department of the Environment, Water, Heritage and the Arts (DEWHA), now the Department of Sustainability, Environment, Water, Population and Communities, as it was considered that they could have a significant impact on matters of national environmental significance. It was determined that the proposed developments comprised a controlled action as they are likely to have a significant impact on threatened species and communities listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

On 23 March 2010 approval was granted by the former Minister for Environment Protection, Heritage, Water and the Arts for the subdivision and residential development of land owned by Coal & Allied at Nords Wharf, Gwandalan and Middle Camp, and the dedication of land to the State Government for conservation purposes. The proposal is considered to be consistent with the approval granted under the EPBC Act, subject to compliance with the relevant conditions of approval.



## 4. CONSULTATION AND ISSUES RAISED

In accordance with 75H(3) of the Act, the environmental assessment was exhibited from 17 November 2010 to 17 December 2010. Advertisements for the exhibition period were published in the Sydney Morning Herald, Newcastle Herald and the Gosford Central Coast Express Advocate. Copies of the environmental assessment and accompanying State significant site study and draft voluntary planning agreement (VPA) were made available for public viewing at the Catherine Hill Bay bowling club, Lake Macquarie Council, and Department of Planning offices at Newcastle, Gosford and Sydney, as well as on the Department's website. The Department also sent letters to public authorities and owners and occupiers of land surrounding the Nords Wharf site to inform them of the proposal and exhibition details.

The proposal for Nords Wharf was exhibited concurrently with proposals for Middle Camp and Gwandalan. An assessment of the key issues has been undertaken in Section 6 of this report.

In 2007 a Community Reference Group (CRG) was established to consider Coal & Allied's previous applications for the Southern Estates. The CRG was comprised of representatives of the local communities affected by the proposals. The CRG was re-convened to consider the current proposals for the Coal & Allied Southern Estates, with a meeting of the CRG with representatives of the proponent and Department of Planning held during the exhibition period on 15 October 2010.

### 4.1 Submissions from the Public

A total of 43 submissions were received in response to the public exhibition. A summary of the key issues raised is provided in Table 2.

**Table 2 – Summary of Public Submissions**

<b>Topic</b>	<b>Issue Raised</b>
Biodiversity	<ul style="list-style-type: none"> <li>• Loss of land with high ecological and biodiversity significance</li> <li>• Impacts on flora, fauna and ecological communities including those listed as endangered</li> <li>• Reduced width of an existing wildlife corridor, and loss of existing green buffer between Newcastle and the Central Coast</li> <li>• Impacts on Lake Macquarie and associated marine habitat</li> <li>• Deficiencies of the ecological assessment and flora and fauna surveys</li> </ul>
Conservation Lands	<ul style="list-style-type: none"> <li>• Archaeological, geological, and contamination assessment is required</li> <li>• proponent should rehabilitate conservation lands to address contamination, erosion, weed invasion, and rubbish</li> <li>• Conservation lands do not offset impacts associated with proposed development</li> </ul>
Heritage	<ul style="list-style-type: none"> <li>• Impacts on Aboriginal heritage</li> <li>• Traditional owners should have involvement in proposal</li> <li>• Impacts on European heritage values of the Kanangra Scout Camp</li> </ul>
Bushfire	<ul style="list-style-type: none"> <li>• Development is inappropriately located in a high fire risk area</li> </ul>
Urban Design	<ul style="list-style-type: none"> <li>• Inadequacy of proposed urban design guidelines and landscaping requirements</li> <li>• Proposal would result in increased crime, and reduce safety of the area</li> <li>• Proposed development is out of scale with existing development, and housing density too high</li> <li>• Impacts on the character and amenity of the existing village</li> <li>• Visual impacts from existing Nords Wharf settlement, other surrounding areas, and Lake Macquarie</li> </ul>
Social impacts	<ul style="list-style-type: none"> <li>• Impact on, and lack of, services and facilities</li> <li>• Loss of the Scout Camp facilities</li> <li>• Lack of employment opportunities</li> </ul>

Topic	Issue Raised
	<ul style="list-style-type: none"> <li>• Lack of social impact assessment</li> <li>• Need for additional boat ramp facilities</li> </ul>
Traffic and access	<ul style="list-style-type: none"> <li>• Lack of public transport</li> <li>• Lack of car parking facilities, particularly associated with conservation lands and boat ramps</li> <li>• Increased traffic</li> <li>• Safety issues associated with the Pacific Highway / Awabakal Drive intersection</li> <li>• Increased traffic at intersection of Government and Branter Road, and need for a secondary access to the proposed development.</li> </ul>
Utilities	<ul style="list-style-type: none"> <li>• Limited capacity of water, sewer and electricity infrastructure</li> </ul>
Other	<ul style="list-style-type: none"> <li>• Cumulative impact of proposed development and other nearby proposals</li> <li>• The proposed location is inconsistent with Government policy for future growth</li> </ul>

#### 4.2 Submissions from Government Agencies

Submissions were received from 12 State Government authorities including 1 Commonwealth Government authority in response to the public exhibition, being:

- Lake Macquarie City Council (Council);
- The former Roads and Traffic Authority of NSW (now Roads and Maritime Service);
- The former Department of Environment Climate Change and Water (now the Office of Environment and Heritage);
- Hunter New England Health;
- Transport NSW;
- NSW Rural Fire Service (RFS);
- NSW Office of Water (NOW);
- The former Department of Industry and Investment (Industry & Investment);
- The Mine Subsidence Board;
- Lake Macquarie Local Area Command, NSW Police;
- Hunter Central Rivers Catchment Management Authority; and
- Commonwealth Department of Sustainability, Environment, Water, Population and Communities.

Only Council's submission objected to the proposal, for the following reasons:

- it is not a priority in terms of meeting the Lower Hunter Regional Strategy dwelling targets;
- the area has limited access to facilities including public transport and medical and health services;
- it would result in negative biodiversity impacts; and
- it would overwhelm the existing character of the Nords Wharf area.

The Rural Fire Service submission advised that the information provided was not adequate to determine whether the proposal is consistent with *Planning for Bushfire Protection 2006*. In particular RFS raised concern about the site access. Through its preferred project report, Coal & Allied revised its proposal to respond to the issues raised by RFS. RFS made a subsequent submission advising that it supports the proposal, subject to a number of conditions.

Submissions received from other agencies outlined conditions which they consider should be imposed on any concept plan approval.

A copy of all submissions is provided in Appendix F and issues raised have also been discussed in the Department's assessment in Section 6 of this report.

## 5. INDEPENDENT HEARING AND ASSESSMENT PANEL

### 5.1 Independent Hearing and Assessment Panel

An Independent Hearing and Assessment Panel (IHAP) was established on 24 July 2007 to review the previous concept plan applications, under Section 75G (1)(a) of the Act (since repealed). The panel members were Gabrielle Kibble (Chair), Mike Collins (heritage and property expert) and Andrew Andersons (architecture and design expert). The terms of reference for the panel were to:

1. *Consider and advise on the:*
  - a) *following impacts of the project:*
    - *Heritage conservation;*
    - *Built form and urban design;*
    - *Visual impact;*
    - *Appropriateness of the proposed urban footprints; and*
    - *Vehicle and pedestrian circulation onsite and in the locality.*
  - b) *relevant issues raised in submissions in regard to these impacts; and*
  - c) *adequacy of the proponent's response to the issues raised in submissions; and*
2. *Identify and comment on any other related significant issues raised in submissions or during the panel hearings.*

On 2 June 2008, the Panel submitted a Key Planning Principles Report, which set out principles that should be adhered to prior to any approval of the concept plans. This report was to assist the proponent in preparing its response to submissions and preferred project report for the previous applications.

On 28 October 2008, the Panel submitted its final report. The report provided advice on whether the preferred project report had addressed the Key Planning Principles, and outlined its recommendations regarding outstanding issues. In relation to Nords Wharf, the Panel recommended that the Minister approve the amended concept plan subject to the Statement of Commitments prepared by the proponent, and any recommendations of the Department. A copy of the Panel's reports are provided at Appendix D.

The current concept plan incorporates recommendations made by the IHAP in respect of the former 2007 proposal. Recommendations made by the IHAP have been considered by the Department in its assessment. A summary of the recommendations made in the Panel's final report, and the Department's comments are provided in Table 3.

**Table 3 – Consideration of IHAP Recommendations**

<b><i>IHAP outcome / recommendation</i></b>	<b><i>Inclusion within current proposal / Department position</i></b>
<b>Littoral Rainforest EEC</b>	
Additional mapping of Littoral Rainforest EEC confirmed that of the 13.6 hectares of the EEC found within the site, approximately 525 sqm (of which approximately 300m <sup>2</sup> is a canopy only variant) extends into the proposed development footprint.  The Panel concluded that loss of 525 sqm of this EEC is acceptable, given the area set aside for conservation.	The extent of clearing of this EEC associated with the current proposal is consistent with that considered by the Panel.  The Department concurs that this extent of clearing is appropriate. This issue is discussed in more detail in Section 6.3 of this report.

<b><i>IHAP outcome / recommendation</i></b>	<b><i>Inclusion within current proposal / Department position</i></b>
<b>Crangan Bay</b>	
<p>In response to the preliminary Panel report the proponent provided additional information on how the proposal would mitigate impacts on the water quality and seagrasses in Lake Macquarie, and foreshore erosion, including a water sensitive urban design strategy.</p> <p>The Panel concluded that the water sensitive urban design measures and riparian and foreshore setbacks proposed by Coal &amp; Allied should prevent negative impacts on Crangan Bay.</p>	<p>The current proposal includes the same commitments to water sensitive urban design as those considered by the Panel.</p> <p>The Department supports the water sensitive urban design strategy, subject to implementation of a monitoring program. This issue is discussed in further detail in Section 6.4.2 of this report.</p>
<b>Consultation with the Aboriginal community</b>	
<p>The preliminary Panel report requested further consultation with the Aboriginal community. In response the proponent committed to the preparation of an Aboriginal Cultural Heritage Management Plan in consultation with relevant stakeholders. The Panel concluded that this commitment appropriately addressed its concerns.</p>	<p>The current proposal includes a commitment to prepare an Aboriginal Cultural Heritage Plan of Management in consultation with relevant stakeholders.</p> <p>Further, at the request of the Department, the proponent has carried out additional consultation with Aboriginal stakeholders on the Aboriginal heritage impact assessment provided as part of its concept plan environmental assessment. This issue is discussed in further detail in Section 6.9.2 of this report.</p>
<b>Waterfront reserve</b>	
<p>The Panel recommended that the waterfront reserve shall be a minimum width of 75m and publicly available at all times.</p>	<p>The land transfer plan provided with the current proposal shows the waterfront reserve as being approximately 75-80 metres in width.</p> <p>The accessibility of the foreshore reserve would be determined by OEH following transfer of the land.</p>
<b>Mine Subsidence</b>	
<p>The Panel recommended that further geotechnical assessment is required prior to construction of dwellings on the site in accordance with the preliminary contamination, geotechnical and mine subsidence reports.</p>	<p>The proponent's current proposal has committed to undertaking further geotechnical assessment.</p> <p>The recommended instrument of approval requires this to be carried out prior to commencement of subdivision work. This is discussed in section 6.5.</p>

## 6. ASSESSMENT OF ENVIRONMENTAL IMPACTS

After consideration of the environmental assessment, submissions, preferred project report and response to submissions, the Department has identified the following key environmental issues associated with the proposal:

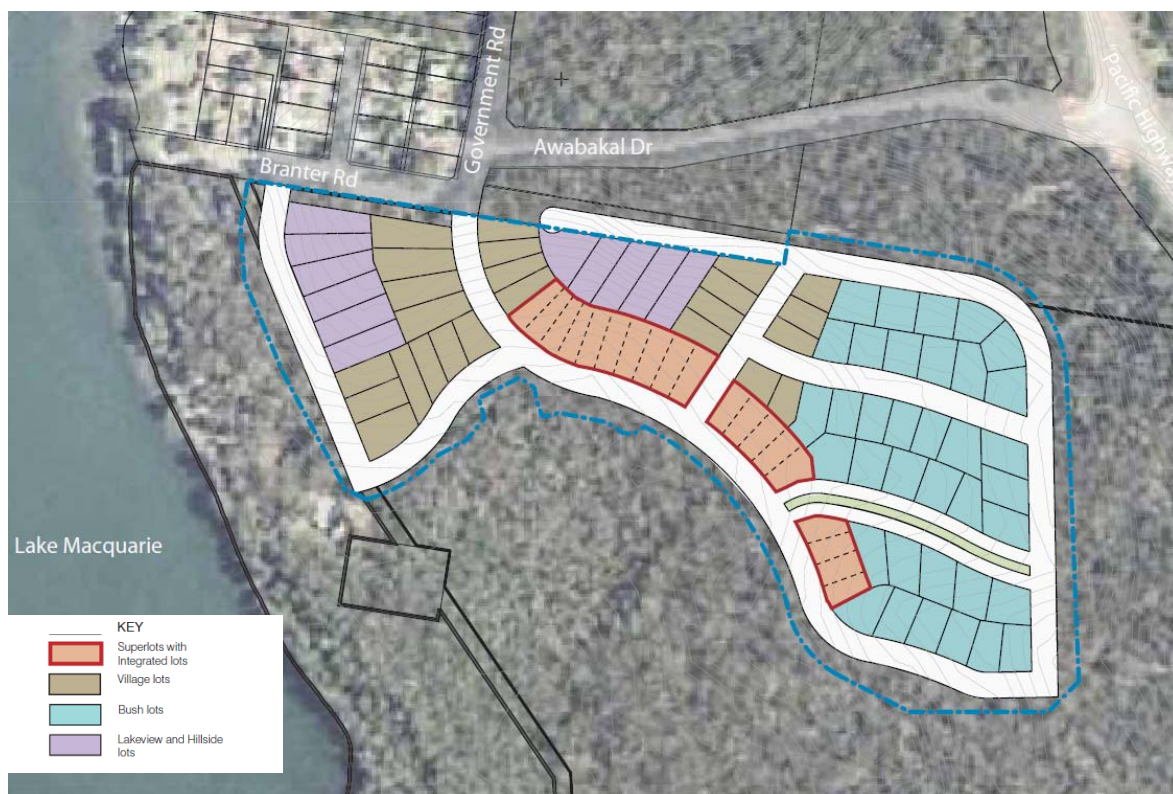
- Urban design and built form;
- Infrastructure contributions and local services;
- Biodiversity;
- Soils and water;
- Bushfire risk;
- Traffic and transport; and
- Heritage.

### 6.1 Urban Design and Built Form

#### 6.1.1 Development Area and Lot Layout

The proponent has identified a proposed development area which responds to the topography and ecological and heritage constraints of the site. In particular the development footprint has been located to avoid the EEC Swamp Mahogany Paperbark Forest to the south of the development area, and to provide a set back to Lake Macquarie to protect foreshore vegetation, and an Aboriginal heritage midden.

The concept plan proposes a maximum yield of 90 dwellings on the Site. It does not seek approval for a specific lot layout however an indicative lot layout shows how 90 dwellings could be achieved within the proposed development area (Figure 4). The indicative lot layout shows a mix of lot sizes ranging from 450 sqm to 930 sqm, as well as 3 super lots for integrated housing from 1600 sqm to 5000 sqm. Housing is proposed to be predominantly low density detached housing, with the exception of the integrated housing lots which are proposed as semi detached housing.



**Figure 4 – Proposed building types**

The proposed mix of lots is set out at table 4 below.

**Table 4 - Lot Sizes and built form**

Lot Type	No of lots	Minimum lots size
Integrated housing	19 (21%)	350 sqm
Village housing	24 (27%)	500 sqm
Bush houses	36 (40%)	570 sqm
Lakeview and hillside houses	11 (12%)	900 sqm

The subdivision layout also identifies a lot which is proposed as a landscaped buffer adjacent to the development on the southern of Branter Road to screen the estate from the existing Nords Wharf settlement.

Council's submission states that the proposal would overwhelm the existing character of the Nords Wharf area, and that the development footprint and number of dwellings should be significantly reduced.

#### Consideration

The Department considers the proposed development area appropriately responds to its context, and is of an appropriate scale in having regard to the existing Nords Wharf settlement.

The Department also considers that the mix of lots is appropriate, and further that the proposed lot sizes would be consistent with the controls for other residential areas under the *Lake Macquarie Local Environmental Plan 2004* (the LEP) for the low density residential zone. For other residential areas, the LEP establishes a minimum lot size of 450 sqm for a standard residential lot. However, the LEP also includes a provision which requires a subdivision of over 10 lots to provide between 10% and 40% of small lot housing lots being between 300 sqm and 450 sqm.

The Department notes that the proponent has not identified future management arrangements for the landscaped buffer along Branter Road. The Department considers that this land should be offered for dedication to Council, and that the relevant subdivision application must demonstrate that the future ownership and management arrangements for the landscaped buffer have been negotiated with Council. Should Council not accept the dedication of the landscape buffer, these areas should be incorporated into the neighbouring residential lots. This requirement has been incorporated into the recommended instrument of approval.

#### **6.1.2 Urban Design Guidelines**

As part of its concept plan environmental assessment, the proponent has also prepared urban design guidelines, comprising a public domain plan and built form design guidelines. The proponent's statement of commitments includes a requirement that future development is to comply with the urban design guidelines.

Council's submission notes that the concept plan proposes a strong landscape master plan, offering the potential for a high quality of design that is appropriate to the setting. However, council considers that the Urban Design Guidelines do not provide a sufficient level of detail. Council considers that the urban design guidelines contain inconsistencies, and there is a lack of detail to demonstrate the feasibility of the proposed design principles. Council also questioned the role of the urban design guidelines, and how they would be implemented.

Council considers that the following detailed guidelines are required:

- integration of asset protection zone (APZ) requirements into the design guidelines, including how planting within private open space, road reserves, and swales will conform to reduced fuel loads requirements;
- identification of appropriate planting for swales and road reserves, noting that the guidelines currently identify trees which would not be acceptable to council;
- details to demonstrate how trees would be retained during subdivision and dwelling construction works;

- landscaping treatments within individual lots, including specific requirements for deep soil zones;
- details on how cut and fill is to be minimised;
- requirements for retaining structures including indicative maximum heights and design approach, acceptable materials, and landscaping to reduce impact of retaining structures;
- requirements for retention of vegetation within individual lots;
- site fencing requirements including acceptable styles, treatments and materials; and
- a more detailed plant species selection list, as the existing one is very limited.

Council also noted that it does not support the following aspects of the urban design guidelines:

- double garages are not suitable to be located near the streetscape;
- varied street set backs are not appropriate; and
- corner blocks should be required to comply with the front set back on all street frontages.

In relation to landscaping of the Site, Council has requested that all public domain plantings be maintained for a period of five years.

Council's submission also requests that the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* (Code SEPP) should not apply to the development as it does not provide consideration of coastal, heritage and environmental significance of the area.

In response to concerns raised by Council, the proponent has confirmed that the urban design guidelines form part of the proposed concept plan, and as such, if approved, future development of the Site will be required to comply with the guidelines. The proponent also noted that it has committed to the preparation of a construction management plan and tree management plan which will detail how existing trees identified for retention are to be protected.

### Consideration

The Code SEPP sets out the State Government's policy on assessment of exempt and complying development across the State. The Code SEPP allows dwellings on lots of 200 sqm or greater to be approved as complying development subject to specific development controls. Under the Code SEPP dwellings on lots within bushfire prone land can be developed as complying development but only where the lot is not subject of bush fire attack level of 40 (very high) or within the flame zone. Based on the bush fire threat assessment which forms part of the concept plan, it is considered that some lots at Nords Wharf could be able to be developed as complying development. The urban design guidelines would not apply to a dwelling which was approved as complying development.

The Department does not consider that there is any reason to support an exclusion of the Code SEPP at Nords Wharf. However, any such request should be considered through the current state wide process, where an expert panel (comprising of representatives of the Local Government and Shires Association, industry, Planning Institute of Australia and the Department) considers and provides recommendations on local exclusion to the Minister.

Notwithstanding the above, it is important the guidelines for development of individual lots are in place to guide development of lots where this is not carried out as complying development. To ensure that this occurs, the *Lake Macquarie Local Environmental Plan 2004* outlines requirements for the preparation of a development control plan (DCP) for the site. In accordance with the transitional provisions for Part 3A, under Section 75M of the Act, any concept plan approval would satisfy the obligation to prepare a DCP. Accordingly, it is recommended that the urban design guidelines be reviewed and amended as set out overleaf to ensure that they address the DCP preparation requirements under the *Lake Macquarie Local Environmental Plan 2004*. Further, the final urban design guidelines should be prepared in a form which could be adopted as site specific controls within the council's development control plan at some stage in the future.

- private landscaping requirements, including specific requirements for deep soil zones;
- details on how cut and fill is to be minimised;
- requirements for retaining structures including maximum heights and design approach, acceptable materials, and associated landscaping;
- requirements for retention of vegetation within individual lots;
- site fencing requirements; and
- a detailed plant species selection list.

As mentioned previously, Council also raised specific issues regarding double garages, varied street set backs and alternative set backs for corner lots. Under the Code SEPP double garages could be approved as complying development. Further the Code SEPP sets out a different front boundary set backs for different lot sizes, as well as alternative set backs for secondary frontages. Whilst the front boundary set backs set out in the urban design guidelines are broadly consistent with those in the Code SEPP, the secondary frontage set backs are significantly less than those set out in the Code SEPP. The Department considers that increasing the secondary frontage setbacks would provide an improved streetscape outcome. Accordingly it is recommended that in preparing detailed urban design guidelines that the secondary boundary set backs are revised to be consistent with or greater than those set out in the Code SEPP.

The recommended instrument of approval includes a modification to the concept plan requiring revised guidelines to be prepared in consultation with council, and to the satisfaction of the Department, prior to lodgement of any development application for a dwelling on the site.

The Department also considers that further consideration should be given to site landscaping. As such the recommended instrument of approval requires the preparation of a Landscape Management Plan prior to further subdivision of the site, which is to include the following details:

- a strategy for the retention of trees on the site;
- proposed public domain treatments; and
- proposed landscaping of swales, detention basins, roadside verge and other public domain areas, including species selection.

These details would be carried into landscaping plans and public domain plans to be completed in consultation with Council prior to the commencement of works on site.

### **6.1.3 Visual Impact**

Council considers that the visual assessment provided is inadequate, and in particular that view points should not only be taken from the area of the other side of the lake, but from the lake itself.

In response, the proponent indicated that the development footprint is set back from Lake Macquarie by approximately 75 metres and that a buffer of trees exists between it and the water. The change in level and extent of existing vegetation would ensure that the visibility of the proposed development from the foreshore or from the lake is minimised. In addition to this, a 10m landscape buffer of trees and shrubs is proposed to screen the development from residences on Branter Road.

#### Consideration

The Department considers that preparation of the more detailed urban design guidelines and detailed landscape design plans, including plans for retention of existing trees, will be important to ensure that visual impact is minimised. However, the Department is satisfied with the broad approach and considers that, subject to the requirements discussed above, visual impacts of the proposed development can be minimised to an acceptable level.

