



Gwandalan Residential Development, Concept Plan MP10_0084

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

May 2012

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EXECUTIVE SUMMARY

This is a report for an application seeking Concept Plan approval for development of a site at Gwandalan, in the Lower Hunter region, for residential purposes, 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 an indicative layout of the Gwandalan site for residential development and dedication of land for conservation purposes, comprising the following:

- development of 62.24ha of the site for a maximum of 623 residential dwellings across two stages;
- Torrens title subdivision to allow for the excision and dedication of 205.75ha of land for conservation purposes, including a 100 metre wide foreshore reserve;
- up to 3,000m² of local commercial / retail floor space within the development area;
- conceptual road layout incorporating pedestrian and cycle paths;
- infrastructure works including bio-retention drainage facilities; and
- landscaping and open space.

The proponent also submitted a State significant site (SSS) study in support of rezoning the site for residential and environmental protection. The site was rezoned by way of an amendment to the *Wyong Local Environmental Plan 1991* on 13 April 2012.

The estimated project cost of the total development is approximately \$149 million.

Previous Applications and Independent Hearing and Assessment Panel

The proponent lodged Concept Plan and State Significant Site (SSS) rezoning applications for the same site in February 2007. Theses applications were withdrawn on 11 June 2010 in light of decisions by the Land and Environment Court which invalidated the former Minister for Planning's approvals relating to the Rose Property Group development at Catherine Hill Bay / Gwandalan, and Huntlee. Under the transitional provisions for Part 3A projects, the Part 3A declaration for the previous Concept Plan application has been revoked and as such the application is no longer a Part 3A project.

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 Environmental Assessment for the Concept Plan was exhibited with the State Significant Site study for Gwandalan from 17 November to 17 December 2010. The proposal for Gwandalan was exhibited concurrently with the proposals for Middle Camp and Nords Wharf. These sites are also owned by Coal & Allied and are part of the lands known as the Coal & Allied Southern Estates.

The Department received 49 submissions from the public, 48 of which were in objection to the proposal. Submissions were also received from the following 11 Government agencies: Mine Subsidence Board, former Department of Environment, Climate Change and Water (now the Office of Environment and Heritage), Heritage Office, Hunter Central Rivers Catchment Management Authority, Hunter New England Area Health (NSW Health), Roads & Traffic Authority, Wyong Shire Council, former Department of Industry and Investment (Mineral Resources), NSW Rural Fire Service, NSW Office of Water, the former NSW Transport and the Commonwealth Department of Sustainability, Environment, Water, Population and Communities.

Of the Government agencies, Wyong Council and the former Department of Industry and Investment (DI&I) objected to the proposal. Council's concerns related to the timing, scale, and biodiversity impacts of the proposal. The DI&I's objection related to sterilisation of the site for future mining and risk of subsidence.

Key issues raised during the consultation included:

- traffic impact and access;
- impact on existing water/sewerage infrastructure;
- community infrastructure and local facilities/services and employment;
- ecological impact and the conservation value of the land;
- Aboriginal and European heritage;
- cumulative impacts;
- scale of the proposed development;
- mine subsidence and impact on mining potential;
- housing supply;
- amenity impacts relating to the village character and lifestyle of Gwandalan; and
- the statutory planning context and the Part 3A process.

Preferred Project Report

On 15th March 2011, the Proponent submitted its response to submission and Preferred Project Report to address issues raised by the Department, agencies and public submissions. The only substantial change to the concept plan involved provision of an additional access from the south west of the development to Kanangra Drive to address issues raised by the Rural Fire Service regarding emergency access.

The Proponent also provided a revised Statement of Commitments. In addition, the Proponent submitted a Revised State Significant Site study, including an Amended Zoning Plan and Amended Additional Permitted Uses Map. The Amended Zoning Plan proposed a B4 zone at three locations – two west of the proposed foreshore park and one in the north of the site, adjacent to the proposed seniors living units - to allow for retail/commercial uses. The Amended Additional Permitted Uses Map allowed for seniors housing in the north of the site and attached dwelling and multi dwelling housing adjacent to the proposed foreshore park.

On 16 June 2011, the Proponent submitted an addendum to it PPR, which included a revised Heritage Impact Statement.

Voluntary Planning Agreement

A voluntary planning agreement (VPA) was executed on 12 March 2012 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 VPA has been entered into by the Minister for Planning and Infrastructure, the Minister for Environment and the proponent.

Summary of Assessment

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 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.

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1 BACKGROUND

The Gwandalan 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 Nords Wharf 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 immediately south of the existing urban centre of Gwandalan, within the Wyong Shire Local Government Area (see Figure 1). The closest town centre is Swansea, a distance of 19km to the north east. In a regional context, the site is located within the Lower Hunter Region between Gosford and Newcastle.



Figure 1 - Site Location (Development Site shaded in blue, conservation lands shaded dark green)

The site area is approximately 268 hectares (see Figure 2) comprising:

- The proposed development area (62.24hectares); and
- The proposed conservation lands (205.75 hectares).

The registered land titles which make up the site are listed as Lot 2 DP 1043151 and Lot 57 DP 755266. The site is bound by a paper road (adjacent to Summerland Road) and Gwandalan village to the north, Crangan Bay in Lake Macquarie to the east, undeveloped vegetated land to the south and Kanangra Drive to the west.

The site is accessed from the Pacific Highway, which is located to the south of the site, via Kanangra Drive.



Figure 2 – Map of Proposed Development Area and Conservation Area

1.2 Site Description

The site features a mild to moderate fall to the north-east to the shoreline of Crangan Bay, forming part of the southern parts of the Lake Macquarie catchment. The site is also characterised by substantial stands of mature Snappy Gum Woodland, along with other native Eucalypt species, with ground cover predominantly native shrubs.

The site contains a shallow valley identified as Strangers Gully, which contains two Endangered Ecological Communities ("EECs") identified as 'Riparian Melaleuca Swamp Woodland' and 'Coastal Wet Sand Cyperoid Heath'.

1.3 Site History

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.

The site is subject to a mining lease held by Lake Coal. A current application has been submitted to the NSW Department of Planning and Infrastructure.

The site is identified as a location for a power station under the *Wyong Local Environmental Plan 2004*, but no development has ever progressed.

1.4 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 The Concept Plan

The Concept Plan seeks approval for the following:

- development of 62.24ha of vacant land for up to 623 residential dwellings;
- dedication of 205.75ha of conservation land from the site to the NSW Government, including subdivision to excise the conservation lands;
- up to 3,000m² of local commercial / retail floor space within the development area;
- indicative staging of the future development of the site;
- indicative local road network;
- three public recreation parks and two bushland reserves (including Strangers Gully);
- vegetation buffer corridor along Kanangra Drive; and
- road and intersection upgrades in the vicinity of the site.

Approval is not being sought for a specific lot layout. However, an indicative layout has been provided showing how the maximum yield of 623 would be achieved as well as potential locations for open space, bushland reserves and a vegetated buffer (see Figure 3). The indicative lot layout proposes varied lot sizes ranging from 300 to 950sqm, with some larger lots up to 1,500sqm, to accommodate a mix of housing types.

The proposed Concept Plan identifies sites for local shops and services, being adjacent to the public recreation park, and within the proposed super-lot which the Proponent identifies will be considered for a seniors housing development.

The estimated capital investment value of the proposal is \$149 million.

2.2 Preferred Project Report / Response to Submissions

On 15th March 2011, the Proponent submitted its response to submission and Preferred Project Report to address issues raised by the Department, agencies and public submissions. The only substantial change to the concept plan involved provision of an additional access from the south west of the development to Kanangra Drive to address issues raised by the Rural Fire Service regarding emergency access. The Proponent also provided a revised Statement of Commitments. In addition, the Proponent submitted a Revised State Significant Site study, including an Amended Zoning Plan and Amended Additional Uses Map. The Amended Zoning Plan proposed a B4 zone at three locations to allow for retail/commercial uses. The Amended Additional Permitted Uses Map allowed for seniors housing in the north of the site and attached dwellings and multi dwelling housing adjacent to the proposed foreshore park.

On 16 June 2011, the Proponent submitted an addendum to it PPR, which included a revised Heritage Impact Statement.



Figure 3 - Proposed Concept Plan and indicative lot layout (preferred project report)

2.3 Staging

Development staging, including connections to and provision of infrastructure, is proposed to commence in the north of the site and extend progressively southwards (refer to Figure 4 Staging Plan, below).

It is proposed that sewer, water and electricity infrastructure will be provided in the first stage. The number of proposed lots in each stage will be determined by market forces.



Figure 4 - Proposed Staging Plan

2.4 Voluntary Planning Agreement

A voluntary planning agreement (VPA) has been prepared to facilitate the transfer of 205.75ha of land to the NSW Government for conservation purposes and associated remediation and reserve establishment works. The VPA also ensures 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 exhibited with the concept plan and SSS study. The VPA was subsequently amended to include suitable means of enforcement in relation to the contributions (infrastructure contributions, and dedication of land and associated works) proposed. The amended VPA was exhibited for 28 days from 17 August 2011 to 14 September 2011.

The VPA was executed by the proponent, the Minister for the Environment and the Minister for Planning and Infrastructure prior to determination of the SSS and concept plan proposals on 12 March 2012.

2.5 Project Need and Justification

The Lower Hunter is the sixth largest urban area in Australia and one of the State's major centres of economic activity. It is expected to continue to grow as people are attracted by its lifestyle and opportunities.

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 part 'proposed urban area'. The concept plan proposal is consistent with the LHRS. The development of the Site will contribute to the target set out in 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 (LHRS)* and the companion *Lower Hunter Regional Conservation Plan* (LHRCP).

Similarly, the proposal is also consistent with the *Central Coast Regional Strategy (CCRS)*, which identifies the subject site as a 'proposed urban area' and the proposed offset lands as 'proposed conservation lands'. Again, the CCRS considers the conservation of land within the Peninsula as a priority. The draft North Wyong Shire Structure Plan (NSWSSP) designates Gwandalan as a proposed residential area with an estimated net developable area of 44ha, capable of accommodating 662 dwellings. Under the NWSSP's staging strategy, Gwandalan is identified for development in the 'long-term'.

As such, there is justification in releasing Gwandalan earlier than previously identified in order to ensure that high priority conservation lands are protected and transferred to public ownership, consistent with the priorities identified in the LHRS and CCRS.

3 STATUTORY CONTEXT

3.1 Major Project

On 15 July 2010, the 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 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 Study

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 has submitted a State Significant Site (SSS) study which recommends the listing of Gwandalan in Schedule 3 of the Major Development SEPP. It is proposed that the zoning of Gwandalan will comprise R2 – Low Density Residential and E1 – National Parks and Nature Reserves. These zones are based on the *Standard Instrument (Local Environmental Plans) Order 2006.*

Given that the NSW Government is not expected to have an ongoing approval role for future development at Gwandalan, the site has been 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. *State Environmental Planning Policy*

Amendment (Gwandalan) 2012 was gazetted on 13 April 2012 which amends the Wyong Local Environmental Plan 1991, to list the site in a standalone part.

