

Application DOC16/155556

Hi

We totally support the proposal



03 May 2016

NSW Coastal Panel

Re- Application no CP 16-001

Please accept this submission regarding the construction of a rock armoured revetment wall which forms the estuarine edge of Lots 1 and 2 DP 1209371- 46 Arrawarra Beach Road Arrawarra.

This construction could have unforeseen consequences on the natural behaviour of the confluence of the 2 creeks that are an integral part of the fragile coastal habitat.

There is no identified benefit to the natural environment.

Because of the potential risk to this sensitive environment please accept this opposition to the proposal.

[REDACTED]

[REDACTED]

[REDACTED]

29/04/2016

NSW Coastal Panel

RE: Coastal Protection Works – 46 Arrawarra Beach Rd, Arrawarra 2456

DA CP16-001

To Whom It May Concern

[REDACTED] we would like to fully support Astoria's rock armoured
revetment wall.

Two years ago we were able to do the same work with large rocks and geo tech fabric, the result has been a
resounding success in that the erosion of the bank on our block is now non- existent and the marine life has
absolutely exploded, particularly at night. We would be only too happy to show this to anyone concerned.

I might also add we were put through hell by neighbours who screamed environmental recklessness; they
suddenly have nothing to say.

So in conclusion we believe Astoria's DA is to be commended, as it will only do well for the environment.

[REDACTED]

[REDACTED]

[REDACTED]

PS: All over Australia, in fact all over the world, coastal rock walls are being built or have been built in the past to
stop erosion. Coffs Harbours own harbour is totally man made.

SUBMISSION LETTER - OBJECTION TO DEVELOPMENT

Attention: NSW Coastal Panel

Application Name: Astoria (Arrawarra application)

Application Number: No CP 16-001

Location: 46 Arrawarra Beach Road, Arrawarra NSW

Development Proposal: Seawall; demolition of existing caravan holiday park structures; and development of 24 Lots.



This is my formal **submission** in regards to the proposed / application development of 46 Arrawarra Beach Road, Arrawarra NSW.

I am writing to you because I **strongly object** to the proposal of Arrawarra CP 16-001 and 0667/16DA on the following grounds:

- The proposed revetment wall is at the confluence of Yarrawarra and Arrawarra creeks that form part of the Solitary Islands Marine Park.
- The proposal wall is not sanctioned by the Solitary Islands Authority and is therefore ecologically irresponsible and poses negative externalities.
- The location of the wall is not within the site boundary. In Australian case law, land that is lost to the sea ceases to be 'real property' and reverts to Crown ownership. Therefore any boundary originally defined by survey ceases to exist and cannot be reclaimed. The wall cannot be placed where they propose.
- An additional, unacceptable risk of further erosion to the coastal reserve would occur if the proposed works took place.
- The SEPP26 littoral rainforest remnant (1 of only 2 in the Local Government Area) extends to the northern edge of Yarrawarra Creek and would be at risk of accelerated damage.
- Aboriginal artifacts of cultural significance exist on adjoining land and these could be impacted negatively.
- Accelerated erosion caused to the bank of the Yarrawarra Creek since the installation of the present gabion sea wall is evident in photographs. Some 4500m³ of public reserve has disappeared since this structure was installed.
- If the Rock Revetment wall is built as specified and extends into Yarrawarra Creek it will encourage a scour pool to be created and cause adjoining properties to erode.
- The wall will also impact on the visual amenity of several neighbours.
- The NSW Rural Fire Service (RFS) released their review on the 10/50 code being used by Astoria's development plans to remove trees - any area within 100 meters of the coastline and any area that backs onto a National Park is not under the 10/50 code, which means trees cannot be removed from the area.
- Arrawarra is an Aboriginal sacred site. Astoria did not consult with the Garby Aboriginal elders (eg Matthew Jeffery) of the Arrawarra area in their DA - an injunction by the Aboriginal elders has been filed.
- Locals / residents of (little) Arrawarra can only access Arrawarra beach through this park, development of the holiday park will impose numerous **negative externalities** onto the residents of Arrawarra (little) in terms of: removal or restricted access to the beach, increased traffic flows and noise pollution along the Arrawarra Beach Road; increased death/injury to local wallaby / kangaroo populations which frequently access and cross Arrawarra Beach Road.
- This proposed development is not in the best interest of the local community which has worked to establish itself as a unified shared sacred space with the natural environment.
- This proposed development is not in the interest of the local Aboriginal elders of Arrawarra.

As a resident: my emotional voice, voters of this area have purchased and paid stamp duty, council rates and fees here for ONE reason only: the positive externalities of this area as it is.

Kind Regards

[REDACTED]
[REDACTED]

Application Name: Arrawarra Application,
Application Number: No CP 16-001
Location: 46 Arrawarra Beach Road, Arrawarra

[REDACTED]

Dear Coastal Panel,

I want to let you know that I oppose the building of the wall at Arrawarra Caravan Park. [REDACTED]

[REDACTED]
I have often had wonderful family gatherings at the Caravan Park. [REDACTED]

They all camp together in the same area and we have great get catch-ups. My grandchildren who are spread around the country, come when they can and bring my great grandchildren to stay in the low cost cabins. This place is very important to my family. We not only have cheap accommodation but also have direct access straight through the park and over the bridge to the beautiful beach and wonderful creeks.

I am worried that if the wall is built with all the big rocks it would be dangerous for someone of my age or my younger great grandchildren to find their way to the beach. I also believe that if the area is subdivided and the park closes there will be no way for me or anyone who does not live at Arrawarra, to come park their cars and have day visits to go to this beach. This would be the first time in my life time that the general public was denied access.

Yours Sincerely

[REDACTED]

The Chair
NSW Coastal Panel
C/- Office of Environment and Heritage
PO Box A 290
Sydney South NSW 1232

Re: Submission against the Application CP 16-001 46 Arrawarra Beach Road, Arrawarra Beach P/L

Dear Sir

I am concerned about the above Application and DA 0667/16DA lodged with Coffs Harbour City Council to redevelop the Arrawarra Beach Holiday Park and its possible impacts on the fragile Arrawarra beach environment.

My concerns relate to the following:

- The need to consider Application CP 16-001 46 and DA 0067/16DA as a joint assessment and determination process.
- The Coastal Protection Act 1979 No 13 that prohibits a public authority from authorising or carrying out development in a coastal zone without the Ministers consent.
- The State Environmental Planning Policy 71 and the need for the development to comply with the principles in a responsible manner.
- The need for a revetment wall to facilitate the proposed development.
- The need to address the provisions of the of the Environmental Protection & Biodiversity Conservation (EPBC) Act in a responsible manner.
- Complying the objectives of the E2 zones as per the CHCC DCP 2015.
- The need to address vulnerable species as defined in the EPBC Act in a responsible manner.
- Recent reports that there has been limited consultation with the Coffs Harbour & District Local Aboriginal Land Council and Garby Elders.

Based on the scale and size of the development it would appear that an inappropriate proposal of this nature would not be in the best interest of the community, future generations and the amenities of this sensitive coastal environment.

The opportunity to provide comments is appreciated.

Regards

A black rectangular redaction box covering the signature of the sender.

Application Name: Arrawarra Application,
Application Number: No CP 16-001
Location: 46 Arrawarra Beach Road, Arrawarra

[REDACTED]

I now state, there are no reportable political donations (including donations of \$1000 or more) made in the previous two years that I need to declare.

I am writing to you because I object to the proposal on the following grounds.