With regard to views from Lake Macquarie, the Department considers that impacts from the proposed development would be minimal as foreshore vegetation within the proposed foreshore conservation lands will provide adequate screening.



## 6.2 Infrastructure and Services

### 6.2.1 State Infrastructure Contributions

A voluntary planning agreement (VPA) was executed by the Minister for Planning and Infrastructure, the Minister administering the *National Parks and Wildlife Act 1974* and Coal & Allied Operation Pty Ltd (the proponent) on 12 March 2012 to secure the delivery of State infrastructure contributions.

Consultation was carried out with relevant agencies to determine the State infrastructure contributions requirements for Nords Wharf. The former Department of Education and Training and Hunter New England Area Health Service advised that their current services would be able to accommodate demand generated by the proposed development at Nords Wharf, and as such did not seek any infrastructure contributions.

The following State infrastructure contributions contained in the VPA reflect all requirements identified through the consultation:

- contribution towards the acquisition of a 3000m<sup>2</sup> emergency services site for Ambulance NSW (\$196 per lot); and
- upgrade of the Pacific Highway and Awabakal Drive intersection as works in kind to the RMS's satisfaction.

Under the VPA the proponent is required to deliver the state infrastructure contributions prior to the issue of the first subdivision certificate that creates the first urban lot within the Nords Wharf development area.

Contributions associated with the Coal & Allied's Gwandalan and Middle Camp proposals would also contribute funds towards the emergency services site. Coal & Allied identified a specific site within its Middle Camp landholdings to be dedicated to NSW Ambulance instead of a cash contribution. The VPA includes an option for an emergency services site to be dedicated where it is agreed to by the Minister for Planning and Infrastructure and Ambulance NSW.

In its submission, NSW Ambulance advised that it has carried out a review of its future needs and has determined that the proposed site at Middle Camp is not suitable, and that Swansea would be the preferred location for an emergency services facility.

#### Consideration

Planning Circular PS07-018 sets out the NSW Government's policy for State infrastructure contributions, including that contributions are to be reduced to 75% of the cost of the infrastructure required, and to 50% if paid prior to 30 June 2010. The 50% discount was subsequently extended to 30 June 2012. These discounts have been applied in the VPA for the Emergency Services facility. However, the discounts have not been extended to the intersection upgrade as this is to be delivered as works in kind, and is required to mitigate the impacts of the proposed development.

Under the terms of the VPA the proponent would be required to pay the cash contribution towards the emergency services facility, unless it could nominate an alternative site to the satisfaction of the Minister for Planning and Infrastructure and Ambulance NSW.

The recommended instrument of approval requires the proponent to prepare a staging plan prior to the submission of the first subdivision application detailing the schedule for the delivery of contributions associated with the proposal, including State infrastructure contributions. This is to be approved by the Director-General of the Department of Planning and Infrastructure.

The Department considers that State infrastructure contributions have been suitably addressed for Nords Wharf through the execution of the VPA.

### 6.2.2 Local Contributions – Section 94

Through the Statement of Commitments the proponent has agreed to the payment of contributions in accordance with the *Lake Macquarie City Council Section 94 Contributions Plan No.1 – Citywide 2004* (the Section 94 Plan) as outlined in Table 5 overleaf.

The Statement of Commitments advises that the contribution will be made by either dedication of land free of costs, payment of monetary contributions or works in kind, or any combination of these, subject to a deed of agreement to be entered into with Lake Macquarie City Council. However, the proponent is not proposing the dedication of parks or local open space at Nords Wharf.

**Table 5 –Section 94 Plan rates**

Item	Contribution rate (per lot)	Total Nords Wharf
Open space acquisition	\$7,702	\$693,180
Recreation facilities	\$5,772	\$519,480
Community facilities (incl. land)	\$2,927	\$263,430
Management	\$175	\$15,750
<b>Total</b>	<b>\$16,576</b>	<b>\$1,491,840</b>

Note: the rates shown are subject to CPI, and are valid until February 2011.

Council has allocated the majority of contributions for Nords Wharf to the upgrade and provision of recreation and community facilities, including an upgrade to the existing Nords Wharf oval. Council also considers that the proposed development does not warrant the dedication of any new areas of open space.

Council has indicated that it supports the payment of contributions in accordance with the Section 94 Plan, including opportunities for works in kind and/or dedication of land.

#### Consideration

Noting that Section 94 contributions cannot be levied at concept plan stage, the Department supports the proposed approach to the payment of local contributions, but considers that any works in kind or land dedications would need to be agreed to by Council. The recommended instrument of approval includes the requirement for a staging plan, which would include details of the delivery of Section 94 contributions to be prepared and approved by the Director-General prior to residential subdivision. Under the recommended terms of approval, any works in kind or land dedication in lieu of monetary contributions required under Council's Section 94 Plan must be negotiated with Council and formalised through an appropriate legal mechanism, such as a Deed of Agreement (which is included as a Statement of Commitment), or VPA.

#### **6.2.3 Local Contributions – \$5 million allocation**

In addition to Section 94 contributions, the proponent has allocated \$5 million for initiatives associated with the delivery of social infrastructure to support the existing and future communities for the three sites comprising the Southern Estates. The proponent held a Design Charette process in August 2007, as part of the previous concept plan application process, to help identify community priorities for funding.

Table 6 outlines the initiatives that the proponent proposes to be funded for Nords Wharf from the \$5 million allocation:

**Table 6 – Initiatives proposed for Nords Wharf under the \$5 million allocation**

Infrastructure / initiative	Cost
<u>Employment generation</u> Contribute towards the funding of a regional development project to identify employment opportunities in the Swansea area.	\$5,000
<u>Boat ramp facilities</u> <ul style="list-style-type: none"> <li>Provide additional trailer parking for the Branter Road boat launching ramp and contribute to the upgrade of the Branter Road boat launching ramp</li> <li>Contribute to the upgrade of existing boat ramp facilities near Cams Wharf.</li> </ul>	\$230,000 \$150,000

Infrastructure / initiative	Cost
<u>Parks and open space</u> <ul style="list-style-type: none"> <li>Contribute to a local playgroup</li> <li>Upgrade to Gathercole Park (within the existing Nords Wharf village)</li> </ul>	\$10,000 \$100,000
<u>Footpath extension</u> Extend 1.2m foot path in Government Road from the bus stop nearest to the new estate to public school. Note: new 1.2m footpath from new estate to closest bus stop is required under the Statement of Commitments.	\$85,000
<u>Sustainability</u> Promote sustainability through: <ul style="list-style-type: none"> <li>On-lot Rainwater harvesting - potential grant scheme for individual rainwater tanks.</li> <li>Reduced power demand for proposed dwellings (to be offered as option).</li> <li>Introduction of a sustainable education program for existing and new residents.</li> <li>Exceed Local &amp; State Government criteria for sustainable development.</li> </ul>	\$180,000
<u>Aboriginal community</u> Establish scholarships for archaeology students from the Aboriginal community, linked to local schools.	\$25,000
<u>Walkways</u> Provision for walking paths external to development footprints between Nords Wharf and Gwandalan. This item is subject to approval from Office of Environment & Heritage.	\$400,000
	<b>\$1,185,000</b>

In relation to the proposed walkways, the proponent has advised that in the instance that approval for these works is not granted, the proponent will allocate the funds to alternate community benefits not covered by Section 94 or State infrastructure contributions.

The \$5 million allocation includes the provision of a shared path connecting residential development at Nords Wharf to Catherine Hill Bay along Awabakal Drive to Government Road. The details of this path will be subject to agreement with OEH, RMS (Pacific Hwy crossing) and Council, as well as any other relevant landowner. Provision of the shared path would be detailed in a VPA with the relevant authorities.

Council's submission indicated its support for proposed contributions in accordance with the above allocations, subject to further consultation with Council should the funds be re-allocated. Council has also requested that the proposed footpath to the Nords Wharf School include a short extension of approximately 135 metres to Gathercole Park. The proponent has responded by stating an additional connection to Gathercole Park could potentially be provided for through the \$5 million allocation for social infrastructure across the Southern Estates.

### Consideration

The Department notes that the \$5 million allocation is over and above contributions required by Council's Section 94 Plan. The Department supports the \$5 million allocation in principle but considers that further detail is required on the proposed initiatives, including their delivery and timing. This can be provided through the preparation of the staging plan which is recommended to be submitted for approval prior to any residential subdivision. The staging plan is required to be prepared in consultation with Council.

Further, the Department considers that the proponent should consider the extension of the proposed pathway to Gathercole Park as requested by Council. This requirement has been incorporated into the recommended instrument of approval.

### 6.2.4 Local Facilities

Council's submission and public submissions have raised concern about accessibility of the development to local facilities including health and medical, and retail facilities.

#### Consideration

The Department considers that proposed development would not support retail development or health or medical facilities. Accordingly, these would be required to be accessed in nearby centres such as Swansea. The Department considers that this appropriate having regard to the location and scale of the proposed development.

Further, Hunter New England Area Health Service advised that their current services would be able to accommodate demand generated by the proposed development at Nords Wharf, and did not seek any infrastructure contributions.

### 6.3 Flora and Fauna

As previously discussed, the site is highly vegetated. The proposed development at Nords Wharf would result in the clearing of the majority of the 10.18 hectare development area and as such has the potential to impact on flora and fauna directly through the removal of this vegetation and spread of invasive fungi during development.

Concern has been raised in public submissions that the proposal would:

- result in the loss of land with high ecological and biodiversity value including the loss of the existing green buffer between Newcastle and the Central Coast;
- impact on flora, fauna and ecological communities including those listed as endangered; and
- reduce the width of an existing wildlife corridor.

