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SD:Scott Duncan
F2006/00251

17 July 2007

Mr Michael File
Director, Strategic Assessments
Department of Planning
23-33 Bridge Street
SYDNEY NSW 2001

Dear Mr File

**REQUIREMENTS AND ISSUES FOR DIRECTOR GENERAL'S ENVIRONMENTAL
ASSESSMENT REQUIREMENTS FOR CONCEPT PLAN AND PROJECT APPLICATION FOR
COAL AND ALLIED GWANDALAN DEVELOPMENT.**

Reference is made to your letter received on 3 July 2007 which requests key issues and assessment requirements of concern to Council for the Concept Plan and Project Application for the Coal and Allied development at Gwandalan.

The proposal is a very large development with the potential for significant:

- Environmental;
- Economic; and
- Social impacts

Council is concerned about the limited timeframes which exist to adequately respond to this matter.

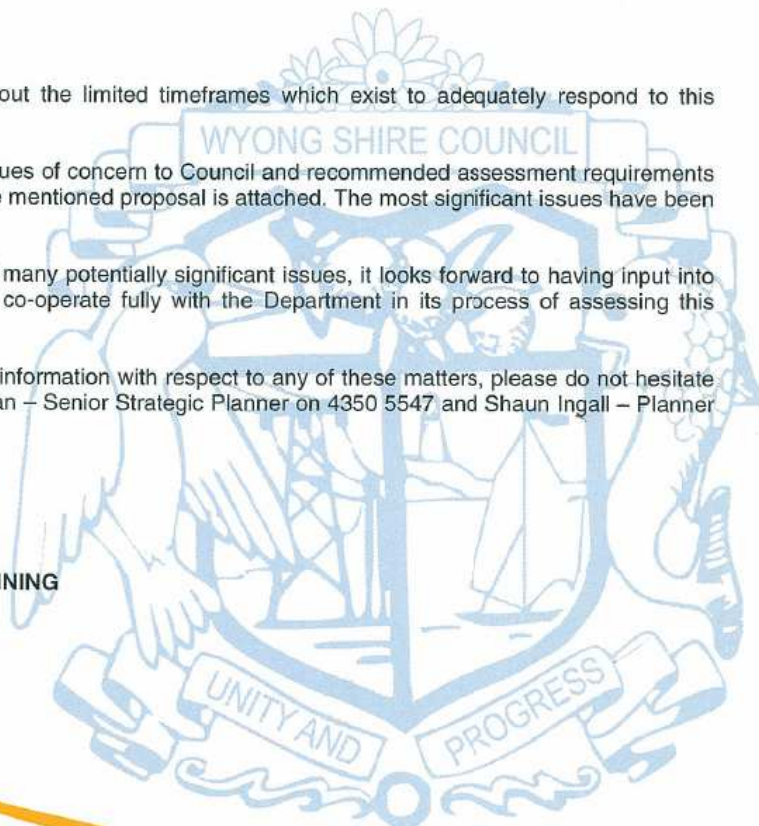
A summary of the key issues of concern to Council and recommended assessment requirements associated with the above mentioned proposal is attached. The most significant issues have been highlighted.

While Council has raised many potentially significant issues, it looks forward to having input into the EA process and will co-operate fully with the Department in its process of assessing this significant project.

If you require any further information with respect to any of these matters, please do not hesitate to contact Mr Scott Duncan – Senior Strategic Planner on 4350 5547 and Shaun Ingall – Planner 4350 5735

Yours faithfully


Gina Vereker
DIRECTOR SHIRE PLANNING



Environmental Assessment Requirements

Coal & Allied Gwandalan

1. STORMWATER IMPACTS AND INTEGRATED WATER CYCLE MANAGEMENT (IWCM)

- Negligible impact of development on Lake Macquarie and surrounding creeks and natural drainage channels, i.e. foreshore and near shore zones
- An IWCM needs to be prepared which considers proposed variations to flow regimes (both above and below ground) for the site and sensitive downstream ecosystems areas. This will require stringent monitoring to establish baseline flows and appropriate wetting/drying regimes for down stream ecosystems.
- IWCM needs to have regard for the impacts of changing flow regimes of native vegetation (particularly EEC's). This particularly needs to consider those drainage channels and creeks which will be incorporated within the development area.
- Impacts of extensive clearing will need to consider downstream impacts on Lake Macquarie, drainage channels and creeks.

2. BUSHFIRE PROTECTION

- Consideration should be given to the impacts of the proposed extension of infrastructure and asset protection zones into the Conservation area dedicated as per the Memorandum of Understanding (MOU).
- The site is surrounded on the north, south and west by Category 1 bushfire vegetation. Consideration needs to be given to the appropriate design of APZ as per *Planning for Bushfire Protection 2006*. This includes consideration of accessibility to and egress from the site by emergency vehicles for fire fighting purposes.

3. FLORA AND FAUNA

- Consideration should be given to the impacts of the proposed extension of infrastructure and asset protection zones into the Conservation area dedicated as per the Memorandum of Understanding (MOU).
- Consideration needs to be given to the potential impacts on native flora and fauna, particularly EEC's and vulnerable, threatened or endangered fauna, with habitat ranges being taking into account, particularly in relation to the extensive vegetation clearing that will be required.
- Threatening processes such as urbanisation, weed invasion, domestic animals require consideration on the surrounding and downstream areas of the site.
- Consideration to be given to impacts on native flora and fauna.
- Concept plan to include:
 - Detailed flora and fauna surveys and corridor assessments
 - Vegetation Management Plans
 - Key threatening process management plans
- High quality threatened species habitat is present throughout the entire site. Council is aware of the presence of a large population of *Angophora inopina*, Endangered Ecological Communities, regionally significant plant communities and wildlife corridors (these are shown on the attached map). Large populations of *Tetratheca juncea* are also known to occur in the locality. The proposal does not appear to have had any regard to the significant threatened species and biodiversity values which exist on this site.



4. ROADS AND TRANSPORT

- A commitment to and establishment of a public transport network is required which connects the area to major town centres of Lake Macquarie and Wyong Shire Council.
- Assessment of whether current road networks (including the Pacific Highway) will support the additional usage created by the proposal.
- Connectivity to Gwandalan is only via Kanangra Drive. Consideration to how this proposal may be more incorporated into existing townships should be considered.
- There is a need to address the issue of single access in and out of Gwandalan and Summerland Point.
- A contribution to the local road network will be required in accordance with the proposed s94 plan.

5. INFRASTRUCTURE

- Consideration should be given to the impacts of the proposed extension of infrastructure and asset protection zones into the Conservation area dedicated as per the Memorandum of Understanding (MOL).
- All infrastructure for the proposal should be provided by the applicant at a standard in accordance with Council's standards (including water and sewer services, roads, kerb and guttering etc).
- All infrastructure necessary must be provided at the proponents expense. It is understood that water and sewer is to be provided from the Hunter as advised for Council's Investigation Engineer.
- The proponent must supply and fund all on site and downstream water and sewer infrastructure.

6. MINE SUBSIDENCE / MINING

- Proposal to meet approval requirements by the Mine Subsidence Board.

7. URBAN FORM AND URBAN PLANNING

- The proposed density has not been provided. Working on a 35% development constraint assumption means 16 dwellings per Hectare. This results in average lot sizes of 625m² based on achieving the maximum yield of 700 lots. As the proposed zoning R1 permits all forms of dwellings, consideration needs to be given to built form.
- Consideration needs to be given to affordable housing (may be achievable given large lots sizes).
- Built form needs to be consistent and tie in with the local character of the surrounding suburbs of Gwandalan and Summerland Point and environmental constraints.
- The physical isolation of the area from surrounding suburbs and potential cumulative impacts needs to be further considered.
- Staging must be demonstrated within the concept plan.

8. OPEN SPACE

- All open space should be supplied by the applicant in accordance with Council's relevant s94 plans.
- Clarification required as to whether the foreshore park will be actively managed and who will be the management agency.
- Ensure designated parks and recreational resources will be available for the whole community.
- Open space needs to be embellished (bridges, cycleways, playground equipment, revegetation, carparking etc).
- Open space must be consistent with Wyong Shire Council Open Space Principles Plan and Local Parks Strategy.
- Must provide for equitable social use of Open Space while protecting biodiversity and utilising water sensitive urban design.
- A contribution to land and regional open space will be required in accordance with the proposed s94 plan for the area.



9. SOCIAL IMPACT

- An assessment is to occur of how existing community facilities and services (such as schools, child care, recreation facilities etc) will support the additional potential arising from an additional 700 lots from the proposal if no new facilities are to be provided as part of the development. If new facilities are to be provided as part of the development, the impact on existing facilities should be assessed.
- The impact of the additional population on the surrounding townships and relative physical isolation of the proposal needs to be considered, i.e. school upgrades, sporting facilities, community facilities etc.
- A contribution to community facilities will be required in accordance with the proposed s94 plan.

10. CONTAMINATION ISSUES

- Management of potentially contaminated land (including acid sulfate soils).
- S149 notification is required on any land that is not fully rehabilitated.

11. VISUAL IMPACTS

- Visual impacts and aesthetics of the proposal from Gwandalan, Kanangra Drive, Catherine Hill Bay and Nords Wharf to be considered.

12. ABORIGINAL AND EUROPEAN HERITAGE

- Further assessment of Aboriginal Significant Sites and items on site (in particular the foreshore needs to be undertaken). The impacts of increased usage of the foreshore area (as part of the proposed public park) on these sites need to be assessed in terms of potential for disturbance.

13. IMPACTS ON LAKE MACQUARIE STATE RECREATION AREA FROM INCREASED VISITOR USAGE

- Consideration should be given to potential impacts on Lake Macquarie State Recreation Area due to proposed development proposals and increased visitor usage.

14. COASTAL

- Access is not to degrade the foreshore / coastal zones.

15. CONSISTENCY WITH RELEVANT PLANNING DOCUMENTS / LEGISLATION

- Where applicable, the proposal should be consistent with the Wyong Shire Council Tuggerah Lakes and Coastal Catchments Stormwater Quality Management Plan.
- No consideration has been given to the *draft Central Coast Regional Strategy (dCCRS)* to provide a regional context for the development. This plan makes no provision for development in this location. Further, consideration has not been given to Water Plan 2050 and proposed additional population increases.
- Council's role in the approval of future dwellings and structures needs to be clarified – will they fall into the 3A classification also?

16. SUSTAINABILITY

- All facets of the proposal are to incorporate elements of sustainability wherever applicable.

17. RETAIL PROVISION

- Assessment is to occur of how existing businesses will support the additional potential population from the proposal if no new facilities are to be provided as part of the development. If new businesses are to be catered for as part of the development, the impact on existing businesses should be assessed.



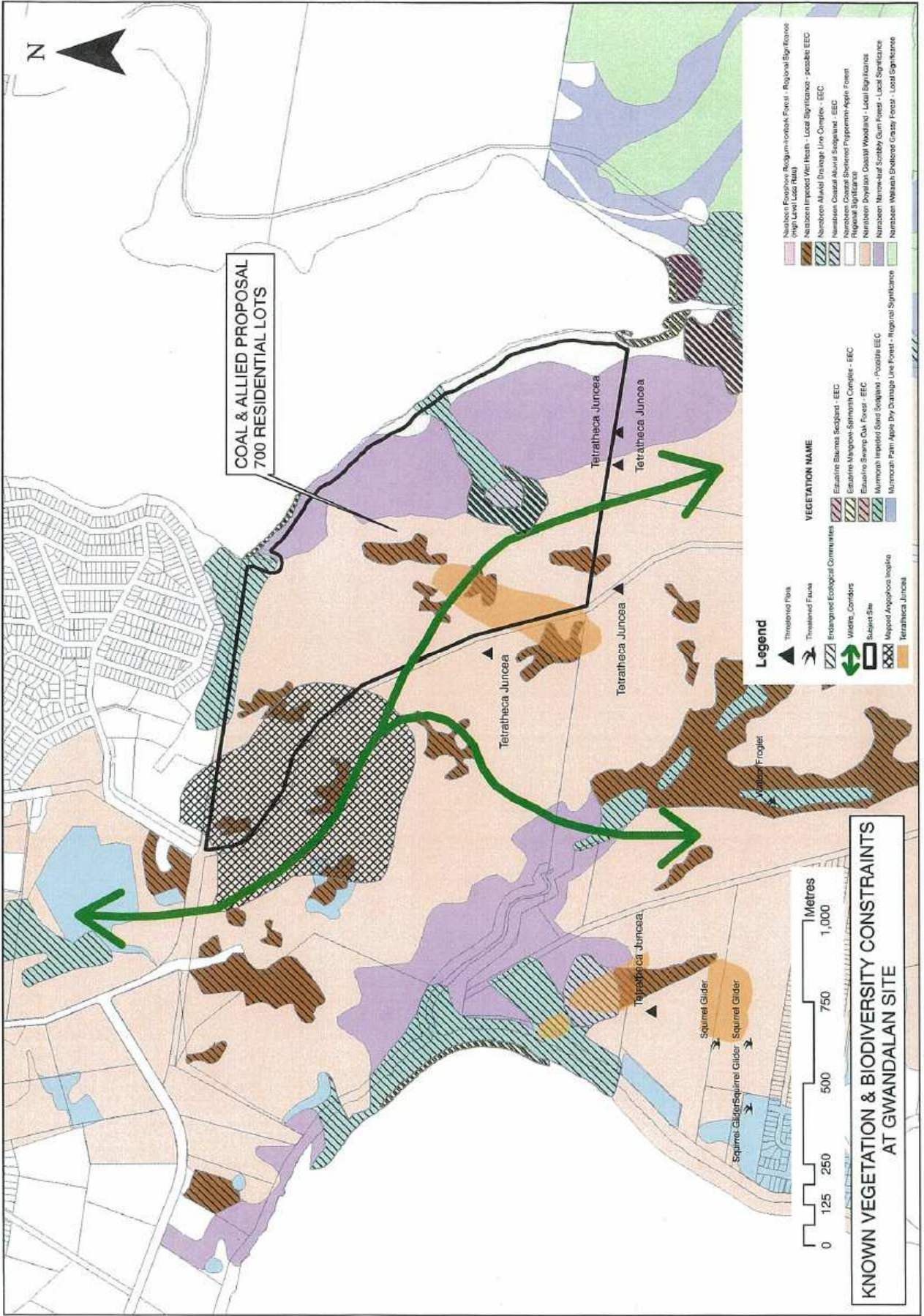
18. PLANNING AGREEMENTS AND / OR DEVELOPER CONTRIBUTIONS

- Development to be subject to Council's Shire Wide Contributions Plan and also to the Northern Districts Contribution Plan that is currently in draft format.

19. FURTHER AGENCIES OR AUTHORITIES REQUIRED?

- Ministry of Transport should be added to the list of agencies required to be consulted.





Wyong Shire Council – 7 March 2008 Submission

COAL & ALLIED PART 3A SUBMISSION - GWANDALAN

Key issues of concern to Council with Concept Plan and Project Application for Gwandalan Coal and Allied proposal

URBAN FORM AND PLANNING

- The Coal and Allied proposal is not identified by Council's Residential Development Strategy (RDS). The appropriateness and timing of development on the site is questioned. New residential release areas should be concentrated around existing urban centres with good public transport and social support services.
- The proposal does not address the draft sustainability criteria for new land releases on the Central Coast as detailed in the draft Central Coast Regional Strategy (dCCRS). It is also likely to fail many of the sustainability criteria listed in Appendix 4 of the dCCRS.
- The proposal is inconsistent with Council's adopted Retail Strategy which states that the combined area of the proposed 600 dwellings at Catherine Hill Bay and 920 dwellings at Gwandalan would require no more than 1500 m² of retail floor space per location. As such, the proposal for 2800m². This would appear to be excessive and outside of that proposed in Council's Retail Strategy.
- The northern part of the site is proposed to be used for aged housing. Whilst this is not an appropriate development due to its isolated location, poor public transport and lack of social support services for the elderly. It's development should be timed such that it is not released until additional shops, facilities and services are provided. It is therefore not appropriate for this to form part of the 1st stage of the project.
- Proposed zoning controls are too general. The R1 – General Residential zoning is appropriate over some parts of the site. However, this zoning should not be used in areas where conservation reserves, recreational areas, neighbourhood centres and retirement living are proposed. Council is currently developing its LEP 2011. It will be important to ensure consistency with any Environmental Planning Instrument which the Minister creates for this site and new zones which are being created by Council under LEP 2011. It is requested that the Department of Planning liaise with Council on this matter.
- The visual assessment included in the Concept Plan and Project Approval documentation is completely inadequate given the site's lakeside and heavily vegetated location. It is also unclear how the Design Guidelines which form part of the Concept Plan will be applied as planning controls. Will they form part of a DCP? This is especially important if the remaining stages of the development are dealt with under Part 4 of the Environmental Planning and Assessment Act, 1979.
- Development Control Plan should be prepared for the site and Council given the opportunity to review it prior to Project Approval and/or Concept Approval being granted.
- The placement of residential uses on steep slopes is a concern on some parts of the site. The appropriateness of residential development in terms of its suitability is questioned, especially around Stranger's Gully.
- Aboriginal heritage impacts and mitigation measures are not addressed adequately in the Environmental Assessment (EA) or Statement of Commitments (SOC).
- Street lighting should be provided in all streets, not just the main streets.
- A considerable number of lots are orientated east-west in lieu of the preferred north-south orientation. Greater variation in lot sizes should be provided as part of the proposal and

consideration should be given to the requirements of DCP 2005 – Wyong Shire (Chapter 66 – Subdivision).

FLORA AND FAUNA

- The report demonstrates that the Gwandalan site has very high biodiversity values, at both the local, state and federal level. These values include:
 - A significant number of threatened species listed under both State and Commonwealth legislation have been recorded on site.
 - Habitat for a range of threatened species that are cryptic and difficult to survey are likely to be present.
 - Three Endangered Ecological Communities (EECs) are present which are of high conservation value from a landscape conservation perspective (i.e. connects from the lake edge to ridge top along a significant corridor).
- The off-set strategy is grossly deficient. The strategy implies that an off-set of somewhere in the order of 1:1 or 1:2 is appropriate to mitigate the loss of important habitat for a number of threatened species. It is not apparent how the proposed Offset Strategy will satisfy the “maintain and improve” outcome and whether the regional offsets are sufficient to mitigate habitat and threatened species losses associated with proposal.
- Council’s Flora and Fauna Guidelines should be applied to verify if the level of survey effort and the conservation assessment is adequate within the local area.
- The proposal is clearly inconsistent with Council’s Conservation Management Guidelines for a number of threatened species including:
 - The Squirrel Glider Conservation Management Plan
 - The Tetratheca juncea Conservation Management Plan
 - Angophora inopina Management Recommendations.

Points of concern are detailed in Appendix A.