The proposed rezoning of the site is the subject of a separate report.

3.3 Permissibility

As illustrated in (Figure 5), the site is zoned R1 General Residential; R2 Low Density Residential; and E1 National Parks and Nature Reserves.



Figure 5 – Zoning of Site, as per SEPP Amendment (Gwandalan)

All the proposed land uses under the concept plan are permissible with consent except the proposed commercial / retail floor space. The Department considers that the proposed location of the commercial / retail floor space is inconsistent with the *draft North Wyong Shire Structure Plan*, and as such is not supported. The Department therefore recommends that the concept plan be modified to exclude this component of the proposal and this has been discussed in more detail in Section 6.1.1.

3.4 Objects of the EP&A Act 1979

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.

3.5 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 Gwandalan, 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 205.75ha 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.

3.6 Director-General's Report

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 as follows:

Section 75I(2) criteria	Response
Copy of the Proponent's environmental assessment and any preferred project report;	The Proponent's EA, Preferred Project Report and addenda are found in Appendix C and Appendix D or this report.
Any advice provided by public authorities on the project;	A summary of comments received from Governmen agencies, and how these have been addressed, is included in Appendix F.
Copy of any report of a Planning Assessment Commission in respect of the project;	No review has been required by the Planning Assessment Commission. However, reports of the IHAP, which considered the previous proposal relating to the site, are included in Appendix D.
Copy of or reference to the provisions of any State Environmental Planning Policy that substantially govern the carrying out of the project;	Each relevant SEPP that substantially governs the proposal is identified in Appendix E.
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 proposal and that have been taken into consideration in the environmental assessment of the project under this Division;	An assessment of the development relative to the prevailing environmental planning instrument is provided in Section 3 of this report.
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 submitted by the Proponent adequately addresses the Director General's Requirements. The Department advised the Proponent that the Environmental Assessment adequately addresses the DGRs on 12 November 2010.
Clause 8B criteria	Response
An assessment of the environmental impact of the project	An assessment of the environmental impact of the proposal is discussed through Section 0 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 or Commitments, Modifications to the Concept and additional Environmental Assessment Requirements as part of the recommended Instrument of Approval.
The suitability of the site for the project	The site is considered suitable for the development as discussed in Section 6 of the report

Table 1 – Section 75I of the Act and Clause 8B of the Regulation

3.7 Other Relevant Legislation and Environmental Planning Instruments

Appendix E sets out the relevant consideration of legislation (including other Acts) and environmental planning instruments as required under Part 3A of the Act. They include the following:

- Wyong Local Environmental Plan 1991;
- State Environmental Planning Policy No.14 Coastal Wetlands;

- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy No. 71 (Coastal Protection);
- State Environmental Planning Policy No. 55 (Remediation of Land);
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004; and
- State Environmental Planning Policy (Housing for Seniors and People with a Disability) 2004.

Further details on the Department's consideration of relevant SEPPs and LEPs are provided in Appendix E.

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 recommended Concept Plan approval.

4 CONSULTATION AND ISSUES RAISED

4.1 Consultation

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 Gwandalan bowling club, Wyong Shire 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 Gwandalan site to inform them of the proposal and exhibition details.

The proposal for Gwandalan was exhibited concurrently with proposals for Middle Camp and Nords Wharf. 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 2 December 2010.

The Department received 49 submissions from the public, 48 of which were in objection to the proposal. Submissions were also received from the following 11 Government agencies. Issues raised in submissions are summarised below.

4.2 Submissions from the Public

A total of 49 public submissions were received in response to the public exhibition. A summary of the key issues raised is provided in Table 2. A total of 4 submissions were 'form letters', and 45 were individually prepared submissions. One letter of support was received.

Table 2 – Summary of Public Submissions and Issues raised in CRG meeting			
Topic	Issue Raised		
Biodiversity	 environmental impacts on threatened species, water quality, Crangan Bay and its associated wetlands / seagrasses impact on the conservation value of the land and the protection of the wildlife corridor; impact on flora and fauna, vegetation and ecological values, including fauna corridors and SEPP 14 wetland; inadequate width of proposed buffers 		
 Mining Subsidence mine subsidence and sterilisation from future mining; and mining to be completed before residential development 			
Heritage	 impact on indigenous heritage and presence of Aboriginal middens 		
 vulnerability to bush fires and flooding inadequacy of runoff assessment 			
Urban Design	 inadequate open space/recreational facilities negative impact on character of existing village as a result of overdevelopment. high density housing is inappropriate for the area. 		
Social impacts	 isolation of site from community infrastructure inadequate capacity of social infrastructure including local schools, medical facilities to accommodate population growth inconsistency with planning principles of <i>Lower Hunter Regional Strategy</i> in terms of locating new housing close to existing town centres serviced by public transport, health services and schools Isolation from, and lack of, employment opportunities Inadequate study of local employment opportunities 		
Traffic and access	 lack of pedestrian/cycling infrastructure Lack of public transport Increased traffic inadequate traffic study cumulative traffic impacts of proposed development and other developments in the locality 		
Utilities	 inadequate utility infrastructure to service new housing Inadequate community consultation 		
Other	 oversupply of housing cumulative impacts associated with Rose Property Group's residential projects at Nords Wharf and Catherine Hill Bay isolation from employment opportunities Inconsistency with Draft North Wyong Shire Structure Plan in terms of proposed timing of the development impact on local lifestyle objection to development of Wallarah Peninsula; permissibility of the proposals, and the requirement for a rezoning; by-passing normal planning processes; transparency of process commencement date for the development not clarified consistency with the draft North Wyong Shire Structure Plan and Lower Hunter Regional 		

Table 2 – Summary of Public Submissions and Issues raised in CRG meeting

Topic Issue Raised

Strategy

- Assessment should be carried out by the PAC
- Request that submission made in respect of previous application be considered under the current application

4.3 Submissions from Government Agencies

Submissions were received from 11 State Government authorities, and 1 Commonwealth Government authority in response to the public exhibition, being:

- Wyong Shire Council
- Heritage Office (now part of Office of Environment and Heritage)
- Mine Subsidence Board
- Department of Environment and Climate Change and now the Office of Environment and Heritage (referred to in this report as OEH)
- Hunter Central Rivers Catchment Management Authority
- NSW Health
- Roads and Traffic Authority and now the Roads and Maritime Service (referred to in this report as RMS)
- NSW Office of Water (NOW)
- NSW Department of Industry and Investment (now Department of Primary Industries)
- NSW Transport (now Transport for NSW)
- Rural Fire Service
- Department of Sustainability, Environment, Water, Population and Communities

Council and the NSW Department of Industry and Investment (NSWDII) objected to the proposal. Council's submission stated the timing and scale of the proposal is inappropriate and the site is geographically isolated. In further correspondence, Council also objected to the scale of proposed retail/commercial component and recommended a the retail component be limited to 1500m2, provided this does not include a supermarket, preferably located on the north western portion of the site where it could integrate with the future Gwandalan Village Centre.

NSWDII's submission objected for the following reasons:

- proposed mining operation is not compatible with scale of residential development and will sterilise future resource recovery; and
- increased risk of subsidence

The response from the RFS advised that the proposal did not include enough information to make a full assessment against *Planning for Bushfire Protection 2006*. In particular RFS raised concern about adequacy of the proposed asset protection zones (APZs) and emergency access / egress to the site.

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.

The other agencies did no object to the proposal and have provided their requirements for future development, to be incorporated into the Concept Plan approval. All Issues raised and the responses are detailed in Appendix F.

A copy of the submissions has been provided at APPENDIX F. Issues raised have also been discussed in the Department's assessment in Section 6 of this report.

5 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 Gwandalan, 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 is provided in Table 3.

Table 3 – Consideration of IHAP Recommendations

IHAP outcome / recommendation	Consistency of Current Proposal with IHAP recommendations

Reduction in Development Footprint (Strangers Gully and Development Area 'C')

Reduction in the development footprint through the removal of Strangers Gully and the development area to its south east, identified as Southern Hamlet C in the original Concept Plan. This land will now form part of the conservation lands to be dedicated to the NSW Government. The development area will be reduced from 80ha to 63.9 hectares

The proposal reduces the development footprint to 62.24 ha by omitting Stranger's Gully and the part of the site previously referred to as Hamlet C, in accordance with the IHAP recommendations.

Increase in the area of the Conservation Lands

Corresponding increase in the area of the conservation lands to be transferred from Coal and Allied to the State Government.

The proposed conservation lands have been increased from 192ha, as proposed under the

IHAP outcome / recommendation	Consistency of Current Proposal with IHAP recommendations		
	previous application, to 205.75ha, under the current application. The conservation lands now include Strangers Gully/area previously proposed		
	for development as Hamlet C. The Department considers that the current proposal are consistent with the IHAP recommendation in this regard.		
Reduction in the Housing Yield			
Reduction in the housing yield at Gwandalan from 700 dwellings to 623 dwellings	The current proposal will generate a maximum housing yield of 623 dwellings, which is consistent with the IHAP's recommendations.		
Revised Statement of Commitments			
Revised Statement of Commitments to address issues raised by the IHAP, the Department, OEH and in submissions.	The current Statement of Commitments includes requirements for the preparation of a Statement of Management Intent and ongoing maintenance of APZs for 5 years or until all lots are sold, in accordance with the recommendations of the IHAP report.		

6 ASSESSMENT ISSUES

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:

- Land use and urban design
- Infrastructure and services
- Flora and fauna
- Mining
- Soils and water
- Traffic and transport
- Aboriginal heritage
- Bushfire management

6.1 Land Use and Urban Design

6.1.1 Proposed Land Uses

Within the development area, proposed land uses comprise residential, open space/recreational and commercial/retail.

The residential component of the Concept Plan proposes a maximum yield of 623 dwellings on the site, across a development area of 62.24ha. The development area includes 11.27ha of open space, which comprises the buffer land along Kanangra Drive, the riparian corridor dividing the site into Hamlets A and B, the bushland park and public recreation park.

The development area also proposes 3000 sqm gross floor area (GFA) of local retail/commercial services to support the residential development at two 'neighbourhood centres', located adjacent to the senior living lots and south-west of the public recreational park.

The Concept Plan proposes to dedicate 205.75ha of conservation lands to the NSW Government in perpetuity and to subdivide the site to excise the conservation lands.

Public submissions have raised concerns that the proposed development represents overdevelopment of the Wallarah Peninsula, would lead to an over-supply of housing in the area and includes inadequate open space provision.