- The proposed revetment wall is at the confluence of Yarrawarra and Arrawarra creeks that form part of the Solitary Islands Marine Park. The proposal is not sanctioned by the Solitary Islands Authority and is therefore ecologically irresponsible.
- The location of the wall is not within the site boundary. In Australian case law, land that is lost to the sea ceases to be 'real property' and reverts to Crown ownership. Therefore any boundary originally defined by survey ceases to exist and cannot be reclaimed. The wall cannot be placed where they propose.
- An additional, unacceptable risk of further erosion to the coastal reserve would occur if the proposed works took place.
- The SEPP26 littoral rainforest remnant (1 of only 2 in the Local Government Area) extends to the northern edge of Yarrawarra Creek and would be at risk of accelerated damage.
- Aboriginal artifacts of cultural significance exist on adjoining land and these could be impacted negatively.
- Accelerated erosion caused to the bank of the Yarrawarra Creek since the installation of the present gabion sea wall is evident in photographs. Some 4500m3 of public reserve has disappeared since this structure was installed.
- If the Rock Revetment wall is built as specified and extends into Yarrawarra Creek it will encourage a scour pool to be created and cause adjoining properties to erode.
- The wall will also impact on the visual amenity of several neighbours.

I thank you for this opportunity to comment.

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
Coffs Harbour City Council

Attention: Marc Daley

Secretary NSW Coastal Panel

Re: Document 16/155556 46 Arrawarra Beach Road Arrawarra DA CP 16-001

Dear Sir/ Madam

My wife and I would like to voice our total approval for the above DA. We can see only benefit to the local community in a great many ways. This revetment work will minimise soil erosion and prevent trees falling into the creek which has been an ongoing problem in this area for many years [REDACTED]
[REDACTED]
[REDACTED]

It is a well-known fact that rocks encourage marine growth and habitat for small fishes crabs etc. Which in turn attracts other species e.g. Bird life. Sadly there are no koalas in the area in my observation over the last 20 years of visiting Arrawarra and now owning our property there.

Fortunately there are many wallabies which seem to thrive along with the foxes rabbits and feral cats.

This revetment work will beautify the area, save the foreshore from more erosion whilst giving ongoing access to the beach for all to enjoy.

Under the existing usage of the area there is nothing positive to report. There has been no preventative works carried out to save the foreshore.

Let's lift the profile of the settlement to give locals and the residents the chance to enjoy this wonderful area for generations to come.

Thank you for your time and consideration.

Yours sincerely
[REDACTED]

[REDACTED]

Re: DA Coastal Protection Works, Arrawarra
Application number CP 16-001
46 Arrawarra Beach Road, Arrawarra

To whom this may concern,

I basically support the proposal for a new revetment wall to replace the existing Gabion wall but with some reservation.

I do not support the proposal of Arrawarra Beach Pty Ltd to build the revetment wall around reclaimed land area which has been lost over the years to erosion.
Approval of such a claim would have massive repercussions around the Australian coastline.

Yours Sincerely

[REDACTED]

[REDACTED]

The Chair
NSW Coastal Panel
c/o Office of Environment & Heritage
PO Box A 290
Sydney South NSW 1232

Re: Submission against the Rock Revetment Wall application CP 16-001 46 Arrawarra Beach Road, Arrawarra Beach

Dear Sir,

I strongly object to the proposed development of Arrawarra Beach Holiday Park. The proposed development is ecologically irresponsible and will irrevocably and detrimentally effect the surrounding beach environment.

The proposed revetment wall will have significant impact on aboriginal landmarks. The local indigenous community strongly oppose the development.

The proposed revetment wall will actually divert two natural water courses significantly impacting the coastal littoral rainforest.

The proposed revetment wall has not been sanctioned by the Solitary Islands Marine Park Authority.

The estimated mean high water mark is highly contestable and in fact fictitious. The current gabion wall is totally covered in a large high tide.

The proposed height of the wall is ambiguous....varying from 2m to 3m depending on which submission is referred to.

The immediate coastal environment is rich in unique Fauna and Flora the proposed revetment wall will irreversibly and detrimentally affect a variety of sensitive species.

Residents of the local Arrawarra village may have access to this beautiful unique coastal site **legally** denied to them at any time .This has already occurred under the auspices of the current owners.

This is a significant development proposal...one with irreversible consequences...a short sighted proposal which permanently damages a precious coastal **public** resource. A resource which has been managed over the years with the bordering littoral forest replanted by concerned locals under the guidance of the national parks.

[REDACTED] this Holiday Park is one pocket of a unique coastal surfing region that is still available to all.

Yours Sincerely
[REDACTED]

Application Name: Arrawarra Application,
Application Number: No CP 16-001
Location: 46 Arrawarra Beach Road, Arrawarra

[REDACTED]

I now state, there are no reportable political donations (including donations of \$1000 or more) made in the previous two years that I need to declare.

I am writing to you because I object to the proposal on the following grounds.

- The proposed revetment wall is at the confluence of Yarrawarra and Arrawarra creeks that form part of the Solitary Islands Marine Park. The proposal is not sanctioned by the Solitary Islands Authority and is therefore ecologically irresponsible.
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- The SEPP26 littoral rainforest remnant (1 of only 2 in the Local Government Area) extends to the northern edge of Yarrawarra Creek and would be at risk of accelerated damage.
- Aboriginal artifacts of cultural significance exist on adjoining land and these could be impacted negatively.
- Accelerated erosion caused to the bank of the Yarrawarra Creek since the installation of the present gabion sea wall is evident in photographs. Some 4500m3 of public reserve has disappeared since this structure was installed.
- If the Rock Revetment wall is built as specified and extends into Yarrawarra Creek it will encourage a scour pool to be created and cause adjoining properties to erode.
- The wall will also impact on the visual amenity of several neighbors.

I thank you for this opportunity to comment.

[REDACTED]

Application Name: Arrawarra Application,
Application Number: No CP 16-001
Location: 46 Arrawarra Beach Road, Arrawarra

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[REDACTED]

Application Name: Arrawarra Application,
Application Number: No CP 16-001
Location: 46 Arrawarra Beach Road, Arrawarra



I now state, there are no reportable political donations (including donations of \$1000 or more) made in the last two years that I need to declare.

I wish to keep my personal information private

I wish to object to the proposal on the following grounds. Thankyou in advance for your consideration of my comments.

- The Development Application does not adhere too many of the core aims of the *Coastal Protection Act 1979*.
- Suitable provisions and strategies have not been made to maintain the wall over its expected life.
- Possible erosion to adjacent lands, the beach and the nearby Littoral Rainforest has not been addressed or managed satisfactorily.
- I have specific concerns in relation to heightened erosion of the beach, and identified indigenous artefacts located on adjacent land and property at each end of the wall.
- The revetment wall will limit access and use of the beach by the general public. At present there is direct access via the caravan park and a concrete boat/ canoe ramp with entry straight into Arrawarra Creek. The application states '*access will be formalised through the community title scheme subdivision*'. Access by the public using a community title development does not constitute a guaranteed permanent access. The public could be denied access at a future date for the first time in history.
- The sloping shape of the works, and materials used such as huge rocks of up to 3 tonnes could pose a significant hazard to public safety.
- I advocate for a unified and long term solution for the site. Coffs Harbour Council has initiated a program to develop a Coastal Zone Management plan to address the issues of '*bank erosion, entrance management, the management of Aboriginal heritage and water quality*'. This process will allow the council, the wider community, (including local indigenous elders) and all local landholders the opportunity to participate in determining a local perspective on measures to protect and enhance the estuary in an environmentally responsible way to manage this site for all into the future.

Thank you for this opportunity to make a comment.



SUBMISSION LETTER - OBJECTION TO DEVELOPMENT

Attention: NSW Coastal Panel

Application Name: Astoria (Arrawarra application)

Application Number: No CP 16-001

Location: 46 Arrawarra Beach Road, Arrawarra NSW

Development Proposal: Seawall; demolition of existing caravan holiday park structures; and development of 24 Lots.



To the NSW Coastal Panel

Chair, NSW Coastal Panel, c/- Office of Environment and Heritage, PO Box A290, Sydney South NSW 1232.

This is my formal **submission** in regards to the proposed / application development of 46 Arrawarra Beach Road, Arrawarra NSW.

