

5 December 2016

The Chairman
NSW Coastal Panel
C/- NSW Office of Environmental and Heritage
Level 14
59-61 Goulburn Street,
Sydney NSW 2000

Dear Sir,

Re: **CP16-001 Arrawarra Seawall - Applicant Arrawarra Beach Pty Ltd**

Reference is made to the above Development Application and the assessment prepared by City Plan Services (CPS), 1 December 2016, and the memo to Marc Daley, OEH, prepared by Gary Blumberg of Royal Haskoning (RH) DHV of 30 November 2016 on behalf of the Panel.

The purpose of this letter is to address matters raised and to confirm that the Panel have sufficient information to approve the Development Application. Should there remain any uncertainty in terms of revetment design, ongoing maintenance/management of the structure or any other relevant matter, it is considered that the provisions of S80(3) of the *Environmental Planning and Assessment Act 1979* provide the Panel with the statutory framework to issue the consent:

"Deferred commencement" consent:

A development consent may be granted subject to a condition that the consent is not to operate until the applicant satisfies the consent authority, in accordance with the regulations, as to any matter specified in the condition. Nothing in this Act prevents a person from doing such things as may be necessary to comply with the condition.

The Coastal Panel is reminded that all prior formal and informal requests for additional information by letter on 19 April 2016 and by email on 22 September were addressed in a timely manner. To date, the proponents have spent a significant amount of time and resources on this application. Re-development of the site consistent with the environment and residential zone objectives is not considered to be an unreasonable expectation. The whole development, the revetment and the residential subdivision, has been designed to best practice standards and to ensure the overall environmental outcome meets current environmental standards and community expectations.

It is understood that the Panel intend to determine Development Application CP16-001 on 6 December 2016. Prior to determination of the DA, it is respectfully requested that the Panel consider the following response to the matters raised by CPS and RHDHV.

Firstly, RHDHV, have "closed out" most of the matters raised in their desktop assessment of 21 September 2016. It appears that the remaining concern is the design saddle level at the seaward entrance to the estuary and that "non-government" owned seawalls should be constructed to withstand 0.8 m sea level rise to 2100. We offer further response to those outstanding concerns in discussions below, from which it is evident that both of those technical concerns would be readily addressed by a condition of consent.

Further to this, it is noted that the Panel has previously imposed deferred commencement conditions (DA CP13-001 Umina) to enable a development proposal to proceed after additional re-assessments occur to the satisfaction of the Panel and the Council. In this regard, it is

respectfully suggested that the imposition of deferred commencement condition(s) pursuant to S80(3) of the *Environmental Planning and Assessment Act 1979*, would enable the proponents to complete any additional assessments in the knowledge that the overall proposal has been granted consent.

The remaining comments/opinions are as listed below (*RHDHV comments in italics*):

1. Wave overtopping

- *Further investigation on overtopping impacts and remedial strategy required.*
- *Design wave overtopping in excess of 400 L/s per m predicted which is a very high value. Further investigation on overtopping impacts and remediation required.*

Response – Paul O'Brien, Water Technology

The concerns of RHDHV regarding the very high rates of overtopping are shared by the revetment designers. Indeed, as noted in the Design Report and subsequent responses to Requests for Information, it has been a significant focus of design efforts. The outcome of those design efforts is that the special armouring is required on crest of the structure and across the width of the E2 Zone. Such design techniques are widely used by coastal engineers to ensure the structural integrity of the revetment and land levels behind it during the 100 year ARI storm event. Any grassing or vegetation within the E2 Zone will be damaged, but not the revetment structure itself nor any essential infrastructure behind it.

We note that the concerns of RHDV appear to relate to the “*safety implications for severe wave overtopping to carry across the 20m E2 buffer*”. RHDHV have not opined that the structural design of the crest is in some way inadequate, but instead that there could be a safety issue associated with people being in the overtopping area during a 100 year ARI storm. Whilst that is certainly a valid safety issue (as it is for the entire shoreline during such events), it does not affect the structural characteristics of the revetment.

2. Revetment design re climate change

Clarification required.