Submissions from the public and Council state that the proposal is inconsistent with the timeframe for Gwandalan as identified in the Draft North Wyong Shire Structure Plan. Public submissions also raised concerns that the development would be inconsistent with the LHRS as a result of inadequate local public transport, employment opportunities and educational facilities. Public submissions have stated that the proposed conservation lands constitute a land bribe.

Wyong Council raised concerns that the quantity of proposed commercial floor space is inconsistent with its *Retail Centres Strategy Review* (September 2007) and that it could adversely impact on existing businesses at Gwandalan. The proposed development is not factored into the projections outlined in Council's *Retail Centres Strategy Review*. Council indicated that it would not support the provision of 3000sqm of retail space, but would not object to a small neighbourhood centre with a maximum GFA of 1500sqm to service the Gwandalan proposal, provided this does not include a supermarket.

The Department also acknowledges the submission made by QMC Property Group Pty Ltd, which provides evidence of local community support for the provision for commercial/retail facilities, such as a neighbourhood supermarket, medical centre, swim centre and speciality shops, in Gwandalan. It is noted that QMC Property Group is the owner of the site of the proposed centre to the north of the subject site, as identified in the Structure Plan.

Department's Consideration

The Gwandalan site is identified in the *Lower Hunter Regional Strategy* (LHRS) as '*Proposed Urban Development*' (see Figure 6). The LHRS does not set out a timeframe for development of the site. However, Gwandalan forms part of the Wallarah Peninsula, which is identified as an area with high biodiversity value, and the conservation of land within the Peninsula is considered a priority under the LHRS.

Similarly, the proposal is also consistent with the *Central Coast Regional Strategy (CCRS)*, which identifies the subject site as a 'proposed urban area' and the proposed offset lands as 'proposed conservation lands'. Again, the CCRS considers the conservation of land within the Peninsula as a priority. The accompanying draft *North Wyong Shire Structure Plan* (NWSSP) designates Gwandalan as a proposed residential area with an estimated net developable area of 44ha, capable of accommodating 662 dwellings. Under the NWSSP's staging strategy, Gwandalan is identified for development in the 'long-term'.

The Department considers that the proposal is consistent with the LHRS and CCRS and that there is justification in releasing Gwandalan earlier than previously identified in order to ensure that high priority conservation lands are protected and transferred to public ownership, consistent with the priorities identified in the LHRS and CCRS.

In relation to open space, the Department is satisfied that the proposed quantity of open space (11.27 ha) exceeds that required under Wyong Shire Council's Section 94 Contributions Plan (6.44 ha). As such, the Department is satisfied that the quantity of open space provided is sufficient, however it is recognised that the location of the open spaces would need to be resolved at DA stage for each subdivision application. The Department recommends that prior to the lodgement of the first application for subdivision, that the Proponent prepare a staging plan which identifies the location of open space and the management regime for the ongoing maintenance of open space. In addition, the Department considers that each subdivision application must demonstrate that the quantity of open space is consistent with the concept plan and detail the proposed

landscaping and domain treatments for all areas to be designated as public open space. These requirements have been incorporated into the recommended instrument of approval.



Figure 6 – Status of Site under Lower Hunter Regional Strategy and Central Coast Regional Strategy

In relation to the proposed commercial/retail services, this issue was assessed by the Department as part of the Proponent's proposal to rezone the site for residential and conservation purposes. The Department considered that the proposed location of the commercial/retail services was inconsistent with the *draft North Wyong Shire Structure Plan* and as such, these uses are prohibited on the site under the Wyong LEP. Accordingly it is recommended that the concept plan be modified to remove the proposed retail/commercial precincts, and this modification is reflected in the recommended instrument of approval.

However, it is noted that the residential zones under the Wyong LEP allow neighbourhood shops with a maximum GFA of 125 sqm, subject to development approval from Council. This will allow for small local retail services to be located to service the day to day needs of the proposed residential areas.

In the event that the potential new centre, to the north of the subject site, is not progressed, or is not progressed within a timeframe that is adequate to service the locality, it maybe appropriate for larger retail uses within the Concept Plan area to be considered. However, this would require a planning proposal to be lodged with Council to amend the zoning and a modification to any concept plan approval would be required.



Figure 7 – Draft North Wyong Structure Plan

6.1.2 Development Area and Lot layout

The Concept Plan does not included proposals for residential subdivision. However, the Concept Plan does propose an indicative site layout for the development of 62.24ha of the site for 623 dwellings.

The proponent has identified a proposed development area which responds to the topographical, ecological and heritage constraints of the site and also the character of existing residential development in the Gwandalan area. The proposed development area excludes Strangers Gully to the south east, which was identified through the

IHAP process as having biodiversity values, and is set back approximately 100m from the foreshore of Lake Macquarie.



Figure 8 – Indicative Lot Layout

The subdivision layout (see Figure 8) proposed by the Concept Plan provides a mix of lot sizes that will accommodate a range of housing types from small to medium sized detached 1 to 2 storey dwellings, to attached two storey terraces, different housing types and associated lot sizes. The indicative lot layout includes a mix of lot sizes ranging from 300 to 950 sqm with some larger lots up to 1,500 sqm. The proposed mix of lots is set out at Table 4 below.

Table 4 - Lot Sizes and Built Form

Dwelling Type	No of lots	Minimum lots size
Shop Top Housing	15	360 sqm and 80sqm maximum retail/commercial GFA per lot
Town House (attached on both sides)	30	300 sqm
Village A (detached housing)	545	500 sqm
Village B (detached housing)	33	630 sqm

Dwelling Type	No of lots	Minimum lots size
Seniors Independent Living Units	Equivalent to 196 dwellings	Not specified
Local Centre Retail	1	1600 sqm

Public submissions have raised concerns that the scale of the proposed development represents overdevelopment of the Wallarah Peninsula, would lead to an over supply of housing in the area, includes inadequate open space provision and that the proposed medium density lots are inappropriate.

Department's Consideration

The proposed lot layout and lot sizes reflect the established character and scale of the existing low density urban areas of Gwandalan and Summerland Point. The Department considers that the introduction of a limited number of medium density lots in the east of the site (representing ~7% of the overall yield), and the potential for senior living units in the north, is appropriate and will provide sufficient housing variety and choice, and potentially allow for the provision of more affordable housing in the area.

It is noted that the number of shop top housing lots is likely to decrease given the Department's recommendation that the concept plan be modified to remove the proposed retail/commercial precincts. However, these lots are primarily located in the area that has been zoned R1 General Residential and it is considered that these lots could be developed similarly to the Townhouse lots without affecting the overall yield for the proposal.

The proposed layout has taken into consideration the environmental constraints associated with the site, including the topography and the presence of sensitive ecological assets, such as Stangers Gully. The proposed mix of lots, with a predominance of low density lots combined with medium density housing, shop top housing and potential neighbourhood shops are considered appropriate for the area.

The Department is satisfied that the layout, while indicative, provides for pedestrian/cyclist connectivity to the existing urban area of Gwandalan and has been designed to integrate with any proposed retail development on lands to the north. In addition, the location of townhouse, village and shop top housing lots in the site's centre successfully orientates the layout, and connectivity, toward the lake and proposed lakeside open spaces.

The Department considers that the overall Concept Plan layout and the key design principles achieve an appropriate form of urban development that will complement the existing housing and environmental character of Gwandalan and its hinterland.

In relation to the dedication of and management of buffer to the east of Kanangra Drive, the Department considers this land should be offered for dedication to Council. The Department therefore recommends 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.

6.1.3 Urban Design Guidelines (UDGs)

The proposed Urban Design Guidelines (UDGs) set out proposals and guiding principles to inform future development applications for subdivision and individual lot development. The UDGs comprises a

- public domain plan, which address issues such as a public domain strategy, street types, parks and opens space, plant types and materials, and
- design guidelines for building types, site coverage, building height, streetscape, setbacks and provide open space and landscaping.

The Statement of Commitments states that future development will comply with the detailed Urban Design Guidelines which have been submitted with the Concept Plan. The Guidelines set out key principles and strategies for development, including:

• maximum height of 1 to 2 storeys;

- flexible setbacks to maximise retention of trees and to accommodate Asset Protection Zones; and
- treatment of the proposed public domain, including landscaping comprising native planting and lawns

A height limit map submitted as part of the Urban Design Guidelines indicates a height limit of 1 storey over approximately 60% of the development site area in response to mine subsidence constraints.

Council submitted additional comments relating specifically to the UDGs, which raised issues relating to access, cycleway provision and carriageway layout, access for service and delivery vehicles to Village Green shops, acoustic protection, parking, traffic calming, development staging, Water Sensitive Urban Design, building types /site coverage/FSR, parks and open space and flood planning levels, location and type of detention basins, hydraulic modelling and mine subsidence.

Public submissions raised issues relating to impact on the lakeside village character and atmosphere of Gwandalan, potential for anti-social behaviour, location and construction materials of the proposed foreshore path, and the current lack of footpaths in the area.

Department's Consideration

The Code SEPP sets out the State Government's policy on assessment of exempt and complying development. 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 above 40 (very high) or within the flame zone. Based on the bush fire threat assessment which forms part of the concept plan, it is likely that a substantial portion of lots could be developed as complying development. As such, the concept plan and urban design guidelines would not apply to a dwelling which was approved as complying development.

Notwithstanding the above, to ensure that provisions are in place to guide the future development of individual lots, the *Wyong Local Environmental Plan 1991* outlines requirements for the preparation of a development control plan (DCP) for the site. Noting that a concept plan approval would satisfy any requirement to prepare a DCP, the Department considers that urban design guidelines should be reviewed and amended as follows to ensure that they address the DCP preparation requirements under the *Wyong Local Environmental Plan 1991* and the issues raised by Council:

- remove reference to the local centre retail;
- include details on the following:
 - cut and fill and requirements for retaining structures;
 - private open space and landscaping requirements,
 - requirements for retention of vegetation within individual lots, having regard for any requirements of Planning for Bushfire Protection 2006;
 - site fencing requirements;
 - requirement s for set backs for secondary frontages on corner, garages and site cover controls; and
- demonstrate how necessary storm water infrastructure can be accommodated on individual lots, in particular small lots.

A requirement for the urban design guidelines to be revised prior to the first application for subdivision in consultation with Council has been incorporated into the recommended instrument of approval.

Additionally, the Department considers that further consideration should be given to landscaping and treatment of the public domain. As such the Department recommends that any subdivision application should include a landscaping and public domain plan prepared in consultation with Council comprising

- a strategy for 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.

This requirement has been incorporated into the recommended instrument of approval.

6.1.4 Visual Impact

The site is visible in its vegetated state from Kanangra Road, Lake Macquarie and the existing townships of Gwandalan and Nords Wharf. Council therefore consider that visual impacts and aesthetics of the proposal should be considered from Gwandalan, Kanangra Drive, Catherine Hill Bay and Nords Wharf.