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- Arrawarra is an Aboriginal sacred site. Astoria did not consult with the Garby Aboriginal elders (eg Matthew Jeffery) of the Arrawarra area in their DA - an injunction by the Aboriginal elders has been filed.
- Locals / residents of (little) Arrawarra can only access Arrawarra beach through this park, development of the holiday park will impose numerous **negative externalities** onto the residents of Arrawarra (little) in terms of: removal or restricted access to the beach, increased traffic flows and noise pollution along the Arrawarra Beach Road; increased death/injury to local wallaby / kangaroo populations which frequently access and cross Arrawarra Beach Road.
- This proposed development is not in the best interest of the local community which has worked to establish itself as a unified shared sacred space with the natural environment.

- This proposed development is not in the interest of the local Aboriginal elders of Arrawarra.

[REDACTED] my emotional voice, voters of this area have purchased and paid stamp duty, council rates and fees here for ONE reason only: the positive externalities of this area as it is.

[REDACTED]

Application Name: Coastal Protection Works, 46 Arrawarra Beach Road, Arrawarra

Application Number: CP 16-001

Location: 46 Arrawarra Beach Road, Arrawarra

[REDACTED]

I now state, there are no reportable political donations (including donations of \$1000 or more) made in the previous two years that I need to declare.

I am writing to you because I object to the proposal on the following grounds.

- The proposed revetment wall is at the confluence of Yarrawarra and Arrawarra creeks that form part of the Solitary Islands Marine Park. The proposal is not sanctioned by the Solitary Islands Authority and is therefore ecologically irresponsible.
- The location of the wall is not within the site boundary. In Australian case law, land that is lost to the sea ceases to be 'real property' and reverts to Crown ownership. Therefore any boundary originally defined by survey ceases to exist and cannot be reclaimed. The wall cannot be placed where they propose.
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- If the rock revetment wall is built as specified and extends into Yarrawarra Creek it will encourage a scour pool to be created and cause adjoining properties to erode.
- The wall will also impact on the visual amenity of several neighbors.

I thank you for this opportunity to comment.

Signed,

[REDACTED]

Application Name: Arrawarra Application,
Application Number: No CP 16-001
Location: 46 Arrawarra Beach Road, Arrawarra

[REDACTED]

I now state, there are no reportable political donations made in the previous two years that I need to declare.
Please keep my name and contact details confidential.

I have concerns regarding the proposal and would like to object on the following grounds.

1. The proposed wall is at the convergence of Arrawarra and Yarrawarra creeks and are in the Solitary Islands Marine Park. This proposal isn't endorsed by the Solitary Islands Authority and is consequently ecologically irresponsible.
2. The wall is not located wholly within the site boundary. Australian law maintains, land that is eroded by the ocean is longer considered to be 'real property' and so becomes owned by the Crown. So original boundaries defined by survey cease to exist and can't be reclaimed. Therefore the wall can't be built in the location proposed.
3. If the revetment wall was built an unacceptable risk of further erosion to the coastal reserve would occur.
4. Extending to the northern edge of Yarrawarra Creek is the SEPP26 littoral rainforest remnant. It is one of only two in the Local Government Area. This important area would be at risk of enhanced harm.
5. On adjoining land identified Aboriginal artefacts of cultural significance exist and these could be adversely impacted.
6. Confirmation exists in photographs of enhanced erosion caused to the bank of the Yarrawarra Creek since the installation of the gabion sea wall. A substantial amount of public reserve has vanished since this structure was erected.
7. A scour pool to be created if the Rock Revetment wall is built as specified. This will encourage erosion to adjoining properties.
8. The visual amenity of several neighbouring properties will also be affected.

I appreciate your time for reading this submission

[REDACTED]

APPLICATION NO EP16-001

ARRANARRA BEACH PTY LTD.
46
ARRANARRA BEACH RD. ARRANARRA.

DEAR SIR

I am objecting to the sea wall being constructed as it will change the natural flow of the tide and the rainforest will be endangered. It's quite common knowledge that the wall they want to construct is not for environmental reasons but for the development of 24 houses. This is a naturally beautiful area - and there is no where else in NSW that is as unique Australia will lose so much as the tourists from all over the world are our best advertisement. Besides what they spend in Walgeolga - and Coffs Harbour is significant.

The Chair
NSW Coastal Panel
c/o Office of Environment & Heritage
PO Box A 290
Sydney South NSW 1232

20 April 2016

Re: Application CP 16-001 46 Arrawarra Beach Road, Arrawarra Beach P/L

Dear Sir,

I write to protest the proposed closure and subsequent development of Arrawarra Beach Holiday Park for the following reasons:

The proposed revetment wall is not located wholly within the site boundary. A previous attempt to repair and relocate the sea wall in 2008 DA 887/08 was soundly rejected by Council. Ambulatory boundary law must surely come into play in this instance, given the potential to be used as a precedent on Beachfront land already eroded.

The proposed revetment wall is ecologically irresponsible and has not been sanctioned by the Solitary Islands Marine Park Authority and its construction will irrevocably and detrimentally further change the local marine and vegetation landscape.

The Revetment Wall proposal has formulated without realistic consideration of the intensity of King Tides and Cyclonic seas and their impact via deflection upon the EPBC listed Littoral Rainforest. The current rock gabion wall has already been responsible for the significant loss of vegetation, an Aboriginal midden and changes to the estuary system, forming part of the Solitary Islands Marine Park.

Photographic evidence exists showing accelerated erosion to the northern bank of Yarrawarra Creek and the loss of the nearby coastal midden since the construction of the current gabion sea wall.

Astoria have indicated on maps submitted a fictional mean high water mark (MHWM) in both Yarrawarra and Arrawarra Creeks. Anybody who visits the site will observe the current rock wall forms a solid border to the water's edge, even at low tide. High tides most especially King Tides completely submerge the current wall

The Revetment Wall specification drawings are grossly inconsistent. Drawings 15-849NSW-00 to 15-849NSW-18 from Coastal Engineering Solutions Pty Ltd. show a minimum design height of 3m. The de Groot and Benson, Typical Section cross section drawing No: 00074-DA05 in the Engineering Issues Statement, submitted to Council with the DA, show a rock revetment design height of 2m? Please provide clarification.

The environmentally sensitive Littoral Rainforest, estuaries and Marine Park coastal landscape will be further negatively impacted by the proposed revetment wall. The SEPP 26 Littoral Rainforest extending right to the northern edge of Yarrawarra Creek (source CHCC fine scale mapping) is at risk of being further destroyed. Items listed and protected under the Environment Protection and Biodiversity Conservation Act 1999 are matters of national environmental significance and are relevant to this DA because of the potential of further serious erosion of the Littoral Rainforest by a bigger, better sea wall.

A development of this scale, impacting so heavily on the local environment should only be considered when a fully detailed and rigorous Environmental Impact Statement (EIS) is completed. None was submitted with this DA.

The Coffs Harbour and District Local Aboriginal Land Council or the Garby Elders (from Yarrawarra) have not been consulted during the preparation of either DA. Given the site has great historical

significants as a meeting place (Yarrowarra) convention should demands that a full and detailed Heritage study is completed with local input.

The Coastal Protection Act 1979 No13 prohibits a public authority from authorising or carrying out development in the coastal zone, without the consent of the Minister, *"if the Minister is of the opinion that the development: is inconsistent with principles of ecological sustainable development; adversely affects the behaviour of the sea or an arm of the sea or bay, inlet, lagoon, lake, body of water, river, stream or watercourse; or adversely affects any beach or dune, the bed, bank, shoreline, foreshore or flood plain of the sea or an arm of the sea or any bay, inlet, lagoon margin, lake, body of water, river, stream or watercourse"*.