#### Flora

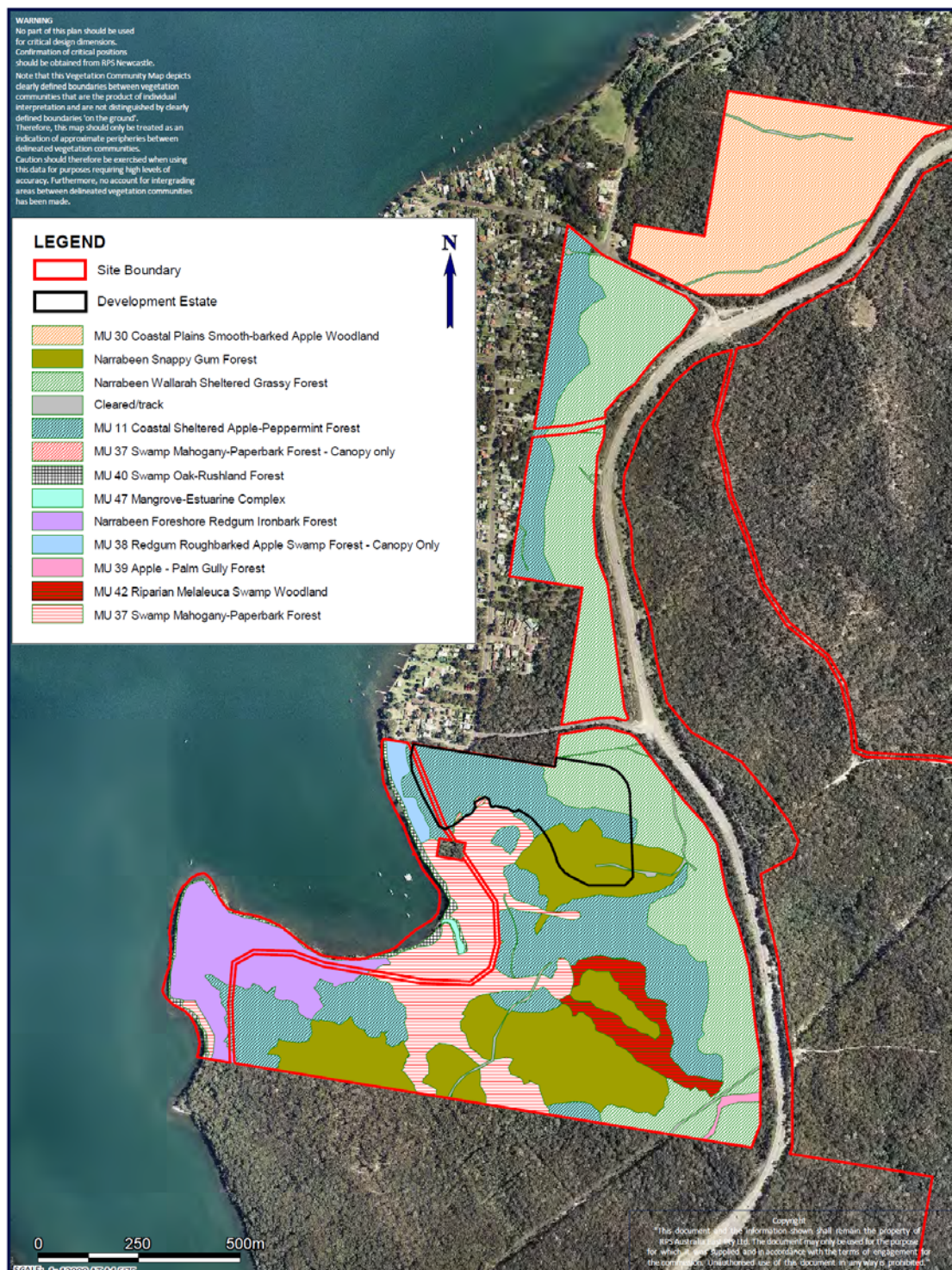
An ecological assessment (RPS Australia East Pty Ltd, November 2010) submitted with the concept plan identifies 11 native vegetation communities within the site, of which 5 are listed as Endangered Ecological Communities (EEC) under the NSW *Threatened Species Conservation Act 1995* (TSC Act) and 5 have been classified as Groundwater Dependent Ecosystems (GDE). The location of these vegetation communities is depicted in Figure 5.

The proposed development at Nords Wharf would result in the clearing of 10.18 hectares and facilitate the conservation of 116.6 hectares of land. The extent of EECs and GDEs to be cleared and that to be retained and conserved according to the proposal is outlined in Table 7 and depicted in Figure 5.

**Table 7 – Proposed Extent of Clearing of Endangered Ecological Communities and Groundwater Dependent Ecosystems**

<b>Vegetation Type</b>	<b>Total Area (ha)</b>	<b>Area to be Cleared (ha)</b>	<b>Area to be Conserved (ha)</b>
Narrabeen Foreshore Redgum – Ironbark Forest (EEC)	8.61	-	8.61
Swamp Oak Rushland Forest (EEC & GDE)	1.24	-	1.24
Swamp Mahogany – Paperbark Forest (EEC & GDE)	13.65	100m <sup>2</sup> plus 300m <sup>2</sup> of canopy in disturbed areas	13.61
Mangrove-Estuarine Complex (GDE)	0.13	-	0.13
Redgum Roughbarked Apple Swamp Forest (EEC & GDE)	0.89	-	0.89
Riparian Melaleuca Swamp Forest (EEC & GDE)	3.66	-	3.66
	<b>28.18</b>	<b>0.04</b>	<b>28.14</b>

Note: Figures based on Ecological Assessment Report prepared by RPS November 2010



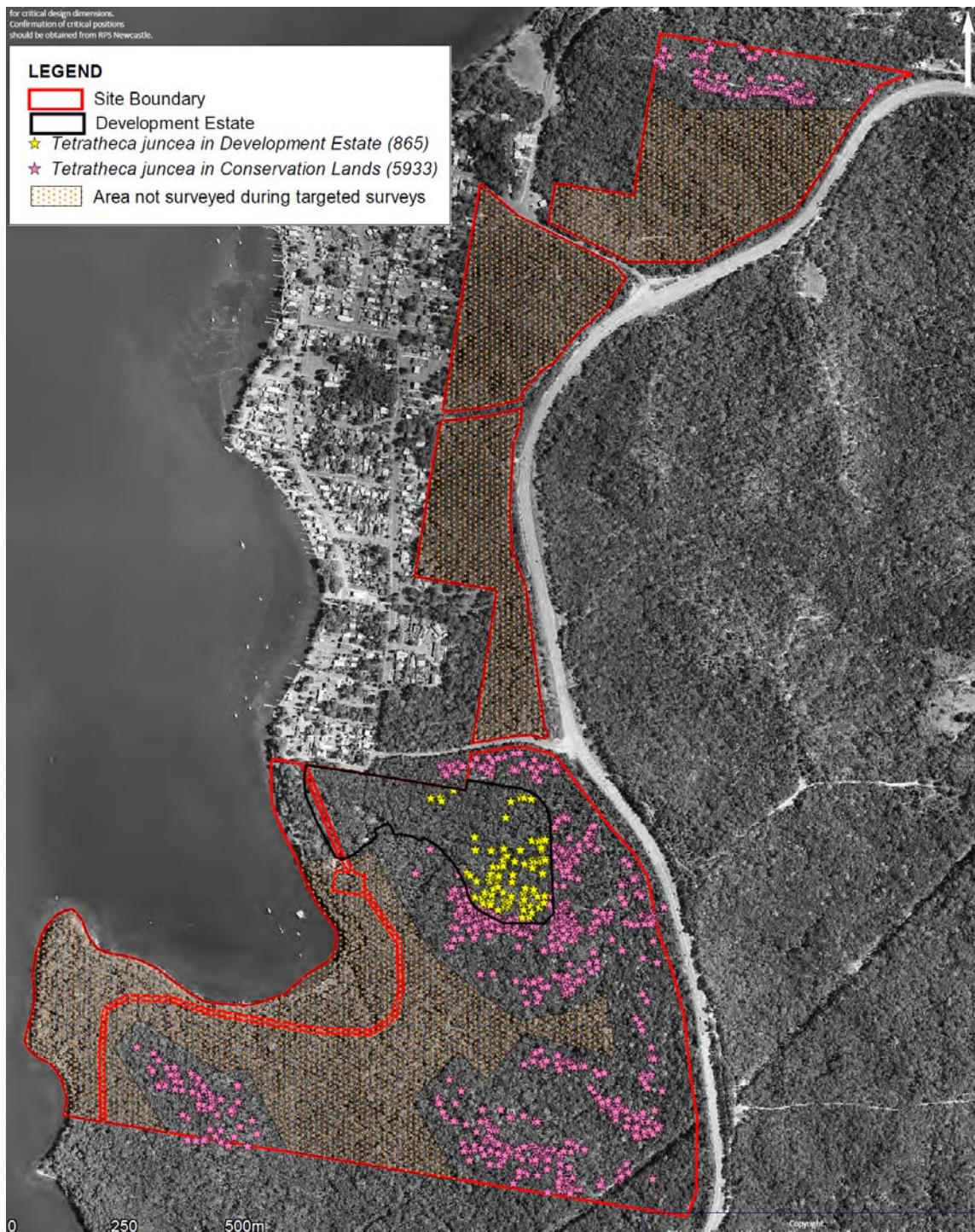
**Figure 5 – Vegetation communities present within the site**

The only EEC or GDE proposed to be removed as part of the proposal comprises approximately 400 square meters of Swamp Mahogany Paperbark Forest. The remaining EECs and GDEs are located within land to be dedicated for conservation purposes.

Targeted surveys across the site identified a total of 220 flora species, including one threatened species of orchid, *Tetratheca juncea*, listed under the TSC Act. A total of 6,798 individual *Tetratheca juncea* plants were recorded. A further six threatened flora species were considered to have potential habitat within the site.



Approximately 865 individuals (12%) of the recorded population of *Tetratheca juncea* would be cleared as a result of the proposal. The remaining 5,933 (88%) individuals of the recorded population are located within proposed conservation land.



**Figure 6 – Extent of *Tetratheca juncea* within the site**

### Fauna

Within 10 Km of the site, 35 threatened species of fauna have been identified in previous studies of the area. Targeted surveys of the site identified the following six threatened species of fauna:

- Grey-headed Flying-fox;
- Powerful Owl;
- Eastern False Pipistrelle ;
- Little Bentwing-bat ;

- Eastern Bentwing-bat ; and
- Glossy Black-Cockatoo.

A further 7 threatened species of fauna are considered to have a moderate or greater likelihood of occurring within the site due to the presence of potential habitat, including the Swift Parrot, listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as Endangered. Their presence was not, however, recorded during targeted surveys.

The proposed development would involve the removal of some hollow-bearing trees and other potential habitat for threatened fauna. The ecological assessment by RPS determined that abundant and generally higher quality habitat exists elsewhere in areas of the site proposed for conservation and as such, the proposal is unlikely to constitute a significant threat.

#### *Estuarine Species*

Mangroves, seagrasses and seaweeds are listed as protected marine vegetation under the NSW *Fisheries Management Act 1994* (FM Act). Surveys undertaken in the preparation of a Marine Baseline Assessment for Lake Macquarie (GHD October 2010) in support of the concept plan, identified 5 dominant seagrass species in the vicinity of the Site. No seaweeds or mangroves were identified. Several species of migratory and marine birds and fish listed under the EPBC Act, TSC Act and FM Act have been previously recorded in the vicinity of the site, however these were not recorded during the baseline assessment. The baseline assessment concluded that the proposed development would not directly impact on seagrasses or marine species, providing that stormwater runoff is appropriately managed. This is discussed further in Section 6.5 of this report.

#### Consideration

In its submission, the former Department of Environment, Climate Change and Water (referred to herein as the Office of Environment and Heritage (OEH)) identified a number of significant conservation outcomes associated with the proposal, including the transfer into public ownership of environmental conservation lands identified in the Lower Hunter Regional Conservation Plan. While the proposal involves the clearing of 10.18 hectares of native vegetation, including a small area containing an EEC and GDE, a number of the endangered orchid species *Tetratheca juncea*, as well as potential habitat for several threatened flora and fauna species, the Department considers that the dedication of 116.6 hectares of conservation lands containing a broader range of high quality vegetation and habitat will offset any impacts. The dedication of conservation lands proposed will contribute to the establishment of a significant regional biodiversity corridor between Wallarah National Park and Munmorah State Conservation Area. The OEH indicated in its submission that it considers the potential impacts of the proposed development on threatened species have been adequately addressed, and that proposed offsets in conservation lands comply with the OEH offsetting principles.

The proponent has committed to the preparation of a Tree Management Plan to provide for the identification and retention of significant trees prior to clearing. The Department considers that where possible, mature and hollow-bearing trees should be retained, including through the design of roads and stormwater devices. Future applications for residential subdivision and development should provide a clearing protocol to minimise the potential impacts of clearing on native fauna. It is also recommended that any future clearing be supervised by an ecologist. These requirements have been incorporated into the recommended instrument of approval.

The Department considers that the implementation of Water Sensitive Urban Design and the adoption of stormwater control mitigation strategies (discussed in Section 6.4 of this report) will ensure current surface runoff flows are maintained and adequate post development aquifer recharge, minimising any potential impacts on GDEs. Those GDEs located in close proximity to Lake Macquarie are considered less likely to be impacted. The proponent has also committed to the preparation of a Pet Management Strategy to manage potential impacts of pet ownership on native flora and fauna. Nonetheless, the Department considers that any future subdivision application should include details of the management of any impacts on GDEs, and this requirement has been incorporated into the recommended instrument of approval.