Public submissions raised concerns of the impact on views from Nords Wharf generated as a result of the proposed development. No submissions relating to visual impact were received from government agencies.

Department's Consideration

The proposal incorporates a 100 metre buffer from the foreshores of Crangan Bay which is proposed to form part of the conservation areas for dedication to OEH. Given its heavily vegetated state and canopy height, it will screen future housing to 1 and 2 storeys as viewed from the water, the existing township of Gwandalan and Nords Wharf. Similarly a buffer zone of at least 50m width is proposed along the western boundary of the site, thereby preserving its natural visual quality as viewed from Kanangra Drive. Furthermore, the proposal dedicates 205.75ha of land to OEH for conservation purposes which significantly contributes to retention of the natural character of the area.

In terms of future housing form and subdivision compatibility with the existing Gwandalan township, the site forms a southward extension to this and proposes lot sizes consistent with those in Gwandalan, and future housing will be predominantly 1 - 2 storey detached dwellings. Therefore, from an urban design and land use perspective the proposal is considered to reflect the existing character, and to be an acceptable extension, of the township of Gwandalan.

In terms of village amenity the site represents a significant extension to the existing Gwandalan township which will see it grow by approximately 50%. Notwithstanding, it is considered that the village character of Gwandalan will be preserved given that as an 'urban centre' it will retain a relatively small size compared with the larger neighbouring centres of Lake Munmorah and Swansea.

Therefore, the Department is satisfied that the visual impact of the proposal will be minimal.

6.2 Infrastructure Contributions

6.2.1 State Infrastructure Contributions

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

Consultation was carried out with relevant agencies to determine the State infrastructure contributions requirements for Gwandalan. The Proponent has agreed to the following State infrastructure contributions, based on the consultation, and as determined by the State Government in accordance with Planning Circular PS07-018, by entering into a Voluntary Planning Agreement:

- upgrade of the intersection at Pacific Highway / Kanangra Drive as a works in kind arrangement;
- a contribution toward the acquisition of a 3,000 sqm area of land in Catherine Hill Bay for a multi-use emergency services facility (\$196 per lot); and
- a contribution toward the acquisition of a 1 hectare area of land adjacent to the existing Gwandalan Primary Public School (\$1,157 per lot).

The Voluntary Planning Agreement also includes an option for the Proponent to elect to pay a cash contribution towards the Pacific Highway / Kanangra Drive intersection upgrade. Under the draft VPA, the proponent is required to deliver the state infrastructure contributions prior to the issues of the first subdivision certificate that creates the first urban lot within the Gwandalan development area.

Contributions associated with Coal & Allied's Nords Wharf 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 of Planning and Infrastructure and NSW Ambulance.

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, that Swansea would be a preferred location for an emergency services facility.

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

The agreed contributions reflect infrastructure levy reforms (as set out in Planning Circular PS08-017) whereby State infrastructure contributions are to be reduced to 75% of the cost of infrastructure.

Department's 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. These discounts have been applied in the VPA for the Emergency Services facility and the contribution toward the acquisition of a 1 hectare area of land adjacent to the existing Gwandalan Primary Public School. 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 appropriately addressed.

6.2.2 Local Contributions – Section 94

Through its Statement of Commitments, the Proponent has committed to pay contributions in accordance with Wyong Council's relevant section 94 contributions plans, through cash contributions, dedications of land and works in kind. The Proponent has also committed to enter into a deed of agreement with Wyong Council to make arrangements for payment of local contributions.

Table 4 below shows how the Proponent intends to meet the contribution requirements of the relevant plans, being *Wyong Shire Council Section 94 Contributions Plan No. 11 - Shire wide Infrastructure, Services and Facilities* and *Northern Districts Section 94 Development Contributions Plan.*

Item	Contribution plan (per lot)	Proponent's commitment (per lot)
Shire wide contributions		
Regional Open Space	\$160.75	\$0
Cycleway network	\$329.77	\$0
Performing Arts Centre/Public Art	\$372.11	\$372.11
Administration	\$71.42	\$71.42

Table 4 Section 94 Contributions (indexed to November 2010)

Item	Contribution plan (per lot)	Proponent's commitment (per lot)
Northern Districts Contributions		
Roads	\$3980.86	\$3980.86
Open space	\$4,194.52	\$4,194.52 (as land dedication/works in kind in lieu of cash contribution)
Community facilities	\$3,548.04	\$3,548.04
Administration	\$494.19	\$494.19
Water	\$4119.58	\$4119.58
Sewer	\$843.89	\$843.89

The Proponent considers that regional open space will be delivered through conservation lands to be dedicated to OEH. As such, it is not proposed to pay a monetary contribution for regional open space. Similarly, the Proponent considers that cycleways included within the overall development will adequately contribute to the cycleway network and no further cash contribution is required.

Wyong Council's submission raised a number of concerns about the proposed local infrastructure contributions. Council considers that the Proponent should pay all shire wide contributions, including regional open space and cycleway network contributions, as open space and cycleways provided within the subject site will not meet the same objectives as those intended to be funded through shire wide contributions.

The Northern Districts Section 94 Development Contributions Plan outlines that the subject site will require 6.44 hectares of open space to cater for a predicted 2,146 residents, and states that this land is to be dedicated at no cost to Council. The open space cash contribution rate in the contributions plan relates to embellishment of open space only.

Council considers that works in kind embellishment could be offset against local park contributions, but that cash contributions would still be required toward other open space categories that are not proposed as part of the Concept Plan, including playing fields, large parks, courts and semi natural open space. Council requests that embellishment costs and resultant open space contributions are to be negotiated through a Deed of Agreement with Council.

Department's Consideration

The Department considers that the Proponent should be required to pay all contributions in accordance with Council's relevant contributions plans, although it may be appropriate, subject to agreement by Council, that the works in kind/embellishment of open space within the development area be offset against the open space cash contribution rate in the section 94 plan. The Department also considers that any works in kind and/or land dedication would need to be negotiated with Council.

Section 94 contributions cannot be levied at Concept Plan stage. The recommended Instrument of Approval, therefore, includes a requirement for a staging plan to be prepared, which would include details of the delivery of Section 94 contributions as well as the location and management regime for open space, with the plan to be approved by the Director-General prior to residential subdivision. Under the recommended terms of the approval, any variations to contributions required under Council's relevant contributions plans, including offsets for works in kind or land dedication, must be negotiated with Council and formalised through an appropriate legal mechanism, such as a deed of agreement or VPA.

The Department considers that the requirement of the recommended Concept Plan approval would ensure that mechanisms for the delivery of S94 contributions would be finalised prior to any development applications being lodged.

6.2.3 \$5 Million Allocation

In addition to the regional and local contributions, the Proponent has allocated \$5 million (for the three sites which make up the Coal & Allied Southern Estates) for initiatives associated with the delivery of social infrastructure to support the existing and future communities in the area. The proponent held a Design Charette process in August 2007, as part of the previous concept plan application, to help identify community priorities for funding.

Table 5 sets out the initiatives that the Proponent proposes to fund for Gwandalan, as part of the \$5 million allocation.

Item / Description of work	Contribution value
Employment generation	\$5,000
Funding of State & Regional employment opportunities	
Boat Ramp Facilities / Wharf:	
Contribute to the upgrade of the existing boat ramps at Lions Park	\$250,000
Contribution to upgrade of Koowong Road Wharf	\$250,000
Sustainability Initiatives - C&A grant scheme	\$1,246,000
Funding towards:	
on-lot rainwater harvesting - potential grant scheme for individual rainwater tanks	
reduced power demand for future dwellings (optional to owners)	
introduction of a sustainable education program for residents.	
design that exceed Local & State Government criteria for sustainable development.	
Aboriginal Community	\$25,000
Establish scholarships for archaeology students through local schools	
Walkways	\$500,000
Provision of walking paths within the conservation lands (Subject to OEH approval)	
TOTAL	\$2,276,000

As discussed above, the proposed walkways are within land which is to be dedicated to OEH and as such these walkways will require approval of OEH. The Proponent has advised that in the instance that OEH does not grant this approval, the funds would be allocated to alternate community benefits not covered by section 94 or State infrastructure contributions.

Wyong Council's considers that the proposed initiatives will have limited direct benefit for the Gwandalan Community.

Department's Consideration

The \$5 million allocation is over and above contributions required under section 94. The Department supports the \$5 million allocation in principle, but considers that the Concept Plan does not adequately address how and when the initiatives identified will be implemented and delivered. This can be addressed through the preparation of the staging plan which is recommended to be submitted for approval prior to any development applications being

lodged. This requirement has been incorporated into the recommended instrument of approval, with the staging plan being required to be prepared in consultation with Council.

6.3 Soils & Water

The impacts of the proposal on soils and water within the site, and adjacent lands and water bodies, are examined in the following section. Sensitive environments located in the vicinity of the site include Crangan Bay and in Strangers Gully, which contains Endangered Ecological Communities (EECs). Issues requiring consideration include management of stormwater from the site and changes to flooding behaviour as a result of the proposal, effects of climate change on the proposal and the potential for contamination.

6.3.1 Stormwater and Groundwater Management

To reduce nutrient loadings and peak runoff rates of stormwater, the Water Sensitive Urban Design (WSUD) Strategy submitted with the Concept Plan proposes a series of control measures within the development site aimed at achieving the following:

- on-site bio-retention / detention systems for individual lots to manage the quantity and quality of all hard surfaces including driveways and roofs;
- public bio-retention/ detention facilities at key locations to manage stormwater quantity and quality on contributing road sub-catchments (see Figure 9);
- provision of swales and bio-retention swales adjacent to major roadways; and
- rainwater tanks for each dwelling.

The Proponent, through its Statement of Commitments has agreed to prepare a maintenance program for the public stormwater system, and manage these facilities for a 5 year period or until all lots are sold.

OEH's submission identifies the protection of the ecology of Lake Macquarie / Crangan Bay as a key concern. To achieve this, OEH states that the following issues are to be addressed:

- modification of development footprints;
- use of water sensitive urban design principles;
- management and control of foreshore vegetation and human access / recreation areas; and
- imposition of strict development controls.

NOW stated that the issues of groundwater interception, potential impacts on groundwater, or the protection of groundwater quantity and quality during construction of underground service infrastructure have not been addressed.

Wyong Council's submission states that the proposed Stormwater Quality Management systems will create issues relating to the location, type, lining and maintenance of swales. Council warn that revised proposals to address these issues may have significant impacts on road reserve widths and the WSUD treatments required. Council also state that it is unwilling to accept more than 2 sewer pumps.

Department's Consideration

Modelling undertaken by the proponent to analyse the effectiveness of the proposed stormwater treatment train indicates that stormwater generated by the proposal would be treated to an appropriate level prior to being discharged to Lake Macquarie.