- It is premature to consider the proposal without the results of the Central Coast Conservation Strategy being released. The Environmental Assessment done for the site is inconsistent with the regional assessment developed by the Department of Environment and Climate Change (DECC) for the Department of Planning for the Central Coast. The “draft Biocon Layer” that has been developed for this project identifies the entire study site (including the proposed development area) as a high priority site for conservation. The proposed development needs to conform to the regional biodiversity assessment developed in the “draft Biocon Layer” so that it supports conservation at the regional level rather than conflicting with regional conservation goals.
- Concerned about the amount of habitat loss and impacts on high quality vegetation. Particularly concerned that all of the site will be cleared as part of Stage 1 Project Application. The site should be left in a natural state until construction starts for other stages, except for the construction of roads and other infrastructure.
- It is not clear what impact the proposed sewerage main to service the development will have on conservation lands. This will need to connect to the Summerland Point Treatment Plant.
- Management of edge effects and sensitive vegetation along visual buffers, foreshore areas and development impacts upstream of sensitive sites is not well explained in the document.
- Crangan Bay is the last undeveloped bay on Lake Macquarie and the seagrass and macroalgae populations are in a good state. Concerns are raised with potential impacts on Crangan Bay and foreshore areas from urban development and increased foreshore use.

- There are clearly more environmentally sympathetic options for the site which would fully protect Stranger's Gully which have been ignored e.g. Master Plan "Plan B" developed during the Design Charette with the community in 2007.
- The submission does not clearly demonstrate whether the proposed stormwater treatment ponds are sized appropriately or whether environmental objectives will be met.

BUSHFIRE PROTECTION

- There are a number of problems with the road layout from a bushfire planning perspective. These include:
 - Northern hamlet should be directly connected to Kanangra Drive along the main southwest/north-east running road to provide for an additional access/egress for emergency services, particularly as the Northern Hamlet has been identified for retirement or seniors living purposes.
 - East-west road along the southern boundary should also directly connect to Kanangra Drive for improved access/egress.
 - Road along the southern boundary is proposed directly adjoining land owned by the NSW National Parks and Wildlife Service (NPWS); therefore the entire APZ needs to be contained within the road reserve, and should be 24m wide.
 - The additional connections mentioned above would also minimise through traffic within the proposed subdivision adding to the amenity for local residents and pedestrians.
- It is unclear whether all of the subdivision will be Torrens Title or Community Title. This may have an impact on vegetation and fuel maintenance demands within APZs.

OPEN SPACE

- Proposed location of open space provides reasonable access to parkland within walking distance of all residents. However, residents in the most north western part of the proposal are outside 500 m walking distance of a park.
- The size and distribution of open space appears reasonable. The overall apportionment appears to be adequate for the future population.
- The proposed central park is not on a drainage line and will have the best chance to be developed fully for social open space adjacent to the major landscape feature being the lake foreshore. The foreshore is accessible from 13 streets and provides logical road verge access paths to the lake.
- To maximise the ecological and visual amenity values able to be provided on the lineal land parcels in the north and south of the central road there should be a comprehensive application of WSUD treatment trains which should be located in lineal open space parcels.
- The central road presents a major visual opportunity to establish a line of trees to frame the vista down to the lake overlooking the central parkland.
- The landscape buffer to Kanangra Drive is wide and there will be informal access across and along it. Consideration needs to be given to safe and logical entry to the subdivision circulation system on Summerland Road to reduce desire paths through the buffer. Landscape planting and treatment of the buffer should use local species which are able to survive with minimal water and weed control. If possible the buffer should be fenced any construction is commenced. All protected bushland should remain fenced to prevent vehicle access.

SECTION 94 - FUNDING AND SERVICING

- The applicant proposes to spend \$5,000,000 on community services and facilities. No details are provided on what items are being provided.

- Council's Section 94 Contribution Plan and Development Servicing Plan must be applied at the Concept Plan and Project Application approval stage. At its meeting held on 23 January 2008, Council adopted the Section 94 Contributions Plan for the Northern Districts (which covers this land). The plan came into effect on 1 February 2008 and sets contribution rates for development of the Coal and Allied land for roads, community facilities, open space and administration. Development of the Coal & Allied land will also be subject to any contributions under the Shire-Wide Section 94 Contributions Plan and the Gwandalan District Development Servicing Plan which covers water and sewer provision. Copies of these plans can be downloaded from Council's website <http://www.wyong.nsw.gov.au/>.
- Coal & Allied has previously claimed that the dedication of open space and the issue of recognising credits for land dedications will be addressed in the future. This issue must be addressed now as part of the current Concept Plan and Project Application. Council maintains that any contribution by Coal & Allied to the upgrading of Kanangra Drive is warranted. Council's existing Section 94 Contribution Plans covering the site reflects this stance.
- There is no mention of whether additional Telstra infrastructure will be provided such as CPUX & RIMS (like small electricity cabinets) or whether provision of media/broadband cabling will be provided.
- The report states that the electricity network has sufficient capacity through Lake Munmorah Zone Sub Station then it goes on to state that a new zone sub-station may need to be constructed.
- There are some comments in the report that sewer rising mains & gravity mains require easements where equal to or greater than 300mm diameter. This is incorrect as all sewer rising mains require easements, irrespective of size.
- There is no mention of reclaimed water infrastructure (including mains within all residential streets).

MINE SUBSIDENCE

- The proposal occurs within a Mine Subsidence District so approval of the Mine Subsidence Board must be obtained for any development.
- Coal resources exist beneath the site. Future development has the potential to sterilise these coal resources. Underground mining could mean that surface development staging plans will need to be altered to enable mining to be completed. Mine subsidence engineering requirements might also impact on the size and design of proposed structures.

ROADS AND TRANSPORT

There are a number of specific road and transport issues which are outlined under the following sub-headings.

NOTE: All comments based on traffic report prepared by Parsons Brinckerhoff Australia Pty Ltd November 2007, Plans by Cardno (Drawing No YN27002-202 – Sheets 1 to 4 only provided) amended 24/10/2007.

External Issues

- A roundabout is required at the intersection of Road No 8 (southern intersection) and Kanangra Dr. The roundabout should be designed for 80km/hr speed limit, not 60km/hr as stated on page 2 of PB Report Executive Summary. Any consideration for reduction in the speed limit has to be directly referred to the RTA.
- Upgrading/widening of the curves along Kanangra Dr is required in accordance with Council's Section 94 contributions plan.
- No direct access will be permitted to properties off Kanangra Drive.

- Consideration should be given to a connection from the southern most east-west road to Kanangra Dr. This will assist in providing a more efficient bus service.
- The applicant will need to enter into a Deed of Agreement with the RTA for the upgrading of the Kanangra Dr/Pacific Highway intersection.

Internal Issues

- The intersection of Road No 4 with Summerland Road needs to be realigned approximately 40 metres to the east to create a 4-way intersection with the access road to an approved industrial subdivision located on the northern side of Summerland Rd. This should eliminate headlight problems etc from the industrial estate. The intersection should be designed in accordance with AUSTRROADS standards and evidence provided to ensure there are no sight distance or design problems. Swept paths for HRV's (including 14.5m buses) should be incorporated into the intersection design. Details for this intersection need to be submitted for Council approval.
- The 13m wide pavement on Summerland Rd from Kanangra Dr to the industrial subdivision road must be extended east to the intersection of Road No 1 to cater for the bus route, on road cycleway and on-street parking (both sides).
- Summerland Rd pavement should extend further east from Road No 1 with a "T" intersection formed with Road No. 3. The intersection requires raised concrete medians. The pavement width can be reduced on Summerland Rd between the intersections of Road No 1 and No 3 to 7.6m in accordance with Council's DCP 66 requirements.
- All major four-way internal intersections treatments need to be identified to Council's satisfaction.
- A roundabout is the preferred intersection treatment at the intersection of Road No 2 and Summerland Rd.
- All pavements widths and road reserves widths are to be in accordance with Wyong Council's DCP 2005, Chapter 66 & Chapter 67.
- The 24m width shown for street Type C1, is not adequate as a bus route and an on-road cycleway. It needs to be widened to 27m, incorporating 4.5m verge/footpaths, 3.5m parking lanes, 3.0m travelling lanes and a 5m wide swale.
- The width shown for the rear laneway, to the retail area, is totally inadequate to service the proposed developments. Refer to other comments under "Parking".
- DCP 2005 (Chapter 66 – Subdivision) identifies maximum street speeds that are to be achieved. The proposed road layout needs to be modified and/or traffic calming devices/slow points provided throughout the development to ensure the slow speed environment within the development is maintained. This is essential, particularly on approaches to intersections and along long sections of roads with steep gradients. Council requires that facilities be installed so that the driving speeds are physically limited to the speeds identified in the DCP. It is not sufficient to rely on regulatory speed signs.
- Due to the steep grade (>7%) on the approaches to the intersections of Summerland Rd with Road No 2, Road No 4 and Road No 3, speed reduction devices are required on the approaches to these intersections.
- In accordance with Section 138 of the Roads Act an application is required from the developer to the Roads Authority to carry out any works within existing road reserves.
- Some areas of the road geometry are inappropriate e.g. corners that may be too tight for the vehicles they need to serve, intersections that are not square (although they could easily be).
- The road hierarchy (based on diagrams) does not appear to be representative of the layout being served. E.g. higher class roads serving small catchments.

Parking

- Sect 5.10.4 Page 59 of the PB Report highlights that a maximum of 2800 sq m retail GFA is proposed within the site. Further details on the parking areas and service facilities need to be provided for Council's approval. All parking needs to be provided in accordance with Council's DCP Part 61. The servicing arrangements and on-street parking proposed on Road No 3, in the vicinity of the retail area, does not meet these requirements. Also, the proposed parking is on the opposite side of the road to the proposed retail area.

Pedestrian pathways/cycle ways

- Insufficient pedestrian/cycle ways are provided within and adjacent to the development. Facilities are required to promote and accommodate cycling and the use of motorised scooters (retirement villages) for recreational purposes and trips to shops, playing fields and schools etc.
- As it is most likely that a bus stop will be required on Kanangra Dr at the southern end of the development, a pedestrian connection is required from the southern most east-west road to Kanangra Dr, to encourage use of public transport. A pedestrian refuge is also required on Kanangra Dr in this vicinity.
- Off-road pedestrian/cycle ways are required for the full extent of the development along Summerland Rd, Road No 1 and Road No8 (Retail Precinct). The pathways are to connect to Kanangra Dr and the "Coastal Connector Path".
- The "Coastal Connector Path" needs to be extended north to connect with the footpath in Gamban Rd.
- Several other connections are required from the east-west streets to the "Coastal Connector Path".

Public Transport

- The applicant needs to pay a contribution to the Ministry of Transport for the enhancement of bus servicing for the development.
- The applicant needs to provide a letter from the Ministry of Transport and local bus company stating that it will extend the current bus service to include the proposed development.
- Bus stops and bus shelters need to be provided in accordance with the requirements of the Bus Operator, Ministry of Transport and Council. All facilities need to be installed in accordance with Disability Discrimination Act (DDA) requirements.

Street Lighting

- Lighting should be in accordance with relevant AS. Lighting is required in all streets and at all intersections.

SOCIAL

- The \$5m pledge from Coal & Allied towards additional future social infrastructure requirements is considered to be an extremely positive initiative which will benefit the local community (see Appendix B for further information). A number of potential projects were identified by Gwandalan community representatives at the Charette.
- The applicant is to provide and maintain a courtesy bus for the Retirement Village for shopping trips etc.
- The cumulative population increase arising from the Coal & Allied and Rosecorp developments is significant. This represents an additional 2,518 people or an 86% increase over the current population of Gwandalan or a 49% increase over the current population of Gwandalan/Summerland Point.

- No detail is provided on the capacity of services and facilities to meet the needs of increased population on the existing small community of Gwandalan arising from the C&A proposal and the nearby Rosecorp proposal.
- Little apparent excess capacity in current service provision occurs in the district in terms of social services. Education and health services are two key areas of concern. No comments/commitments have been forthcoming from the respective State government agencies on how these issues will be addressed.
- Particular attention needs to be given to the needs of young people, particularly as the large group of pre-school and primary school aged children move into this target group.
- As population increases attention will need to be given to accessing local GP services. There is only one GP in Gwandalan.
- The area is serviced by an infrequent bus service. This is a challenge for some population groups (young, very old, those on low income, people with a disability). It also poses a problem with accessing range of social infrastructure that is only available outside of the local area (higher order retail, medical, cultural, leisure, entertainment, secondary education).
- The Concept Plan and Project Approval provides no detail on social related issues as part of the "Key Issues Section". Limited and generalised information is provided on the existing range of services and facilities at Gwandalan.
- No detail is provided on the capacity of services and facilities to meet the needs of increased population on the existing small community of Gwandalan.
- The mix of housing types is in line with the objectives of Council's Promoting Choice: A Local Housing Strategy for Wyong Shire. The social demographic research of the existing community (see Appendix B) highlights the need to maintain affordable housing in this area.
- Further negotiations will be required to clearly establish the proponent's commitment to social infrastructure provision, community development initiatives and partnership opportunities.
- The Concept Plan states that 2,800 m2 of retail floor space will be provided for the development. No details are provided on the nature of this use and the implications this might have on existing businesses in Gwandalan.
- The impact of the proposed development on the existing social structure, character and amenity of the local community (quality of life issues) has not been adequately addressed in either the Concept Plan or Social Infrastructure Study (see specific comments which have been made on the Social Infrastructure Study by Council's Senior Social Planner in Appendix B).

Wyong Shire Council – 7 March 2008 Submission

Appendix A – Detailed Comments on Key Threatened Species Management Plans

Squirrel Gliders

- The impact of the proposal on the Squirrel Glider population is inconsistent with the clearly defined assessment methodology for this species in the Squirrel Glider Management Plan. This inconsistency is therefore of considerable concern to Council. The assessment of the development impacts on the Squirrel Glider population needs to be assessed using the methodology contained within Wyong Shire Council's Squirrel Glider Management Plan.

Tetratheca juncea

- The area surveyed supports a very significant population of *Tetratheca juncea* and up to a half of this species will be removed by the development. In addition the assessment of the impact of the development on *Tetratheca juncea* is likely to be unsound by the counting methodology used in assessment and in any event runs counter to the overall principles of the *Tetratheca juncea* Conservation Management Plan proposed by Lake Macquarie City Council which also makes specific recommendations to protect large populations of the species in the northern part of Wyong Shire. The principle of protecting the largest and most important populations from further loss of habitat, plants and fragmentation should be applied to this population.

Angophora inopina

- A total 698 *Angophora inopina* are located on the development site with only 54 reported to be lost as a result of the development. However, 644 of the retained plants are retained in the "buffer" adjoining Kanangra Drive. Long-term, these plants will be subject to increased levels of weed invasion, altered fire frequencies and disturbance associated with the adjacent urban area. Previous observations conducted by Council's Natural Resource Officer suggest that these plants are likely to fail to recruit under these conditions. Thus the likely real long-term loss is much greater than reported, better represented as ~ 29% rather than 0.02%.

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Appendix B: Detailed Comments on Social Infrastructure Study

Review Summary

The population of Gwandalan and Summerland Point at the 2006 Census was 2,941 and 2,175 respectively (total 5,116). The area has experienced steady growth with the development of small subdivisions. Gwandalan has an average annual growth rate of 2.3% for the period 2001 to 2006. There has been no population increase in Summerland Point during this period.

The additional 1,820 residents which will be generated by this proposal (700 lots x 2.6 persons per household) represents a 62% increase to the current population of Gwandalan or a 36% increase to the current population of Gwandalan/Summerland Point area.

When combined with the additional 698 residents (note Urbis has stated a figure of 560) for the proposed Rosecorp development at Gwandalan, **the cumulative population increase is significant** – representing an additional 2,518 people. This equates to an 86% increase over the current population of Gwandalan or a 49% increase over the current population of Gwandalan/Summerland Point.

Existing residents place a high value on the natural environment, a strong sense of community and the “village” lifestyle. The size of this development is likely to impact on the character and amenity of the local area.

It is agreed that the population profile of the incoming population is likely to be similar to the existing population of the Gwandalan/Summerland Point area, i.e. A higher proportion of families with children of primary school age, a higher proportion of residents in the transition-from-work age groups (55-69 years).

Opportunities exist to increase the range of housing and availability of affordable housing options to meet the needs of different social groups. The increased population may provide critical mass for facilities and services.

Audit of Current Infrastructure

Existing social infrastructure at Gwandalan includes: Community Hall, two pre-schools, a primary school, doctor's surgery, Bowling Club, convenience shops, foreshore reserves, Tunkawallin sporting complex (oval, skate park, tennis courts) and a number of sporting and community groups.

- *Childcare:* One of the pre-schools is operating at capacity; the other is running at 50% of total capacity and would be able to accommodate additional children. Family day care services also have places available.
- *Primary School:* Gwandalan Primary school is at capacity. It was originally built for 300 students now cater for 440. Buildings are inadequate and 50% of classes are accommodated in demountables. The addition of further demountables would impinge on play areas and open space. The school hall is inadequate for the current school population.

- *High School:* The closest high school for Gwandalan residents is Lake Munmorah High School. This school has little capacity to accommodate any significant increase in student numbers. Current enrolments are approx 960 with building provisions allowing for a total enrolment of 1050. Further expansion is restricted due to adjacent wetlands. Provision of additional demountables is not possible due to area being used for an oval and games court.
- *Further Education:* Residents can access university and TAFE colleges in Newcastle and Central Coast.
- *Health:* Higher order health services are provided at John Hunter, Gosford, Wyong and Belmont Hospitals. The closest GP services are at Gwandalan, Lake Munmorah and Swansea. The Gwandalan surgery has limited capacity to take on new patients. With the projected population increase additional GP services will be required. The need for additional medical, dental and related services was identified in the community workshops as vital.
- *Aged Care:* There are no aged care facilities in Gwandalan.
- *Transport:* Gwandalan is generally poorly serviced by public transport. The limited number of services and the long routes are main reasons why they are underutilised and not economically viable. Any increased provision of transport services would need to be subsidised until population increases to a level capable of supporting an economically viable transport service.
- *Commercial:* Retail facilities comprises a number of small convenience businesses including a small supermarket, post office, chemist, fruit and vegetable store, real estate agent, baker and liquor store, doctor's surgery, dentist, hairdresser, newsagent and service station.
- *Community & Recreation facilities:* There is a range of sporting, recreation and community facilities in the Gwandalan District and public facilities are provided along the foreshore.
- *Emergency Services:* NSW Ambulance Service – Belmont (16km), Doyalson; NSW Rural Fire Brigade – Nords Wharf (6km), NSW Police – Swansea (9km)

Implications documented in the report:

- "communities are relatively isolated from regional centres and their associated services."
- "there are clear challenges for service planning and provision for community members choosing to live out their retirement years locally or age in place."
- "many residents are travelling long distances to participate in health, education and other community services and for retail services."
- "indications are that improved public transport service will be critical to the social sustainability of the communities, in overcoming social isolation and providing a basic need to individuals without access to car transport."
- Health and education services are either at capacity or have limited capacity to meet population increases.
- "We note that there are likely to be cumulative impacts on regional social infrastructure for Gwandalan as a result of respective developments, in particular relating to health and education services. The particular concern raised repeatedly about the location of future secondary school facilities remains potentially the most critical issue to be addressed."