Response – Paul O'Brien, Water Technology

RHDHV makes the comment that because the revetment structure is privately owned, then it should be constructed to accommodate the effects of future climate change. The current preliminary design of the proposed revetment identifies that this would require the addition of an extra layer of armour rock on the front slope when actual climate change effects manifest themselves. There is adequate room to add this armour without extending beyond the MHWB boundary.

Should the RHDHV comment reflect the policy of the Coastal Panel, then including the extra layer of armour as part of initial construction would be made a condition of consent.

Selection of +0.2 m AHD saddle level.

More detailed assessment required. In absence of further assessment and based on RHDHV review of comparable creek systems in NSE, it is suggested that -0.1m AHD saddle level be adopted.

Response – Paul O'Brien, Water Technology

It is pertinent to appreciate that whilst this issue appears to have evolved to be one on which the decision regarding the technical veracity of the design turns, it is in reality easily resolved. A 0.3 metre increase in depth across the beach berm equates to an approximately 8% increase in design wave height, which equates to an approximately 11% increase in the dimension of the average rock within the currently specified range of 350kg to 3.0 tonnes. This minor change will be readily achieved by simply amending the

average rock size in the Technical Specification that will be issued to prospective contractors during the construction phase.

If the Coastal Panel was to direct that a condition of consent was to adopt the RHDHV suggested saddle level of RL-0.1m AHD, then the rock specification will be changed to reflect the implication to rock armour size.

3. Low crest level and wave overtopping, including effects of SLR.

Strategy required to manage wave overtopping.

Response – Paul O'Brien, Water Technology

As noted above, the concerns of RHDHV regarding the very high rates of overtopping are shared by the revetment designers. It has been a significant focus of design efforts. The outcome of those design efforts is that the special armouring is required on crest of the structure and across the width of the E2 Zone.

We again note that the concerns of RHDHV appear to relate to the "safety implications for severe wave overtopping to carry across the 20m E2 buffer" rather than the structural design of the crest is in some way inadequate.

It is noted that RHDHV's brief was to review the overall suitability of the seawall and determine whether it meets contemporary engineering design standards considered appropriate for this location. RHDHV state that the various matters have now been satisfactorily addressed to assist the Coastal Panel in its consideration of the application. It is further noted that RHDHV is satisfied with the sizing of the rock armour and that the removal of the existing rock gabion will provide a safety benefit.

Secondly, the five (5) recommendations of CPS are addressed below (CPS comments in italics).

1. *The Panel (CPS) is not satisfied that the proposed revetment wall the subject of the Development Application will not, over the life of the works, pose or be likely to pose a **threat to public safety** as required by s55M(1)(a)(ii) of the Coastal Protection Act 1979.*

Response

In respect of S55M of the Coastal Protection Act 1979, the comments/opinions of RHDHV include:

- Removal of this gabion wall would remove a structure which is potentially hazardous, thereby providing a safety benefit (p9 RHDHV memo 19/9/16).
- the revetment, as currently proposed, but with some modification to fully locate the structure within the private property boundary over its life, should not unreasonably limit or be likely to unreasonably limit public access to or use of the beach, nor should it pose or be likely to pose a threat to public safety (p10 RHDHV memo 19/9/16).

Regarding maintenance of the revetment, over the life of the works, RHDHV agrees that the following condition of consent, or similar, could be imposed (Item 8 App A RHDHV memo 30/11/16).

- Pursuant to the provisions of Section 55M of the Coastal Protection Act 1979, a legally binding arrangement for the life of the works being negotiated and executed with ... City Council to ensure:
 - the restoration of the beach, or land adjacent to the beach, if any increased erosion of the beach or adjacent land is caused by the presence of the works, and
 - the maintenance of the works.