The Department considers that, subject to detailed design, the proposed WSUD strategy will appropriately manage the impact of stormwater runoff from the site. In addition, the 100 metre buffer to Crangan Bay will provide further protection to receiving waters of Crangan Bay and associated sea grasses.

Nonetheless, the Department considers that the WSUD strategy will need to be refined through the detailed design phase and, as such, any development application for subdivision should include further details of the stormwater management measures required. These measures should be designed in accordance with Council's requirements. These requirements have been incorporated into the recommended instrument of approval.

With regard to Stranger's Gully, and associated EECs and groundwater dependant ecosystems, it is recommended that the WSUD strategy should include a monitoring program to ensure that the proposed stormwater devices are effective in maintaining the natural values of this area. As such, a requirement has been included in the recommended Statement of Commitments requiring the Proponent to develop a monitoring program as part of any application for subdivision.

With regard to issues raised by Council about the level of detail provided in relation to water quality infrastructure and potential groundwater impacts raised by NOW, the Department considers that these issues can be addressed at subdivision stage, and this has been reflected through the recommended instrument of approval.



Figure 9 – Stormwater Management and Flood Levels

6.3.2 Flooding and Climate Change

The drainage study submitted with the Concept Plan contains the following key findings relating to flooding and climate change:

 under existing climate conditions, all lots are located above the 100-year Average Recurrence Interval ("ARI") plus freeboard level, with minimum inundation of the foreshore road; and considering the long term climate change predictions to 2100 conditions, and allowing for wave run-up and 0.5m high freeboard, eight foreshore lots would be affected in a 100-year ARI event.

The study states that for these 8 lots which are predicted to be effected by the climate 100-year ARI, only the lower portions of each lot is affected with the majority of each lot sloping up above the flood level so that they may still be developed. In addition, 16 lots would be affected during a probable maximum flood event under future climate change conditions. However, the Proponent states that the site has sufficient space and locations to assemble during flood events and the road layout provides a number of routes for evacuation. While this may be the case, the indicative subdivision plan submitted with Concept Plan does not enable confirmation of this, as the precise alignment and location of lot boundaries are yet to be finalised which will occur through subsequent subdivision applications.

Hunter Central Rivers Catchment Management Authority supports the proposed 100m (plus predicted loss to sea level rise) setback.

Department's Consideration

The Department considers that flooding and climate change has been appropriately addressed and that the proposal is otherwise considered to have an acceptable risk of flooding in the event of climate change and sea levels rising.

Nonetheless, the Department considers that each future subdivision application will need to demonstrate that each lot would be able to accommodate a dwelling above the 100 year flood level plus 0.5 freeboard; and to demonstrate that lots below the Probable Maximum Flood level can be safely evacuated in a flood event. These requirements have been incorporated into the recommended instrument of approval.

6.3.3 Contamination

The preliminary contamination report submitted with the Environmental Assessment indicates that localised remediation is required due to the unauthorised dumping within the development site, including fibro materials containing asbestos in some cases.

The report confirms that the site does not contain any gross contamination, and the land will be suitable for residential use after remediation. As part of the proposed Statement of Commitments, the land is to be remediated by the Proponent who has committed to carry out the following prior to issue of a Construction Certificate for the Stage 1 subdivision works:

- development of a Remediation Action Plan;
- appropriate remediation works to remove identified contaminants exceeding OEH land use criteria;
- deleterious material and possible associated surface impact removed;
- validation testing and verification;
- validation of asbestos contamination should be conducted by a qualified asbestos consultant; and
- waste classification to OEH guidelines of any materials destined for off-site disposal at a licensed landfill

Department's Consideration

The Department is satisfied that the development site can be made suitable for residential development through remediation and as such complies *State Environmental Planning Policy 55 – Remediation of Land* and that the management measures proposed by the Proponent are appropriate. Nonetheless, the Department recommends that the remediation action plan (RAP) should be prepared and submitted with the first subdivision application for the site. The RAP should be prepared in accordance with relevant OEH guidelines and must:

- a. characterise the nature and extent of contaminated material;
- b. detail the proposed remediation process, including treatment methodologies and processes;
- c. justify the proposed treatment and remediation criteria;
- d. detail the proposed remediation management measures; and
- e. include a site validation plan.

This requirement has been incorporated into the recommended conditions of approval.

6.4 Future Mining and Mine Subsidence

6.4.1 Future Mining Potential

The site is currently partially undermined and the entire development site is subject to an existing mining lease held by Lake Coal. The two existing seams are located in the Wallarah and Great Northern seams, at depths of 120m at the southern end of the site and 150-185m at the northern end, respectively. Current mining leases held by Lake Coal are identified as Consolidated Coal Leases (CCL) 706 and 707, with expiry dates of 2022 and 2023 respectively. The mine was formerly owned by the Proponent, Coal and Allied, from its opening of 1962 until 1994.

In addition, Lake Coal has lodged two project applications with the Department of Planning and Infrastructure seeking approval under Part 3A of the EP&A Act 1979 for underground mining operations at the Chain Valley Colliery. Contrary to the advice provided in the Proponent's response to submissions, the proposed underground mining area extends beneath the Gwandalan development area and conservation lands, as illustrated in Figure 10 and Figure 11 below. It is noted that the development site is identified in blue and the conservation lands are identified in light purple in both Figure 10 and 11. Figure 10 shows the extent of the existing mine workings below the subject site. Lake Coal's proposal is to mine the Great Northern Seam, which extends under the entirety of the development site and large portions of the proposed conservation lands. Figure 11 shows that Lake Coal also intends to mine the Fassifern Seam below the entire subject site and the conservation lands to the west.

Lake Coal's has stated that it intends to fully extract the economically viable Fassifern seam beneath the site for the next 21 years. Lake Coal Pty submitted that the residential development will result in a greater risk of subsidence and will sterilise future mining reserves. It stated that the EA has not assessed modellings for Fassifern seam workings and consequently, the mine would have to design workings to suit the proposed residential development and there would be a loss of coal reserves.

Lake Coal Pty states that housing located in the proposed mining lease area should be designed to withstand subsidence associated with full extraction panels in a 3m seam, in the order of 1.5m. The proponent's geotechnical assessment, prepared by Douglas Partners, includes assumptions that the mining layout proposed for underneath the subject site will be similar to that of existing residential areas. Lake Coal Pty disputes this, stating that partial extraction is not feasible and that full extraction is intended.

The Department of Industry & Investment (now Department of Primary Industry (DPI)) submitted an objection to the proposal on grounds that it would sterilise coal reserves under the site and increase risk of mine subsidence. Further, DPI considers that restricting mining to partial extraction will sterilise coal reserves and may not be sufficient to ensure that there are no unexpected subsidence impacts. DPI does not support the proposed development occurring before mining has been completed.

The Proponent's response to submissions states that the Coal & Allied development site only represents approximately 3.3% of the area contained within CCL 706 and CCL707. Given the potential for either of these abovementioned scenarios and the lack of an independent assessment that demonstrates that partial extraction is not feasible, the potential for sterilisation of the site from future mining is not considered an issue of adequate significance to prevent the proposal from proceeding. The principle of development of the land for residential purposes is established under the *Central Coast Regional Strategy, the Lower Hunter Regional Strategy* and the *Lower Hunter Regional Conservation Plan.*

Department's Consideration

Clause 13(2) of the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries)* 2007 (Mining SEPP) requires the consent authority to consider whether or not a development is likely to have a significant impact on future recovery of minerals (including by limiting access to, or impeding assessment of, those resources). It is also required to evaluate and compare the respective public benefits of the proposed development against future recovery of minerals.

In addition to the above, the Department has considered the impact on future mining in the wider context of the economic, social and ecological benefit to the State in receiving 205.75 hectares of conservation lands as part of
the proposal. While a dollar value cannot be placed on this, securing the conservation lands represents a substantial public benefit that is consistent with the principles of Ecologically Sustainable Development and Intergenerational Equity.

It is the Department's position that the assessment of this proposal will be completed before that of the proposed mining project application. To date, an environmental assessment for the proposed extraction under the site has not been received by the Department and this assessment will need take into consideration any decision made in respect of the residential proposal. This is reflected in the Director General's requirements for the mining project which were issued on 12 August 2008.

Furthermore, mining techniques in the future may evolve to enable full extraction without causing subsidence, while being economically viable, which is not an unreasonable suggestion given the site is not identified for mining until 2023.

On this basis, the Department concurs with the Proponent that reasonable resource recovery could be permitted under both the residential and conservation lands with minimal risk of subsidence and disturbance to surface features.

Furthermore, partial extraction has been carried out under existing township areas. Therefore it is likely that partial extraction could at least be carried out under the development site. Accordingly, the Department considers that the proposal would not unreasonably restrict opportunities for recovery of coal resources under the site. The Department also agrees with the Proponent's position that the development area of 62.24ha represents a very minor portion of Lake Coals' mine lease area.

The site has been rezoned by way of an amendment to the Wyong Local Environmental Plan 1991 and the Mining SEPP continues to apply to the site. Accordingly, mineral exploration would be permissible without consent and underground mining would be permissible with consent, within both the development and conservation areas.

It is important to note that, were the Minister for the Environment to declare the conservation lands as a National Park under the *National Parks and Wildlife Act 1974*, it would become unlawful to prospect or mine for minerals in this area. However, the Department is of the opinion that this is a matter for consideration by the Minister for the Environment following the transfer of land, and as such has not been given further consideration in this report.

6.4.1 Mine Subsidence Hazard

Mine subsidence hazard has been considered in the Proponent's Preliminary Contamination, Mine Subsidence and Geotechnical Assessment (Douglas Partners October 2010). As previously discussed, the site is underlain by abandon workings in two seams, the Wallarah seam and the Great Northern Seam. Within the site, the depth of cover ranges from 120 metres to 150 metres for workings associated with the Wallarah Seam and 150 metres to 185 metres for workings associated with the Great North Seam.

The Mine Subsidence Board (MSB) has provided surface development guidelines based on the current mine workings. MSB has stated that the guidelines would not be appropriate should full extraction take place.

The Proponent considers that, if the development proceeds, coal could be recovered under partial extraction mining methods (subject to obtaining development consent) without creating subsidence risk. During the preparation of the proposed development, the proponent consulted with the Mine Subsidence Board (MSB) in relation to potential subsidence. The MSB identified the key constraint as the need to limit development to single storey in areas where a risk of predicted subsidence and tilts exceeded 0.4 m and 4mm/m, respectively.

Consistent with the MSB's advice, the Proponent's environmental assessment identifies development in some areas of the site as being restricted to single storey brick veneer, whilst allowing double storey brick veneer construction on the remainder of the site (see Figure 12). Double storey construction on the Site is proposed on the basis that mine subsidence can be managed through use of light weight building construction. The Proponent's assessment also notes that if any building with a large footprint is to be located on the site, for example as part of the possible seniors living development, it would require heavy articulation or separation into a number of structures.