Comments:

The Gwandalan District has an existing level of social infrastructure that is generally commensurate with population levels. Increased population could lead to increased internal self-sufficiency in relation to services and facilities and local businesses.

A the key challenge is to increase self-sufficiency (viability of services) without compromising the physical isolation of Gwandalan which is a key factor in contributing to sense of place and one of the key reasons why people are attracted to this area.

There is little apparent excess capacity in current service provision.

It is agreed that education and health services are two key areas of concern. No comments/commitments have been forthcoming from the respective State government agencies on how these issues will be addressed.

The proposed development will have a significant impact on Gwandalan Primary School. The school is at capacity and under resourced to meet a growing student population.

There is limited capacity for increased enrolments at Lake Munmorah High School. Swansea High has some capacity for increased enrolments.

It is understood that it is unlikely that the Department of Education and Training will consider any new school developments rather, capacity at existing schools needs to be taken up prior to new buildings being placed on existing school sites. It has already been noted that any additional demountable buildings would impact significantly on current play and open space areas.

Particular attention needs to be given to the needs of young people, particularly as the large group of pre-school and primary school aged children move into this target group. Links Youth Service provides outreach activities however, additional recurrent funding is required for staffing and programs.

In addition, the area has a higher proportion of people aged 65 years and over. Particular attention will also be required to meet the needs of older people as they "age in place".

As population increases attention will need to be given to accessing local GP services. There is one GP in Gwandalan. Other medical services have to be accessed outside the local area. However, many of these services are also at or near capacity. No formal response had been received from Northern Sydney Central Coast Health or Hunter Health.

The area is serviced by an infrequent bus service. It is agreed that there may be significant challenges for some population groups (young, very old, those on low income, people with a disability) accessing range of social infrastructure that is only available outside of the local area (higher order retail, medical, cultural ,leisure, entertainment, secondary education).

Projected Social Infrastructure Provision

The Lower Hunter Regional Strategy specifies only a limited range of infrastructure provision for the southern areas, including the study area and none of which is social infrastructure.

It indicates that funds collected by Councils through Section 94 contributions plans and levies will be used to fund local infrastructure.

The State Significant Site Study states that C&A has agreed to pledge \$5M towards future infrastructure in the southern land developments.

The report has identified the following general areas of need:

- Equitable access to transport (a subsidised bus service);
- Adaptable and affordable housing and other services and facilities that support ageing in place;
- Recreational facilities for children and young people;
- Multi-purpose community facilities with capacity for a range of organisations, age groups or functionalities; and
- Foreshore/park embellishments that protect and enhance the local environment.

The report has identified the following specific areas of need:

- Education – primary and secondary.
- Health – medical & ancillary, dental and related services. There may be an opportunity to provide professional rooms as part of a retail facility development or part of the embellishment of community halls.
- Aged Care – potential to support one aged care facility with provision for self care and hostel care.
- Multipurpose community facilities – there is potential for Tunkawallin Hall to be embellished as an activities centre for young people.
- Open space and recreation – residents value the lake foreshore. The Section 94 plan identified a number of embellishments to recreational facilities.
- Emergency services – the location for emergency response services (police and ambulance) needs to be addressed.
- Cultural services – notes that there are no current plans for additional library services or cultural services.

In addition to these social infrastructure requirements the report recommends that C&A support community development processes which allow for building of sustainable resilient communities in the form of environmental education, support for new residents and integration of new and existing communities.

The report refers to Council's draft Section 94 Plan for the Northern Area and lists the works identified. The report recommends that C&A contributes to Section 94 provisions in respect for community facilities as outlined in the S94 Plan. It is the opinion of Urbis that that given the substantial land dedication for conservation, S94 contributions for district open space provision should not apply.

The report recommends that C&A continue discussions with the State Government regarding both levied and voluntary contributions including potential for:

- Equitable access to transport (via a subsidised bus service);
- Provision of housing diversity and other services and facilities to support ageing in place;
- Provision of emergency response services; and
- Foreshore/park embellishments that protect and enhance the local environment.

The report concludes that there will be an impact upon current community infrastructure as a result of the proposed development however, has suggested that staging of the development will largely mitigate this impact with the exception of GP services. Benefits associated with the proposal include section 94 contributions, voluntary contributions and enhanced retail services.

Comments:

Council's Section 94 Plan for community facilities indicates that funding is to be collected for the embellishment of local community halls at Gwandalan, Summerland Point, Mannering Park, Chain Valley Bay and Tunkawallin. Rather than provide one district multi-purpose community centre a model of localised community facility provision is considered to be the best model of provision in this district given a range of factors including the geography of the area and nature of settlement, lack of public transport and localised use of most facilities. These facilities are serving localized communities and have the potential to be key focal points of activity.

Section 94 funds will be used to upgrade and embellish existing facilities to enhance the functionality of each facility and make them more attractive for existing and potential user groups. By incorporating additional storage and activity/meeting space at some of the halls it may also be feasible for a range of community service organizations to outreach to this area.

Whilst Section 94 contributions can be used for capital works no recurrent funding is available for programs and activities – youth, community support, aged services, child and family services, health services etc. This is the responsibility of State Government agencies. There is a real need in this area for additional recurrent funding to staff and support a range of community development, family support and youth programs.

Opportunities also exist to redevelop and expand usage of Tunkawallin Hall. The facility is considered to be well located in relation to other recreation and residential land uses and accessible to residents of Gwandalan and Summerland Point however it is in poor condition and has low levels of usage. The facility was originally designed as an indoor recreation centre for young people but has not been used for this purpose. Opportunities exist for a joint venture or partnership with Council to provide a facility for the community – this could potentially be an indoor recreation and leisure centre for all age groups.

What social infrastructure, capital and recurrent, is to be provided by the State Government to match population increase and needs of the future population?

The Charrette Report lists a number of potential projects identified by Gwandalan community representatives. They include:

- Upgrade to existing boat ramp/wharf facilities
- A hydrotherapy pool
- A scout hall
- Further facilities for active recreation at Tunkawallin Park
- Cycleway and pedestrian pathways

Representatives however, stated that there could not be definitive about this list without further consultation with residents.

Further negotiations will be required to clearly establish the proponent's commitment to social infrastructure provision, community development initiatives and partnership opportunities. The report does not single out the community infrastructure requirements associated with Stage 1 of the proposed development.

COMMUNITY CONSULTATION

A number of matters raised as part of the planning charette are mentioned briefly in the report. These include:

- Some residents would welcome additional community infrastructure and higher order commercial services eg. banking;
- Dependence on motor cars;
- Rejection for a suggestion of additional retail facilities as part of the development, such as a small supermarket and associated shops, because of the adverse affect on existing businesses;
- A proposal for a neighbourhood centre with several shops and health-related services in the development area was notionally supported; and
- A concept for locating appropriately designed and adaptable home-work premises on Kanangra Drive was not supported.

Comments:

The Social Infrastructure Study does not fully document the nature or outcomes of community consultations held with local residents in relation to the proposed development. These have been documented in the Charrette Report.

The size of the proposed development has generated a significant level of community concern and there is a high level of public opposition to the proposed development.

Representatives of the Gwandalan community present at the charrette clearly stated that the preferred option of the community is no development at all on the Coal & Allied lands and that they were present at the charrette to ensure that any proposals made will have the least detrimental effect on our community and the immediate environment. Residents were in agreement with Council that in accordance with the published plan, Precinct 1A (rosecorp) was the only land subject to rezoning for residential subdivision in 2011 and at no stage had they been informed by the Department of Planning of further rezonings to accommodate extra residential increases.

"It is also patently obvious that the community consultation portion of the charette will be restricted to helping the developer try and make a poor planning decision somehow more acceptable to the community. This community has always maintained an acceptance of gradual increases in population, on the basis that Gwandalan would remain "basically" the same village that attracted residents over the last 55 years. We are committed to the future of our community, and believe and state emphatically that it is impossible for a "planning charette" to arrive at a "master plan" that will satisfactorily integrate 950 houses into Gwandalan without significantly, impacting negatively on the culture of the village. Once again, we state that the communities preference is for no development of the subject site. Our second option would be to have a development, similar in layout and context to the Murray's Beach development which would provide a yield of 450 lots." (Charrette Report)

Community representatives provided a character statement on specific cultural strengths of the village of Gwandalan. These included (as documented in the Charrette Report):

- "The residents of Gwandalan have purposefully selected to live in relative isolation from larger centres. This has created an almost tribal sense of consecutiveness between the residents, as they recognise this common aspiration amongst their neighbours.
- To reinforce their place, as a member of the tribe, extremely high participation in communal events is generated. Many of these events revolve around the voluntary maintenance and beautification of the village. Other events are more general celebrations of community, such as the annual Christmas Carols in the park, Anzac Day Ceremony and the regular fun runs and kid's days out.
- All stages of life are embraced in different forms, when a community works well. The children, to a degree, become everyone's children. The adults supply their physical strength and energy for numerous projects, whilst the older community members contribute to sustaining the general wellbeing of the less able residents.
- The village of Gwandalan has grown slowly over many decades which has allowed for new residents to be gently absorbed into the community. A sense of sharing has always been prevalent in our culture. An example of this is the nature of the waterfront areas which are exclusively waterfront reserve, (other than the very contentious 'Rosecorp Compound'). The waterfront lands form a social meeting place for all of the residents.
- The community recognises that the cultural values surrounding small isolated villages are not the exclusive domain of Gwandalan. However, they have always embraced this culture and recognise their vulnerability when faced with extensive population growth and the inevitable influx of culture changing infrastructure."

Recent consultations undertaken with residents by Council staff during the Community Plan process confirm the above. It is clear that residents value:

- Quiet peaceful location
- Small "village" community
- Knowing other residents, ability to say hello, friendliness
- Natural environment and the lake
- "Isolation" (advantage and disadvantage)
- Location – close enough to Newcastle and Sydney
- Affordability
- Good place to bring up kids -safe
- Great sense of community and community spirit

Challenges of living in the community include:

- Threat of development
- Lack of medical services – long waiting list at Gwandalan and books have been closed

- Anti-social behaviour and lack of modern facilities for young people (there are lots of water related activities)
- Would like improved roads and pathways
- Lack of transport services

ATTACHMENT 2 - LOCAL COMMUNITY SUBMISSION

Some ideas for your own submission letters. You must include the heading; name; address and date and sign the letter. You can choose any of the dot points below or include some of your own. Have your friends and relatives write as well. They do not have to live in the area. Copies can be sent to: Paul Skinner, Chairman, Rio Tinto, 120 Collins Street, Melbourne Vic 3000 or you can write an additional letter to him re Coal and Allied's plan.

NOTE: If you wish to address the independent panel re your submission, you must include this on the first page of your submission.

Name
Address
Date

Director, Strategic Assessments,
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Dear Sir/Madam,

Re State Significant Site and Concept Plan Proposal MP 07/0096 Gwandalan

I object to this proposal for the following reasons:

Open the letter with reasons why you like to live in the area.

Issues we have identified so far:

Lower Hunter Regional Strategy:

- The only justification Coal and Allied have for the planned subdivision is because it is included in the Lower Hunter Regional Strategy. Wyong Shire, where Gwandalan is, is not part of the Lower Hunter and the population increases for that area would not include this subdivision so the development would have no value to the Lower Hunter.
- It would appear that the Government has accepted this to be a suitable area for development even though 80 ha of prime vegetation would be destroyed. The only justification they could have is to gain land for "National Park" at no cost to the Government. They have not considered the impact this development would have on the local community and the native plants and animals.
- Coal and Allied are not offsetting 192 hectares. That land already exists and should be made into a National Park with the 80 hectares Coal and Allied want to develop. Coal and Allied are prepared to destroy the other 80 hectares of precious bush habitat, which is equally as important as the 192 hectares being offered as an offset, to make no less than \$77m.
- The Lower Hunter Regional Strategy was written to include Coal and Allied and other major landholders in the Lower Hunter, which would indicate that the Government believes they are doing the right thing. Gwandalan is a small town on a narrow peninsula and any further development should be within the existing town, not 700 extra homes on prime bushland.

- According to the Lower Hunter Regional Strategy new developments should be located near existing town centres; within 800 metres of reliable public transport; close to High Schools and close to work opportunities. This is clearly not the case with the Gwandalan land.
- The alternative considered by Coal and Allied was for “No development”. This would have a better outcome for the environment since the 80 ha of prime bush would be saved and the development of 700 unnecessary home sites would not occur. The 192 ha may not have been transferred to the Government but it would remain environmentally protected so it is unlikely to be in a worse condition because of this. If the land is so important to the Government then they should consider buying or leasing it from Coal and Allied.

Biodiversity:

- If this development goes ahead 80 ha of bush will be destroyed. Up to 60,000 trees and native vegetation being removed including the protected plant *Tetratheca juncea*. Coal and Allied say they are environmentally aware, but since they mine coal, this seems to go against this statement.
- It is particularly important in this area that trees are retained since the land is only 4 km. from Vales Point coal fired power station. Greenhouse gas emissions from the power station need to be negated by the trees.
- Wyong Shire has 68% or 48,000 ha of bushland retained within the Shire. This includes 28% on private land that would include Coal and Allied land at Gwandalan. The biggest threat to biodiversity within the shire is development and in this instance it is inappropriate development. To destroy 80 ha of prime bushland in return for 192 ha of land being handed to the State Government (land that is already there) is a high price to pay.
- One of the principles of biodiversity is to “maintain or improve”. Coal and Allied state they are achieving this by returning land to the Government. I believe they are destroying 80 ha of bushland which contains significant flora and fauna; a significant wetland and potential to destroy the seagrass beds in Crangan Bay.
- The whole South Wallarah Peninsula is extremely diverse, supports habitat for a number of threatened plants, including *Tetratheca juncea* and *Angophora inopina*, animals and vegetation communities. The whole area of Coal and Allied’s land should be included in the National Park estate because if the proposed development goes ahead, fragmentation of the bush would cause loss of biodiversity. The development will reduce the effectiveness of the existing wildlife corridor.
- In a report written by Department of Conservation in 2003 entitled “Conservation Assessment of Lands – South Wallarah Peninsula” they state:
“It is the position of the DEC that the South Wallarah study area is of extremely high conservation value and that development opportunities across the site are limited due to the potential for incremental habitat loss and fragmentation.”
- The habitats between Munmorah and Lake Macquarie SCAs and generally between Chain Valley Bay and Crangan Bay are considered to be of highest significance to the Squirrel Glider and Masked Owl (Smith et al 2002).
- The area proposed for development is Dry Open Forest/Woodland and within the site is Strangers Gully which is a significant wetland that supports aquatic fauna such as the Wallum Froglet (threatened in Wyong Shire). The area contains summer flowering eucalypts and winter

flowering banksias which provide an important habitat for nectar feeding animals such as the Squirrel Glider.

- Coastal habitats are now considered the stronghold of the Squirrel Glider in NSW and the population of Squirrel Gliders in the Northern Wyong and Southern Lake Macquarie area is the largest known in NSW (Smith 2002). These animals are territorial and will die if their bushland homes are destroyed.
- Understorey shrub removal would occur if this development is allowed which would destroy the homes of a large number of birds, bats and arboreal marsupials that nest or roost in the shrub layer. Removal of the understorey eliminates species that depend on the shrub layer and reduces the abundance of other species that feed in both the canopy and understorey. Bird diversity has been found to be up to 70% lower in frequently burnt or grazed forests (Smith et al, 1994). Just because land is being offered to the Government for National Park does not mean this will not happen when the 80 ha of land is cleared.
- *Angophora inopina* is a small, rare, long lived tree species that occurs in woodlands in the north of Wyong Shire with the most significant area being along Kanangra Drive Gwandalan. It has been found that seedlings are unlikely to survive if the understorey is dominated by weeds and changes to the watertable and hydrological processes due to residential developments is also known to be a threat to this species. Even though the project intends to have a buffer area along Kanangra Drive to protect these trees, there will be significant changes in the hydrology which will threaten their survival.
- Although Coal and Allied say they are using the best practice for drainage there is great potential for this development to cause problems to sea grass beds in Crangan Bay as they cannot filter out dissolved contaminants. This is the last undeveloped bay in Lake Macquarie and should remain that way. Coal and Allied are planning to run stormwater drainage off the roads into the wetland at Strangers Gully. This and the proximity of people and domestic pets will destroy the wetland.

Social / lifestyle constraints:

- Gwandalan Primary School is at capacity. There are now 450 students in a school built for 250. The assembly hall is too small to accommodate the whole school and there is limited room for further buildings without reducing open space.
- Munmorah High School is at capacity and has no room for any extensions. Coal and Allied have said there is capacity at Swansea High School, but this is outside Gwandalan area and is difficult to get to by public transport.
- The development would be unlikely to provide more business for existing local shops because stage 2 has provision for shops with housing combined. It will be a settlement in its own right.
- Busways have said the population would need to double (+10,000 people) for the service to improve. Currently there are 9 services a day from Gwandalan to Lakehaven with 3 of these services operating on school days only. The service takes up to 50 minutes to get to Lakehaven. There is one service a day to Charlestown at 1.09 p.m. but no service back from Charlestown. Coal and Allied have indicated that all services go to Charlestown from Gwandalan. There are two services to Swansea each day with only one back. That return service leaves 50 minutes after arriving at Swansea on the first service. By no stretch of the imagination do we have useful public transport to Swansea or Charlestown. We are not linked to the Lower Hunter.