- *An easement in favour of ...City Council being created over the portion of the property affected by the revetment wall, and a positive covenant under Section 88BA of the Conveyancing Act 1919 being established over the easement, burdening the owners of the property and their successors to maintain the revetment wall to the satisfaction of the Council. Such maintenance is to also include management of future "outflanking", public safety and upgrading of the works if necessary in the future to meet changed climatic conditions.*

2. The Panel (CPS) considers that the Development Application does not contain sufficient information to demonstrate how the proposed legally binding arrangement for the **ongoing management and maintenance** of the proposed revetment wall may be extended to the restoration of adjacent land that may be eroded as a result of the proposed revetment wall, such as the land occupied by saltmarsh vegetation and littoral rainforest on the northern shore of Arrawarra Creek.

Response:
Maintenance

Consent conditions listed in (1) above will provide a suitable legally binding arrangement for the ongoing management and maintenance of the proposed revetment wall.

Saltmarsh Vegetation

The following comments from the Ecosure assessment of 29 September 2016 put into perspective the extent of saltmarsh vegetation near the site.

Approximately 20 m² of two isolated patches of Coastal Saltmarsh will be removed by the proposed action. Patches less than 4000 m² are generally considered to be less productive and more prone to degradation through external nutrient sources (TSSC 2013). Given the minor area to be cleared as part of the proposed development, it is highly unlikely that there will be adverse effects on the broader ecological community within the LGA, specifically given that there are patches within 60m of the two small patches to be cleared. The removal may have a moderate impact on the local occurrence of this community, but given the small area of removal, it is unlikely to be a significant impact on the regional occurrence.

Potential indirect impacts to surrounding patches to remain were considered from potential changes in hydrology from the seawall. The stormwater basin outlets will be positioned away from the extant patches and the rock sea wall are on the opposite side of the patches and will not likely have any adverse changes to hydrology. The sea wall is likely to improve the water quality by minimising erosion affects to the banks of the creek, therefore potentially contributing to improving the locally remaining patch health.

The removal of the two small patches on site is not considered to have an adverse effect on either the extent or composition of the EEC such that this local occurrence within the Arrawarra estuary is placed at risk of extinction (i.e. the two local populations that are isolated will be removed, however this will not impact the surrounding communities as it is not a significant patch).

Littoral Rainforest

A map showing the site boundary in relation to the mapped area of littoral rainforest is provided at Attachment A. Note that the revetment is located within the 100 m wide buffer to the littoral rainforest and is separated from the mapped littoral rainforest by Yarrowarra Creek and a nature reserve (Coffs Coast Regional Park). The Minister's Concurrence was granted pursuant to SEPP 26 Littoral Rainforests to DA 0667/16DA, copy attached. The concurrence was granted subject to proposed revegetation including littoral rainforest species. The preliminary Vegetation Management Plan includes littoral rainforest species.

3. *The Panel (CPS) considers that the primary purpose of the proposed revetment wall is to protect future residential development on the site from coastal hazards and is therefore **inconsistent with the objectives of the E2 Environmental Conservation zone** which seek to protect, manage and restore areas of high ecological or cultural values and prevent development that could have an adverse effect on those values.*

Response

Coastal protection works are permissible with consent in the E2 zone. As recently as March 2014, the panel approved coastal protection works within E2 and R2 zoned land at Umina (CP13-001) as shown at Attachment B.

The subject application shares similarities with the Umina development in that both proposals involve coastal protection works within E2 zoned land for the purpose of a residential subdivision.

4. *The Panel (CPS) considers that the proposal's **likely impacts on marine and estuarine ecosystems** have not been adequately addressed and may result in a significant change to habitat, species diversity and abundance.*

Response:

Potential ecological impacts arising from the proposal have been comprehensively addressed in the Statutory Ecological Assessment by Naturecall Ecological (December 2015) and the Addendum Report and 7 part tests of significance prepared by Ecosure Environmental in June and September 2016.

Additionally, hydro dynamic modelling (Umwelt, October 2016) indicates that flow velocity with and without the revetment are essentially the same, meaning that it is unlikely the revetment will result in changes to the estuarine environment of such a magnitude to adversely impact the surrounding ecosystem.

CPS recommends that the likely impacts of the development should be considered in the context of the comments provided by Mr David Greenhalgh of the Solitary Islands Marine Park (SIMP) and by Ms Nicky Owner of the NSW Office of Environment and Heritage. Neither of these agencies have an approval role in this development and their submissions are advisory only.