This development raises a considerable number of issues relating to the Act that have not been addressed. The proposal claims to minimise impacts on remnant native vegetation, which can be disputed by statements trees will be removed to allow filling the site, and provide for future biodiversity through the management and enhancement of the riparian buffer land, which can be challenged because a considerable amount of the riparian buffer land would be in private hands.

The development will impact the local tourist industry. The Holiday Park is a vibrant hub of tourist activity. With the establishment of Mojo the park has attracted an even greater number of holiday makers who inject significant funds into local businesses.

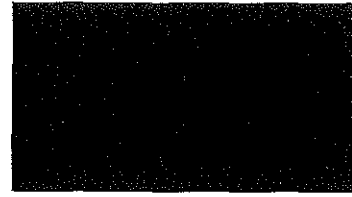
Arrawarra point is a famous surfing landmark. Holiday makers from all over Australia delight in this unique surfside Holiday Park which affords walking access to the point.

The Coastal Panel should not support this development which will adversely affect the local marine park environment, a nationally listed Littoral Rainforest and local Arrawarra residents. All Australians who over the years have stayed and forged family traditions by camping at Arrawarra will thank you for a responsible decision to this DA application.

Thank you for the opportunity to comment
Regards



Chair
NSW Coastal Panel
c/o Office of Environment & Heritage
PO Box A 290
Sydney South NSW 1232



Re: Application CP 16-001
46 Arrawarra Beach Road
Arrawarra Beach P/L

We refer to the above DA which is for a proposal for the construction of a rock armoured revetment wall which forms the estuarine edge of Lots 1 & 2 DP 1209371 at Arrawarra. We wish to lodge our objection in the strongest possible terms to the project.

A previous DA 887/08 was lodged by the proponent in October 2008 with Coffs Harbour City Council for the extension and repair to the existing seawall which was subsequently refused by Council in May 2013. At that time, we lodged an objection and a copy of the letter is appended for your information as many of the issues raised then are of great concern now for the current seawall proposal.

We have also expressed our concerns about the development proposal for a 24 Lot Subdivision with CHCC and have extracted relevant paragraphs from our letter to Council for inclusion in this letter as the 2 DA's are closely linked insofar as the residential proposal is dependant on the revetment wall proposal to succeed in its current form.

As you would be aware, the Arrawarra Holiday Park is located right at the confluence of the Yarrowarra and Arrawarra Creek systems which are constantly changing dependant on weather conditions and tidal influences and these changes naturally affect the whole estuarine environment. We are worried that a project of such magnitude will interfere with and change the whole ecology and flow of the creek systems and impact negatively on the fragile coastal landscape which surround and on the SEPP 26 listed Littoral Rainforest (refer next page).

Of great concern is the proposal to reclaim land lost to erosion over many years. The proponent is relying on a survey plan which was approved by Crown Lands on 17 December 2014 and which accepted the surveyors definition of MHW of Arrawarra Gully and Arrawarra Creek. (**Refer Crown Lands approval letter dated 18 December to Surveyor Heinz Karl at Appendice B Crown Lands Boundary Definition**).

We find it astounding that Crown Lands has signed off on this as it has always been our understanding that under NSW Ambulatory Boundaries Law that where land is gradually eroded by the sea, any part that comes to lie below the MHW ceases to be land that is real property. So effectively, by accepting the surveyors definition of MHW out in both

Yarrawarra and Arrawarra Creeks, Crown Lands have given the proponent the green light to reclaiming that part of both creeks lost to the gradual effects of coastal erosion over many years. [REDACTED] the estuary bank is configured now roughly as it was back then. When Astoria P/L purchased the property in 2002 it was with the full knowledge that the erosion had occurred long ago along both creek banks in the areas where they are seeking to reclaim to MHWL and construct a rock revetment wall.

This decision could have ramifications all along the NSW coast where erosion is becoming a very controversial issue. It could also mean that adjoining property owners in Arrawarra could reclaim land to a defined MHWL and make an application for a revetment wall out in Yarrawarra Creek and undergo a similar project if the 2 Caravan Park DA's are approved. It would certainly create a precedent if approved.

We are concerned that the DA does not properly assess the impacts of the proposed development on the sensitive estuarine systems of Yarrawarra and Arrawarra Creeks both of which are in the Solitary Islands Marine Park (part of the Marine Estate) and adjoin the subject land. Furthermore, it does not mention let alone address the fact that the Yarrawarra/ Arrawarra Creek System is an ICOLL and that due consideration should have been given to ensure that the proposed sea wall development does not impact on the natural entrance processes that occur.

In November 2015 we were involved in preliminary discussions with Council and WBM about the Arrawarra Creek Coastal Zone Management Plan study and are awaiting the Draft Options Report which is due for release soon and may have outcomes that have some relevancy to the proposed development of the revetment wall.

Of great concern to us is the incorrect mapping of the SEPP 26 Littoral Rainforest on page 29 of the Statement of Environmental Effects. CHCC's own Vegetation mapping shows that the Littoral Rainforest extends much further across the southern most section of the Coffs Coast Regional Park at Arrawarra and therefore the proposed revetment works will impact the rainforest when mapped correctly. **In respect of the Sepp 26, attached is an email response from Toni Hart, Compliance Officer OE&H confirming the EP&PC listing for the Arrawarra Littoral Rainforest site which is a nationally threatened ecological community.** It talks about the role the Australian Government has in regulating actions that may impact on defined items of Australia's natural and cultural heritage (called matters of 'national environment significance') something that the proponent has chosen to misrepresent and therefore not address.

[REDACTED]

We have already observed the negative effects of erosion on the northern bank of Yarrawarra Creek from the impact of tidal and floodwaters bouncing from the existing gabion wall which is having serious effects on the edge vegetation & SEPP26 particularly during King Tides and in severe weather events. The proposed development will in our view exacerbate an already serious problem in this area particularly if the proponent is allowed to construct the seawall out to the MHWL historical boundary. **Attached is a copy of the Arrawarra Coastcare Site Draft 2016**

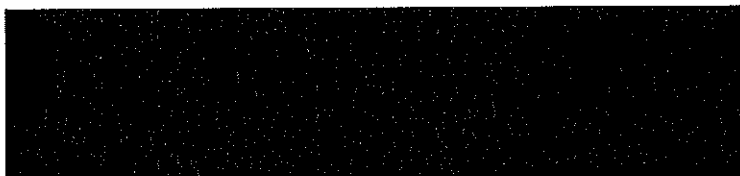
Management Plan prepared by NPWS which indicates the extent (Zone A) of the Littoral Rainforest referenced from CHCC 2012 Fine Scale Vegetation Mapping – NPWS GIS layers. You will note that the Littoral Rainforest designated as Zone A & B extends as far south to the river bank and not as depicted on page 29 of the Statement of Environmental Effects.

Also, it was disappointing to note that the local Garby Elders were not consulted nor notified of the development proposal. Due to the very rich cultural history of the Aboriginal people in the Arrawarra locality, the construction of such a large armoured wall in the 2 estuaries is not consistent with the preservation of the Midden site to the north which has already been eroded as a result of the current gabion rock wall having been constructed.

We have noticed that there is conflicting information in the Statement of Environmental Effects in respect of the height of the revetment wall. The drawings by Coastal Engineering Solutions indicate that the seawall design height will be 3.00m AHD while the Engineering Issues Statement prepared by de Groot & Benson shows a typical cross section drawing being of the internal road, proposed lot with dwelling and the E2 Buffer including revetment wall, being a height of 2.00m AHD (see attached plan). **We would appreciate this being clarified as a one meter variation is substantial.**

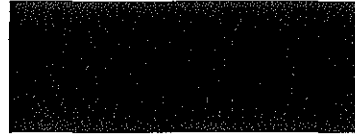
Also of concern is the sheer visual impact of the rock revetment wall from the foreshore. We note that the rocks at the toe/crest of the wall are proposed to be of significant size namely, minimum size 3 tonne and understand from the plans that the toe of the will be on the MHWB boundary. The Primary Armour nominal size is to be 1 tonne so visually it will be almost of breakwall proportions. What impact will this be likely to have on the marine environment one can only wonder.