- While there is currently only one GP in Gwandalan for 5000 people, access to specialist services would have to be outside the area. The need to travel long distances to access these services should be a constraint to this development particularly since they want to attract retirees who depend on these services. Having to wait sometimes over one month to access these services would also be a constraint.
- People looking to live in the Central Coast would probably consider the high cost of petrol and the lack of medical and other facilities before settling on Gwandalan as a suitable place to reside. I hope that if the development is approved the land will be sold because I feel people are not lining up to move here. You can see this from the number of houses for sale and the time they take to sell. There does not appear to be any market survey being done, in the concept plan.
- The lack of work in the area means people have to travel long distances to their employment. Coal and Allied claim their project will generate work but everyone here does not work in the building trade so a lot of those workers will have to travel to work here. The need to travel to or from Gwandalan will generate greenhouse gases which we should be trying to avoid. This project cannot be regarded as carbon neutral particularly having regard to the large area of bush to be cleared.
- Some of the most significant threats affecting fauna are fox/cat predation, timber harvesting and shrub removal. Predation by foxes and cats is considered the primary cause of fauna extinction in Australia. Domestic cats left out at night are known to kill up to 25 native animals in one year. This is another reason why the development should not go ahead. When a development is adjacent to a National Park homes should be excluded from having domestic cats.
- The Appendix K, Report For Marine Baseline Assessment of Lake Macquarie sets out to convince people that Crangan Bay is just a mediocre waterway. This is absolutely untrue. Crangan Bay is the last undeveloped bay on Lake Macquarie and the Seagrass and Macroalgae populations are in a good state. This is in spite of the low amount of water change with the tide and a well known marine expert uses the criteria from Crangan Bay as a yardstick to judge other waterways. If you compare its statistics with Chain Valley Bay which is similar in most respects but has development the comparison indicates how much damage is done by development. It does not matter what sort of Water Sensitive Urban Development is employed it will still have a major impact

Wyong Shire Council

SUBMISSION ON PREFERRED PROJECT REPORT –COAL & ALLIED GWANDALAN CONCEPT PLAN

ASSESSMENT OF PROPONENT'S RESPONSE TO WYONG SHIRE COUNCIL'S ORIGINAL SUBMISSION

Please Note: Many of the original concerns raised in Council's submission do not appear to have been satisfactorily addressed.

URBAN FORM

- 1. The Coal & Allied proposal is not identified by Council's Residential Development Strategy (RDS). The appropriateness and timing of development on the site is questioned. New residential release areas should be concentrated around existing urban centres with good public transport and social support services.**

Proponent Response:

The site is not identified in the RDS. However Gwandalan has been identified in the LHRS and CCRS for urban development and conservation. The site is assessed against the 8 criteria policy for guiding decisions about future growth opportunities under the RDS. Refer to Section 5.17 of the EA.

Although the site is not located adjacent to a major centre, the land identified for development is an appropriate extension of the existing township and is in close proximity to existing services and facilities at Gwandalan.

The Coal and Allied land offset package provides the opportunity to create new communities for the Lower Hunter region and in doing so, implement key objectives and outcomes of the LHRS and CCRS associated with accommodating sustainable population and employment growth and environmental outcomes.

Council Response – Inadequate response.

Both the LHRS and CCRS identify the C&A holding in Gwandalan as a planned future residential development. However, these are only identified in this location because of the MOU, not due to the suitability of the site to accommodate a larger residential population.

- 2. The proposal does not address the sustainability criteria for new land releases on the Central Coast as detailed in the Central Coast Regional Strategy (CCRS). It is also likely to fail many of the sustainability criteria listed in Appendix 4 of the CCRS.**

Proponent Response:

In this instance, Gwandalan has been identified in the LHRS and CCRS for urban development **and** conservation. It is important to note that LHRS and CCRS clearly states that the sustainability criteria will not apply to proposals for development in the areas identified as green conservation corridors on the strategy map. This applies to the Gwandalan site. Notwithstanding the proposal still meets the sustainability criteria for the Central Coast by:

- Conservation of land with significant ecological value.
- The dedication of conservation lands to the NSWG will help ensure the green buffer between the Lower Hunter and Central Coast Regions will be preserved in perpetuity. This will also protect and enhance the regions environmental and biodiversity assets.
- Provision of housing that will contribute to overall increasing population and changing occupancy rates in the Central Coast region.
- Provision of a range of housing forms in order to respond to the key demographic drivers of a shrinking household size and aging population.

- Focusing new development adjacent to existing urban areas, whilst protecting important environmental assets.
- Strengthen the viability of existing services and facilities in Gwandalan and Summerland Point.
- Provision of infrastructure to meet the needs of all future residents on the site.
- Ensure quality urban design and amenity that is sensitive to the lakeside location.
- Protection of aboriginal heritage values along the foreshore area.
- Consistent with the Draft Lower Hunter Regional Conservation Plan.

Council Response – Inadequate response.

Both the LHRS and CCRS identify the C&A holding in Gwandalan as a planned future additional residential development, and the LHRS states that *“the Sustainability Criteria will not apply in the Watagan to Stockton and Wallarah Peninsula green corridors to protect the significant biodiversity and natural resource values of these areas.”* However, this is referring to the green corridors only, not the planned residential areas on the Wallarah Peninsula.

Therefore, it appears that the Proponent may have misinterpreted the intention of this statement in the LHRS. The intention of this statement is to necessarily preclude development from being considered for these Green Corridors, including the Green Corridors of the Wallarah Peninsula. Whilst the subject site is located in close proximity to the Wallarah Peninsula Green Corridor, it is not considered to be a part of the Green Corridor, and therefore the Sustainability Criteria does apply to the Gwandalan site.

In this regard, the proposal should be assessed against the Sustainability Criteria developed by the DoP, as it is failing to apply its own policies.

- 3. The proposal is inconsistent with Council's adopted Retail Strategy which states that the combined area of the proposed 600 dwellings at Catherine Hill Bay and 920 dwellings at Gwandalan would require no more than 1500m² of retail floor space per location. As such, the proposal for 2800m² would appear to be excessive and outside of that proposed in Council's Retail Strategy.**

Proponent Response:

Retail studies prepared for the Concept Plan identify the potential for 6-8,000m² of retail space to service both Coal & Allied and Rose Group's developments. Council's strategy completed without consideration C&A & Rose Group developments. The level of retail services provided is consistent with the outcomes the urban design charrette and Wyong Council's stated position at the charettes.

Council Response – Inadequate response.

No Retail Study is provided to support the Concept Plan. Council's *Retail Centres Strategy Review* (September 2007), found the area to have a much lower threshold for retail space.

The Proponent's response that Council's study did not consider either the Rosecorp or Coal & Allied proposals is incorrect. Council's Strategy has considered both proposals, and it was deemed that these developments would increase the demand for local convenience retail services in both localities within Gwandalan. Based on this, Council's Retail Strategy concluded that it is unlikely that a provision of more than 1,500m² of local retail services would be required in either locality.

The Part 3A residential development proposal for Gwandalan includes a new centre which would be anchored by a supermarket of 2,110m² together with 800m² of specialty retailing. This floorspace is inconsistent with Council's Strategy and has the ability to compromise the economic viability of existing shops located within Gamban Road and Orana Road, Gwandalan. If the proposal proceeds as per the Concept Plan, then there is a possibility that there shall be an oversupply of retail space within the Gwandalan precinct.

Future demand for retail and bulky goods floorspace within the Gwandalan area will be met through the establishment of a Village Centre at Lake Munmorah in line with the RCSR and the draft CCRS. Any additional demand for retail floorspace generated by the Part 3A residential development proposal at Gwandalan will be accommodated within the development proposal. As such, it is considered unlikely that Council would support any proposed change of use to permit retailing on the subject site.

- 4. The Concept Plan states that 2,800m² of retail floor space will be provided for the development. No details are provided on the nature of this use and the implications this might have on existing businesses in Gwandalan.**

Proponent Response:

Extent and type/mix of retail is subject to further investigation and consultation with relevant stakeholders.

Retail studies prepared for the Concept Plan identify the potential for 6-8,000m² of retail space to service both Coal & Allied and Rose Group's developments. The level of retail services provided is consistent with the outcomes of the urban design charette and Wyong Council's stated position at the charettes.

EIA of specific retail uses may be required at a later DA stage.

Council Response – Inadequate response.

No Retail Study is provided to justify the claims made in the Concept Plan. Please see Council's comments in relation to Proponent's response No.3.

In addition to the points made above, Council is concerned with the approach taken by the Proponent, which implies that a "Gated Community" design is the desirable outcome. It is preferable that this development, if it is to go ahead against the wishes of both Council and the Community, reinforces the existing community rather than create an isolated, self-sufficient enclave which will create an undesirable separation within the Gwandalan community.

- 5. The northern part of the site is proposed to be used for aged housing. This is inappropriate due to its isolated location, poor public transport and lack of social support services for the elderly, its development should be timed such that it is not released until additional shops, facilities and services are provided. It is therefore not appropriate for this to form part of the 1st stage of the project.**

Proponent Response:

There is a desire within the community for "aging in place" facilities, which was expressed during the local community consultation process and the charette

Council Response – Inadequate response.

This response fails to address Council's concerns that construction of Aged Housing as part of Stage 1 of the development will isolate elderly residents, with inadequate facilities such as shops and health services nearby, as well as inadequate public transport options.

The proposal would achieve better outcomes by eliminating the staged nature of the development.

- 6. Proposed zoning controls are too general. The R1 – General Residential zoning is appropriate over some parts of the site. However, this zoning should not be used in areas where conservation reserves, recreational areas, neighbourhood centres and retirement living are proposed. Council is currently developing its LEP 2011. It will be important to ensure consistency with any Environmental Planning Instrument which the Minister creates for this site and new zones which are being created by Council under LEP 2011. It is requested that the Department of Planning liaise with Council on this matter.**

Proponent Response:

The proposed R1 General Residential zone was selected to allow sufficient flexibility to facilitate the various land uses proposed under the development Concept Plan. This matter will be further discussed with DoP.

Council Response – Inadequate response.

This response fails to address Council's concerns in relation to the appropriate Standard Zones which should apply to the site.

However, as the listed objectives of the R1 zone includes "*To enable other land uses that provide facilities or services to meet the day to day needs of residents*" and *Child care centres, Neighbourhood shops, Places of public worship* and *Seniors housing* are permitted alongside residential dwellings, this is no longer considered to be an issue by Council.

7. The visual assessment included in the Concept Plan and Project Approval documentation is completely inadequate given the site's lakeside and heavily vegetated location.

Proponent Response:

Adequate design solutions and documentation have been provided in the Concept Plan,

Council Response – Inadequate response.

This response fails to address Council's concerns. However, the issue could be addressed at Project Application stage.

8. It is also unclear how the Design Guidelines which form part of the Concept Plan will be applied as planning controls. Will they form part of a DCP? This is especially important if the remaining stages of the development are dealt with under Part 4 of the *Environmental Planning and Assessment Act, 1979*.

Proponent Response:

Design Guidelines for the development have been prepared by Allan Jack & Cottier.

Council Response – Inadequate response.

This response fails to address Council's concerns. However, the issue could be addressed at Project Application stage.

9. A Development Control Plan should be prepared for the site and Council given the opportunity to review it prior to Project Approval and/or Concept Approval being granted.

Proponent Response:

Design Guidelines for the development have been prepared by Allan Jack & Cottier.

Council Response – Inadequate response.

This response fails to address Council's concerns. A Development Control Plan should be prepared prior to Concept Approval being granted. At the very least, the *SEPP (Major Projects) 2005* amendment to incorporate the Gwandalan site as a State Significant Site needs to include more robust controls, to formalise the design guidelines for the site and provide some guarantee (to Council and the community) that these guidelines will be followed.

10. A considerable number of lots are orientated east-west in lieu of the preferred north-south orientation. Greater variation in lot sizes should be provided as part of the proposal and consideration should be given to the requirements of DCP 2005 – Wyong Shire (Chapter 66 – Subdivision).

Proponent Response:

The Proponent has not responded to this issue.

Council Response – Inadequate.

The Proponent needs to address this issue prior to Project Application approval at the latest. Council would like to re-iterate the importance of DCP 2005 – Wyong Shire (Chapter 66 – Subdivision) and

request that the Department of Planning require the Proponent to respond as to why this issue has not been addressed in the PPR.

- 11. The placement of residential uses on steep slopes is a concern on some parts of the site. The appropriateness of residential development in terms of its suitability is questioned, especially around Stranger's Gully.**

Proponent Response:

Dwellings on steep sites will use split level construction to minimise cut and fill. Development south of Strangers Gully has been deleted from the Concept Plan. This is reflected in the Preferred Project Report.

Council Response – Adequate response.

This issue has been adequately addressed.

- 12. Aboriginal heritage impacts and mitigation measures are not addressed adequately in the Environmental Assessment (EA) or Statement of Commitments (SOC).**

Proponent Response:

The EA is accompanied by a completed and complying HIA for Aboriginal heritage

Council Response – Adequate response.

This issue has been adequately addressed.

- 13. Street lighting should be provided in all streets not just the main streets Community had expressed their opinion to minimise street lighting for protecting local wildlife.**

Proponent Response:

Street lighting will be in accordance with Australian Standards, however the detailed selection of appropriate lighting to minimise light spill will be determined at CC stage.

Council Response – Adequate response.

This issue has been adequately addressed.

FLORA & FAUNA

The long term conservation and preservation of flora and fauna in the area is severely undermined by the developments outlined in the project application.

- 14. The report demonstrates that the Gwandalan site has very high biodiversity values, at both the local, state and federal level. These values include:**

- A significant number of threatened species listed under both State and Commonwealth legislation have been recorded on site.
- Habitat for a range of threatened species that are cryptic and difficult to survey are likely to be present.
- Three Endangered Ecological Communities (EECs) are present which are of high conservation value from a landscape conservation perspective (i.e. connects from the lake edge to ridge top along a significant corridor).

The off-set strategy is grossly deficient. The strategy implies that an off-set of somewhere in the order of 1:1 or 1:2 is appropriate to mitigate the loss of important habitat for a number of threatened species. It is not apparent how the proposed Offset Strategy will satisfy the “maintain and improve” outcome and whether the regional offsets are sufficient to mitigate habitat and threatened species losses associated with proposal.

Proponent Response:

Under the current proposal a 1:4 offset is achieved. This is further increased by the additional lands that will be set aside within the development estates as public open space, conservation lands, drainage corridors etc.

Council Response – Inadequate response.

The off-set strategy remains grossly deficient.

15. Council's Flora and Fauna Guidelines should be applied to verify if the level of survey effort and the conservation assessment is adequate within the local area.

Proponent Response:

The proposal is to be assessed under Part 3A of the *Environmental Planning and Assessment Act 1979*. The ecological assessment must comply with the DGEAR's issued for this project. Thus State Government flora and fauna assessment guidelines (DECC) are utilised rather than those prepared at the local government level.

Council Response – Inadequate response.

Whilst the Proponent's comments are correct in the simplest sense, Council's recommendation stands. It would be eminently more suitable and useful from a local perspective if the surveys and conservation assessment are undertaken in accordance with local requirements and making best use of local knowledge.

16. The proposal is clearly inconsistent with Council's Conservation Management Guidelines for a number of threatened species including:

- **The Squirrel Glider Conservation Management Plan**
- **The *Tetratheca juncea* Conservation Management Plan**
- ***Angophora inopina* Management Recommendations.**

Proponent Response:

Noted, however as a Part 3A assessment, NSW Government becomes the determining authority with input and advice sought from its environmental department (DECC).

Council Response – Inadequate response.

Whilst the Proponent's comments are correct in the simplest sense, Council's recommendation stands.

17. It is premature to consider the proposal without the results of the Central Coast Conservation Strategy being released. The Environmental Assessment done for the site is inconsistent with the regional assessment developed by the Department of Environment and Climate Change (DECC) for the Department of Planning for the Central Coast.

The "draft Biocon Layer" that has been developed for this project identifies the entire study site (including the proposed development area) as a high priority site for conservation. The proposed development needs to conform to the regional biodiversity assessment developed in the "draft Biocon Layer" so that it supports conservation at the regional level rather than conflicting with regional conservation goals.

Proponent Response:

DECC comments, within the IHAP report, that the offset lands contain high biodiversity values and represent important conservation gains in the Wallarah Peninsula area. Whilst the development lands contain areas of high biodiversity value, these values are presented in the offset lands, other DECC reserves or the range of the species extends beyond the Wallarah Peninsula. DECC's view that the total offset package, as set down in the various MoUs, delivers a sound and defensible conservation outcome for the Wallarah Peninsula.

This is seen in the context of ecological values of the offset lands. Furthermore, Strangers Gully and land to the south will not be developed as a direct result of the IHAP review and recommendations.

Council Response – Inadequate response.

The IHAP Report makes 3 recommendations to the proposal to minimise the potential impact of development on Crangan Bay and to ensure that the proposed development is appropriate in terms of biodiversity impacts. IHAP therefore considers that prior to approval the Gwandalan Concept Plan shall be amended as set out in the key principles below:

- i. The development footprint shall be reduced through the deletion of development in Area C – the Southern Hamlet and the area identified as Strangers Gully as illustrated in the Concept Plan. The Panel notes that this accords with the development footprint shown in Option 2 in the Concept Plan for Gwandalan. As noted by DECC this will protect the ecologically significant Strangers Gully, high conservation value vegetation further to the east and enhance protection of Crangan Bay and Lake Macquarie's ecology.

Note: Key Principle 1 has been adhered to by the Proponent.

- ii. The development shall be further revised to incorporate increased development setbacks from the foreshore and riparian zones, implementation of strict stormwater controls and provide for the proper management and control of foreshore vegetation and human access / recreation areas having regard to potential impacts on the Lake.

Note: Key Principle 2 has not been adhered to by the Proponent, as the Concept Plan has not been revised to incorporate increased development setbacks from the foreshore and riparian zones, and this deviation has not been adequately justified to Council's satisfaction. In particular, the riparian zone of Strangers Gully is not adequately addressed in the Proponent's PPR. The minimum setback of 26m is not adequate to protect this riparian zone. There should be an increased development setback to the north of the riparian zone of Strangers Gully.

- iii. Any future application relating to the proposed retirement uses within the Gwandalan site should be assessed in light of the requirements set out for Seniors housing in *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*.

Note: Key Principle 3 can be dealt with at Project Approval stage of the development.

18. **Concerned about the amount of habitat loss and impacts on high quality vegetation. Particularly concerned that all of the site will be cleared as part of Stage 1 Project Application. The site should be left in a natural state until construction starts for other stages, except for the construction of roads and other infrastructure.**

Proponent Response:

Where possible trees will be retained on individual housing lots.

Council Response – Inadequate response.

This provides no guarantee that anything will be done to retain trees on individual housing lots. The Concept Plan should be amended to require the Proponent to only clear vegetation in order to construct roads and incorporate other infrastructure and services. Individual housing lots do not need to be cleared until residential land is ready to be released. This will conserve a larger number of trees and therefore retain a semblance of the natural ecology of the area.

Clearing should be staged to allow opportunity for fauna to slowly disperse into adjoining natural areas.

19. **It is not clear what impact the proposed sewerage main to service the development will have on conservation lands. This will need to connect to the Summerland Point Treatment Plant.**

Proponent Response:

Where possible the sewer mains will be contained within road reserves. As with all developments, existing easements, service corridors/ trenches will be utilised. Further details and assessment may be required at the detailed design stage.

Council Response – Adequate response.

This issue has been adequately addressed.