Figure 10 Proposed and Existing Mining Areas in relation to Site – Great Northern Seam



Figure 11 - Location of Proposed and Existing Mining Areas in relation to Site - Fassifern Seam



Figure 12 - Building Height

Department's Consideration

The Department considers that appropriate consideration has been given to mine subsidence and this has been reflected in the height restrictions proposed in the concept plan. Nonetheless, The Department considers that any future application for construction of buildings and associated structures should meet any requirements of the MSB, including:

- geotechnical investigations to demonstrate that there is no risk of mine subsidence affecting the site and the
 appropriateness of the strata to support the development;
- that the plans for subdivision works including services, have taken into account the geotechnical conditions of the site; and
- identification of the measures required to remove the risk of subsidence.

These requirements are reflected in the recommended instrument of approval.

Future resource extraction may result in mine subsidence hazard. However, any such extraction would be subject to approval, and mine subsidence impacts would need to be considered through that approval process.

6.5 Traffic and Transport

The site is currently accessed from Kanangra Drive, a two-lane road running north from the Pacific Highway (see Figure 13). Kanangra Drive services the existing Gwandalan township to the north. Summerland Road, which joins with Kanangra Drive to the north-west, forms the site's northern boundary. An unregistered gravel fire trail, known as Link Road and Chain Valley Bay Road, provides an additional access to the site. A network of unsealed roads provide access from Kanangra Drive and Summerland Road to the centre of the subject site.

6.5.1 Regional Roads

Concerns have been raised in relation to cumulative impacts on traffic flows along Kanangra Drive and the proposal by Rose Property Group residential development at Gwandalan which has been granted Concept Plan approval and is the subject of a current project application to the Department. Public submissions have highlighted community concerns regarding:

- the need to upgrade Kanangra Drive to accommodate the forecasted increase in traffic, generated as a result of the proposed development; and
- inadequacy of the traffic modelling

To manage these impacts, the Proponent has committed to contribute toward the upgrade of the intersection of the Pacific Highway and Kanangra Drive, to provide:

- One left turn slip lane (100 metres) turning north from Pacific Highway to Kanangra Drive;
- One left turn slip lane (50 metres) turning north from Kanangra Drive to Pacific Highway;
- Additional right turn storage land (100m) for southbound traffic from Kanangra Drive to Pacific Highway.

The Proponent's Statement of Commitments states that the intersection upgrade will be completed prior to release of a subdivision certificate for Stage 1.

Traffic studies submitted with the Concept Plan (Hyder Consulting, September 2010) take into account predicted cumulative impacts of the proposed developments (Gwandalan and the Rose Property group proposals) and confirm that this upgrade is necessary to ensure that it can continue to operate within an appropriate level of capacity.

With the proposed intersection upgrade carried out, the predicted Level of Service is B, which in accordance with relevant guidelines, is considered to be good with acceptable delays and spare capacity. The RMS has provided the detailed requirements for the upgrade of the Pacific Highway / Kanangra Drive intersection, including the following:

- Pacific Highway (Southern Leg): A left turn slip lane to replace the existing left turn arrangement, and provide a minimum length of 180m, including taper;
- Blue Wren Drive (Eastern Leg): the current configuration is to be retained;
- Pacific Highway (Northern Leg): right turn only lane shall be extended to a minimum length of 190m, including taper; and
- Kanangra Drive (Western Leg)
 - A single signalised left turn slip lane shall replace the existing left turn arrangement and provide with a minimum length of 100 metres, including taper;
 - The combined through / right turn lane must be retained;
 - o A right turn only lane shall be provided with a minimum length of 100 metres, including taper; and
 - $\circ\;$ The single departure lane must be retained.

The RMS has advised that the intersection upgrade of Kanangra Drive and Pacific Highway is to be carried out prior to the occupation of Stage 1 of the subject development, and in accordance with a Works Authorisation Deed (WAD), which the developer is required to enter into with the RMS. The Proponent's PPR states that it is willing to enter into the WAD and will carry out works according to the RMS' requirements.

The Proponent's does not object to the RMS requirements.



Figure 13 - Local and Regional Road Network and Bus Routes

Department's Consideration

The Department is satisfied that there has been appropriate consideration of cumulative traffic impacts and that the road upgrades proposed by the Proponent are appropriate. It is noted that under the Wyong LEP, that satisfactory arrangements need to be made for the provision of designated State public infrastructure before the land is subdivided. The executed VPA requires the proponent to upgrade the Pacific Highway / Kanangra Drive intersection to the requirements of the RMS. Under the terms of the executed 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. In addition, the recommended instrument of

approval requires the Proponent to design the intersection upgrade at Pacific Highway / Kanangra Drive in accordance with the RMS requirements. The Department considers that the executed VPA together with the recommended instrument of approval adequately addresses the issues raised by RMS and the community.

6.5.2 Local Roads

Public submissions have raised concerns relating to safety issues and congestion caused by traffic exiting from Stage 1 of the new development into the existing roundabout located between Gwandalan and Summerland Point.

The Proponent has committed to the following local road upgrades to mitigate potential impacts on the local road network:

- provision of localised widening of Kanangra Drive and construction of a 'type C' intersection, south of the proposed development, to provide right turn movements in and out of the development; and
- upgrade of the existing intersection at Summerland Road / Kanangra Drive by providing a fourth leg to the roundabout to provide access to the northern part of the site.

Council has detailed its requirements for the local road network, including

- intersection treatments should to be designed to Council satisfaction;
- the local road network including pavement widths and road reserves should be designed in accordance with Council's relevant Development Control Plan;
- the need for traffic calming measures, and minor changes to the road network;
- requirements for cycleways, parking lanes and parking, as well as dimensions of street types; and
- the need for a 10kmph 'shared zone' at the Village Green and bus-stop infrastructure.

Department's Consideration

The Department considers that the detailed design of internal roads and upgrades of local roads should be addressed through the subsequent development applications for each subdivision. Consequently, the Department recommends that with each subdivision application the Proponent be required to provide:

- a revised assessment of the predicted impacts of this traffic on the capacity, efficiency, and safety of the surrounding road network;
- details of the local road network, including road widths, and local road upgrades required; and
- location of cycleways and parking lanes;
- requirements for parking and street lighting; and
- details of a shared zone around the Village Green, including speed limits.

Accordingly, these requirements have been incorporated into the recommended instrument of approval.

6.5.3 Public Transport

Gwandalan is currently serviced by bus route 99 which is operated by Busways Wyong providing fourteen services per day through Gwandalan, along Kanangra Road, connecting Lake Haven and Charlestown (see Figure 13). The Proponent's Concept Plan states that Busways Wyong will consider more frequent services as additional residential development occurs in Gwandalan, Middle Camp, Catherine Hill Bay and Nords Wharf. The Proponent's Statement of Commitments includes a commitment to provide bus stops along Kanangra Road as part of the proposal.

The Proponent also commits to:

- negotiating with the bus operator regarding a future bus route to service the development, with the intention of providing bus stops within 400m of the majority of proposed residential lots; and
- provision of new bus stop infrastructure on Kanangra Drive at the development application stage.

Department's Consideration

The Department supports the proposed public transport infrastructure commitments. 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. If bus stops are to be located along Kanangra Drive, any pedestrian access across the vegetation buffer along Kanangra Drive, must have consideration for impact on threatened species in this location.

The Department considers that a requirement be included in the approval for the deviation of the existing bus route to take in the proposed residential development, to be negotiated with Council and the bus operator at development application stage.

6.6 Flora and Fauna

The site is highly vegetated. The proposed development at Gwandalan would result in the clearing of the majority of development area and as such has the potential to impact on flora and fauna directly through the removal of this vegetation.

A survey of the site identified eleven native vegetation communities (see Figure 14) within the site of which four are listed as Endangered Ecological Communities (EEC) under the *Threatened Species Conservation Act* 1995 (TSC Act) including:

- Redgum Roughbarked Apple Forest (EEC River Flat Eucalypt Forest on Coastal Floodplains);
- Swamp Oak Rushland Forest (EEC Swamp Oak Floodplain Forest);
- Swamp Mahogany Paperbark Forest (EEC Swamp Sclerophyll Forest on Coastal Floodplains);
- Riparian Melaleuca Swamp Woodland (EEC Swamp Sclerophyll Forest on Coastal Floodplains); and
- Freshwater Wetland Complex (EEC Freshwater Wetlands on Coastal Floodplains), located in Strangers Gully, outside the development area

The proposal includes the clearing of approximately 60 hectares of land and facilitate the conservation of 205.75 hectares of land. The extent of EECs to be cleared, and retained and conserved as part of the proposal is detailed in Table 6.

Table 6 – Proposed Extent of Clearing of Endangered Ecological Communities and Groundwater Dependent Ecosystems

Vegetation Type	Total Area (ha)	Area to be Cleared (ha)	Area to be Conserved (ha)
Redgum Roughbarked Apple Forest (EEC – River Flat Eucalypt Forest on Coastal Floodplains)	3.96	0.14	3.82
Swamp Oak Rushland Forest (EEC – Swamp Oak Floodplain Forest);	5.1	-	5.1
Swamp Mahogany - Paperbark Forest (EEC Swamp Sclerophyll Forest on Coastal Floodplains);	3.92	-	3.92
Riparian Melaleuca Swamp Woodland (EEC - Swamp Sclerophyll Forest on Coastal Floodplains)	32.31	2.99	29.32
Freshwater Wetland Complex (EEC – Freshwater Wetlands on Coastal Floodplains)	0.27	-	0.27
	45.56	3.13	42.43

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

Two threatened flora species were also identified on site, the orchid, *Tetratheca juncea* (10,089 individual plants identified), and *Angophora Inopina* (3,109 trees identified). Both of these species are listed as vulnerable under the *Threatened Species Conservation Act* 1995, and *Angophora Inopina* is also listed as vulnerable under the *Environment Protection and Biodiversity Conservation Act* 1999.

The proposal would result in approximately 34% (3,498 plants) of the recorded population of *Tetratheca juncea* and 0.02% (54 trees) of the recorded population of *Angophora Inopina* being removed. A further 2% of *Tetratheca juncea* trees are to be retained in the Bushland Reserve along the eastern side of Kanangra Drive, and the Proponent has stated that is likely that further *Tetratheca juncea* plants could be retained within the landscaped areas of the development. It is also noted that a further 644 individual *Angophora Inopina* are located in the development area, and are primarily located in the buffer zone along Kanangra Drive.

It is noted that the Proponent has received approval from the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (DSEWPC) under *the Environmental Protection and Biodiversity Act 1999 (EBPC Act)*, which requires the proponent to development a long term management plan for the conservation and viability of the *Angophora Inopina* population, located in the northern portion of the proposed buffer zone.