Thank you for the opportunity to comment on this proposal and we await your decision on this important matter.



'COPY'

The General Manager
Coffs Harbour City Council
Locked Bag 155
Coffs Harbour NSW 2450




21 November 2008

Attention: Gilbert Blackburn

**Re: Development Application 887/07 Extension and repair to existing seawall
Arrawarra Caravan Park**

Dear Gilbert

I am writing to express the concerns that I have about the above proposal and wish to object to the proposal in its current form.

 I have observed the considerable changes in movement of the entrance channel from Arrawarra and Yarrawarra Creeks to the ocean over that time and, more particularly, since the existing rock gabion wall was erected in the early 1990's, there has been significant and ongoing erosion on the northern bank of Yarrawarra Creek. I am concerned that the tidal waters impacting against the existing rock wall are having serious effects on the edge vegetation and remnant Littoral Rainforest (SEPP 26) on the northern bank and on the remains of the Aboriginal Midden further north particularly during the Spring Tides, King Tides and in heavy seas.

As you would be aware, the Arrawarra /Yarrawarra Creek system is an ICOLL and in recent years the estuaries have been closed on an increasingly regular basis due to either a build up of seaweed or sand at the entrance. A back up of water then occurs for sometimes months at a time until heavy rain forces an opening. The consequences are that the water level builds up to such an extent that when it finally breaks through, it is forced over the footbridge near the entrance and also into the northern bank of Yarrawarra Creek as the water is deflected from the existing rock wall. The proposed 130 metre extension to the seawall in the currently unprotected area on the north west side of the existing seawall (from the 1 metre wide footpath) will only exacerbate this problem and cause further erosion on the northern bank putting the Littoral Rainforest at increased risk. In recent years, a group of mature Casuarina trees have already disappeared from the northern bank opposite the footbridge and the corner bank continues to wash away up to the Midden site.

The plan indicates that the extension in the north west corner from the 1 metre wide footpath will extend for a considerable distance into Yarrawarra Creek and is 3 metres high at that point. This will have a considerable impact in narrowing the existing channel where the creek bends in that corner. In times of flood the sheer volume of water coming down the creek will be forced into the northern bank and will have huge repercussions for the vegetated area on the perimeter of the north western corner including many regenerating mangroves. This will put the Littoral Rainforest in further danger from erosion from another angle. Additionally, during

high tides and heavy seas, the impacts will be similar. The extension of the seawall as proposed will also divert flood waters and high tides further onto the private properties to the west of Councils' drainage easement as the surging water deflects from the seawall.

Experience in both Australia and New Zealand has indicated that seawalls similar to that proposed by Astoria have lead to accelerated erosion in adjacent areas. These structures are designed to protect the land behind them and do not address the causes of erosion. It is my understanding that there are other options available to stop the erosion without impacting on the estuarine system and the adjacent environment.

In late 2001, the Arrawarra Creek Interim Entrance Management Strategy was completed (plan adopted 29/10/2003) which identified and examined the issues affecting Arrawarra and Yarrawarra Creeks including socio economic and environmental impacts of closure of the entrance to the ocean, changes in water quality and creek opening protocols etc. Will Astoria Developments P/L be required to demonstrate that the proposed extension to the seawall will not in any way interfere or impact on the entrance processes particularly as it relates to ICOLL management practices.

Other issues of concern when considering this proposal are as follows :-

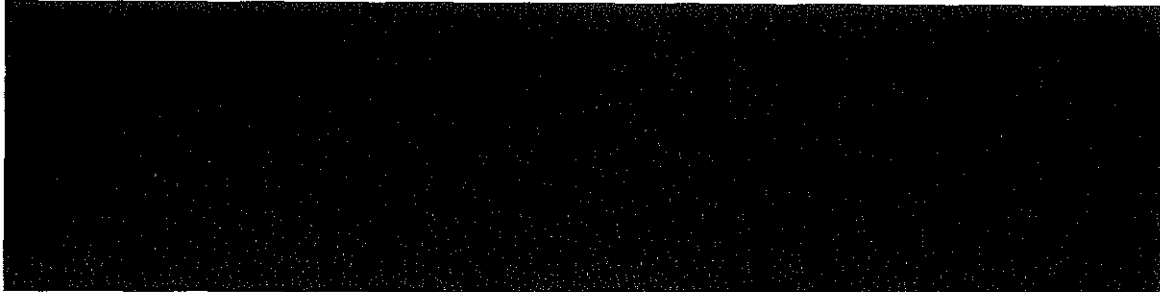
- Acid Sulphate soils likely to be present
- Visual amenity – structure intrusive in present form
- Unsuitability of wire framed gabion wall in coastal setting (eastern side)
- Loss of trees and other vegetation on southern bank Yarrawarra Creek
- Impacts of future sea level rise due to climate change
- Repercussions for the natural coastal & estuarine processes

In the event of the proposal being approved in any form, a condition of consent should be that Astoria Developments P/L is required to take appropriate measures to install erosion protection on the northern bank of Yarrawarra Creek extending from the bend in the creek to the midden area on Corindi Beach just to the north.

Could you please acknowledge receipt of my submission and I look forward to hearing from you when the application is determined.



FW: 46 Arrawarra Beach Road, Arrawarra QLD [SEC=UNCLASSIFIED]



Thank you for your email of 3 November 2014 concerning the vegetation clearing currently occurring at 46 Arrawarra Beach Road, Arrawarra QLD.

The Australian Government has a role in regulating actions that may impact on defined items of Australia's natural and cultural heritage (called matters of 'national environment significance'). These items are listed and protected under the *Environment Protection and Biodiversity Conservation Act 1999* (the Act) and include for example, Ramsar Wetlands of International Significance, listed species threatened at the national level, and certain migratory species, among others.

Matters of national environmental significance which are relevant in the Arrawarra area include the ecological community Littoral Rainforest and Coastal Vine Thickets of Eastern Australia which is listed critically endangered under the Act. In particular the koala (*Phascolarctos cinereus* combined populations of Qld, NSW and the ACT) which is listed vulnerable under the Act is known to occur within the area. You may wish to use the search tool available on the Department's website www.environment.gov.au/erin/ert/index.html to find out more about the matters of national environmental significance that may occur in the area.

Actions that are likely to have a significant impact on any matters protected by the Act require consideration by the Australian Government. This is in addition to the normal assessment and approval process administered by state and local governments.

The Squirrel Glider (*Petaurus norfolcensis*), Hoary Wattled Bat (*Chalinolobus nigrogriseus*) and Powerful Owl (*Ninox strenua*) are not listed and protected under the Act. Queries relating to their welfare should be directed to the state agency, the Department of Environment and Heritage Protection.

Officers in the Department's Compliance and Enforcement Branch will examine whether the proposal is likely to impact on any matters protected by the EPBC Act and require referral to the Australia Government for consideration and if so to ensure that any such requirement is met.