The Department considers that the potential impacts of the proposal on flora and fauna have been adequately addressed by the proponent.

#### *Conservation Lands*

The Department concurs with the OEHs position that the dedication of the proposed conservation lands will adequately offset potential impacts on flora and fauna arising from the proposal. It would also contribute to the protection of a conservation corridor linking the Wallarah National Park and the Munmorah State Conservation Area. As such the Department is satisfied that the proposal would not significantly impact upon threatened species, communities and populations listed under the TSC Act.

The Department notes that the proponent originally committed to preparing a Statement of Interim Management Intent (SIMI) detailing an interim management regime for the conservation lands prior to the transfer and gazettal of this land under the *National Parks and Wildlife Act 1974* (NPW Act). The OEH has advised that the origins of the SIMI relate to the Design Charette in 2007, and the need for the SIMI to be undertaken is no longer required as the draft VPA details the works required to remediate and establish the reserve.

Nonetheless, the Department concurs with OEH that appropriate environmental controls need to be put in place to manage the interface of the development and conservation areas, to ensure that any future development of the site does not impact on the conservation lands. In this regard, the Department considers that any subdivision application should include details of the management of the:

- spread of the invasive fungi *Phytophthora cinnamomi* during subdivision works; and
- interface between the development area and the conservation lands (including the foreshore area) including appropriate environmental controls (e.g., erosion and sediment controls, appropriate location of construction materials etc) to minimise any potential impacts on the conservation lands.

These requirements have been incorporated into the recommended instrument of approval and would ensure impacts on the conservation land from the future development of the site are minimised and managed.

The Department also considers that sufficient information regarding the torrens title subdivision of the proposed conservation lands has been provided, and recommends that no further assessment or approvals are required for this subdivision to be carried out. Consequently it is recommended that project approval be granted for this component of the proposal in conjunction with the concept plan approval. This is addressed within Schedule 3 of the recommended instrument of approval. The proponents proposed subdivision plan is provided at Appendix 2 of the recommended instrument of approval.

## **6.4 Soils and Water**

### **6.4.1 Groundwater**

The NSW Office of Water (NOW) raised concerns about the potential impacts of underground service infrastructure required by future development on groundwater. The NOW requested that the issue of groundwater interception and the protection of groundwater quantity and quality during construction of these services be addressed. In response the proponent indicated that excavations for the installation of telecommunication, water, and sewer services are generally expected to be less than 1.5 metres and therefore groundwater is not likely to be encountered. Geotechnical investigations identified low permeability soils and found groundwater was generally at a depth of greater than 3 metres within the proposed development area. Minor seepage into excavations of less than 3 metres could occur from localised perched water following rainfall, however this could be easily managed using sump pumps with no impact to the overall groundwater regime.



### Consideration

The Department considers that further assessment of excavations and extent of cut and fill should be undertaken during the detailed design to identify groundwater levels and to establish any management measures that may be required to minimise impacts on groundwater.

It is noted that where excavations intercept groundwater, a licence under Part 5 of the *Water Act 1912* is required. The Department has therefore recommended further assessment requirements to ensure that the full extent of potential groundwater impacts are considered prior to any development proceeding.

#### **6.4.2 Stormwater Management**

In order to mitigate potential water quality impacts the proponent has adopted a Water Sensitive Urban Design (WSUD) strategy to manage stormwater quality and quantity associated with the proposed development. The proposed WSUD strategy incorporates:

- opportunistic vegetated swales (potentially including bio-retention) along main overland flow routes and roadside green areas to remove sediment and suspended solids;
- precinct scale detention/ bio-retention basins in two locations along the southern boundary of the proposed development shown in Figure 3;
- gross pollutant traps located upstream of the precinct scale detention basins to remove coarse sediment and gross pollutants prior to discharging into basins and open areas;
- on-lot detention facilities; and
- rainwater tanks for individual lots.

Modelling of the quantity and quality of the stormwater generated by the proposal indicated that the proposed WSUD strategy would ensure:

- that Council's stormwater quality targets are met and consequently stormwater would be treated to an acceptable level prior to discharge; and
- post development stormwater flows from the site are managed appropriately.

The proponent's Statement of Commitments requires details of the bio-retention basins, bio-swales and swales to be submitted with the stage 1 construction certificate application. These facilities are proposed to be dedicated to Council, however Coal & Allied has committed to manage these facilities for a five year period or until all lots are sold (whichever occurs first).

Council have questioned whether the proposed bio-swales comply with the maximum slope requirement of 4%.

Council has also requested that nutrient and sediment control devices are erected pre-clearing and post-construction works in sensitive areas, such as adjoining watercourses. The proponent has committed to the preparation of a stormwater management strategy to manage water quality impacts during construction.

The NSW Office of Water (NOW) submission highlighted that there are a number of streams through the development area which are not identified in the concept plan. NOW raised concerns regarding the proposed location of roadways adjacent to streams. NOW considers that the concept plan should be re-designed to ensure protection of riparian corridors.

### Consideration

The Department considers that the proposed WSUD strategy adequately addresses the management of potential stormwater impacts associated with the future development of the site. The Department considers that design details of stormwater management devices will be required to accompany future residential subdivision applications. Such devices should be designed to the satisfaction of Council and in accordance with relevant Council policies and government guidelines. Further the proponent should outline management arrangements for public stormwater facilities prior to their dedication, with these arrangements to be negotiated with Council. These requirements have been included in the recommended instrument of approval.

As no major watercourses exist in the proposed development area, the Department does not consider that the proposed development layout requires redesigning to provide additional protection to riparian corridors.

Further monitoring is recommended to ensure that the proposed stormwater devices are effective in maintaining the natural values of Crangan Bay, seagrass beds, and Swamp Mahogany Paperbark Forest EEC. Any such program should include:

- Monitoring of data against relevant water quality standards and the baseline data collected prior to commencement of works;
- Monitoring of changes in hydrology caused by the development to ensure no detrimental impact on the water quality in Crangan Bay, seagrass communities in Crangan Bay, and Swamp Mahogany Paperbark Forest which adjoins the development area.
- Details on mechanisms and responsibilities for the management and reporting of the results; and
- Identification of remedial actions to be implemented in the event of a discrepancy between the actual and predicted performance of the water quality controls and/or any adverse impacts on seagrass beds communities or Swamp Mahogany Paperbark Forest EEC.

Accordingly, the recommended instrument of approval includes a requirement for a monitoring program to be submitted as part of any future residential subdivision application. Under the recommended approval the proponent would also be required to provide a copy of the monitoring program to NOW.

#### **6.4.3 Flooding**

The site is adjacent to Lake Macquarie and is subject to flood hazard from Lake Macquarie and from local overland flow paths. The proponent has prepared an assessment of the flood hazard, and has committed to manage flood hazard in accordance with the NSW Floodplain Development Manual. The flood levels identified through the proponent's assessment are identified in Figure 7.

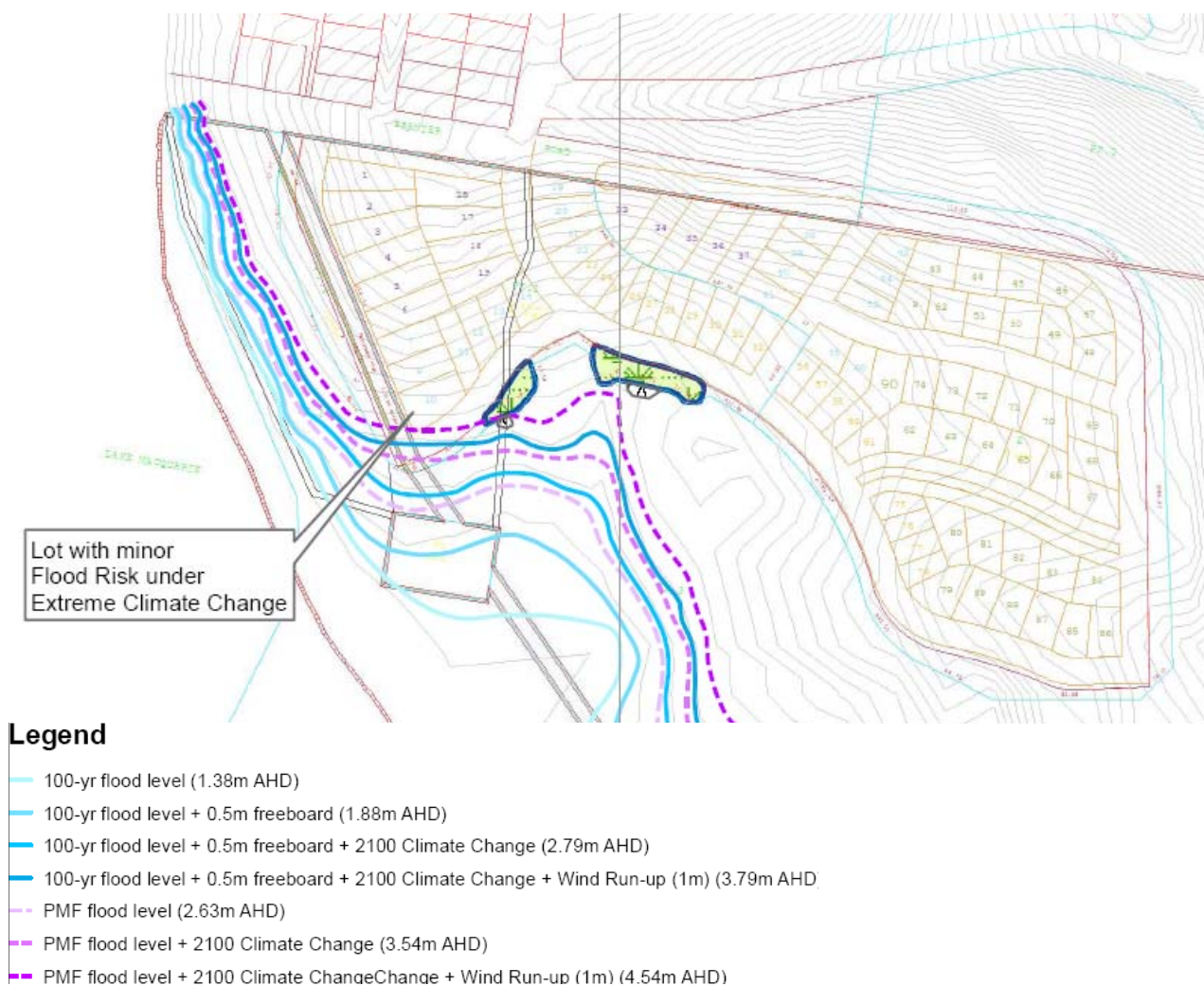
Under existing climate conditions the proposed development area is entirely above the 100 year flood level (plus 0.5m freeboard). Further the proposed development is entirely above the probable maximum flood level.

The assessment of flooding and climate change impacts indicates that with the exception of one lot, the proposed development would be located outside of the 100-year flood level identified for the 2100 future climate change scenario (see Figure 7). The proponent has also advised that changes in level are likely to occur as a result of future subdivision works, which could result in this lot no longer being effected as a result of localised filling.

#### Consideration

The *NSW Sea Level Rise Policy Statement* (2009) sets out sea level rise planning benchmarks of an increase above 1990 mean sea levels of 40cm by 2050 and 90cm by 2100. The *NSW Coastal Planning Guideline: Adapting to Sea Level Rise* adopts these benchmarks and identifies areas below the flood planning level (typically the 100 year flood level plus 0.5 metre freeboard) as the coastal flooding risk area. A key principle of the Guideline is avoid intensifying land use in coastal risk areas through appropriate strategic and land use planning.