Eight threatened fauna species were recorded within the site during fauna surveys, including *the Crinia tinnula* (Wallum Froglet), *Petaurus norfolcensis* (Squirrel Glider), *Glossopsitta pusilla* (Little Lorikeet), *Pteropus poliocephalus* (Grey-headed Flying-fox), *Falsistrellus tasmaniensis* (Eastern False Pipistrelle), *Miniopterus australis* (Little Bentwing-bat), *Miniopterus schreibersii oceanensis* (Eastern Bentwingbat) and *Scoteanax rueppellii* (Greater Broad-nosed Bat). A further 9 threatened fauna species are considered as having a moderate or greater opportunity of occurring within the site due to the presence of potential habitat within the site. The removal of vegetation as part of the proposal has the potential to impact on theses threatened fauna species.

Public submissions have raised the following concerns relating to flora and fauna impacts:

- Impact on flora, fauna and habitat
- Reduction in wildlife corridor
- dedicate the and for conservation and retain the wildlife corridor around lake
- the land has a high conversation value
- adverse Impact on seagrass beds
- Inadequate Flora & Fauna survey
- clearing of trees/vegetation.

The OEH's submission supports the proposed dedication of offset lands, stating that the lands represent significant conservation outcomes. Furthermore, OEH considers that impacts within the development site and adjoining conservation areas on threatened species have been adequately addressed by the Proponent. To minimise impacts on the Crangan Bay's ecosystem, OEH recommends modification of development footprints, including appropriate setbacks from foreshore and riparian zones, use of water sensitive urban design principles, proper management and control of foreshore vegetation and human access / recreation areas and imposition of strict development controls.

Stranger's Gully, at the south west of the development area, has been identified as an area of high biodiversity significance, and to afford greater protection, Stranger's Gully is included in the conservation lands, as recommended by the IHAP and the OEH.

Council has raised concern about the impact of site clearing on native fauna, and has recommended that clearing of the site is staged to allow native fauna to disperse into adjoining natural areas.

Department's Consideration

With regard to OEH's suggestion that modification of the proposed development footprints would minimise the impact on ecosystem health, it is noted that the proposed footprint has been reduced from that originally proposed and in line with the IHAP recommendations. Therefore, the Department considers that further reduction of the footprint in order to manage ecological impacts is unnecessary.

The Department considers that the conservation lands will adequately offset the impacts of the proposed development, and that the proposal can proceed subject to implementation of recommendations set out in the *Ecological Assessment Report* (RPS 2010) prepared as part of the Concept Plan as discussed below.

The *Ecological Assessment Report* recommended that a management plan be prepared to ensure the survival of *Angophora inopina* and *Tetratheca juncea* within both the retained areas of the development estate and the conservation lands. The Department supports the preparation of such a plan and considers that the management plan also should give consideration to location of pedestrian pathways through the vegetation buffer along Kanangra Drive to minimise impacts on threatened species. These requirements have been incorporated into the recommended instrument of approval.

The Ecological Assessment Report (RPS 2010) also recommended that clearing across the site is minimised, and mature or hollow bearing trees retained where possible. General recommendations were also included for procedures to be put in place during clearing to mitigate impacts on native fauna. The Proponent's Statement of Commitments requires the owner to protect trees of significance (habitat and old growth) during lot planning by marking and retention of significant trees wherever appropriate prior to progressive clearing of sites. The Department considers that the Proponent should be required to provide further details with each subdivision application on how it intends to a minimise clearing and retain trees in accordance with the recommendations of the Ecological Assessment Report. Any procedures and strategies would be carried into a Vegetation Management Plan to be completed prior to commencement of any works on site. This is reflected as a requirement in the recommended instrument of approval.

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. Reference to the SIMI has been removed from the revised Statement of Commitments.

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 *Phytphtora cinnamonmi* during subdivision works; and
- the interface between the development area and the conservation lands (including the foreshore area) and 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.



Figure 14 - Vegetation Communities Present within the Site.

6.7 Aboriginal Heritage

A Heritage Impact Assessment (ERM, October 2010) has been provided as part of the Concept Plan proposal. Site surveys carried out as part of the assessment identified exposures of Aboriginal shell middens within the proposed development area and adjacent foreshore buffer. The majority of these exposures are associated with a large midden which extends along the Crangan Bay foreshore (midden site #45-7-0079). Two further individual midden exposures were identified near Kanangra Drive (in the north-west and south-west of the site), which are not considered to form part of the larger foreshore midden, and are highly eroded (see Figure 15 below).

The midden which extends along the foreshore has been identified as having high archaeological significance, whereas the middens near Kanangra Drive are identified as having low archaeological significance. All sites are considered to have a high level of significance to the Aboriginal community.

The Heritage Impact Assessment (HIS) also provided the following analysis of the potential of the development area and adjacent foreshore to contain further archaeological material and the likelihood of that material being undisturbed, including areas with (see Figure 15 below):

- High Archaeological Potential being areas associated with the foreshore midden, with the potential to further intact and undisturbed archaeological deposits.
- Moderate Archaeological Potential being land adjacent to the identified foreshore midden and within the proposed development area, with the potential for material associated with midden #45-7-0079 to be present in this area.
- Low Archaeological Potential being the remainder of the development area, including the two middens identified near Kanangra Drive and indicating sporadic use of the inland area for subsistence activities.

The areas identified as having high archaeological potential are entirely outside of the proposed development area, and are contained within the proposed foreshore reserve which will dedicated to the NSW Government and will be afforded protection in perpetuity. The proposed development will impact on areas identified as having moderate and low archaeological potential, including the two middens located near Kanangra Drive. The Heritage Impact Assessment sets out recommended Aboriginal heritage mitigation measures which include:

- interpretation of Aboriginal heritage;
- management of potential impacts on the areas identified as having high archaeological potential, and to be retained within the foreshore reserve;
- preparation and implementation of a research design for areas identified as having moderate archaeological
 potential, including a sampling strategy and consideration of research questions posed in the Heritage
 Impact Assessment; and
- monitoring of all topsoil stripping by Aboriginal stakeholders for the purposes of recovering cultural material.

Through the consultation process, the OEH identified the following concern:

- incomplete evidence of Aboriginal consultation process;
- additional details of mitigation strategies are required regarding areas of moderate archaeological potential. In particular, the OEH have identified Aboriginal shell midden sites known as 'Gwandalan 1' (site #45-7-0254) and 'Gwandalan 2' (site #45-7-0253), which require such mitigation measures. Such measures are to be negotiated between the proponent and registered local aboriginal stakeholders and these negotiations are to be documented in the Aboriginal Cultural Heritage Management Plan (ACHMP);
- There is a risk that Aboriginal midden site #45-7-0079, in the east of the site, will be impacted on during clearing and when establishing recreational areas close to the midden;
- The Potential Archaeological Deposit identified along the foreshore has not been registered as an aboriginal site on the Aboriginal Heritage Information Management System (AHIMS);
- OEH is limited in its ability to assess of cultural significance of Aboriginal cultural heritage values in the absence of the views of Aboriginal communities; and
- The Aboriginal Cultural Heritage Management Plan (ACHMP) is to be prepared which is to include documented, continuous consultation with Aboriginal communities, procedures for ongoing their involvement and mitigation and management strategies for all sites



Figure 15 - Location of Archaeological Sites and Areas of Archaeological Potential

A submission was received from the Awabakal Traditional Owners Aboriginal Corporation (ATOAC), a registered Aboriginal stakeholder and community representative body. The submission details the concerns of the community, including:

- consultation has been inadequate and stakeholders have been provided with insufficient time to comment on the proposals;
- there is ethnographical evidence that the subject lands have previously inhabited by the Awabakal community;
- the archaeological field survey is inadequate as it was limited to areas around existing trails, disturbed by motorbikes and/or highly vegetated areas with poor ground visibility;
- the HIS has relied on AHIMS/archaeological database, which has not been updated since July 2007;
- objection to removal of any topsoil from the site;
- there is a need for subsurface excavation of the entire site through extending test pits to points throughout the site;
- HIS and Plan of Management is to:
 - provide mitigation measures to address development related impacts, devised in consultation with community, with particular emphasis on areas close to watercourses;
 - all artefacts discovered on site should be reburied on site;
 - there should be no impact on the midden sites;
- Awabakal names to be used in street names/parks/community areas etc and interpretive signage and artworks to be provided; and
- All aboriginal stakeholders to be notified in event of any onsite archaeological discoveries and workers to be trained in aboriginal cultural awareness.

The Proponent submitted a revised Heritage Impact Statement (HIS) as part of the PPR. The revised HIS provided evidence of consultation to date with the registered aboriginal stakeholders, sets out details for future consultation and provides a response to the Aboriginal stakeholder's comments.

Department's Consideration

The Department is satisfied that the revised HIS addresses issues relating to the documented consultation process, as required by the OEH, and that the level of assessment and field surveys undertaken is appropriate for the purpose of the concept plan. The Department also supports the preparation of an ACHMP and considers that a number of issues raised by the ATOAC can be addressed in the ACHMP. The Department considers that the ACHMP should incorporate OEH requirements and should include:

- procedures for ongoing Aboriginal consultation and involvement;
- details of the responsibilities of all stakeholders;
- a statement of the Aboriginal cultural significance of the Site;
- details of proposed mitigation and management strategies for Aboriginal sites identified to be impacted within the Site, including but not limited to, further investigations, salvage activities and monitoring programs;
- identification and management of any proposed cultural heritage conservation area(s);
- procedures for the identification and management of previously unrecorded sites (excluding human remains);
- details of an Aboriginal cultural heritage education program for all contractors and personnel associated with construction activities;
- details of an appropriate keeping place agreement with local Aboriginal community representatives for any Aboriginal objects salvaged through the development process;
- details of proposed Aboriginal cultural heritage interpretation strategies for the Site; and
- compliance procedures in the event that non-compliance with the ACHMP is identified.

These requirements have been reflected in the recommended instrument of approval.

6.8 Bushfire Management

A Bushfire Threat Assessment submitted in support of the concept plan considers the proposed development against the requirements of *Planning for Bushfire Protection 2006* and the *Australian Standard AS3959-2009 Construction of Buildings in Bushfire Prone Areas.* The assessment sets out requirements for asset protection zones (APZs) of between 10 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.

Comments received from NSW Rural Fire Service (RFS) raised the following concerns relating to bushfire management:

- Classification of vegetation, details of the effective slopes to the west and north-east of the site, and road widths
- Emergency vehicle access from Kanangra Drive to the south west part of the site is required
- The proposed APZs do not comply with Planning for Bushfire Protection (PBP)
- Proposed landscape character is not compatible with a managed environment for bushfire protection.

In response, the Proponent amended the proposed concept plan, as shown in Figure 16 below, providing an additional 'left in – left out' access/egress arrangement onto Kanangra Drive in the south-west of the site. In addition, the Proponent has included a commitment to prepare a Bushfire Management Plan for each stage of subdivision in accordance with the requirements of *Planning for Bushfire Protection 2006*, and any requirements of the RFS, as part of its Statement of Commitments.