Kind Regards

Toni Hart

Compliance Officer

Compliance and Enforcement Branch

Department of the Environment

GPO Box 787 CANBERRA ACT 2601

For more information, please contact:

toni.hart@environment.gov.au

Arrawarra Coastcare
Group Started 2006

Site Plan November 2015
VPMS 295 DRAFT Feb 2016



Vegetation Condition Key

Good	Virtually weed free, structure / species composition and diversity typical for that community
Fair	Minor infestations of weed species, structure / composition mostly intact
Poor	Severe weed infestations, poor native regeneration and / or structure
Very poor	Virtually native-free! Missing most strata, very limited regeneration

NSW COASTAL PANEL
APPLICATION NO CP16-001
46 ARRAWARRA BEACH RD
ARRAWARRA

DEAR SIRS

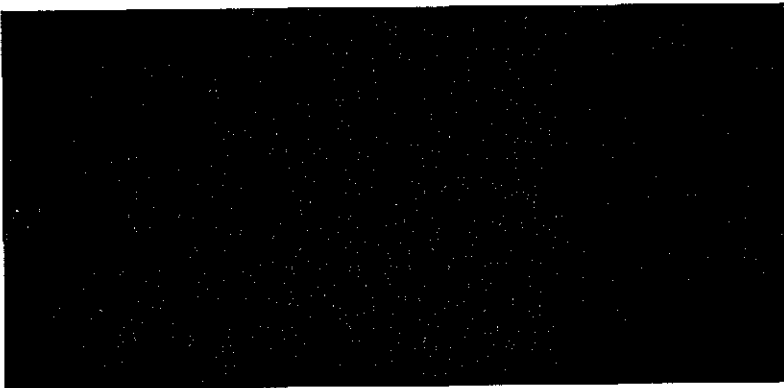
I object to the
coastal sea wall being erected
around the Arrawarra Holiday
Park - The wall will do more
damage to the environment -
which should be left to its
natural state.

Yours faithfully

Statement of Environmental Effects

Coastal Protection Works, 46 Arrawarra Beach Road, Arrawarra

Comments / Submission on the Proposal



Summary

To whom it may concern,

This submission is written to outline my objections to the DA at 46 Arrawarra Beach Road, Arrawarra, N.S.W. After reading the Development Application I have concerns that I now wish to raise with you.

Overview of my concerns:

- On first appraisal the Development Application of 370 pages appears to be an imposing document containing numerous pictures, images and information, but on close inspection it becomes clear that a specialist town planner has written the Application. The document appears to be very bias and indicates a vested interest in the Development application. It appears to be more an advocacy document than an impartial application.
- I believe the location nominated for the wall does not sit with in the current boundary.
- I do not understand how the current Development Application can be considered separate e to the revetment wall that 'The proposed development is dependent on the approval and construction of' and 'that forms an integral part of the application.' It should not be considered in isolation because the long term feasibility of the development proposed is dependent wholly on protecting site from future erosion. The works proposed are not located entirely inside the boundary of the site.
- I maintain it is ecologically irresponsible of the proponents to seek approval for this project when a Coastal Zone Management plan is being formulated for this area.
- In my opinion the wall, which will contain large rocks up to 3 tonne in size, will be extremely visually conspicuous especially from the beach.
- The heritage assessment ignores or down plays much of the important indigenous heritage on site.
- I am annoyed at the previous environmental damaged carried out by the proponents under the guise 10/50 legislation and object to their proposal to destroy more trees. Also I contend replacement planting may be rejected due to bushfire risk.
- A detailed assessment the development would have on flora and fauna in the estuary is a major omission.
- I object to the inference that public access will be improved.
- The location of the Littoral Rainforest present on the northern bank of the Yarrawarra Creek has not been accurately defined.
- The viability of the current holiday facility is severely understated.
- The social impact the closure of the Caravan Park would cause has not been addressed.
- The submission fails to adhere too many of the core aims of acts and policies in place for the future use and benefit of coastal zones.

I thank you in advance for your consideration throughout the following document.

Introduction

As described on Coffs Harbour Council Website

http://www.coffsharbour.nsw.gov.au/places-for-living/our-coast/Pages/arrawarra_creek.aspx

Arrawarra Creek

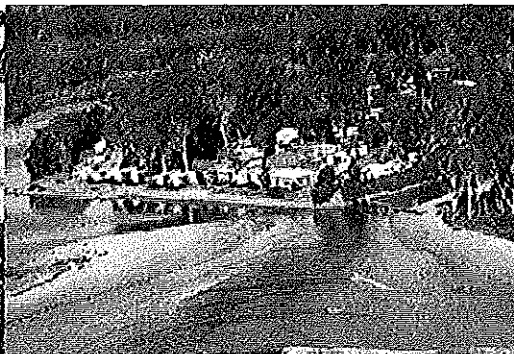
Arrawarra Creek is a small estuarine water body situated at Arrawarra, approximately 30 kilometres north of Coffs Harbour. The creek has a typical water area of around 0.2km² and a catchment area of approximately 20km². It is generally accepted that the creek is in good health.

While the creek is open to the sea most of the time, it occasionally closes due to natural accretion of the entrance sand berm, giving it a classification of an ICOLL - an Intermittently Closed and Open Lake or Lagoon. When closed from the ocean tidal exchange is limited which can effect water quality and the health of fish in the creek.

The estuary catchment has several cultural heritage sites that are highly valued by the local aboriginal community, which include middens and open campsites. Breakout events of the closed creek can cause erosion of a large midden located adjacent to the estuary entrance.

While Coffs Harbour City Council have artificially opened the estuary a number of times in the past, the Interim Entrance Management Strategy, Arrawarra Creek has been developed to limit mechanical opening of the ICOLL unless clear risks to both ecological and human health are present.

As outlined the estuary is an ever changing landscape and numerous images exist to demonstrate changes in the path taken by Arrawarra Creek to the ocean. Recently the river was closed to the ocean tidal exchange and required Coffs Harbour City Council to artificially open the estuary. The river entrance was created in a southerly location which is far removed from the normal, natural location of the river mouth which is generally to the north.



I have personally witnessed the current gabion rock wall regularly topped during high tides and have seen the waves breaking on the footbridge during king tides and storm activity. For this reason I foster strong concerns for the possibility of erosion to adjacent unprotected banks should a large protective structure be installed. I harbour fears for the ongoing health of the estuary and continued preservation of nearby significant environmental and heritage sites. My specific concerns are outlined in this submission.

Specific Comments

Summary

The proposed revetment wall is located entirely within the site's boundaries and will enable the site to be developed under separate future proposals for residential land use consistent with the Coffs Harbour LEP 2013 R2 Low Density zone objectives and of a similar character to the adjoining residential neighbourhood.

I oppose the statement above. The location proposed for the new wall does not appear to sit within the current site boundary. Disputes over land covered by the sea, date back for centuries. The doctrine of accretion is a well settled doctrine. Natural boundaries formed by a permanent body of water are called ambulatory boundaries and since the bounding water lines alter over time, the legal boundaries also change. In NSW boundaries shaped by tidal waters are defined by the mean high water mark and any land that is steadily eroded ceases to be 'real property' and ownership of the land lost and it reverts to the ownership of the crown. The Mean High Water Mark as shown in the application is absolutely absurd as locals are aware and have regularly witnessed the current gabion wall inundated by high tides and totally submerged during king tides. The wall cannot be built where the surveyors have indicated. Some of this land belongs to the crown.

1.1 Background

A separate Development Application will be lodged with Coffs Harbour City Council for a residential subdivision of the land.

Remarkably Development Application no 0667/16DA has been submitted to Coffs Harbour Council prior to approval for the construction of the revetment wall. Submissions from the public closed on 22nd April 2016. It is difficult to fathom how the residential development can be considered separate to the revetment wall that 'The proposed development is dependent on the approval and construction of' and 'that forms an integral part of the application.' It should not be considered in isolation because the long term feasibility of the development proposed is dependent wholly on protecting the site from future erosion. It would seem the proponents have put the cart before the horse and it seems pertinent to consider any feasible reason for these actions. Perhaps a statement in point 1.2 Consent Authority could explain the proponents haste.

'Note: If a coastal zone management plan does not apply to land on which coastal protection works are proposed, the Coastal Panel has the function of determining the development application (CI 129A of SEPP Infrastructure). It is noted that Coffs Harbour City Council has adopted a Draft Coastal Zone Management Plan, however the Minister is yet to certify this plan.

Consequently a coastal zone management plan does not apply to the site and the Coastal Panel is the consent authority'.