20. Management of edge effects and sensitive vegetation along visual buffers, foreshore areas and development impacts upstream of sensitive sites is not well explained in the document.

Proponent Response:

A Statement of Interim Management Intent (SIMI) is to be prepared as a Statement of Commitment.

Council Response – Adequate response.

This issue has been adequately addressed.

21. Crangan Bay is the last undeveloped bay on Lake Macquarie and the seagrass and macroalgae populations are in a good state. Concerns are raised with potential impacts on Crangan Bay and foreshore areas from urban development and increased foreshore use.

Proponent Response:

The marine baseline assessment has recommended a number of mitigation measures to be adopted to prevent direct and indirect impacts. WSUD strategies will manage stormwater discharges, thereby minimising the impacts on account of the development. Results of further studies undertaken relating to this matter are included as Appendices to the PPR.

Council Response – Adequate response.

This issue has been adequately addressed.

22. There are clearly more environmentally sympathetic options for the site which would fully protect Stranger's Gully which have been ignored e.g. Master Plan "Plan B" developed during the Design Charette with the community in 2007.

Proponent Response:

Noted. Development south-east of Strangers Gully has been deleted from the Concept Plan.

This is reflected in the Preferred Project Report. Strangers Gully Wetland will therefore be protected under the current development proposal. A vegetated buffer is also accommodated under the current proposal from the proposed development. Appropriate mitigation measures have also been proposed to ensure that post development flows / downstream flows will maintain or improve on pre development flows. To this end nutrient and sediment loads will be mitigated to ensure that potential impacts are negated.

Council Response – Adequate response.

This issue has been adequately addressed.

23. The submission does not clearly demonstrate whether the proposed stormwater treatment ponds are sized appropriately or whether environmental objectives will be met.

Proponent Response:

All WSUD have been modelled in the MUSIC model and sized according to Council DCP requirements

Council Response – Adequate response.

This issue has been adequately addressed.

BUSH FIRE

24. There are a number of problems with the road layout from a bushfire planning perspective. These include:

(a) Northern hamlet should be directly connected to Kanangra Drive along the main south-west/north-east running road to provide for an additional access/egress for emergency services, particularly as the Northern Hamlet has been identified for retirement or seniors living purposes.

(b) East-west road along the southern boundary should also directly connect to Kanangra Drive for improved access/egress.

Note: The additional connections mentioned above would also minimise through traffic within the proposed subdivision adding to the amenity for local residents and pedestrians.

(c) Road along the southern boundary is proposed directly adjoining land owned by the NSW National Parks and Wildlife Service (NPWS); therefore the entire APZ needs to be contained within the road reserve, and should be 24m wide.

Proponent Response:

Noted.

Council Response – Inadequate response.

The bushfire issues discussed in Council's original submission are serious issues and the Proponent should be required to address these concerns prior to Concept Plan approval.

The Proponent "noting" Council's concern is a woefully inadequate response to such a serious issue, and reflects a level of disregard displayed by the Proponent throughout the response to submissions.

Parts (a) and (b) have not been addressed, with the Proponent making no attempt at providing for future egress from the northern and southern extremities of the site.

Council does however note that the Addendum Bushfire Threat Assessment – Southern Estates – Gwandalan, prepared by RPS Harper Somers O'Sullivan Pty Ltd and dated August 2008 provides information on the revised APZ. This report states that based on the site vegetation types, an APZ of 15 metres would be required. This perimeter road is proposed to be 20 metres in width, and the bushfire consultant states that this will ably provide for the recommended APZ and no ongoing bushfire management within the subject bushland reserve shall be required.

Therefore, subject to RFS concurrence, part (c) of Council's comments has been addressed.

25. It is unclear whether all of the subdivision will be Torrens Title or Community Title. This may have an impact on vegetation and fuel maintenance demands within APZs.

Proponent Response:

Noted. There will be no community title lands associated with the current proposal. Suggested ongoing management should be per Council / NPWS best practice dependant on land ownership (refer to Offset and APZ Land Ownership maps)

Council Response – Adequate response.

This issue has been adequately addressed.

OPEN SPACE

26. Proposed location of open space provides reasonable access to parkland within walking distance of all residents. However, residents in the most north western part of the proposal are outside 500 m walking distance of a park.

Proponent Response:

The furthest point the subdivision of the North West section is 425m. All lots are within approximately 500m walking distance from Northern Park, measured by actual walking distance on the road.

Council Response – Adequate response.

This issue has been adequately addressed.

- 27. To maximise the ecological and visual amenity values able to be provided on the lineal land parcels in the north and south of the central road there should be a comprehensive application of WSUD treatment trains which should be located in lineal open space parcels.**

Proponent Response:

All stormwater management is based on WSUD according to industry accepted guidelines and Council DCPs

Council Response – Adequate response.

This issue has been adequately addressed.

- 28. The central road presents a major visual opportunity to establish a line of trees to frame the vista down to the lake overlooking the central parkland.**

Proponent Response:

This was acknowledged during the design stage but were reluctant to propose any vegetation clearance within the lake buffer zone to complete the lake vista from the central road. If some clearance is acceptable the documents could be amended to suit.

Council Response – Adequate response.

This issue has been adequately addressed.

- 29. The landscape buffer to Kanangra Drive is wide and there will be informal access across and along it. Consideration needs to be given to safe and logical entry to the subdivision circulation system on Summerland Road to reduce desire paths through the buffer.**

Proponent Response:

Agreed. To be considered after Concept Plan approval prior to Construction Certificate.

Council Response – Adequate response.

This issue has been adequately addressed.

- 30. Landscape planting and treatment of the buffer should use local species which are able to survive with minimal water and weed control.**

Proponent Response:

Noted.

Council Response – Adequate response.

This issue has been adequately addressed.

- 31. If possible the Kanangra Dr buffer should be fenced before any construction is commenced.**

Proponent Response:

The site will be subject to the standard Council and Workcover rules and regulations applying to construction sites

Council Response – Adequate response.

This issue has been adequately addressed.

32. All protected bushland should remain fenced to prevent vehicle access.

Proponent Response:

Appropriate protection and site education/induction procedures will be implemented. Generally an Environmental Management Plan is implemented by the civil contractor.

Council Response – Adequate response.

This issue has been adequately addressed.

S94 – FUNDING AND SERVICING

33. The Proponent proposes to spend \$5M on community services and facilities. No details are provided on what items are being provided.

Proponent Response:

Final list is attached to the PPR.

Council Response:

It is disappointing to see that the \$5M has been allocated as follows:

- Funding of a Department of State and Regional Development project to identify employment opportunities in the Swansea area;
- Contribute to the upgrade of existing boat ramps at Lions Park;
- Contribute to the upgrade of Koowong Road Wharf;
- Promote sustainability through – on-lot rainwater harvesting, reduced power demand for proposed dwellings, introduction of a sustainable education program, exceeding local and State govt criteria for existing and new residents; and
- Scholarships for archaeology students from the Aboriginal community in local schools.

There will be a limited direct benefit to the Gwandalan community.

34. Council's Section 94 Contribution Plan and Development Servicing Plan must be applied at the Concept Plan and Project Application approval stage. At its meeting held on 23 January 2008, Council adopted the Section 94 Contributions Plan for the Northern Districts (which covers this land). The plan came into effect on 1 February 2008 and sets contribution rates for development of the Coal and Allied land for roads, community facilities, open space and administration.

Development of the Coal & Allied land will also be subject to any contributions under the Shire-Wide Section 94 Contributions Plan and the Gwandalan District Development Servicing Plan which covers water and sewer provision. Copies of these plans can be downloaded from Council's website.

Coal & Allied has previously claimed that the dedication of open space and the issue of recognising credits for land dedications will be addressed in the future. This issue must be addressed now as part of the current Concept Plan and Project Application. Council maintains that any contribution by Coal & Allied to the upgrading of Kanangra Drive is warranted. Council's existing Section 94 Contribution Plans covering the site reflects this stance.

Proponent Response:

This is subject to ongoing discussions. Some of the S.94 contribution plan details and assumptions are being queried and will be subject to further discussions and negotiations.

Council Response:

Council does not agree with the proposed 'commitments comprising payment of monetary contribution, or dedication of land/carrying out of work for local infrastructure'. This section states that 'The Owner will pay contributions in accordance with the Wyong Council Section 94 Plan, however it then states that C+A is only willing to pay the contribution rates outlined the Northern Districts Contribution Plan for *roads* and *community facilities*. The remaining categories are at reduced values.

Shire Wide

C+A states that it is willing to pay \$702 per lot (library, performing arts and administration) instead of \$1,168 per lot. C+A should pay all of the Shire Wide categories, including cycleways and regional open space as these are for the provision of facilities linking and benefiting the entire shire, not just this site. Open space and cycleways provided just within the subject site will not achieve the same shire wide outcome that facilities provided through the Shire Wide scheme. The Shire Wide open space contribution will assist in funding specific regional open space projects that will benefit the entire shire.

Open Space

The Northern Districts Contribution Plan states that the C+A site will require 6.44ha of open space to cater for the predicted 2,146 new residents. The Plan also states that this land will be required to be dedicated in lieu of payment of contributions (i.e. the plan does not have an open space land component as it is recognised that C+A and RoseCorp would be dedicating open space land instead).

As such, the open space costs in the plan are for works/embellishment only and should be applied to this development. If C+A embellishes the 6.44ha of open space as local small parks, Council may, subject to formal agreement, be willing to reduce the open space works/embellishment cost in the plan by the amount that C+A spends on local park embellishment (i.e. levy \$3,990.40 per lot but agree to reduce the total of this by the amount spent on embellishment of parks in the C+A development).

C+A would still need to pay for works/embellishment of all other open space categories within the Northern Districts, including fields, large parks, semi natural areas and courts.

Final embellishment costs and resultant open space contributions would need to be negotiated through a Deed of Agreement with Council.

Administration

There is no justification provided as to why *Administration* has been reduced from \$470 per lot (which is in the plan) to \$150 per lot. The total amount, as identified in the plan, should be levied.

Water and Sewer Charges

There is no commitment to pay water and sewer charges in accordance with Development Servicing Plan 12. Charges for headworks and distribution should be levied for water. Charges for headworks only should be levied for sewer, using the IPart determination methodology (Headworks cost - operating surplus * 85%). Connection directly into the Gwandalan STP will be at C+A full cost.

Conclusion/Summary

The Department of Planning should be levying C+A the following rates, in accordance with Council's Northern Districts and Shire Wide Contributions Plans and having consideration to the dedication of local open space in lieu of contributions:

CATEGORY	CODE	RATE (PER DU)*
Roads	Northern Districts D	\$3,787.15
Shire Wide	Library Network	\$279.81
	Regional Open Space	\$152.93
	Cycleway Network	\$313.73
	Performing Arts Centre/Public Art	\$354.00
	Administration	\$67.95
Open Space	Northern Districts Open Space Local Parks	\$3,990.40

Community Facilities	Northern Districts Community Facilities	\$3,375.40
Administration	Northern Districts Administration	\$470.15
Water	Gwandalan DSP (headworks and distribution)	\$3,891.05
Sewer**	Gwandalan DSP (headworks only)	\$802.82
TOTAL RATE PER LOT		\$17,485.39

* Indexed to October 2008. Indexation occurs quarterly for Section 94's, with the next indexation to occur on Nov 1 2008. Water and Sewer Charges indexed yearly on 1 July.

** Sewer headworks levied only (Headworks cost - operating surplus * 85%) Connection (i.e. distribution costs) to Gwandalan headworks at developers costs

- 35. There is no mention of whether additional Telstra infrastructure will be provided such as CPUX & RIMS (like small electricity cabinets) or whether provision of media/broadband cabling will be provided.**

Proponent Response:

Extent of communications services are subject to further investigations and discussions with the service providers. Details to be finalised after Concept Plan approval

Council Response – Adequate response.

This issue has been adequately addressed.

- 36. There are some comments in the report that sewer rising mains & gravity mains require easements where equal to or greater than 300mm diameter. This is incorrect as all sewer rising mains require easements, irrespective of size.**

Proponent Response:

As detailed in the Infrastructure Report, all rising mains require easements and all gravity mains with a diameter greater than 300mm.

Council Response – Adequate response.

This issue has been adequately addressed.

- 37. There is no mention of reclaimed water infrastructure (including mains within all residential streets).**

Proponent Response:

Further discussions about the installation of recycled water will take place after Concept Plan Approval.

Council Response – Adequate response.

This issue has been adequately addressed.

MINE SUBSIDENCE

- 38. The proposal occurs within a Mine Subsidence District so approval of the Mine Subsidence Board must be obtained for any development.**

Proponent Response:

Noted

Council Response – Adequate response.

This issue has been adequately addressed.

- 39. Coal resources exist beneath the site. Future development has the potential to sterilise these coal resources. Underground mining could mean that surface development staging plans will need to be altered to enable mining to be completed. Mine subsidence engineering requirements might also impact on the size and design of proposed structures.**

Proponent Response:

Discussions are ongoing.

Council Response – Inadequate response.

ROADS AND TRANSPORT

External issues

- 40. A roundabout is required at the intersection of Road No 8 (southern intersection) and Kanangra Dr. The roundabout should be designed for 80km/hr speed limit, not 60km/hr as stated on page 2 of PB Report Executive Summary. Any consideration for reduction in the speed limit has to be directly referred to the RTA.**

Proponent Response:

The southern access is proposed to be the main access forming a T-junction with Kanangra Drive. It is proposed to modify the existing roundabout at Kanangra Drive and Summerland Road to include the northern access to the development. With this northern access, this roundabout will form a four way junction. The southern access intersection with Kanangra Drive is proposed to be a roundabout and speed to be reduced to 60 kph.

Council Response – Adequate response.

This issue has been adequately addressed.

- 41. Upgrading/widening of the curves along Kanangra Dr is required in accordance with Council's Section 94 contributions plan.**

- **No direct access will be permitted to properties off Kanangra Drive.**
- **Consideration should be given to a connection from the southern most east-west road to Kanangra Dr. This will assist in providing a more efficient service.**

Proponent Response:

The southern access is proposed to be the main access forming a T-junction with Kanangra Drive. We propose a new roundabout with some local widening be required. The speed at this location is proposed to reduce at 60 kph.

Council Response – Inadequate response.

The second issue has not been adequately addressed, as there remains no proposal to provide a connection to Kanangra drive from the southern-most east-west road. The "southern" access described by the Proponent appears to refer to the main access to Kanangra Drive, from closer to the MIDDLE of the site.

In relation to this main access from the MIDDLE of the site, Council will require that a Deed of Agreement be entered into with the RTA in this regard.

- 42. The Proponent will need to enter into a Deed of Agreement with the RTA for the upgrading of the Kanangra Dr/Pacific Highway intersection.**

Proponent Response:

C & A presented Pacific Highway upgrading works to the RTA. A preferred option has been identified and discussed with RTA and is now being finalised following IHAP changes.

Council Response – Adequate response.

This issue has been adequately addressed.

Internal Issues

- 43. The intersection of Road No 4 with Summerland Road needs to be realigned approximately 40 metres to the east to create a 4-way intersection with the access road to an approved industrial subdivision located on the northern side of Summerland Rd. This should eliminate headlight problems etc from the industrial estate. The intersection should be designed in accordance with AUSTRROADS standards and evidence provided to ensure there are no sight distance or design problems. Swept paths for HRV's (including 14.5m buses) should be incorporated into the intersection design. Details for this intersection need to be submitted for Council approval.**

Proponent Response:

Bus route extension via Road 1. Road 4 is proposed to be local access only.

Council Response – Adequate response.

This issue has been adequately addressed.

- 44. The 13m wide pavement on Summerland Rd from Kanangra Dr to the industrial subdivision road must be extended east to the intersection of Road No 1 to cater for the bus route, on road cycleway and on-street parking (both sides).**

Proponent Response:

Forming a four way junction with access road from industrial subdivision and C & A Road No. 4 can not be justified on traffic and on safety grounds.

Council Response – Adequate response.

This issue has been adequately addressed.

- 45. Summerland Rd pavement should extend further east from Road No 1 with a "T" intersection formed with Road No. 3. The intersection requires raised concrete medians. The pavement width can be reduced on Summerland Rd between the intersections of Road No 1 and No 3 to 7.6m in accordance with Council's DCP 66 requirements.**

Proponent Response:

Summerland Road between C & A road 1 and 3 predicts to carry very low traffic. Further assessment will include traffic facilities be required, but can be done after concept approval.

Council Response – Adequate response.

This issue has been adequately addressed.

- 46. All major four-way internal intersections treatments need to be identified to Council's satisfaction.**
- **A roundabout is the preferred intersection treatment at the intersection of Road No 2 and Summerland Rd.**
 - **All pavements widths and road reserves widths are to be in accordance with Wyong Council's DCP 2005, Chapter 66 & Chapter 67.**
 - **The 24m width shown for street Type C1, is not adequate as a bus route and an on-road cycleway. It needs to be widened to 27m, incorporating 4.5m verge/footpaths, 3.5m parking lanes, 3.0m travelling lanes and a 5m wide swale.**
 - **The width shown for the rear laneway, to the retail area, is totally inadequate to service the proposed developments. Refer to other comments under "Parking".**

- DCP 2005 (Chapter 66 – Subdivision) identifies maximum street speeds that are to be achieved. The proposed road layout needs to be modified and/or traffic calming devices/slow points provided throughout the development to ensure the slow speed environment within the development is maintained. This is essential, particularly on approaches to intersections and along long sections of roads with steep gradients. Council requires that facilities be installed so that the driving speeds are physically limited to the speeds identified in the DCP. It is not sufficient to rely on regulatory speed signs.
- Due to the steep grade (>7%) on the approaches to the intersections of Summerland Rd with Road No 2, Road No 4 and Road No 3, speed reduction devices are required on the approaches to these intersections.
- In accordance with Section 138 of the Roads Act an application is required from the developer to the Roads Authority to carry out any works within existing road reserves.
- Some areas of the road geometry are inappropriate e.g. corners that may be too tight for the vehicles they need to serve, intersections that are not square (although they could easily be).
The road hierarchy (based on diagrams) does not appear to be representative of the layout being served. E.g. higher class roads serving small catchments.

Proponent Response:

Noted.

Council Response – Inadequate response.

The Proponent needs to do more than “note” Council’s comments in this regard. This is a woefully inadequate response to such a serious issue, and reflects a level of disregard for Council displayed by the Proponent throughout the response to submissions.

PARKING

47. Section 5.10.4 Page 59 of the PB Report highlights that a maximum of 2800m² retail GFA is proposed within the site. Further details on the parking areas and service facilities need to be provided for Council’s approval. All parking needs to be provided in accordance with Council’s DCP Part 61. The servicing arrangements and on-street parking proposed on Road No. 3, in the vicinity of the retail area, does not meet these requirements. Also, the proposed parking is on the opposite side of the road to the proposed retail area.