The RFS considers the revised arrangement to be adequate and that the required APZs can be accommodated within the site, consistent with PBP. The NSW RFS has provided a number of requirements for future development applications, being:

Road reserves are required to be managed as asset protection zones

- The vegetation buffer between the Kanangra Drive and the Lots is required to be managed as an outer protection area
- The provision for water, electricity and gas supplies are to comply with Planning for Bushfire Protection 2006
- Road access, road widths and landscaping should comply with Planning for Bushfire Protection 2006
- An emergency vehicular access from Kanangra Drive is to be located in south west corner of the development

Wyong Council supports the provision of an additional access to Kanangra Drive at the south west of the development but also consider that an additional permanent access should be provided from the Hamlet A directly into Kanangra Drive.

RFS advice also has identified the vegetated buffer zone to the east of Kanangra Drive as a potential outer protection area. It is noted, that the approval from the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (DSEWPC) under *the Environmental Protection and Biodiversity Act* 1999 *(EBPC Act),* requires the proponent to development a long term management plan for the conservation and viability of the Angophora inopina population, a threatened species, in the northern portion of the proposed buffer zone.



Figure 16 - Indicative Concept Plan Layout, showing emergency access/egress

Department's Consideration

The Department considers the revised proposals for emergency access to the site to be adequate.

The Department considers that an additional access point from Hamlet A to Kanangra Drive is unnecessary given that permanent access is already provided from Hamlet A to the north via Summerland Road. This is consistent with the advice provided by RFS. The Department concurs with the RFS that the site can accommodate the required APZs. However, all other bushfire management issues, including APZs landscaping, and access requirements set out in the PBP, are to be negotiated with the RFS and Council at the development application stage. As such, the Department considers that a requirement should be imposed requiring any subdivision application to clarify bushfire management arrangements as follows:

- demonstrate that the development complies with Planning for Bushfire Protection 2006;
- demonstrate that the location, layout and management arrangements for APZs has been negotiated with Council and the RFS;
- provide a map showing the composition of APZs, including the inner and outer protection zones, and their relationship to the proposed building footprints; and
- outline proposed arrangements for management of bushfire hazard and APZs during the development process.

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.

The Department considers that the potential conflict between the protection/management of the threatened species located in the proposed buffer zone east of Kanangra Drive (as required under the EPBC Act) and the need to provide adequate outer protection zones for bushfire management needs to be managed. As such, the Department has included a requirement in the recommended instrument of approval requiring the Proponent negotiate with Council and the RFS in the preparation of a future management plan for the buffer zone that is consistent with the requirements of the EPBC Act approval. In addition, it is considered that Council may need to accept this land in order to ensure a satisfactory level of management as required under the terms of the EPBC Act approval. As such, the Department considers that the management plan should also include provisions for future ownership of the buffer zone. This requirement has been incorporated into the recommended instrument of approval.

Impacts of climate change on bushfire hazard

Climate change and associated predicted temperature rises will 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.

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 application of current requirements embodied in *Planning for Bushfire Protection 2006* is considered appropriate.

7 CONCLUSION

The Department has assessed the EA, PPR and addendum to the PPR and considered the advice from public authorities as well as issues raised in public 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 considered that the key issues associated with the proposal relate to impacts on mining potential, mine subsidence hazard, traffic and transport, urban design and built form, commercial development, impacts on ecological values including flora and fauna and water quality, Aboriginal heritage, bushfire hazard, and contamination. However, the Department is of the view that the Proponent has satisfactorily addressed these issues or that they can be addressed through modifications to the concept plan and further environmental assessment requirements. The recommended modifications and further assessment requirements are located at Appendix A and include the following:

- remove the proposed commercial / retail floor space;
- Locate all urban lots above the 100 year flood level plus 0.5 metre freeboard;
- ensure bushfire hazards are managed, including through provision of adequate APZs and access arrangements; and negotiation of the location, layout and management arrangements for APZs with RFS and Council;
- ensure mine subsidence hazards are appropriately managed;
- provide a staging plan outlining a schedule for delivery of service infrastructure, local and State contributions, and the Statement of Interim Management Intent;
- prepare detailed urban design guidelines in consultation with Council, and provide details on proposed landscaping and treatment of public domain;
- ensure proposed roads and road upgrades are designed and constructed to RTA and Council requirements;
- investigate opportunities to extend the existing bus route to better service the development;
- outline strategies to minimise clearing and retain trees, and minimise impacts of clearing on native fauna;
- manage the interface between development and conservation lands;
- manage impacts on water quality and groundwater (including groundwater dependant ecosystem communities) through implementation of water sensitive urban design and monitoring;
- preparation of an Aboriginal Heritage Plan of Management., in consultation with registered Aboriginal stakeholders; and
- management of construction impacts, through the preparation of a Construction Environmental Management Plan.

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 of conservation lands requires no further assessment and that project approval for this aspect is granted 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**

It is recommended that the Minister:

- (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).

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Executive Director Whan Renewal and Major Sites

Maddad 9/5/2012. **Director General**

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APPENDIX A. RECOMMENDED INSTRUMENT OF APPROVAL

APPENDIX B. PREFERRED PROJECT REPORT /RESPONSE TO SUBMISSIONS

APPENDIX C. INDEPENDENT HEARING AND ASSESSMENT PANEL REPORTS

APPENDIX D. ENVIRONMENTAL PLANNING INSTRUMENTS

Wyong Local Environmental Plan 1991

The Site was rezoned on 13 April 2012, by way of *State Environmental Planning Policy Amendment (Gwandalan)* 2012 which amended the *Wyong Local Environmental Plan 1991* to protect land of environmental conservation value with environmental protection zoning, identify land appropriate for development with residential zoning, and establish development controls over the Site. The concept plan is generally consistent with the LEP through its proposed layout, land use and development controls. However, the proposal for commercial/retail floor space is not permitted under the LEP and as such it is recommended that the concept plan be modified to exclude this component of the proposal.

It is noted that, in accordance with Section 75M of the Act, the obligation to prepare a DCP as required by the LEP is satisfied in the event that the concept plan is approved for the site.

State Environmental Planning Policy No. 14 – Coastal Wetlands

The aim of SEPP No. 14 is to ensure that the coastal wetlands are preserved and protected in the environmental and economic interests of the State. A coastal wetland is located entirely within the proposed conservation offset lands, which as part of the land offset agreement will be dedicated to OEH, thereby ensuring that the wetland is protected in perpetuity.

State Environmental Planning Policy No. 44 Koala Habitat Protection (SEPP 44)

SEPP 44 aims to 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. SEPP 44 applies to the site as it is located in Wyong local government area which is listed in Schedule 1 of the SEPP. The ecological assessment provided in the Environmental Assessment Report finds that the site is not considered to represent 'Core Koala Habitat'.

State Environmental Planning Policy No. 55 (Remediation of Land) (SEPP 55)

SEPP 55 aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment by specifying that certain considerations be made by the consent authority when determining development applications in general, and where relevant, land has been appropriately remediated. The policy states that land must not be developed if it is unsuitable for a proposed use because it is contaminated, or cannot be remediated to make it suitable for the proposed use.

The proponent has prepared a Preliminary Contamination Assessment, which concluded that the site can be made suitable for residential development through remediation. The proponent has committed to implementation necessary remediation measures prior to issue of the construction certificate for stage 1 works.

The Department is satisfied that the site can be made suitable for the proposed uses, subject to further assessment and consideration at the development application stage.

State Environmental Planning Policy (Infrastructure) 2007

The main objectives of the Infrastructure SEPP are to facilitate the effective delivery of infrastructure by improving regulatory certainty through consistent planning management for infrastructure and providing greater flexibility in the location of infrastructure and service facilities. As part of the assessment process the proposal was referred to relevant State agencies responsible for infrastructure including the RTA, Department of Education and Training, Department of Health, and Emergency Services.

The Proponent contributes to the provision of local and regional infrastructure through a \$5 million dollar grant for local community facilities, and to contribute towards the costs of local road intersection upgrades. In addition the Proponent has agreed to enter into a VPA to contribute towards the costs of land acquisition for the local school and for an emergency services facility.

The Infrastructure SEPP also aims to ensure the RTA is made aware of and allowed to comment on projects for developments listed in Schedule 3 of the SEPP. Schedule 3 identifies development including subdivision for 200 or more allotments where the subdivision includes the opening of a public road. The proposal therefore triggers the Infrastructure SEPP. The project was referred to the RTA for comment in accordance with the Infrastructure SEPP.

State Environmental Planning Policy (Mining) 2007

The Mining SEPP aims to provide appropriate management of mineral reserves and extractive industries, and facilitate development of lands containing extractive mineral resources. In considering a development proposal, the SEPP requires consideration of whether or not the development is likely to have a significant impact on the future recovery of minerals (including by limiting access to, or impeding assessment of, those resources). It is also required to evaluate and compare the respective public benefits of the proposed development against future recovery of minerals.

The proposed development site forms approximately 3.5% of a consolidated coal mine lease which is not considered a significant proportion of the overall lease area. As a result of the proposed development, full extraction is not likely to be possible due to subsidence risk, however partial extraction has been carried out under existing township areas, therefore it is likely that partial extraction could at least be carried out under the development site. Given the small proportion of the proposed development site in context of the mine release area, limiting future mining under the development site to partial extraction is not considered to have a significant impact on the overall value of the consolidated mine lease area.

State Environmental Planning Policy No. 71 – Coastal Protection

SEPP 71 aims to protect and manage the natural, cultural, recreational and economic attributes of the New South Wales coast. The proposal incorporates water sensitive urban design measures to minimise impacts of runoff to Crangan Bay and Lake Macquarie, while the foreshore area is incorporated into the proposed Conservation Lands for transfer to OEH ensuring its ecological and aesthetic values are protected. Public access to the foreshore will also be improved with controlled access paths.

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

The BASIX 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.

State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004

The Seniors and Disabled Persons SEPP aims to encourage housing for aged and disabled persons that is designed to meet their living needs in areas where existing infrastructure and services are provided. The Concept Plan identifies two super lots for future seniors living. Based on their location adjacent to the existing village of Gwandalan which provides local community services, the potential for a future seniors living development is recognised. As no specific design details however are provided in the Concept Plan, full consideration of the SEPP will be given under future Development Applications for a seniors living development.

Hunter Regional Environmental Plan 1989 (Heritage)

The REP aims to conserve the environmental heritage of the Hunter Region, identifies some 1300 heritage items in a number of categories - state, regional, local and areas requiring investigation, and heritage precincts land within the locality is identified in the REP. No items are identified within the site or in the vicinity of the site.

APPENDIX F. SUBMISSIONS SUMMARY

APPENDIX G. POLITICAL DONATION DISCLOSURES