The Department considers that the proponent has appropriately addressed potential flood hazards associated with the site, and further that the proposal is consistent with NSW Government policies on flooding and sea level rise. Nonetheless, future subdivision applications should demonstrate habitable floor levels for dwellings would be located above the relevant flood planning level and this has requirement has been reflected in the recommended instrument of approval.



**Figure 7 – Flood hazard**

#### 6.4.4 Acid Sulphate Soils

An assessment of acid sulphate soils and soil aggressivity was undertaken for the site (Douglas Partners 2010) involving the review of acid sulphate soil maps and sample testing. Based on the results it was considered that development in the southern portion of the site involving excavation depths greater than 1 metre below existing levels, may disturb marginal acid sulphate soils. The assessment also found that soil landscape mapping suggests the possible presence of naturally acidic or saline soils which may be aggressive to buried structures or services. The report outlines general acid sulphate soil management procedures and recommended that the extent and disturbance of acid sulphate soils is confirmed prior to construction.

#### Consideration

The Department acknowledges that the proposed development has potential to encounter soil aggressivity and disturb acid sulphate soils. The concept plan does not seek approval to undertake earthworks, however the Department considers that future development applications involving earthworks and excavation will require further investigation to ensure consideration of acid sulphate soils and soil aggressivity. This is reflected in the recommended instrument of approval.

#### 6.4.5 Contamination

The proponent has identified the following contamination issues within the proposed development footprint:

- presence of lead levels in filling in the central portion of the Site, with levels in exceedence of residential guidelines;
- presence of fibro fragments containing asbestos within filling in the central portion of the Site, and in a small stockpile in the northern portion of the Site;
- unauthorised dumping has also occurred on the site, which is likely to be associated with further asbestos materials at the Site surface; and
- presence of building materials containing asbestos.

An assessment of contamination at the site undertaken by Douglas Partners (2010) concluded that the site can be made suitable for residential development through remediation including the following:

- further delineation of the extent of contamination;
- development of a Remediation Action Plan;
- appropriate remediation to remove identified contaminants exceeding relevant land use criteria;
- deleterious materials and possible associated surface impact removed;
- validation testing and verification (in the case of asbestos to be carried out by a qualified asbestos consultant); and
- waste classification to DECCW guidelines of any material for off-site disposal at a licensed landfill.

The proponent has committed to implementation of the above remediation prior to residential development occurring on the site. The former DECCW indicated that it considers site contamination to have been adequately addressed through the concept plan.

#### Consideration

The Department considers that the proposed development area can be made suitable for residential development through remediation and as such complies with the requirements of State Environmental Planning Policy 55 – Remediation of Land. Further requirements for remediation and for provision of site audit documentation for future development on site have been incorporated into the recommended instrument of approval.

#### 6.5 Former Mining Activity and Mining Potential

The Site is located within a proclaimed mine subsidence district and is underlain by abandoned mining workings in two seams. The Wallarah Seam workings underlie most of the Site and the Great Northern Seam workings encroach only on the south-east corner of the Site. The depth of cover of the Wallarah Seam workings ranges from about 60 to 80m. The depth of cover for the Great Northern workings is in the range of 105m to 125m.

An assessment of mine subsidence has been undertaken by Douglas Partners (2010) on behalf of the proponent. The resulting mine subsidence estimates indicate that possible subsidence would exceed the allowable parameters for two storey development in the south east corner of the Site, but that the remaining area would be suitable for two storey development (see Figure 8).

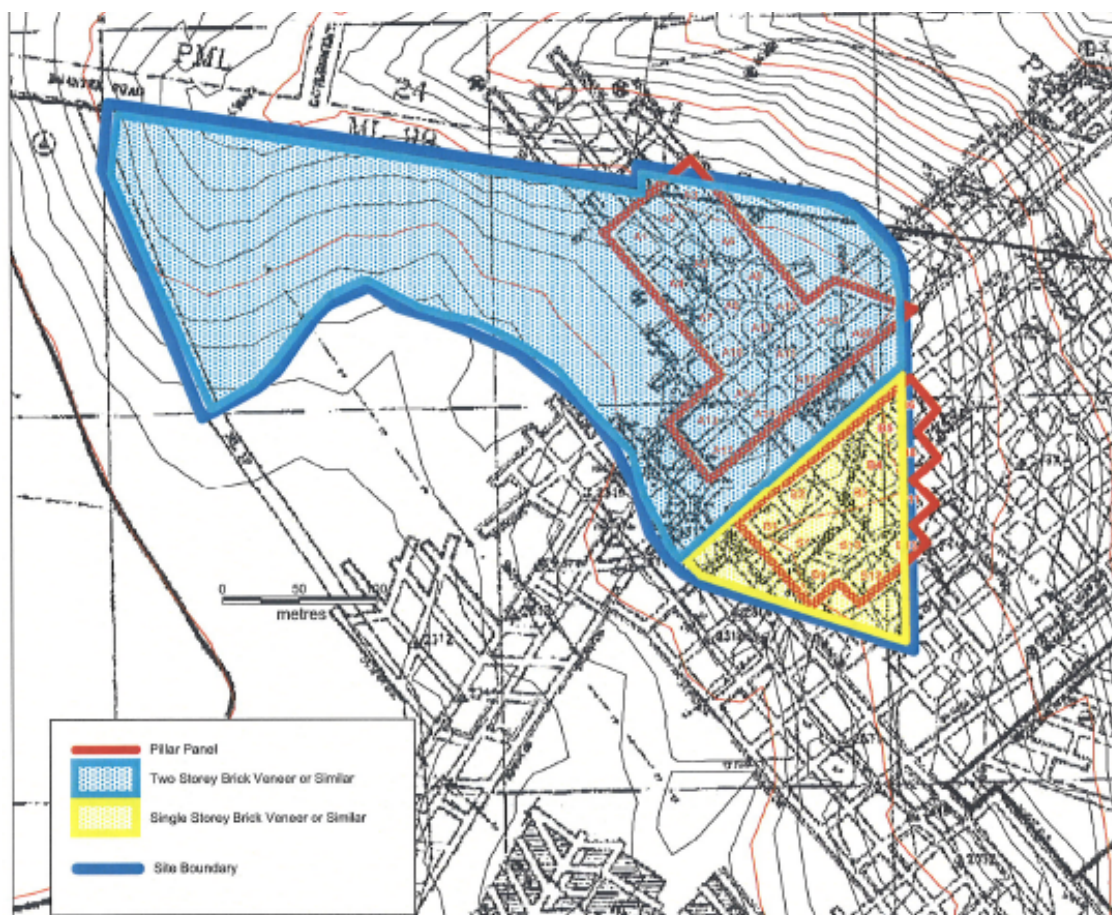
Accordingly, the concept plan only proposes one storey dwellings in this area.

The Mine Subsidence Board (MSB) has advised that it would grant its approval for this proposal subject to the proponent:

- submitting final detailed plans and drawings prior to commencement of construction, containing a certification of a qualified structure engineer that any works will be safe, serviceable and repairable taking into account the geotechnical conditions at the site;
- demonstrating to the MSB that the works are long term stable and that there is no risk or subsidence, or alternatively, removing any risk by suitable means such as grouting; and
- providing a detailed geotechnical investigation to the satisfaction of the MSB.



The former Department of Industry & Investment has advised that mining related issues associated with the proposal have been appropriately addressed, and that it has no objections with the proposal provided that the conservation lands are gazetted as a State Conservation Area under the *National Parks and Wildlife Act 1974*. This is to ensure that resource exploration and extraction could occur in the future.



**Figure 8 – Mine subsidence constraints**

### Consideration

The Department considers that mine subsidence and future mining potential has been adequately addressed by the proponent. Prior to the commencement of development activities on the site, additional consideration and approval from the MSB will be required. The MSB requirements for future development have been incorporated into the recommended instrument of approval.

The future status of the conservation lands under the *National Parks and Wildlife Act 1974* is not a matter for consideration for the concept plan, and would be determined by the Minister for the Environment following the dedication of the land.

## **6.6 Bushfire Risk**

A Bushfire Threat Assessment has been prepared on behalf of Coal & Allied (RPS Australia) which considers the proposed development against the requirements of *Planning for Bushfire Protection 2006* and the revised Australian Standard AS3959-2009 *Construction of Buildings in Bushfire Prone Areas* (AS3959-2009). The assessment sets out requirements for asset protection zones (APZs) of between 20 and 25 metres, as well as recommendations regarding access and egress, construction standards and ongoing management measures. The Bushfire Threat Assessment concludes that future dwellings within the proposed development area would be able to comply with the relevant standards.

In response to the exhibition of the concept plan the RFS raised concern about the site access and suitability of the proposed landscaping works. In response, the proponent amended the concept plan to remove the proposed cul-de-sac and extend the perimeter road to provide access from the north of the development to Government Road. The proponent also confirmed that vegetation within the proposed development area would be managed to an appropriate standard for APZs as per *Planning for Bushfire Protection 2006*. The proponent noted that should detailed designs of proposed roads be unable to accommodate the requirements contained in *Planning for Bushfire Protection 2006*, a performance based assessment would be undertaken as part of any future project application approvals.

Council highlighted concern that APZs are located on land proposed to be dedicated to council, including land adjoining the perimeter road and the detention basins. Council advised that it would not accept maintenance responsibility for swales and other vegetated areas where they form part of APZs, unless a monetary contribution is provided to Council for the management of these APZs for the life of the subdivision. In response the proponent advised it intends to accommodate all APZ areas within street reserves, or within private allotments.

The proponent has committed to preparing a Bushfire Management Plan in accordance with the requirements of the *Planning for Bushfire Protection Guidelines 2006* and any other requirements of the NSW Rural Fire Service.

#### Consideration

The Department considers that bushfire risk to future development on the site can be adequately managed, however further resolution of the subdivision layout and road design is required to ensure compliance with the requirements of the *Planning for Bushfire Protection Guidelines 2006*.

The Department considers that the amendment made to the concept plan to provide a continuous perimeter road that connects to Government Road adequately responds to comments made by the RFS. However, the extended road intersects with Government Road in close proximity to the existing intersection of Government Road / Awabakal Road. Accordingly, the Department considers that the proponent should be required to demonstrate the intersections of Branter Road / Government Road and Awabakal Road / Government Road can operate safely. Alternatively, the proponent would need to identify an alternative access arrangement to the satisfaction of Council and the RFS.

The Department also considers that where any APZ is proposed to be located on Council land the management arrangements would need to be negotiated with and agreed to by Council.

### **6.7 Impacts of Climate Change on Bushfire Risk**

Climate change and associated predicted temperature rises are likely to lead to an increase in the average number of days when the Forest Fire Danger Index (FFDI) rating is very high to extreme. The combined frequency of days with very high and extreme FFDI ratings is likely to increase from 4-25% by 2020 and 15-70% by 2050, with the increase in fire weather risk being greater away from the coast. These estimates are from a CSIRO study of climate change impacts on fire weather in south-east Australia carried out in 2005. The study also highlights a number of uncertainties when assessing the impacts of fire weather risk associated with climate change, such as:

- Changes in rainfall thresholds;
- Changes in ignition and fire loads; and,
- Changes in El Nino-Southern Oscillation events under climate change.

#### Consideration

There is an increased risk of fire weather associated with climate change, as indicated by the FFDI predictions mentioned, however at this stage the regional impacts cannot be easily quantified with any certainty. The coastal location would appear to be an advantage, with a lesser risk than inland areas. Given the uncertainties, the Department is satisfied that the application of current requirements embodied in *Planning for Bushfire Protection 2006* is an appropriate response to this issue.