The main argument in Mr Greenhalgh's submission on behalf of the SIMP relates to the definition of the MHW. The SIMP is governed by the NSW Department of Industry (Lands). NSW Lands approved the definition of the MHW in 2014.

CPS references the SIMP's particular concern that the proposal is *to build the revetment wall some 13 m out into the Arrawarra Creek*. As consistently stated in the SoEE and the design drawings, the proposed revetment will be wholly constructed within the site boundary.

Should the Panel have any particular concern with the location of the proposed revetment in the north-western corner of the site, the construction drawings for the wall may be adjusted to more closely align with the existing location of the bank, rather than the redefined site boundary.

CPS note that in 2007 regarding a previously design seawall, Martens found that:

Since wave heights within the estuary are very low and travel distance generally long (>50m) over very shallow water, erosion on the opposite bank is unlikely to result from the proposed sea wall.

And that the Flow Velocity Modelling by Umwelt in October 2016 concluded that the proposed revetment wall will have a negligible impact on off-site erosion.

It is considered that the findings of Martens (2007) and Umwelt (2016) provide a reliable assessment of the likely impact of the proposed revetment.

5. *The Panel (CPS) considers that the potential impacts of the proposed revetment wall have not been properly addressed and remedied and therefore the subject site is not suitable for the proposed development in its current form and approval is not in the **public interest**.*

Response:

The site is **appropriately zoned** for the development. The present use of the site, the caravan park, is nearing the end of its economic life. Redevelopment for low density residential and coastal protection purposes is well within the public interest.

We are aware that many surrounding residents are very supportive of the development, both in terms of the proposed improvements to public access to the beach and the redevelopment of the caravan park for a use that aligns with the surrounding residential neighbourhood.

Public access to the coastal foreshore will be provided via a 2 m wide concrete path within a 3 m wide easement. The pathway links with the community accessway and then to Arrawarra Beach Road. Public use of the pathway will be legible, functional and covered by a registered S88B right of public accessway.

It is pertinent to note that, under present arrangements, the surrounding residents of Arrawarra village access the beach by trespassing the caravan park. Whilst this situation is tolerated, it is not encouraged due to the ongoing public liability risk.

Other relevant comments to the CPS assessment:

Statutory Considerations

Draft EPs

CPS Page 35: There is no statutory requirement at S79C(1)(a)(ii) to consider the draft SEPP (Coastal Management) 2016. **Clause 24 Savings and transition provisions** of the draft SEPP provide that the policy does not apply to a development application lodged, but not finally determined, immediately before the commencement of this Policy in relation to land to which this Policy applies.

The draft SEPP does not apply to the subject development application.

The likely impacts of the development

CPS assessment of the likely impacts of the development effectively 'closes off' the follow matters:

- Impact on coastal process – discussed in (4) above.
- Impact on Aboriginal heritage – no further issues.
- Flood and Stormwater Management – CPS request a flood history of the site, however no explanation as to the purpose of that request.
- Water quality impact – no further issues.
- Noise impact – no further issues.
- Waste impact – no further issues.

- Air quality impact – measures required to address monitoring of air quality during construction. Consent condition.
- Ecological impact – discussed in (2) and (4) above.
- Access impact – no further issues.
- Visual impact – CPS concerned with the visual impact of vegetation clearance to accommodate the revetment. See Attachment C for existing site photos and proposed landscape treatment. Visual amenity within the E2 zone will improve significantly as a result of the development.
- Construction impact – no further issues.
- Maintenance – discussed in (1) above. RHDHV 'closed out' this matter. CPS queries Council's willingness to be a party to any arrangements under S55M(2) of the Coastal Protection Act. Similarly to DA CP13-001 (Umina), a deferred commencement condition would require the negotiation of a legally binding arrangement for the life of the works.
- Site boundary – discussed in (4) above.
- Social and economic impacts – CPS states that the proponent does not address potential impacts relating to the local tourism industry. Impacts resulting from the closure of the caravan park and the residential subdivision are comprehensively addressed in DA 0667/16 submitted to Council for the subdivision of the land.