Coffs Harbour City Council has taken steps with money received under the NSW Estuary Management Program to develop a Coastal Zone Management Plan for Arrawarra Creek. State Government funding was received to manage, enhance and protect local estuaries.

<http://www.coffscostadvocate.com.au/news/funds-coffs-estuary-ecohealth-projects/2479182/>

In December 2014 it was announced by Member for Coffs Harbour Andrew Fraser and Environment Minister Rob Stokes

'funding has come from this year's round of the Estuary Management Program'. And "The council will receive an additional \$50,000 to develop a Coastal Zone Management Plan for Arrawarra Creek to help preserve its environmental and cultural values.

"The main issues relating to Arrawarra Creek include bank erosion, entrance management, the management of Aboriginal heritage, and water quality."

Both projects are co-funded by local councils.'

The important process to develop a management plan to protect Arrawarra Creek has been put in place by Coffs Harbour Council in association with the NSW Office of Environment and Heritage. In November 2015 it was reported 'residents are invited to a workshop regarding the development of a draft plan to enhance and protect Arrawarra Creek on Thursday'.

<http://www.coffscostadvocate.com.au/news/management-plan-to-protect-arrawarra-creek-on-work/2838643/>

The workshop would

- *'assess the initial development of the draft Arrawarra Creek Coastal Zone Management Plan.*
- *Issues set to be discussed at the workshop include creek bank erosion, creating walkway networks along the creek foreshores, addressing pollution from rural and urban properties and nurturing vegetation along the creek banks.*
- *Coffs Harbour City Council is interested to obtain feedback from residents about highly valued areas of the creek that may need improved management as well as ideas for future use and conservation.*
- *The council is developing the plan in association with the NSW Office of Environment and Heritage, and consultants BMT WBM have been engaged to prepare the plan.*
- *Development of the plan will take about 18 months and will involve community consultation, assessing existing data, identifying information gaps and technical studies to understand the estuary health of Arrawarra Creek.*
- *The final plan will form the basis of applications for grant funds to put the strategies into action*

The essential process in place is in accordance with some of the core aims of many acts including the Environmental Planning & Assessment Act

c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

The Coastal Protection Act 1979 No 13

(f) to recognise the role of the community, as a partner with government, in resolving issues relating to the protection of the coastal environment.

The Water Management Act 2000

(d) to recognise the role of the community, as a partner with government, in resolving issues relating to the management of water sources.

And Coffs Harbour Coastal Reserves Plan of Management of 2000.

- *to ensure that the community is able to be involved in the preparation and implementation of the Plan of Management.*

It would seem pertinent and environmentally responsible for the proponents to await the outcome of the Coastal Zone Management Plan to allow them to properly address concerns, yet they state '*It is noted that Coffs Harbour City Council has adopted a Draft Coastal Zone Management Plan, however the Minister is yet to certify this plan*' and use this as a reason to bypass other authorities to gain approval from the Coastal Panel. It is inconceivable to suggest the revetment wall could be approved prior to the completion of this necessary local study.

2.1 General Description of the Proposal

Planning Intention

The proposed revetment wall has been designed in a way that is visually unobtrusive, by using locally sourced rock placed against the existing bank thereby minimising the volume of earthworks required, reducing the potential for adverse environmental impact.

I object to the statement the wall is 'designed in a way that is visually unobtrusive', in point 2.2 Revetment wall it is outlined;

The proposed three rock armour design method is summarised below. A full revetment wall design set is provided at **Appendix C**.

Type A – Primary Anchor

- Nominal 1 tonne rock size;
- 250 kg – 3 tonne allowable range maximum 50% greater than 1 tonne;
- Min. 2 layers placed on slope of revetment.

Type B – Toe/Crest Buttress

- Min. 3 tonne rock size;
- Single row of rocks placed shoreward most edge of crest armour (Type 1 revetment) and at the base of front armoured slope (Type 1 and 2 revetment);
- Individual rocks to be in firm contact with adjacent Type 'B' rocks.

Type C – Filter Armour

- Nominal 100 kg rock size;
- 30 kg – 350 kg allowable range maximum 50% greater than 100 kg;
- Min. 2 layers placed directly beneath Type 'A' and 'B' primary armour and as a scour blanket behind Type 2 Revetment.
- Suitable geotextile fabric will be used and properly held in place between the under layer and the sand core material.
- Sand back-fill (where required) will be imported to site and similar to the native sand

It is difficult to agree that the importation and positioning of rocks of the nominated size of 3 tonne and 1 tonne would be visually inconspicuous. The view from the beach would be altered considerably.

2.3 Heritage

An AHIMS search was undertaken with a buffer of 200 metres. This search returned three recorded Aboriginal sites within 200 m of the Project Area. A second search was conducted with a buffer of 50 m. The search returned no recorded Aboriginal sites for Lot 1 DP789002 and 2 recorded Aboriginal sites for Lot 12 DP835612. A more extensive search identified the following recorded Aboriginal sites:

- a) 22-1-0034 Arrawarra 3 (AGD 56 518800 6674500) Artefact; and
- b) 22-1-0392 Arrawarra Headland Site (AGD 56 518761 6674645) Partially Destroyed Artefact and Shell.

Issues associated with site Arrawarra 3 are the inaccuracy of the coordinates which suggest it was recorded pre GPS. As such, without a site card and plan this site cannot be positively located. The coordinates for the Arrawarra Headland Site (#21-1-0392) place it immediately west of the Project Area however, the name of the site would suggest it is located on Arrawarra Headland. No site card was available for this site from the AHIMS database.

The shell scatter identified within the northwest corner of the Project Area is identified as being part of Arrawarra Headland Site (#22-1-0392) on the basis of geographic proximity to the existing site record and to the known Arrawarra 1 midden across the creek (Smith 1998). The shell scatter is located well within the proposed environmental protection zone and as such is not directly impacted by development application. Amelioration of disturbance from pedestrian traffic should be considered by removal of pedestrian activity or vegetative restoration of the site.

I suggest the heritage assessment carried out ignores much of the true heritage of the area and displays a complete lack of understanding of the legacy that makes Arrawarra culture so unique and irreplaceable. Indigenous links with the area is well documented. Arrawarra means 'meeting place' and has long been a special location for the local Gumbaynggirr people who would meet in the area to share stories and provisions. Significant research has taken place of the importance of this area to the local indigenous people

http://www.arrawarraculture.com.au/fact_sheets/pdfs/00_Fact_Sheets_Booklet.pdf

The location of midden shells and artefact scatter has been clearly identified. The RMS document, PACIFIC HIGHWAY SAPPHIRE TO WOOLGOOLGA UPGRADE, Aboriginal cultural heritage assessment of project area, Arrawarra on page 10 outlines registered Aboriginal sites and Past archaeological assessments/investigations. A diagram on page 11 details the location endangered artefacts.

Midden # 22-1-079 and artefact scatter 22-1-034

<http://www.rms.nsw.gov.au/documents/projects/northern-nsw/sapphire-to-woolgoolga/sapphire-s2w-arrawarra-rest-area-report-appendix.pdf>

Furthermore the Heritage Study could be considered amateurish as neither the Garby Elders (from Yarrawarra) or the Coffs Harbour and District Local Aboriginal Land Council were consulted. Their dismay and outrage is clearly outlined in a newspaper article dated march 19th 2016.

<http://www.coffscostadvocate.com.au/news/elders-lodge-injunction-on-subdivision/2968784/>

Surely because large sections of the development site will be covered by up to 1.5 meters of fill the traditional owners should be contacted for guidance on decisions that affect areas significant to them. This action goes against the NSW Coastal Policy 1997 that outlines the direction for coastal zone management and planning in NSW.

'It seeks to ensure the natural, cultural, spiritual and heritage values of the coastal environment are protected whilst acknowledging and planning for population growth and economic development.'

One of the outlined themes is 'respecting indigenous and European cultural heritage.'

I strongly suggest the proponents failed to comply with directions of the NSW Coastal Policy 1997.