## 6.8 Traffic and Transport

The main access points to and from the proposed development are via Branter Road, and Government Road. All roads within the proposed development area are local roads and are proposed to be designed with a road reserve of 17m. Awabakal Drive provides direct access to the Pacific Highway and the wider regional road network. The road network around the Nords Wharf development area is provided at Figure 9.

A traffic and transport study prepared for Nords Wharf (Hyder 2010) estimates that 77 peak hour trips would be generated by the proposed 90 dwellings. It is expected that trips internal to the Nords Wharf village would be negligible. Nonetheless, impacts of the proposal on the local road network, as well as cumulative impacts of this proposal along with other developments proposed in the area on the regional road network have been considered below.



**Figure 9 – Road Network**



### 6.8.1 Regional Roads

The proponent's study assessed the cumulative impacts of the proposed development at Nords Wharf along with Coal & Allied's proposals at Middle Camp and Gwandalan, and Rose Group's proposals at Catherine Hill Bay and Gwandalan. It concluded that the combination of these developments would result in impacts on key intersections with the Pacific Highway. The three intersections below would have a significant cumulative impact and would require improvements to operate at a reasonable level of service. They are:

- Pacific Highway/Flowers Drive;
- Pacific Highway/Awabakal Drive; and
- Pacific Highway/Kanangra Drive.

The Pacific Highway/Awabakal Drive intersection upgrade works would be triggered by the proposed development at Nords Wharf site alone. A new partial signal for this intersection was recommended by the study.

The former RTA (referred to herein as the Roads and Maritime Services) provided detailed requirements for the upgrade the Pacific Highway / Awabakal Drive intersection to a signalised seagull intersection. The upgrade is to be subject to a Works Authorisation Deed (WAD). The Roads and Maritime Services (RMS) also considers that a Construction Traffic Management Plan (CTMP) is required, to be submitted to the RMS and Council for approval prior to any construction activities occurring onsite. The CTMP is to include a Vehicle Movement Plan and Traffic Control Plan, and is to ensure minimal impact to the operation of the local and regional road network during construction.

Council has requested that the upgrade of the Awabakal Drive / Pacific Highway intersection must include pedestrian phase to enable a shared pathway to be provided between Nords Wharf and Catherine Hill Bay. The proponent considers that this would be resolved during the detailed design of the road.

#### Consideration

The Voluntary Planning Agreement requires the proponent to upgrade the Pacific Highway / Awabakal Drive intersection to the requirements of the RMS. Under the terms of the VPA the proponent must enter into an agreement with RMS with respect of the carrying out of the works, and achieve practical completion by the date of issue of a subdivision certificate for the first urban lot. The Department considers that this adequately addresses the issues raised by RMS. The requirements of the RMS for this intersection, along with the requirement for a CTMP to be submitted with future subdivision applications have been reflected in the recommended instrument of approval.

In carrying out the detailed design for the road upgrade, the Department considers that the proponent should consider whether a pedestrian phase can be accommodated.

### 6.8.2 Local Roads

Future traffic volumes on existing and proposed local roads as a result of the proposed development, and background growth, were also assessed. The resulting volumes are considered to be well below the RMS's recommended environmental performance standard, which account for both amenity and safety. Modelling of the intersections at Government Road/Awabakal Drive was carried out as part of the traffic study. This modelling demonstrates that the Government Road/Awabakal Drive intersection can easily accommodate the additional traffic movements generated by the proposed development, with the intersection operating at a level of service A (Good operation), and a degree of saturation of 0.05 (5% of capacity) in the morning peak and 0.10 (10% of capacity) in the evening peak.

The proponent has committed to dedicating all local roads to Council, at no cost.

In its submission Council outlined the following concerns regarding the local road network:

- The main entry road should be distinguished from other local streets by feature streetscape treatments.

- All roads and footpaths must comply with Council's DCP requirements. A number of roads within the proposed development are narrower than that required under the DCP.
- The foreshore road is required to accommodate parking on both sides of the carriageway, to provide additional parking in proximity of the foreshore.

### Consideration

The Department considers that the proposed local road network is generally acceptable, however the Department considers that further resolution of the road design is required to be carried out prior to subdivision approval. In this regard the Department considers that prior to subdivision approval the proponent should be required to demonstrate the local road network has been designed to the satisfaction of Council.

### **6.8.3 Pedestrian and Cycle Access**

Pedestrian access is proposed to be provided via footpaths along at least one side of all proposed roads. Footpaths are proposed to be 1.2 metres wide, and generally located on the housing verge. Designated cycles paths are not proposed, with cycle access to be accommodated on local roads.

The proponent has also committed to providing a 1.2 metre wide pedestrian pathway from the proposed development along Government Road to the nearest bus stop. Under the \$5 million allocation the proponent has also committed to extend this pathway to the Nords Wharf school. The proponent has also committed to providing walkways within the conservation land to be dedicated to the NSW Government. Such works would be subject to approval by the Office of Environment and Heritage.

Council has raised the following concerns about the proposed pedestrian / cycle network:

- Footpaths should not be located immediately adjacent to the front boundaries of proposed lots as this area is typically used for electricity boxes for underground power;
- The footpath around the perimeter road should be located on the side of the road adjacent to the conservation lands rather than adjacent to dwellings with a minimum width of 1.5 metres;
- No provision has been made of off-road cycleways or shared pathways within the development area; and
- The proponent should provide a cycleway along Awabakal Drive from the Pacific Highway to the proposed development.

Transport NSW has also requested that dedicated footpaths be provided on both sides of all roads.

In response the proponent has indicated that the concept plan provides for on-road cycling due to the low traffic environment of the proposed development, but that the detailed design of footpaths would be further detailed as part of future project applications, to include provision for cyclists.

The proponent also considers that the footpath width of 1.2 metres is adequate for the levels of pedestrian traffic anticipated and would help to minimise hard surfaces, and maximise deep soil street plantings, and that its location adjacent to dwellings would increase safety through passive surveillance.

### Consideration

The Department considers that the further resolution of footpath locations and widths should be carried out through detailed design of the local road network. However, the Department supports the proponent's view that it is appropriate to accommodate cyclists on road given the low traffic levels.

The Department does not consider that the proponent should be required to provide a cycleway along Awabakal Drive, unless this is negotiated to form part of the proponent's local infrastructure contributions.

### **6.8.4 Public Transport**

An existing bus route operates between Nords Wharf, Lake Haven and Swansea. The closest existing bus stop to the proposed development is located on Government Road approximately

150m north of the Awabakal Drive intersection. The proponent's traffic study recommends an additional bus stop be provided near the intersection of Awabakal Road and Government Road, which would result in almost all of the proposed development being within a 400m radius of a bus stop.

Council has requested that the proponent construct shelters at any new bus stops proposed as a result of the development.

### Consideration

The Department recognises that any changes to the current bus route and locations of bus stops will need to be negotiated with the service provider. However, the Department considers that the proponent should be required to investigate opportunities to deviate the existing bus route to service the proposed development and to provide appropriate pedestrian access to proposed bus stops in consultation with council and the bus operator, and details of these investigations should be lodged with each subdivision application. These requirements have been incorporated into the recommended instrument of approval.

## **6.9 Heritage**

### **6.9.1 European Heritage**

A Heritage Impact Assessment was prepared by ERM (2010) to accompany the concept plan. The Heritage Impact Assessment concluded that the Site does not have any European historical heritage items or value at a local or State level, including historical archaeological potential. As such, the proposed development is not considered likely to impact on any known historical heritage items.

Scout Camp Kanangra is located within the proposed development area and would be demolished should future development of the site proceed. Concern has been raised about the loss of this facility in submissions from members of the public and by Scouts Australia (NSW) and Council. In recognition of the Scout Camp's occupation of the Site, the proponent has committed to the preparation of a heritage interpretation plan for the camp. The proponent has also committed to preparing an oral and documentary history to be produced as a Regional Scout History publication. The Department's former Heritage Branch (now part of OEH) has recommended that future conditions of development approval should require the preparation of a heritage interpretation plan in accordance with Heritage Council Guidelines.

Scouts Australia objected to the proposed concept plan. The proponent has advised that it has maintained discussions with the Scouts regarding the future options and relocation of Camp Kanangra since October 2006.

### Consideration

The site is privately owned land and as such the use of the site by the Scouts is a matter between existing landowner (Coal & Allied) and the Scouts. It is understood that the NSW Scouts have been aware for some time that the Coal & Allied is proposing to redevelop the site.

The Department is satisfied with the assessment that the Site does not have European heritage values, or non-Indigenous archaeological potential, however it supports the proposed documentation and interpretation of the use of the site by the Scouts. Accordingly, the Department considers the removal of the buildings associated with the scout camp acceptable. The Department recommends that a heritage interpretation plan is lodged with the first subdivision application and that any Construction Management Plan required in support of future works to be carried out on site should include procedures in the event that unidentified archaeological relics are discovered on the Site. These requirements have been reflected in the recommended instrument of approval.

### **6.9.2 Aboriginal Heritage**

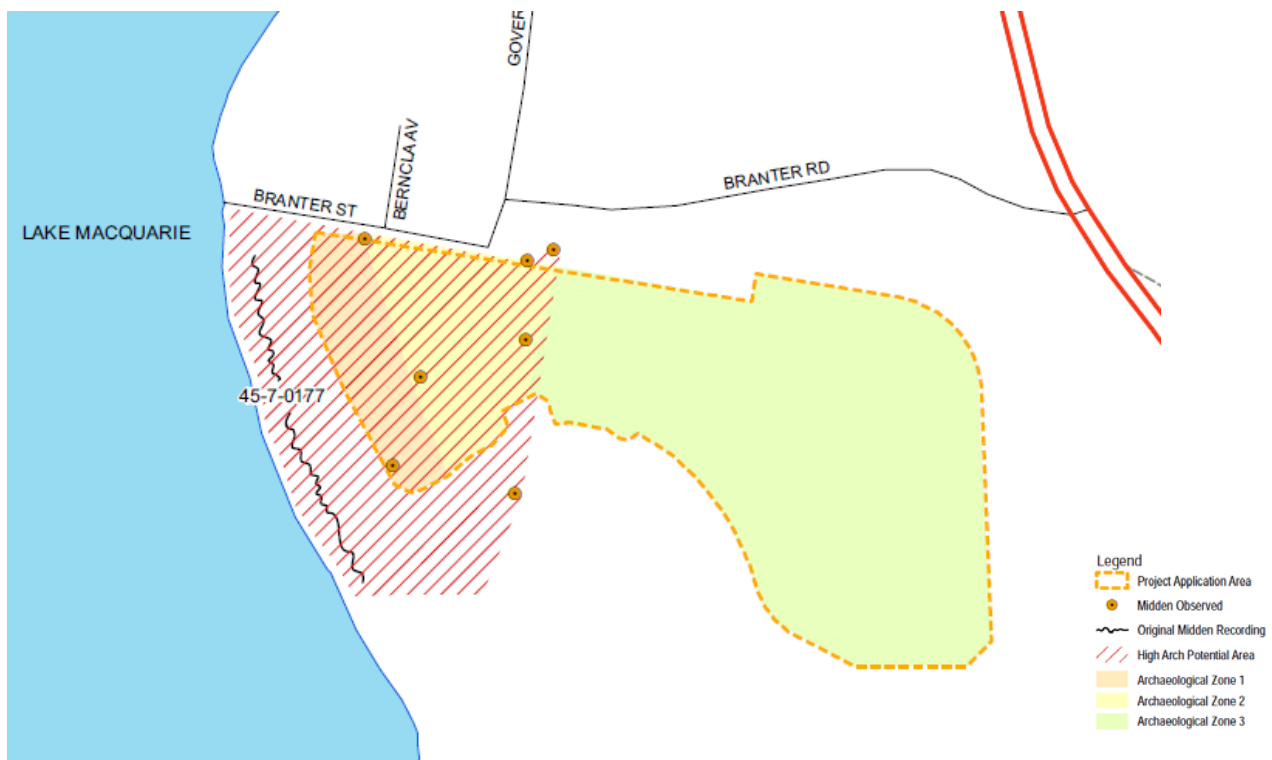
The Heritage Impact Assessment prepared by ERM identified a previously recorded Aboriginal midden site extending from the foreshore and across the western portion of the proposed

development area. Site survey work confirmed the location and extent of this recorded midden and determined that it forms part of an extensive midden complex as shown in Figure 10. Activities associated with the Scout Camp have disturbed parts of the midden to varying degrees, however, these disturbances are mainly restricted to the upper surface of the midden. An assessment of significance of the midden site indicates that it has high social value to the Aboriginal community, high scientific value, and high/moderate archaeological value.