In closing, there does not appear to be any matter raised that should not be resolved by consent conditions, including deferred commencement conditions.

Should the panel wish to discuss any of the matters raised by their consultants or in this letter during the panel meeting tomorrow, 6 December 2016, please contact either Keiley Hunter on 0458 515963 or Kevin Shanahan on 0418 578 766.

Yours faithfully



Keiley Hunter

Encl:

SEPP 26 Concurrence
Attachment A – 100 m wide buffer to Littoral Rainforest
Attachment B – Coastal protection works in E2 zoned land
Attachment C – Visual impact

Mr S McGrath
General Manager
Coffs Harbour City Council
Locked Bag 155
Coffs Harbour NSW 2450

Our ref: 16/05820

Attn: Ms Renah Givney

Dear Mr McGrath

**Subject: State Environmental Planning Policy (SEPP) No 26 –
Littoral Rainforest Concurrence – 24 Lot community title
subdivision – 0667/16DA**

I refer to an application requesting the Minister's concurrence for a proposed twenty four lot community title subdivision including earthworks, vegetation removal, stormwater detention and public access on land subject to clause 4(1)(b) of SEPP 26 at Lots 1 and 2 DP 1209371 and Lot 1 DP 26125.


Following consideration of the matters set out in clause 8 of SEPP 26, the application and its supporting information, as delegate of the Minister, I am pleased to advise that concurrence has been granted pursuant to section 79B of the *Environmental Planning and Assessment Act 1979*, as required in clause 7(4) of SEPP 26, to development as described in Development Application 0667/16DA. Concurrence has been granted subject to the following conditions:

- The Vegetation Management Plan is to demonstrate that revegetation within the mapped SEPP 26 buffer area is to comprise littoral rainforest species endemic to the area;
- Unless being retained in its current alignment, the public right of footway is to be located against the residential allotment boundaries to reduce edge effects on the replanted vegetation; and
- Should the wooden footbridge for any reason in the future be no longer legally or practically accessible to the public, the pathway within the SEPP 26 buffer area is to be removed and the area revegetated.

I note that the Office of Environment and Heritage has made a number of suggestions relating to the broader impacts of this proposal and it recommended that Council consider those comments when undertaking its broader assessment of this development application.

Should you have any further enquiries about this matter, please contact Ms Tamara Prentice, of the Department's Northern Region Office. Ms Prentice can be contacted on telephone number (02) 6641 6610.

Yours sincerely

 25 July 2016

Craig Diss
Acting Director Regions, Northern
Planning Services

As delegate of the Secretary

Attachment A:

100 m wide buffer to Littoral Rainforest
Draft NSW Coastal Management SEPP 'interactive' map:



Littoral Rainforests



Proximity Area for Littoral Rainforests



Attachment C.



No significant vegetation in the E2 zone.



Cabins, retaining wall and rock gabion in the E2 zone.



Remnant vegetation in the E2 – note weeds and ornamental vegetation.



Remnant pockets of native vegetation with understorey of weed regrowth.



Remnant pockets of native vegetation with understorey of weed regrowth. Cabins in the E2 zone.



Remnant pockets of native vegetation with understorey of weed regrowth. Cabins in the E2 zone.

As detailed in the preliminary Vegetation Management Plan, tree removal in the E2 zone will be offset by replacement trees, shrubs and groundcovers using native species within the available space between the proposed revetment and the residential zone boundary. This will result in a significant visual improvement both from within the site and to the site from surrounding vantage

points. As stated in the SoEE, the project will result in the removal of aging caravan park infrastructure, including cabins and ornamental vegetation. The following extract from the Landscape Plan shows the extent of proposed landscaping.



TREE AND SHRUB PLANTING IN E2 ZONE



NATIVE GROUNDCOVERS



2M WIDE PUBLIC PEDESTRIAN PATHWAY WITHIN 3 WIDE EASEMENT.