Proponent Response:

To be provided after Concept Plan approval as part of future DA(s).

Council Response – Adequate response.

This issue has been adequately addressed.

PEDESTRIANS AND CYCLISTS

48. Insufficient pedestrian/cycle ways are provided within and adjacent to the development. Facilities are required to promote and accommodate cycling and the use of motorised scooters (retirement villages) for recreational purposes and trips to shops, playing fields and schools etc.
- As it is most likely that a bus stop will be required on Kanangra Dr at the southern end of the development, a pedestrian connection is required from the southern most east-west road to Kanangra Dr, to encourage use of public transport. A pedestrian refuge is also required on Kanangra Dr in this vicinity.

Proponent Response:

Appendix B (Urban Design Guidelines) outlined street cross section A1 to D showing footpath/pedestrian access throughout the subdivision. Due to low volume of traffic on local roads cyclist demand could be catered for on road.

Council Response – Adequate response.

This issue has been adequately addressed.

- 49. Off-road pedestrian/cycle ways are required for the full extent of the development along Summerland Rd, Road No 1 and Road No 8 (Retail Precinct). The pathways are to connect to Kanangra Dr and the “Coastal Connector Path”.**

Proponent Response:

Appendix B (Urban Design Guidelines) outlined street cross section A1 to D showing footpath/pedestrian access throughout the subdivision

Council Response – Adequate response.

This issue has been adequately addressed.

- 50. The “Coastal Connector Path” needs to be extended north to connect with the footpath in Gamban Rd.**

- **Several other connections are required from the east-west streets to the “Coastal Connector Path”.**

Proponent Response:

To be considered as part of \$5 million funding following Concept Plan approval

Council Response – Inadequate response

The PPR contains detailed information as to where the \$5 million fund will be spent. The Coastal Connector Path is not discussed – this matter requires the attention of the DoP, as the Coastal Connector Path needs to be carried out by the Proponent whether it is a part of the \$5 million funding or not.

STREET LIGHTING

- 51. Lighting should be in accordance with relevant AS. Lighting is required in all streets and at all intersections.**

Proponent Response:

Lighting for new and modified roads will be in accordance with Australian Standards.

Council Response – Adequate response.

This issue has been adequately addressed.

PUBLIC TRANSPORT

- 52. The area is serviced by an infrequent bus service. This is a challenge for some population groups (young, very old, those on low income, people with a disability). It also poses a problem with accessing range of social infrastructure that is only available outside of the local area (higher order retail, medical, cultural, leisure, entertainment, secondary education).**

Proponent Response:

The Proponent has not provided a response to this issue.

Council Response – Inadequate response.

The isolated nature of the development requires that more attention be given to provision of an additional or more frequent bus service.

53. The Proponent needs to pay a contribution to the Ministry of Transport for the enhancement of bus servicing for the development.

Proponent Response:

Discussion is being held with MoT to determine contribution from public transport service.

Council Response – Adequate response.

This issue has been adequately addressed.

54. The Proponent needs to provide a letter from the Ministry of Transport and local bus company stating that it will extend the current bus service to include the proposed development.

Proponent Response:

Discussion is being held with the MOT to agree on proposed bus route extension outlined in Appendix G (Traffic report).

Council Response – Adequate response.

This issue has been adequately addressed.

55. Bus stops and bus shelters need to be provided in accordance with the requirements of the Bus Operator, Ministry of Transport and Council. All facilities need to be installed in accordance with Disability Discrimination Act (DDA) requirements.

Proponent Response:

Noted.

Council Response – Adequate response.

This issue has been adequately addressed.

SOCIAL

56. The Proponent is to provide and maintain a courtesy bus for the Retirement Village for shopping trips etc.

Proponent Response:

Responsibility of the Retirement Village operator.

Council Response – Adequate response.

As part of the Site Compatibility Certificate application, the Retirement Village operator is usually required to provide evidence that such a Courtesy Bus will be provided, depending on the type of housing provided (hostel or serviced self-care).

The consent authority for the Retirement Village can also condition this, and if DoP are consent authority, they are required to provide Council an opportunity to make such recommendations prior to approval.

57. The cumulative population increase arising from the Coal & Allied and Rosecorp developments is significant. This represents an additional 2,518 people or an 86% increase over the current population of Gwandalan or a 49% increase over the current population of Gwandalan/Summerland Point.

- No detail is provided on the capacity of services and facilities to meet the needs of increased population on the existing small community of Gwandalan arising from the C&A proposal and the nearby Rosecorp proposal.

- No detail is provided on the capacity of services and facilities to meet the needs of increased population on the existing small community of Gwandalan.
- The report states that the electricity network has sufficient capacity through Lake Munmorah Zone Sub Station then it goes on to state that a new zone sub-station may need to be constructed.

Proponent Response:

Capacity is directly linked to thresholds for specific services, including health and education and provisions for these are detailed, along with S.94 requirements.

Council Response – Inadequate response.

The Proponent needs to address this issue. The Department of Planning is required under S.79C of the *Environmental Planning and Assessment Act (1979)* to consider this matter prior to granting approval to the Concept Plan.

58. Little apparent excess capacity in current service provision occurs in the district in terms of social services. Education and health services are two key areas of concern. No comments/commitments have been forthcoming from the respective State government agencies on how these issues will be addressed.

- As population increases attention will need to be given to accessing local GP services. There is only one GP in Gwandalan.

Proponent Response:

Capacity is directly linked to thresholds for specific services, including health and education and provisions for these are detailed, along with S.94 requirements.

Council Response – Inadequate response.

The Proponent needs to address this issue. The Department of Planning is required under S.79C of the *Environmental Planning and Assessment Act (1979)* to consider this matter prior to granting approval to the Concept Plan.

59. Particular attention needs to be given to the needs of young people, particularly as the large group of pre-school and primary school aged children move into this target group.

Proponent Response:

See DET comments re primary school and report for comments on pre-school capacity.

Council Response – Adequate response.

This issue has been adequately addressed.

60. The Concept Plan and Project Approval provides no detail on social related issues as part of the “Key Issues Section”. Limited and generalised information is provided on the existing range of services and facilities at Gwandalan.

Proponent Response:

Social Issues have been addressed in the Social Infrastructure Report.

Council Response – Adequate response.

This issue has been adequately addressed.

61. The mix of housing types is in line with the objectives of Council’s Promoting Choice: A Local Housing Strategy for Wyong Shire. The social demographic research of the existing

community (see Appendix B) highlights the need to maintain affordable housing in this area.

Proponent Response:

This is addressed through provision of variety of housing types within a range of lot sizes including small lots and designated area for seniors living.

Council Response – Adequate response.

This issue has been adequately addressed.

62. Further negotiations will be required to clearly establish the proponent's commitment to social infrastructure provision, community development initiatives and partnership opportunities.

Proponent Response:

Agreed.

Council Response – Inadequate response

Has this been carried out yet?

63. The impact of the proposed development on the existing social structure, character and amenity of the local community (quality of life issues) has not been adequately addressed in either the Concept Plan or Social Infrastructure Study (see specific comments which have been made on the Social Infrastructure Study by Council's Senior Social Planner in Appendix B).

Proponent Response:

Among considerations in the SIA report is the issue of ageing in place, a concern shared by the local community. This is addressed in the original submission. In other respects, measures that enhance the character and amenity of the community have also been embraced and addressed.

Council Response – Inadequate response.

The Proponent has not adequately addressed this issue. The Department of Planning is required under S.79C of the *Environmental Planning and Assessment Act (1979)* to consider this matter prior to granting approval to the Concept Plan.

Wyong Shire Council

SUBMISSION ON PREFERRED PROJECT REPORT – COAL & ALLIED GWANDALAN CONCEPT PLAN

ADDITIONAL ISSUES OF CONCERN

BUSHFIRE

- Given the nature of the site, the development will be located in a very high fire risk area. Council refuses to accept any liability for future loss of life or property as a result of inadequate bushfire assessments. If DOP wish to undertake such assessments, they should include future scenarios of increased fire risk with Climate Change.
- Council assumes that the RFS will again comment regarding the issue of slope and APZ sizes. However, Council wishes to stress that bushfire protection measures (eg. APZ's) should not impact on retention of the ecological values of the site. If the RFS require larger APZ's it would not be desirable for these to be included within areas of bushland for conservation (but rather be included in setback areas containing roads, ovals etc).
- The amendment excluding the recommended APZ from within the bushland reserve along the proposed perimeter road (parallel to Kanangra Drive) is an improvement.
 - This will reduce the impacts to the ecological values of this reserve that would have occurred through ongoing fire management within this area of bushland.
 - However, Council still requires that any hazard reduction works do not take place within identified reserves / bushland areas of conservation value, e.g. the corridor along the roadside contains *Angophora inopina* and it will be difficult to adequately protect this species against an urban edge as long-term it depends on appropriate fire regimes, and under scrubbing will further add to these issues.
- The Proponent has not provided the appropriate APZ to the Seniors Living "superlot", as recommended in the original BTA, prepared by Harper Somers O'Sullivan Pty Ltd and dated November 2007. It appears that the additional width for the Seniors Living APZ has been removed entirely in the latest incarnation of the BTA. Why is this so?
- Direct vehicular access has still not been provided between Kanangra Drive and the southern-most perimeter road, as requested by both RFS and Council.

ENVIRONMENT AND PLANNING

- It is premature to consider the proposal for residential development in Gwandalan without the results of the *North Wyong Shire Structure Plan* being released by the Department of Planning.

FLORA AND FAUNA

- Council does not want to be put in the situation of approving subsequent works at the lot level which destroy listed species which the original study never considered or recognised as being present. There is a significant risk that this will occur, as the original study is acknowledged as being deficient.
 - Council could then be placed in the situation where the approval is granted, then subsequently there are threatened species found that affect DA's and Councils' ability to properly provide infrastructure.
 - The Concept Plan approval should be subject to a future survey undertaken by a consultant with specialist orchid survey experience/skills, demonstrating that inadequacies in the original survey are rectified over the next 2 survey seasons (i.e. demonstrating no significant impact).

- The plan aims to protect riparian areas and wetlands on-site or adjacent. However, there remains some uncertainty that this can be achieved because current WSUD has not been shown to work in this type of landscape.
 - In particular, the soil is highly erodible when disturbed and this can potentially impact producing high nutrient loads on riparian areas.
 - The Concept Plan approval should be subject to studies being undertaken that demonstrate no impact (change in nutrient status / change in flow) to any riparian area or wetland within the developments' catchment.

LANDSCAPING

- Council has been unable to find supporting documents that give a conceptual section of development, protection and management of the vegetated buffer area to Kanangra Drive, and the central corridor. Both these pieces of open space will be used as movement and activity corridors, especially by local children. A management strategy should be prepared in keeping with the proposed development of each. It still appears that the central corridor will have a strong WSUD function.
- There is no clear resolution of how the vegetation buffer to Kanangra Drive will be managed, protected or how access will be provided across it to the residential areas. As such the following clause remains relevant:

"The landscape buffer to Kanangra Drive is wide and there will be informal access across and along it. Consideration needs to be given to safe and logical entry to the subdivision circulation system on Summerland Road to reduce desire paths through the buffer. If possible the buffer should be fenced any construction is commenced. All protected bushland should remain fenced to prevent vehicle access."

PEDESTRIANS AND CYCLISTS

Foreshore Reserve/Walk

- The foreshore walk is shown as an elevated boardwalk in the urban design guidelines and appears narrower than a shared pathway. The foreshore walk needs to be a minimum of 2.5 metres wide and designed and constructed in accordance with the relevant Austroads guidelines.
- An elevated boardwalk is very expensive to construct over such a long distance as illustrated in the Concept Plan. More significantly, Council is unlikely to be able to budget for core asset management of a boardwalk over this distance in a fire prone landscape.
 - A more robust and cost effective design must be sought if Council is to take over the whole of life cost of the walk.
- There is also a potential safety issue with a foreshore walk leading to a deep water lake access with little passive surveillance, being over 100 metres from the nearest road. As desirable as a lake edge corridor is, there needs to be more thought in regard to visibility and surveillance of the lake shore path to satisfy the CPTED guidelines Council would use in assessing any DA.
- The foreshore walk needs to be extended north to connect with the footpath in Gamban Rd. This should be in addition to the \$5 million funding provided.
- Several other connections are required from the east-west streets to the foreshore walk. It is likely that informal paths will be made to take a more direct route between the new release area to the south and the existing Gwandalan hamlet by forcing new paths onto the boardwalk or through the bush.
 - More paths developed onto the proposed foreshore path will increase the potential for egress and public safety in a real and perceived sense rather than the current design with very limited egress points for the distance of the pathways.
 - Again, these should be in addition to the \$5 million funding provided.

ROADS AND TRANSPORT

General

- Council is concerned that if not made the Certifying Authority, roads will not be constructed in accordance with Council's Development Control Plan 2005 Chapter No 67 - Engineering Requirements for Development. Council standards. Therefore, Council may consider refusing to accept the roads as public roads unless all roads are constructed in accordance with Council's standards.

External Issues

- A roundabout is required for the intersection of the main access (Street Type C2), located approximately 1.2km south of Summerland Road. The roundabout should be designed to reduce speed through the roundabout to 40km/hr from the existing speed limit of 80km/hr speed limit. Any consideration for reduction in the speed limit has to be directly referred to the RTA.
- The southern most east-west road (Street Type A1) should have a connection to Kanangra Drive to permit a safer and more efficient bus service. The intersection should be an Austroads "Type C". This road is approximately 400 metres south of the proposed intersection (roundabout at Street Type C2) to the development. If this connection is not provided it is most likely that a bus stop will be required on Kanangra Dr at the southern end of the development. A pedestrian connection will be required from the southern road through to Kanangra Dr, to encourage use of public transport. A pedestrian refuge is also required on Kanangra Dr in this vicinity.

Internal Issues

- Council was unable to locate any plans which identify the Road names mentioned in the "Submissions Response Summary".

SOCIAL

- The PPR report states that \$5 million has now been allocated for initiatives associated with the delivery of social infrastructure to support the existing communities of Gwandalan, Nords Wharf and Catherine Hill Bay. It is disappointing to see that the \$5M has been allocated in such a way that there will be a limited direct benefit to the Gwandalan community, as follows:
 - i. Funding of a Department of State and Regional Development project to identify employment opportunities in the Swansea area
 - ii. Contribute to the upgrade of existing boat ramps at Lions Park
 - iii. Contribute to the upgrade of Koowong Road Wharf
 - iv. Promote sustainability through - on-lot rainwater harvesting, reduced power demand for proposed dwellings, introduction of a sustainable education program, exceeding local and State govt criteria for existing and new residents
 - v. Scholarships for archaeology students from the Aboriginal community linked to local schools.
- Furthermore the allocations have not been linked to the general areas of need identified in the Social Infrastructure Report, namely:
 - i. Equitable access to transport (a subsidised bus service);
 - ii. Adaptable and affordable housing and other services and facilities that support ageing in place;
 - iii. Recreational facilities for children and young people;
 - iv. Multi-purpose community facilities with capacity for a range of organisations, age groups or functionalities; and
 - v. Foreshore/park embellishments that protect and enhance the local environment.
- There is a need for funding for both capital and recurrent social infrastructure for facilities, programs and activities related to young people, family support, health, education, public transport and community development initiatives in this area.
- The cumulative population increase arising from the Coal & Allied and Rosecorp developments is significant, and little apparent excess capacity in current service provision occurs in the district in

terms of social services. However, no detail is provided on the capacity of services and facilities to meet the needs of increased population on the existing small community of Gwandalan arising from the C&A proposal and the nearby Rosecorp proposal.

- It is therefore recommended that the following be included as part of any consent conditions:
 - i. Further discussions will be held with Wyong Council to clearly establish commitment to social infrastructure provision (in particular education and health services), community development initiatives and partnership opportunities.
 - ii. Community infrastructure is to be provided as part of Stage 1 of the development.

STORMWATER

Stormwater Management & Flooding

- Council finds it difficult to support the stormwater management proposals of this development without further information or the strict conditioning of various stormwater management aspects.
- The following 2 stormwater and flooding management issues of concern have been identified:
 - i. Freeboard requirements from watercourses and major event overland flow paths.
 - ii. Escape flow paths from trapped low points. The road at the most north westerly location of the site has a trapped low point that will flood adjoining residential and possibly the seniors living lots.
- These issues have been addressed within the suggested conditions of approval in Attachment 3.

Water Quality

- No modelling data was submitted with the application in support of claims that certain pollutant removal targets will be achieved and the impact the necessary infrastructure will have on the development proposal.

Soil & Water Management

- No details were submitted identifying the staging, locations & sizing of sediment basins and the impacts of construction the proposed development will have on groundwater, sensitive receiving areas, watercourses and the lake.

Groundwater

- No details were proposed to mitigate the impacts of development on groundwater dependant ecosystems (despite their identification and mapping) as well as other ecosystems.

Impacts of Climate change

- Sensitivity analysis of the impacts of climate change on the major drainage corridors or water systems with regards to increased rainfall intensity and higher tailwater levels.

Sensitivity of Receiving Areas

- Appropriate discharge locations and treatments within these areas to mitigate the effects of flow concentration, velocity, depth, frequency, etc

WATER SUPPLY AND SEWERAGE SERVICES

Water supply

- There is an existing 450 mm water trunk main running along Kanangra Dr. The developer is required to make 2 connections to this main in order to circulate the water within the proposed development.

Sewerage

- The developer is fully responsible for the design and construction of the sewerage infrastructure within the development site which includes the sewage pumping stations and the associated sewer gravity and rising mains and discharge sewage directly to the head of works at Gwandalan Sewage Treatment Plant.
- In regard to the easements, Council will require an easement for the pumping station site, an easement for gravity mains that are 300 mm in diameter or greater and an easement for the rising mains regardless of size.

Wyong Shire Council

SUBMISSION ON PREFERRED PROJECT REPORT – COAL & ALLIED
GWANDALAN CONCEPT PLAN

RECOMMENDED CONDITIONS OF APPROVAL

MODIFICATIONS TO CONCEPT PLAN

DEVELOPMENT FOOTPRINT

1. The Concept Plan shall be modified so that all infrastructure and other provisions to support the urban development is retained within the development footprint and not within identified reserves, including stormwater management infrastructure, utilities, bushfire Asset Protection Zones (APZ – fuel free and fuel reduced zones) and fencing.

FLORA AND FAUNA

2. The Concept Plan approval is subject to future survey/studies demonstrating that:
 - (a) Inadequacies in the original survey have been rectified over 2 survey seasons, demonstrating no significant impact in particular upon native orchids within the area;
 - (b) The proposed development will have no impact (change in nutrient status / change in flow) to any riparian area or wetland within the developments' catchment.

PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE

CERTIFICATES / ENGINEERING DETAILS

3. A Construction Certificate is to be issued by the Certifying Authority prior to commencement of any works. The application for this Certificate is to satisfy all of the requirements of the *Environmental Planning and Assessment Regulation 2000*. Works are to be designed and constructed in accordance with Council's Development Control Plan 2005, Chapter 67 – *Engineering Requirements for Development*.

DILAPIDATION REPORT

4. A dilapidation report must be submitted to Council prior to issue of Construction Certificate. The report must document and provide photographs that clearly depict any existing damage to the road pavement, kerb, gutter, footpath, driveways, street trees, street signs or any other Council assets in the vicinity of the development and haulage route.

DESIGN AND CONSTRUCTION OF SUBDIVISION WORKS

5. The design and construction of all subdivision works in accordance with Council's Development Control Plan 2005 Chapter No 67 - Engineering Requirements for Development, which are prescribed at the time of commencement of engineering works. The design plans, including an overlay of the vegetation plan identifying trees to be retained as per the approved development plans, and any trees to be removed must be approved by Council prior to issue of the construction certificate.

EROSION AND SEDIMENT CONTROL

6. The control of soil erosion on the site and the prevention of silt discharge into drainage systems and waterways in accordance with the NSW Landcom *Managing Urban Stormwater Soils and Construction, 2004* and Development Control Plan 2005, Chapter 67 – Engineering Requirements for Development. The design plans must include the following requirements:
 - (a) Sediment Retention Basins supporting the construction stages. Note: Calculations supporting capture rates, settling capacity and sediment storage shall be included within the plans.

- (b) Swales, diversion channels, pollutant traps, check dams and other structures shall be detailed and sized.
- (c) Collection and diversion of clean water through the construction zones.
- (d) Staging and sequence of works and controls within the site.
- (e) Maintenance schedules of all soil and water management systems.
- (f) Structural Engineer's Certification of all constructed basins stating structural stability for all storm events up to and including the 100year ARI storm event.
- (g) The design plans, supporting calculations and details of erosion and sediment control works shall be approved by Council prior to issue of the Construction Certificate.

FILLING AND HAULAGE

7. The submission to and approval by Council of details for the disposal of any spoil gained from the site and/or details of the source of fill, heavy construction materials and proposed routes to and from the site. Documentation regarding haulage routes, spoil destination, and fill source shall be submitted to Council/ prior to the commencement of works within the site.

A Geotechnical analysis of all imported filling (where required) materials shall be submitted to Council for assessment and approval prior to the commencement of site works. The fill material shall be Class 1 (VENM – Virgin Excavated Natural Material) as certified by a practising Geotechnical Engineer prior to haulage to site.

The certification documentation shall be submitted to Council throughout the construction phase of the subdivision works.

8. The approved haulage route road pavements shall be tested by a practising Geotechnical Engineering Consultant in accordance with Development Control Plan 2005, Chapter 67 – Engineering Requirements for Development and Austroads Guidelines. The testing results shall be presented in a Geotechnical Engineering Report including the following requirements:
 - (a) Dilapidation Report of effected pavements.
 - (b) Comprehensive rehabilitation program for all effected haulage route pavements.
 - (c) Estimate of costs for rehabilitation works.

Note: A Bank Guarantee/Bond for 125% of estimated costs of the rehabilitation works (as agreed by Council), must be lodged with Council prior to issue of any Construction Certificate.

FLOOD DESIGN & DRAINAGE

9. The submission of detail designs and the preparation and submission of a revised flood model and analysis of the flooding and stormwater drainage systems for the total development site for all watercourses and drainage systems.
10. The submission of detail designs and the preparation and submission of a revised flood model and analysis of the main watercourses. The model shall determine the post subdivision development flood way for all storm events up to and including the 100 year ARI event. The model shall include the following design parameters:
 - (a) Stabilising of the existing natural low flow zone to accommodate the 1.5 year ARI storm event.
 - (b) Inclusion of bio-retention/detention facilities sized from the contributing road catchment. Note: All detention systems shall be combined with bioretention to provide the dual purpose of stormwater quantity and quality management.
 - (c) Provision for on-site detention and rainwater tanks within individual lots and adjoining development.
 - (d) The design of the culverts/bridge on the main watercourse to accommodate the longer ARI storm event.
 - (e) The main northern water course channel and adjoining riparian zones shall be totally contained within the proposed.
 - (f) The designs shall be prepared in accordance with DCP 2005, Chapter 67 Engineering Requirements for Development. The design plans must be approved by Council prior to the issue of a Construction Certificate.

11. The provision of scour protection in accordance with Austroads Waterway Design “*A guide to the Hydraulic Design of Bridges, Culverts and Floodways*” for all elements of the bridge structure/culverts.
12. The natural base flows and the wetting and drying cycles within each catchment and watercourse are to be preserved to maintain riparian vegetation and facilitate groundwater recharge, particularly where there will be impacts on the identified vegetation and/or Groundwater Dependant Ecosystems A design/management strategy is to be prepared in accordance with: Water Sensitive Urban Design Solutions for Catchments above Wetlands, May 2007, Hunter & Central Coast Regional Environmental Management Strategy and Development Control Plan No.2005 Chapter 67 – *Engineering Requirements for Development* prior to issue of the Construction Certificate.

STORMWATER

13. The submission to and approval by Council of stormwater drainage details in accordance with the following requirements:
 - (a) The construction of a minor system 5 year ARI design capacity piped stormwater drainage and 100 year ARI design capacity for overland flow paths being roadways, etc within the internal road network to service the subdivision. Details to be provided to demonstrate safe velocity depth products are achieved at throughout the development. Rear of footpath levels (especially at driveways) are to be set at critical low level lot locations with minimum freeboard levels of 150mm above the design flow level.
 - (b) The construction of an inter-allotment stormwater drainage system to accommodate the 5 year ARI storm event to service each lot in the subdivision with a minimum pipe size of 225mm dia.
 - (c) The construction of reinforced concrete box culverts or approved equivalent road crossings for the Road No 1 to accommodate a 100 year ARI storm event.
 - (d) The design shall be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. The design plans must be approved by Council/RTA prior to the issue of a Construction Certificate.
 - (e) The provision of a drainage reserve over the natural depression (Lots 481 and 76) to accommodate a 20 year ARI piped system and a secondary flow path channel to contain the 100 year ARI storm event Note: The subdivision layout and horizontal road alignment will require amendment to accommodate the drainage reserve. Alternatively, consideration may be given to the realigning of the adjoining roads to provide a piped and overland flow drainage system to cater for the minor (5 yr ARI) and major (100 yr ARI) drainage systems.
 - (f) The provision of a complete planting schedule for all water quality and quantity management structures, prepared by a suitably qualified and experienced practitioner. Plants to be used shall be generally endemic to the catchment area and appropriate for the proposed application. Design plans are to be submitted to and approved by Council prior to the issue of a Construction Certificate and all works, completed, inspected and approved by Council prior to the issue of any Subdivision Certificate.
14. The design and construction of additional stormwater drainage works consisting of stabilised capture, conveyance and discharge structures within Summerland Road East, drainage/habitat reserves, Strangers Gully (extreme care and discharge treatments are to be provided for the sensitive Strangers Gully area) and the foreshore reserve areas for events up to and including the 100 year ARI storm event.

The works shall include connection of the drainage works into the open drainage channels, especially the Summerland Road East connection north of the site. Inlet control structure/s and energy dissipaters shall also be provided. The design shall be undertaken in accordance with Council's Development Control Plan 2005, Chapter 67 – *Engineering Requirements for Development* prior to the issue of the Construction Certificate.

15. The submission of MUSIC (or other similar water quality model) and flood storage modelling requirements to Council in accordance with the approved development plan to demonstrate compliance with the pollutant removal targets as a minimum of:
 - (a) 90% reduction in gross pollutants >5mm
 - (b) 85% reduction in the average annual total suspended solids load

- (c) 65% reduction in the average annual total phosphorus load
- (d) 45% reduction in the average annual total nitrogen load
- (e) No visible oils and greases for the 1.5 yr ARI event and

The design plans must be submitted to and approved by Council prior to the issue of a Construction Certificate.

16. The submission of stormwater and flooding commentary providing calculations (including a sensitivity analysis for the watercourses and drainage reserve) and design documentation regarding impacts of climate change, specifically tailwater level increase and increased rainfall intensity. The commentary shall identify where best practice safety, evacuation or other standard criteria are exceeded and proposed mitigation measures and costs to limit or remove such impacts or justification where it is considered that such impacts may be acceptable without mitigation.

Design details of any works necessary now must be approved by Council prior to the issue of a Construction Certificate and be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*.

17. The provision of Flood Warning signage to all approaches to the detention or wetland area that will be inundated within the development site. Design details shall be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. The design plans must be approved by Council prior to the issue of a Construction Certificate.

ROADS AND TRAFFIC

External Road Network

18. Separate approval from Council as the Roads Authority must be obtained under Section 138 of the *Roads Act 1993* prior to the issue of any Construction Certificate which includes any works within a Council road reserve. For any such works, design plans must be submitted to and approved by Council prior to issue of the Construction Certificate.
19. The provision of a plan of management for any works for the development that impact on any public roads and public land for the construction phase of the development, prior to issue of the Construction Certificate. This plan must be certified by a suitably qualified person prior to issue of the Construction Certificate. All works must be conducted in accordance with this plan. The plan is to include a Traffic Management Plan and/or a Work Method Statement for any works or deliveries that impact the normal travel paths of vehicles, pedestrians or cyclists or where any materials are lifted over public areas.
20. The upgrading of the existing Pacific Highway and Kanangra Drive Intersection as determined by the RTA. A deed of Agreement shall be entered into between the Applicant/Developer and the RTA prior to the issue of any Construction Certificate (or as agreed by the RTA) within the site. Design plans are to be approved by Council and the RTA prior to the commencement of works.
21. The curves in Kanangra Drive between the Pacific Highway and Summerland Road shall be upgraded and widened as identified in the Wyong Shire Council's "*Northern Districts Contribution Plan*" February 2008.
22. The construction of a roundabout at the intersection of Kanangra Drive and the main access (street type C2) located at the existing crest along Kanangra Drive. The roundabout design is to include the following requirements:
 - (a) The roundabout shall be designed to reduce speed to through the roundabout to 40km/hr by providing the deflection at the entry/approach from the existing 80km/hr zone.
 - (b) Adequate capacity for projected traffic volumes for it's design life.
 - (c) Adequate sight distance for vehicles, pedestrians and cyclists approaching and entering the roundabout. This includes adequate sight distance for pedestrians and cyclists entering the roundabout at design crossing points from the footpath.

- (d) The roundabout geometry shall accommodate vehicular turning paths for all vehicles up to and including 14.5m buses, low level buses and 19.0m articulated vehicles maintaining lane direction/discipline and generally be in accordance with Austroads Part 6 Roundabouts and the RTA's Roundabouts - Geometric Design Method.
 - (e) Street lighting to AS 1158 ensuring that all light poles are located outside any clearzone.
 - (f) The provision of facilities for pedestrians and cyclists in accordance with Austroads Part 6 Roundabouts, Part 13 Pedestrians and Part 14 Bicycles.
 - (g) The provision of a Road Safety Audit with approval from Council for any design alterations resulting from the audit.
 - (h) The pavement design axle loading for the roundabout to be is to be 7.5×10^6
- 23.** Construction of the southern east-west (Type A1) road to be extended to Kanangra Drive and designed as an Austroads "Type C" intersection. (Stage 2 B Central Hamlet) shall be in accordance with the following requirements: (Note: The lot layout (Lots 120-124) may require adjustment to ensure that the intersection design geometry is in accordance with the Austroads "Guide to Traffic Engineering Practice" Part 5 Intersections at Grade).
- (a) The design shall be a full "Type C" intersection with "Type B" left turn provision.
 - (b) Street lighting to AS 1158 ensuring that all light poles are located outside any clearzone.
 - (c) The provision of facilities for pedestrians and cyclists in accordance with Austroads, Part 13 Pedestrians and Part 14 Bicycles.
 - (d) The provision of a Road Safety Audit with approval from Council for any design alterations resulting from the audit.
 - (e) The design shall be prepared in accordance Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. The design plans must be approved by Council prior to the issue of a Construction Certificate.
- 24.** Construction of the new connection road (Summerland Road East) to form the fourth leg of the existing Kanangra Drive/Summerland Road Roundabout (Stage 1, Northern Hamlet B). The works shall extend to adjoin the proposed Road No 1 (Street Type G). The design shall be prepared in accordance with the RTA "Roundabout-Geometric Design Method" and the Austroads "Guide to Traffic Engineering Practice" Part 6 and the following requirements.
- (a) A minimum 13.0m wide carriageway for the full extent Summerland Road East and the fourth leg of the roundabout to accommodate a bus route, on road cycleway and on street parking.
 - (b) Street lighting to AS 1158 ensuring that all light poles are located outside any clearzone.
 - (c) The provision of facilities for pedestrians and cyclists in accordance with Austroads, Part 13 Pedestrians and Part 14 Bicycles.
- 25.** Construction of a pedestrian refuge within Kanangra Drive adjacent to the southern connecting intersection to Kanangra Drive that services a bus stop located at the southern end of the development (Stage 2 Central Hamlet B).
- 26.** No direct vehicular access from the lots adjoining Kanangra Drive is permitted.

Internal Road Network (Stage 1 Hamlet A)

- 27.** The construction of Roads within the Stage 1 Northern Hamlet A in accordance with the following design requirements:
- (a) The provision of a road reserve width of minimum 27.0 m on Type C1 roads to accommodate a bus route, on road cycleway, 3.0 m wide travelling lanes, 3.5 m parking lanes, 4.5 m (5.5 m where off road cycleway provided) verge footpaths and a central 5.0 metre wide swale.
 - (b) The provision of traffic calming devices and slow points or the alteration of the road geometry to provide appropriate street design speeds for the development and ensure a slow speed environment in accordance with Council's Development Control Plan 2005, Chapter No 66 - Subdivision.
 - (c) Street design speeds are to be achieved and are particularly critical where road grades exceed 5%. Where this occurs traffic calming facilities are to be provided and are to be

satisfactory for the traffic environment e.g. Generally where intersection approach grades exceed 5%.

- (d) The intersection of Road No 4 with Summerland Road (East) (Road No 1) shall be realigned approximately 40.0 metres easterly to create a 4-way intersection with the adjoining industrial subdivision (DA 583/2005). A roundabout shall be provided at this intersection in accordance with Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. The roundabout is to cater for buses (including 14.5m) and 19.0m articulated vehicles.
- (e) Road No2 shall be extended from Hamlet A to connect to the main access entry street (Type C1) providing through access to the new roundabout on Kanangra Drive.
- (f) The design shall be prepared in accordance with Council's Development Control Plan 2005, Chapter No 67 *Engineering Requirements for Development*. The design plans must be approved by Council prior to the issue of a Construction Certificate.

Internal Road Network (Stage 2, Central Hamlet B)

- 28. The construction of roads within the central Hamlet B in accordance with the following requirements:
 - (a) C1 and 2 road shall have a road reserve width of minimum 27.0 metres to accommodate a bus route on road cycleway, 3.0m wide travelling lanes, 3.5 m parking lanes, 4.5 m (5.5 m where off road cycleway provided) verge/footpaths and a central 5.0 metre wide swale.
 - (b) Road type A3 and B shall include a minimum two way carriage way width of 6.0 metres
 - (c) Carparking with Road No 3 (Type A3) adjacent to the Local shop front shall be provided in accordance with Development Control Plan 2005, Chapter 61 and AS 2890.1. The carpark facility shall be designed to ensure that safety is the key criteria for the design and the mixing of parking, loading and through traffic as well as pedestrians is eliminated or safely addressed.
 - (d) The design shall be prepared in accordance with Council's DCP 2005, Chapter No 67 Engineering Requirements for Development. The design_plans must be approved by Council/RTA prior to the issue of a Construction Certificate.

Roads – General

- 29. Unless specified elsewhere in these conditions, road and verge widths and location of accesses are to be provided in accordance with Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development* and Chapter No. 66 – Subdivision.
- 30. The provision of additional civil works necessary to ensure satisfactory transitions to existing work as a result of work conditioned for the development, at no cost to Council. Design plans are to be approved by Council prior to issue of the Construction Certificate.
- 31. All lots within the local shop front area are to provide sufficient on-site space for the manoeuvring of delivery vehicles to ensure that they enter and depart the property in a forward manner without conflicting with pedestrian movements and other vehicles parking.
- 32. All major 4-way intersections within the development are to have appropriate traffic and safety management treatments to the satisfaction of Council and the Local Traffic Committee. Detail designs are to be provided in accordance with Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*.
- 33. The provision of road hierarchy treatments, street leg lengths, traffic calming and/or road geometry to control street design speeds in accordance with the requirements of Council's Development Control Plan 2005, Chapter No. 66 – Subdivision.
- 34. The pavement design axle loading for all pavements excepting the Kanangra Drive roundabout shall be as follows:
 - (a) Kanangra Drive 5×10^6 .
 - (b) Bus routes 3×10^6 .
 - (c) Road No. 2 (western road) 1×10^6 .

(d) All remaining roads 6 x 10⁵.

35. The geometry of intersections of Roads No.1 (Summerland Rd East) and 4, 2 and 4, 1 and the second last north-easterly road are to be adjusted to provide intersection angles between 70° and 110°.
36. Carriageway widening to be provided at all internal curves, intersections (incl laneways) to cater a design vehicle of a 10.0 m service (Garbage truck maintaining lane discipline) and a 19.0m articulated vehicle (not maintaining lane discipline).
37. Carriageway widths are to be in accordance Council's Development Control Plan 2005, Chapter No. 66 – Subdivision unless modified herein or required to be widened as a result of the provision of bio/swales.
38. Street lighting shall be provided to internal roads and intersections in accordance with AS 1158 ensuring all light poles are located outside of any clearzone.

Parking

39. All parking is to be provided in accordance with Council's DCP 2005 – Part 61.

Public Transport

40. The development is to facilitate/encourage use of Public Transport and is to be to the satisfaction of the MOT and Council. Adequate and proper bus service facilities, including "U" turn provisions are to be provided. Any bus route, through the development which is acceptable to the MOT and bus operator, is to be fully constructed prior to the issue of the Subdivision Certificate.
41. Bus stops and bus shelters need to be provided in accordance with the requirements of the Bus Operator, Ministry of Transport and Council. All facilities need to be installed in accordance with Disability Discrimination Act (DDA) requirements. Footpaths and pedestrian refuges need to be provided to the bus stops to ensure pedestrian safety and encourage the use of public transport.
42. Bus servicing needs to be provided in accordance with the local bus company and Ministry of Transport (MOT) requirements. The applicant is to make a contribution to the MOT for the extension of the current bus service so that existing services in other parts of Wyong Shire are not reduced as a consequence of this development.
43. The applicant is to submit a plan to Council of proposed bus stop locations, after it has held discussions with the bus operator and MOT, for approval by the Local Traffic Committee. Bus shelters are also required at these locations at full cost to the developer.