The Heritage Impact Assessment divided the proposed development area into three archaeological zones:

- Archaeological zone 1: contains the midden and has a high archaeological potential. This zone should be avoided during development if possible, and any impacts arising from development should be mitigated.
- Archaeological zone 2: contains the midden and has a moderate archaeological potential. All impacts arising from development should be mitigated within this zone.
- Archaeological zone 3: This area does not contain any known Aboriginal sites and has low archaeological potential.

The assessment found that any works resulting in top soil clearing, ground breaking or disturbance within Archaeological Zones 1 and 2 are likely to impact and disturb the Aboriginal midden site. As the concept plan proposes development across these zones, mitigation measures for development impacts are recommended, including archaeological excavation of areas of high archaeological potential comprising Archaeological Zones 1 and 2, and interpretation of the Aboriginal occupation and heritage of the Site. The proponent has committed to the preparation of an Aboriginal Cultural Heritage Management Plan (ACHMP) in accordance with the recommendations contained in the Heritage Impact Assessment, and to ensuring that the location of all infrastructure services avoids and protects areas of high Aboriginal significance.



**Figure 10 – Location of Aboriginal midden and archaeological zones**

The submission from the former DECCW (referred to herein as OEH) raised concerns regarding consultation with local Aboriginal communities. In particular OEH requested evidence to demonstrate the views of registered Aboriginal stakeholders regarding the assessment of Aboriginal heritage significance undertaken, the mitigation measures recommended, the proposed

ACHMP and the conservation outcomes for the midden site. OEH recommended that the ACHMP be developed in consultation with Aboriginal stakeholders, and that consultation should continue until the completion of the proposal.

Concerns regarding the methodology for further archaeological investigations recommended by the Heritage Impact Assessment were also raised in the submission from OEH, which highlighted the requirement for any further investigations to be undertaken in accordance with the regulated investigation works required under the NPW Act since October 1 2010, including DECCW's *Code of Practice for Archaeological Investigation of Aboriginal Objects (2010)*. It was also stated that an appropriate keeping place for any Aboriginal objects salvaged during archaeological investigations or discovered during works should be agreed upon with the local Aboriginal community.

On 6 June 2011 the proponent provided an addendum to the PPR which included a revised Heritage Impact Assessment prepared by ERM and revised Statement of Commitments. The revised Heritage Impact Assessment contains evidence of further consultation with registered Aboriginal stakeholders, as requested by OEG. The proponent has committed to undertaking ongoing consultation with Aboriginal stakeholders for the duration of the project, in accordance with all current legislation and guidelines. The proponent has also committed to undertaking further archaeological investigations in Archaeological Zones 1 and 2 as recommended by the Heritage Impact Assessment and in accordance with the requirements identified by OEH, and in accordance with the NPW Act. The involvement of Aboriginal stakeholders in the preparation of the ACHMP and archaeological investigations has been included in the Statement of Commitments, as well as ensuring that requirements are in place should relics or artefacts be discovered during future investigations or site works.

### Consideration

The Department is satisfied that the proponent has met the requirement to consult with Aboriginal stakeholders regarding the proposed concept plan, and that consultation will be ongoing. The Department acknowledges that part of a recorded Aboriginal midden would be affected by the proposed development, however it is satisfied that the impact can be adequately mitigated through further archaeological investigation and salvage, in accordance with the requirements identified by OEH. The proponent has committed to undertaking further archaeological investigations in consultation with Aboriginal stakeholders, and ensuring that appropriate measures are in place to protect Aboriginal cultural heritage during any works undertaken on Site.

The Department considers that the proposed ACHMP will be important in ensuring potential impacts of future development of the Site on Aboriginal heritage are mitigated and managed. The requirements for this management plan, and for further archaeological investigations and Aboriginal heritage interpretation have been addressed in the recommended instrument of approval.

## 7. CONCLUSIONS

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The Department has reviewed the environmental assessment, the preferred project report and the Statement of Commitments and has duly considered the advice from public authorities as well as issues raised in the general submissions in accordance with Section 75I(2) of the Act. All the relevant environmental issues associated with the proposal have been extensively assessed.

It is recognised that there are a number of potential environmental impacts and other issues associated with the development which will need to be managed and/or mitigated, in particular provision of infrastructure, impacts on ecological values including flora and fauna and water quality, bushfire hazard, urban design and built form, contamination, impacts on Aboriginal heritage, and management of traffic and transport. However, the Department is of the view that the proponent has satisfactorily addressed these issues or that they can be adequately addressed through modifications to the concept plan and future development applications associated with the concept plan, including:

- preparing detailed Urban Design Guidelines in consultation with Council;
- preparing a landscape management plan including details for public domain treatments;
- preparing a vegetation and habitat management plan to manage impacts on flora and fauna during development of the Site as well as managing the interface between the Site and conservation lands;
- negotiate future ownership and management arrangements for the landscaped buffer along Branter Road with Council;
- ensure bushfire hazards are managed, including through provision of adequate APZs and access arrangements; and negotiate the location, layout and management arrangements for APZs with RFS and Council;
- preparing a Aboriginal cultural heritage management plan and requirements for further archaeological investigations and Aboriginal heritage interpretation; and
- requirements for stormwater management and further consideration and assessment of contamination, acid sulphate soils and mine subsidence.

Subject to the requirements outlined in the proponent's Statement of Commitments and the modifications and further assessment requirements outlined in the recommended instrument of approval, the Department considers that the proposal is in the public interest as it would provide development of an appropriate scale given the local context and site constraints, and it would facilitate the dedication and protection of conservation lands in perpetuity. On this basis it is also considered that the site is suitable for the proposed development.

The Department recommends that all future development is subject to Part 4 of the Act, with Council as the consent authority. The Department also recommends that the subdivision to enable the transfer to conservation lands requires no further assessment and that the Minister grants project approval in conjunction with the concept plan.

Consequently, the Department recommends that the proposed concept plan be approved, subject to the proposed modifications and further assessment requirements outlined at **Appendix A**.



## 8. RECOMMENDATION

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It is recommended that the Planning Assessment Commission:

- (A) **consider** all relevant matters prescribed under Section 75O(2) of the *Environmental Planning and Assessment Act, 1979* including those relevant matters prescribed by Section 75N and 75I(2) as contained in the findings and recommendations of this report;
- (B) **approve** the concept plan application, subject to modifications, under Section 75O of the *Environmental Planning and Assessment Act, 1979* having considered all relevant matters in accordance with (A) above;
- (C) **determine** the future environmental assessment requirements for subsequent project or development applications associated with the concept plan;
- (D) **determine** no further environmental assessment is required for the transfer of conservation lands and grant project approval; and
- (E) **sign** the instrument of approval (**Tag A**).



**A/Executive Director  
Urban Renewal and Major Sites**



**Director General**

24/4/2012

## **APPENDIX A – RECOMMENDED INSTRUMENT**

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## APPENDIX B – STATEMENT OF COMMITMENTS

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## APPENDIX C – PREFERRED PROJECT REPORT / RESPONSE TO SUBMISSIONS

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See the Department's website at <http://majorprojects.planning.nsw.gov.au>

## APPENDIX D – INDEPENDENT HEARING AND ASSESSMENT PANEL REPORTS

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See the Department's website at <http://majorprojects.planning.nsw.gov.au>

## APPENDIX E – ENVIRONMENTAL ASSESSMENT

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See the Department's website at <http://majorprojects.planning.nsw.gov.au>



## APPENDIX F – PUBLIC SUBMISSIONS

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See the Department's website at <http://majorprojects.planning.nsw.gov.au>

## APPENDIX G – ENVIRONMENTAL PLANNING INSTRUMENTS

The table below provides the Department's assessment of compliance against Environmental Planning Instruments, including State Environmental Planning Policies, that substantially govern the carrying out of the development.

<b>Lake Macquarie Local Environmental Plan 2004</b>	
The site was rezoned on 13 April 2012, by way of <i>State Environmental Planning Policy Amendment (Nords Wharf) 2012</i> which amended the <i>Lake Macquarie Local Environmental Plan 2004</i> , to establish zones and controls for the site.	The concept plan is consistent with the Lake Macquarie LEP through its proposed layout, land use and development controls.
<b>State Environmental Planning Policy No. 55 – Remediation of Land</b>	
SEPP 55 promotes the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. The policy states that land must not be developed if it is unsuitable for a proposed use because it is contaminated.	<p>The proponent has prepared a Preliminary Contamination Assessment, which concluded that the site can be made suitable for residential development through remediation.</p> <p>The proponent has committed to implementation necessary remediation measures prior to issue of the construction certificate for stage 1 works.</p>
<b>State Environmental Planning Policy No. 71 – Coastal Protection</b>	
SEPP 71 aims to protect and manage the natural, cultural, recreational and economic attributes of the New South Wales coast.	It is considered that the proposal addresses the aims of the SEPP through its provision of environmental conservation lands, foreshore set backs to Crangan Bay, and water sensitive urban design measures. Public access to the foreshore will also be improved.
<b>Draft SEPP 66 – Integration of Land Use and Transport</b>	
<p>This draft SEPP aims to ensure that urban structure, building forms, land use locations, development designs, subdivision and street layouts help achieve the following planning objectives:</p> <ul style="list-style-type: none"> <li>(a) <i>improving accessibility to housing, employment and services by walking, cycling, and public transport,</i></li> <li>(b) <i>improving the choice of transport and reducing dependence solely on cars for travel purposes,</i></li> <li>(c) <i>moderating growth in the demand for travel and the distances travelled, especially by car,</i></li> <li>(d) <i>supporting the efficient and viable operation of public transport services,</i></li> <li>(e) <i>providing for the efficient movement of freight</i></li> </ul>	<p>The Department has recommended a modification to the concept plan which would require a bus stop to be provided near the proposed development. This bus stop would locate almost all the development within 400 metres of a bus stop.</p> <p>The concept plan also provides for pedestrian pathways to the existing facilities within the Nords Wharf village.</p>
<b>State Environmental Planning Policy No. 44 – Koala Habitat Protection</b>	
<p>SEPP 44 aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline.</p> <p>SEPP 44 applies to the site as it is located in a local government area listed in Schedule 1. The</p>	The ecological assessment provided in the environmental assessment report finds that the site is not considered to represent 'Core Koala Habitat'.

supplementary ecological assessment provided in the PPR considers SEPP 44, but goes wider due to additional species that are considered potential habitat for koalas.	
<b>State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004</b>	
The SEPP aims to encourage sustainable residential development in accordance with the BASIX scheme. The BASIX SEPP will apply to new dwellings, future retirement housing and the commercial development as identified in the concept plan.	The SEPP will be applied at the Development Application stage for each dwelling / building. An Energy and Water Savings Action Plan has also been prepared to address BASIX requirements.