PEDESTRIAN PATHWAYS / CYCLEWAYS

44. Insufficient pedestrian pathways/cycleways are provided within and adjacent to the development. Facilities are required to promote and accommodate cycling and the use of motorised scooters (retirement villages) for recreational purposes and trips to shops, playing fields and schools etc.
45. Off-road pedestrian pathways/cycleways are required for the full extent of the development along Summerland Rd, Road No 1 and Road No8 (Retail Precinct). The pathways are to connect to Kanangra Dr and the "Coastal Connector Path".
46. The provision at no cost to Council and in accordance with Council's Development Control Plan 2005 Chapter No 66 – Subdivision and Chapter No. 67 - *Engineering Requirements for Development*, as follows:
 - (a) 1.5m wide concrete footpaving (one side only) to all roads within the subdivision with connections from the east-west roads to the "Coastal Connector Path"; and

- (b) 2.5m wide cycleways to Summerland Road, Road No.1, Road No. 8 and connections to Kanangra Drive, the "Coastal Connector Path" and the extension to the "Coastal Connector Path" to join to the path in Gamban Road;
- (c) The "Coastal Connector Path" is to be designed and constructed in accordance with the relevant Austroads guidelines, to a minimum width of 2.5 metres;

NOTE: Paths are to be 100mm thick and reinforced concrete with SL 62 reinforcement. The design plans must be approved by Council prior to issue of the Construction Certificate (this should be in addition to the \$5 million funding provided).

- 47. The location of the cycleway within the public recreation area is to be adjusted to reduce the grade to a more appropriate grade for recreational users. Refer Austroads Part 14 Bicycles. The boardwalk / cycleway in the foreshore area is to be designed to ensure that it does not impact on any watercourses and is a minimum level of RL 1.68 AHD.
- 48. A more robust and cost effective design for the elevated boardwalk / cycleway is required if Council is to take over the whole of life cost of the walk.
- 49. Boardwalk / cycleway areas within the public recreation area are to be constructed from non combustible (masonry) materials approved by Council with safety railings in accordance Austroads Part 14 Bicycles.

LANDSCAPING

- 50. The provision and maintenance of landscaping in accordance with Council's Policy Number L1 – Landscape for Category 3 development including the engagement of an approved landscape consultant and contractor to undertake the design and construction of the landscaping. All landscaping design works are to be approved completed prior to issue of the Construction Certificate. The following matters must be addressed or provided to the satisfaction of Council:
 - (a) The proposed list of plant species (trees, shrubs and ground covers) to be used, details of their height and spread at maturity and whether they are to be young or mature species at time of planting;
 - (b) The provision of an indication of the extent of irrigation (if any) and the water supply source for proposed landscaping works;
 - (c) The position of any mounding or earthworks;
 - (d) The position of any external drainage materials;
 - (e) The location of any external signposting and lighting;
 - (f) Planting used as an integral part of the overall design of the estate and in the development of each allotment;
 - (g) The use of visually unobtrusive security fencing, in terms of colour, size and design, and located behind the landscape setback area. No barbed wire will be permitted.
 - (h) Use of trees to provide shade to buildings, outdoor recreation areas and carparking areas, trees shall also be used to line streets so that a continuous canopy at mature spread is created on each side of the estate roads.
 - (i) Use of shrubs to restrict views into and from the allotments and to enhance tree-planting schemes and ground covers are to be used to tie the soil together in areas not grassed or paved.
 - (j) Selection of trees for habitat and mature scale to break up the visual mass of buildings.
 - (k) Prohibition of access from Kanangra Drive to allotments over landscape setbacks.
 - (l) Proposed landscape works are to maintain necessary sight distances for roads and intersections.
- 51. All road verges are to be wide enough to accommodate the structural plate of a large tree and service requirements.

ENVIRONMENT

- 52. An Ecological Management Plan must be provided by the Proponent and approved by Council and the Department of Planning which provides detail to assist in the coordination of land

management actions of conservation areas and site clearing. Approval will be required prior to site works commencing.

53. Placement and construction of drainage, constructed wetlands and other IWCM infrastructure is to be sensitively located, designed and landscaped to enhance habitat values for threatened amphibians and mitigate identified Key Threatening Processes (e.g. Gambusia and frog chytrid).
54. Services such as water, sewer, power and telecommunications that are unavoidably required to be within any riparian or wildlife corridor are to be sensitively placed so as to avoid, protect or retain known habitat features (e.g. hollow bearing trees, dams, drainage lines etc).
55. All road crossings that traverse conservation land are to be designed by a suitably qualified Ecologist with features to assist with fauna movement and to reduce mortality (e.g. underpasses, landscaping, lighting issues, speed suppression, glide poles – as appropriate).
56. All necessary fire protection measures (asset protection zones fuel free and fuel reduced zones) are to be contained and/or provided within road reserves and/or lots as required by the RFS.
57. The applicant shall demonstrate how Urban Interface Area (UIA) and Edge Treatment requirements are satisfied as per Council's Development Control Plan 2005, Chapter No 66 – *Subdivision* for all industrial lots which adjoin conservation zones.
58. All environmental land that is to be transferred into Council ownership is to be transferred as Community Land, at no cost to Council. All land shall be transferred in a condition acceptable to Council and all management plan actions shall be satisfied prior to hand-over.

FLORA AND FAUNA

59. The Concept Plan is to be amended to provide for a minimum setback of 30m from the Strangers Gully Riparian zone.

MINE SUBSIDENCE

60. Development will need to satisfy any development and building design guidelines and requirements of the Mine Subsidence Board.

OTHER REQUIREMENTS

61. A Geotechnical Engineer's report shall be prepared supporting the controlled filling and classification of all lots. Where required the lots are to be "structural filled" to the requirements of AS 3798-2007 and classified in accordance with AS 2870. The report shall include details of the removal of all organic or unsuitable materials, depth of select fill, grades of the finished surface level and proposed filling materials, lot sizes, layer thicknesses, test locations and results. Inspection reports and certification shall be submitted to Council upon completion of each stage of works. The report must be approved by Council prior to the issue of a Construction Certificate.

WATER AND SEWER

62. An application under Section 305 of the *Water Management Act 2000* is to be made to Council as the Water Supply Authority. Advice will be provided under Section 306 of the *Water Management Act 2000* detailing all necessary works and contributions for the development. Detail designs of the water and sewer works will be required to be submitted to and approved by Council under the *Water Supply Act 2000* prior to issue of the Construction Certificate. Designs to be in accordance with Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. **CONTRIBUTIONS**

63. A monetary contribution is to be paid to Wyong Shire Council, pursuant to Section 94 of the *Environmental Planning and Assessment Act*, towards the provision of the following public amenities and public services within the locality, such contribution to be paid prior to the issue of a Subdivision Certificate in respect of each stage of the proposed development:
 - The developer must pay the Section 94 Roadworks Contributions as identified in Council's Section 94 Contribution Plan.

- The payment to Council of contributions in accordance with Council's Northern Districts and Shire Wide Contributions Plans, as follows:

CATEGORY	CODE	RATE (PER DU)*
Roads	Northern Districts D	\$3,787.15
Shire Wide	Library Network	\$279.81
	Regional Open Space	\$152.93
	Cycleway Network	\$313.73
	Performing Arts Centre/Public Art	\$354.00
	Administration	\$67.95
Open Space	Northern Districts Open Space Local Parks	\$3,990.40
Community Facilities	Northern Districts Community Facilities	\$3,375.40
Administration	Northern Districts Administration	\$470.15
Water	Gwandalan DSP (headworks and distribution)	\$3,891.05
Sewer**	Gwandalan DSP (headworks only)	\$802.82
TOTAL RATE PER LOT		\$17,485.39

* Indexed to October 2008. Indexation occurs quarterly for Section 94, with the next indexation to occur on Nov 1 2008. Water and Sewer Charges indexed yearly on 1 July.

** Sewer headworks levied only (Headworks cost - operating surplus * 85%) Connection (i.e. distribution costs) to Gwandalan headworks at developers costs.

COMMUNITY / SOCIAL INFRASTRUCTURE

64. Community infrastructure such as a subsidised bus service; recreational facilities for children and young people; multi-purpose community facilities with capacity for a range of organisations, age groups or functionalities; and foreshore/park embellishments that protect and enhance the local environment, are to be provided as part of Stage 1 of the development.
65. Further discussions shall be held with Council to clearly establish commitment to social infrastructure provision, community development initiatives and partnership opportunities.

BUSHFIRE

66. The Concept Plan is to provide an Asset Protection Zone (APZ) that is designed in accordance with the *Planning for Bushfire Guidelines 2006*.

DURING WORKS

APPROVED PLANS

67. A copy of the stamped approved plans must be kept on site for the duration of site works and be made available upon request to either the Principal Certifying Authority or an officer of the Council.

RECORD OF INSPECTIONS CARRIED OUT

68. Requirements together with certifications/reports are to be carried out as a minimum in accordance with all the requirements of Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*. Note: As a minimum full, complete and compliant documentation including the following is to be submitted for Council to consider acceptance of the assets.
- Certified design documentation
 - Geotechnical Investigation and Pavement Design Reports (including commentaries, environmental issues and investigation data)
 - Certification Reports of all inspections for all aspects of construction and associated works,
 - Compliance and non-compliance reports
 - Works as executed details
 - Materials testing

- (g) As constructed testing (including retests and determination of extent of failures and areas of rework)

Inspections to be arranged with Council as the Principal Certifying Authority. Notice of required inspection must be given 48 hours prior to inspection, by contacting Council's Customer Service Department on (02) 4350 5555.

OTHER AUTHORITIES

- 69.** Other public authorities may have separate requirements and should be consulted in the following respects:
- (a) Australia Post for the positioning and dimensions of mail boxes in new commercial and residential developments;
 - (b) AGL Sydney Limited for any change or alteration to gas line infrastructure;
 - (c) Energy Australia for any change or alteration to electricity infrastructure or encroachment within transmission line easements;
 - (d) Telstra, Optus or other telecommunication carriers for access to their telecommunications infrastructure.

SITE REQUIREMENTS

- 70.** The provision of a temporary closet on site from the time of commencement of building work to ensure that adequate sanitary provisions are provided and maintained on the building site for use by persons engaged in the building activity. The temporary closet is to be a water closet connected to the sewerage system or approved septic tank or a chemical closet supplied by a licensed contractor approved by the Council.
- 71.** All earthworks are to be limited to the area outlined on the approved development plan.
- 72.** Construction work is only to be undertaken in accordance with the provisions of the Environmental Protection Authority's 'Environmental Noise Control Manual-Guidelines for Construction Noise' as identified below:
- (a) Australian Eastern Standard Time (AEST): Monday to Sunday 7.00 am to 6.00 pm
 - (b) Australian Eastern Daylight Time (AEDT): Monday to Sunday 6.00 am to 8.00 pm

FILLING & LOT REGRADING

- 73.** Lots shall be filled and graded to ensure that they are flood free for all storms and including the 100 year ARI storm event. The finished surface level of the lots shall include a minimum freeboard of 300mm above the 100 year ARI flood level applied to each developable lot.

TREES

- 74.** In relation to tree and vegetation protection, the following requirements are necessary:
- (a) Trees and vegetation within the retained naturally vegetated buffers are to be protected by the erection of a minimum two strand stock fence with parawebbing as per the consulting Arborist and Ecologist's direction, and maintained in good working order for the duration of the works and clearly marked "No Go Areas". The Project Managers are to provide certification to Council that all temporary fencing is in place prior to the issue of a Construction Certificate.
 - (b) All fenced tree protection areas are to be clearly marked as "No Go Areas" on all final approved engineering plans. The location of threatened species habitat and Endangered Ecological Communities are also to be marked on all plans. All fenced tree protection areas are to be clearly marked as "No Go Area" on the fencing itself.
 - (c) No clearing of vegetation or storage of vehicles, fill or material or access is to occur within the "No Go Areas".
 - (d) The consultant Arborist / Ecologist may require other habitat and/or trees to be protected via fencing from time to time. This fencing is to be erected at the appropriate root zone

protection limits (as determined by the consultant Arborist / Ecologist), prior to works being carried out around that particular habitat.

- (e) The management protocols and requirements within these conditions relating to tree and vegetation retention, protection are to be included in all contract documentation, plans and specifications used by each civil contractor and sub-contractors.
- (f) Ecologist on site during tree felling to check for habitat for relocation, sectional dismantling of trees etc.
- (g) The consultant Ecologist and Arborist are to provide appropriate inductions to all on-site staff in relation to these ecological protocols.
- (h) Timber from the site is to be reused on site where practical by way of milling, wood chipping or similar.

DUST CONTROL

- 75. Appropriate measures must be employed during demolition, excavation and construction works to prevent the emission of dust and other impurities into the surrounding environment. All such measures are to be co-ordinated with site sedimentation controls to ensure polluted waters do not leave the site.

ABORIGINAL RELICS

- 76. If Aboriginal engravings or relics are unearthed during construction, all work is to cease immediately and the National Parks and Wildlife Service must be notified. Works may only recommence following endorsement for such from the National Parks and Wildlife Service.

Prior to Release of Subdivision Certificate

CERTIFICATES / ENGINEERING DETAILS

- 77. A Subdivision Certificate is to be issued by the Certifying Authority prior to the registration of the plan of subdivision. The application for this Certificate is to satisfy all of the requirements of the *Environmental Planning and Assessment Regulation 2000*.
- 78. The submission to Council of documentation to demonstrate full compliance with all consent conditions in accordance with Section 157 Clause 2 (f) of the *Environmental Planning and Assessment Regulations 2000* prior to issue of the Subdivision Certificate.

FLOODING

- 79. The creation of a "Restriction on the Use of the Land" under the *Conveyancing Act 1919* on the Final Plan of Subdivision for each lot adjacent to Lake Macquarie or with a surface level of less than RL 3.79m AHD to ensure that the floor level of any habitable room is not less than 0.5m above the 100 year average recurrence interval storm level (1.38 metres) with an allowance for climate change to 2100 (0.91 metre) and an additional 1.0m for wake/wave run-up. Providing a habitable floor level of not less than RL 3.79m AHD. Such level shall be detailed on the Section 88B Instrument and related to AHD.

OTHER REQUIREMENTS

- 80. The plan of subdivision and Section 88B instrument (*Conveyancing Act 1919*) shall establish the following restrictions, with the Council having the benefit of these covenants and having sole authority to release, vary or modify these covenants. Wherever possible the extent of the land affected by these covenants shall be defined by bearings and distances shown on the plan of subdivision.
 - (a) Prohibiting direct vehicular access to proposed Lots adjacent to Kanangra Drive.
 - (b) The creation of "Easements for Support" over batter slopes adjoining the existing or proposed road reserves to benefit the Council with only Council having the right to vary the easement.
 - (c) The creation of an appropriate "Positive Covenant" and "Restriction as to User" over the constructed on-site detention/retention systems and associated works within the lots with

only Council having the right to vary the "Positive Covenant" and "Restriction as to User to ensure the continued maintenance and performance of the stormwater management system in accordance with Council's standard wording. The position of the on-site detention system is to be clearly indicated on the Final Plan of Subdivision.

81. All necessary "Easements to Drain Water and for Services" are to be provided and approved by Council prior to issue of the Subdivision Certificate and registered with the plan of subdivision. Note: "Easements to Drain Water" shall be created over the constructed swale drainage system.
82. The preparation and execution of a "Legal Agreement" between the applicant and Council to ensure the continued maintenance and performance of the stormwater management system within the main northern watercourse and adjoining Wet Detention/Retention systems for a minimum 5 year period or 80% completed development upon the created Lots after Subdivision registration.
83. Dedication of road reserves as Public Roads upon completion of the subdivision works at registration of the Final Plan of Subdivision.
84. Transfer of Lands in Fee Simple in accordance with Council's procedures as follows:
 - (a) For public reserve purposes; and
 - (b) For the constructed or natural drainage systems for drainage purposes.

DILAPIDATION

85. Any damage not shown in the Dilapidation Report submitted to Council before site works had commenced, will be assumed to have been caused as a result of the site works undertaken and must be rectified at the applicant's expense, prior to release of the Subdivision Certificate.

ROADS

86. All works requiring Council's approval as the Roads Authority under Section 138 of the *Roads Act 1993* must be approved by Council prior to issue of the Subdivision Certificate. All details are to be in accordance with Council's Development Control Plan 2005 Chapter No 67 - Engineering Requirements for Development.

SUBDIVISION WORKS

87. The certification by a Registered Surveyor, prior to issue of a Subdivision Certificate that all services and domestic drainage lines are wholly contained within the respective lots and easements.
88. The satisfactory completion of all subdivision and associated works (including water quality facilities, shared paths, water and sewer works, etc required for the development in accordance with Council's Development Control Plan 2005, Chapter No 67 - *Engineering Requirements for Development*.
89. The provision of Works as Executed information as identified in Council's Development Control Plan 2005 Chapter No 67 – Engineering Requirements for Development prior to issue of the Subdivision Certificate. The information is to be submitted in hard copy and in electronic format in accordance with Council's "CADCHECK" requirements. This information is to be approved by Council prior to issue of the Subdivision Certificate.
90. The provision of a maintenance bond in accordance with Council's Bonding Policy for a minimum of 6 months after the satisfactory completion of that section of work.

WATER AND SEWER SERVICES

91. A Section 307 Compliance Certificate under the *Water Management Act 2000* for water and sewer requirements for the development must be obtained from Wyong Shire Council as the Water Supply Authority prior to issue of the Subdivision Certificate. All works for the development must be approved by Council prior to the issue of a Compliance Certificate.

LANDSCAPING

92. The provision and maintenance of landscaping in accordance with Council's Policy Number L1 – Landscape for Category 3 development including the engagement of an approved landscape consultant and contractor to undertake the design and construction of the landscaping. All landscaping works, including the embellishment of the park areas are to be completed prior to issue of the Subdivision Certificate.

Ongoing Operation

ADVERTISING SIGNS

93. No advertisement is to be erected on or in conjunction with the development without prior development consent unless the advertisement is an 'approved sign' under Council's Advertising Signs Development Control Plan 2005 - Chapter No 50 - Advertising Signs.

OTHER REQUIREMENTS

94. A qualified and experienced bush regenerator is to be engaged to undertake weed control within the main northern watercourse, Detention/Retention Basins every 3 to 6 months for a minimum period of 5 years. Native plant regrowth is to be left undamaged. All primary weed control must be undertaken in the first year, with follow up weed control undertaken in the second and third years. Reports are to be submitted to Council twice per year detailing weed control works undertaken.