2.6 Ecological Assessment

Fauna Results

Habitat evaluation

The site is highly modified and therefore lacks habitat features such as wetland/aquatic habitats, an understory of nectar-producing trees, logs or similar debris, significant groundcover or leaf litter, Allocasuarinas or caves.

15 hollow-bearing trees (and nest boxes), mostly in the area currently mapped as Secondary Koala Habitat, preferred sap species, a limited extent of edible-fruit producing trees/palms and a limited abundance of nectar producing trees (with flowering season ranging over most of the year) were identified within the site.

This statement upsets most Arrawarra Locals and anyone who knows what the proponents 'Astoria Group' has done to the wonderful trees that existed in the park. It is well documented that actions by them are very much the reason the site is 'highly modified'

This link will direct you to a newspaper article about their horrific act.

<http://www.coffscoastadvocate.com.au/news/resort-fear-sparking-unrest/2441806/>

And Greens Politician David Shoebridge was so horrified by their actions that he read two notices of motion onto the record in the NSW Parliament

<http://davidshoebridge.org.au/2014/11/14/summer-of-tree-clearing-across-nsw/>

Notice 2 is of interest and is shown below

2. That this House notes with concern that:

(a) on 3 November 2014 on the Mid North Coast in the North Arrawarra caravan park, felling under the 10/50 code resulted in the loss of approximately ten large mature swamp mahogany, red gum and paperbark trees, with a further 40 trees of a similar species mix and size marked for felling,

(b) the area in which these trees are being felled is part of a swamp mahogany endangered ecological community, mapped secondary koala habitat and part of a Council recognised coastal wildlife corridor,

(c) furthermore the area is a recorded habitat, nesting and feeding ground for species including koalas, squirrel gliders, black cockatoos, powerful owls and hoary wattled bats.

These questions must be asked:

If the 40 odd trees were destroyed under the guise of 10/50 code and therefore for bushfire protection and safety why were trees that stand in close proximity to the long term onsite cabins spared? Was the new law blatantly manipulated to remove the trees that suited their plan? Arrawarra Beach Pty Ltd (of 1/55 Grandview Street, Pymble) now want to destroy more trees and are offering to plant others, which in reality they are in all likelihood not able to plant, to offset the losses.

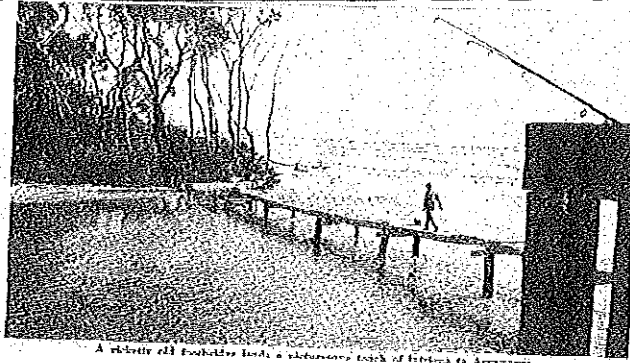
Furthermore an assessment of the impact on the estuarine flora and fauna is a major omission from the Development Application and is further proof of the shortcomings of the publication. The likely impacts of reclamation of areas of the creek and the construction of the revetment wall must be assessed. The SEPP26 Littoral Rainforest remnant (one of only two in the Local Government Area) extends to the northern edge of Yarrawarra Creek. Photographic evidence exists that demonstrates accelerated erosion on the northern bank since the installation of the current rock gabion wall with a substantial amount of public reserve vanishing.



View across Arrawarra Bridge 1979



View back to the Caravan Park prior to installation of Gabion Wall.



Picture from Daily Examiner Thursday, November 26, 1992



Current view demonstrating the loss of important coastal land.

Also Identified indigenous artefacts exist on adjacent land. It is inconceivable that approval could be granted without a thorough investigation into the possible risk to adjoining land that has extreme environmental and cultural significance.

2.7 Social and Economic Impact

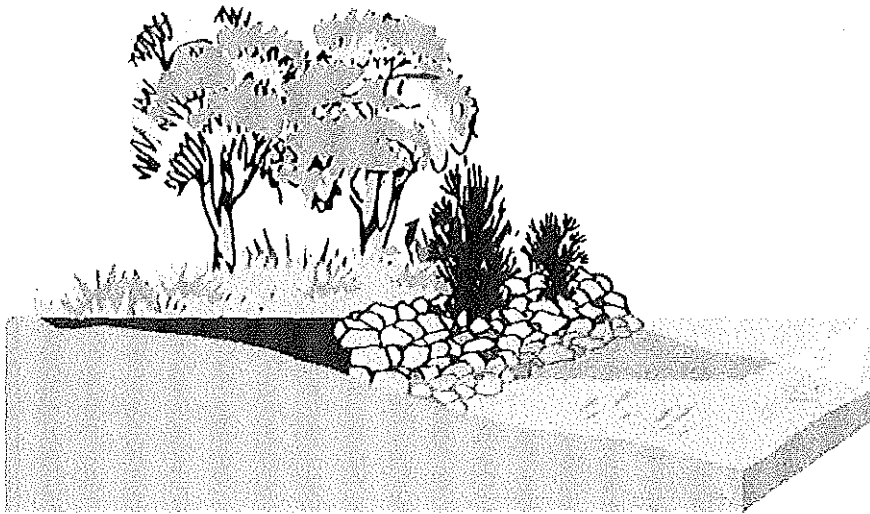
Visual amenity and recreational value of the proposed revetment wall

An image showing the finished seawall and mature vegetation is provided at **Illustration 2.6**. Overall, these changes are considered to be positive for the following reasons:

- The natural rock design is visually less obtrusive than the existing rock gabion baskets.
- Old style cabins and 'unsympathetic' landscape elements – old picnic tables, ornamental garden shrubs and trees presently occupy part of the 20 m wide E2 zone buffer between the caravan park and the estuary. The proposed revetment wall and re-vegetated buffer will return this area to a more natural state for public enjoyment.
- Paths and passive recreation areas will create opportunities for walking, picnics and fishing off the rocks.

I strongly object to several of the statements above. It is difficult to agree that *'The natural rock design is visually less obtrusive than the existing rock gabion baskets'*. As the proponent has outlined this wall will contain rocks of up to 3 tonne in size and include Potential disadvantages of *'Possible community concerns over visual amenity'*. Also as the proponent outlines the wall will reduce foreshore space because of the sloping design.

Considering this, the statement *'The proposed revetment wall and re-vegetated buffer will return this area to a more natural state for public enjoyment.'* Requires further consideration because they also state *'Foreshore access restricted to designated pathways/stairways. (This can also be considered as a potential advantage – random pedestrian access over the rocks is difficult, meaning less impact on natural marine re-growth within the rock areas)'* I have difficulty seeing how this newly created sloping, foreshore restrictive wall is going to provide *'public enjoyment'*. Furthermore I dispute the accuracy of illustration 2.6 provided (shown below). The diagram does not represent a wall as described in the submission. There is no evidence of the rocks of up to 3 tonne displayed. The wall as nominated would be much more intrusive than the design portrayed below.



2.8 Vegetation Removal

The site was previously surveyed by Umwelt Australia in 2004 who did not detect any Koala activity. Idyll Spaces also undertook a survey of vegetation within the site in 2014 as part of a due diligence assessment for previous vegetation clearing. Elks confirmed that site vegetation did not contain any threatened flora species or form part of an EEC listed under the EPBC Act.

Replacement planting

The proposal requires the removal/modification of many of the native trees located in the E2 zone. Under Council's Koala PoM, offset planting is required. Part of the E2 zone will be planted out with associated understorey to establish a self-sustaining native vegetation community as per CHCC's guidelines.

On page 100 of the application in the Statutory Ecological Assessment carried out by Naturecall Environmental is contained the following disturbing information;

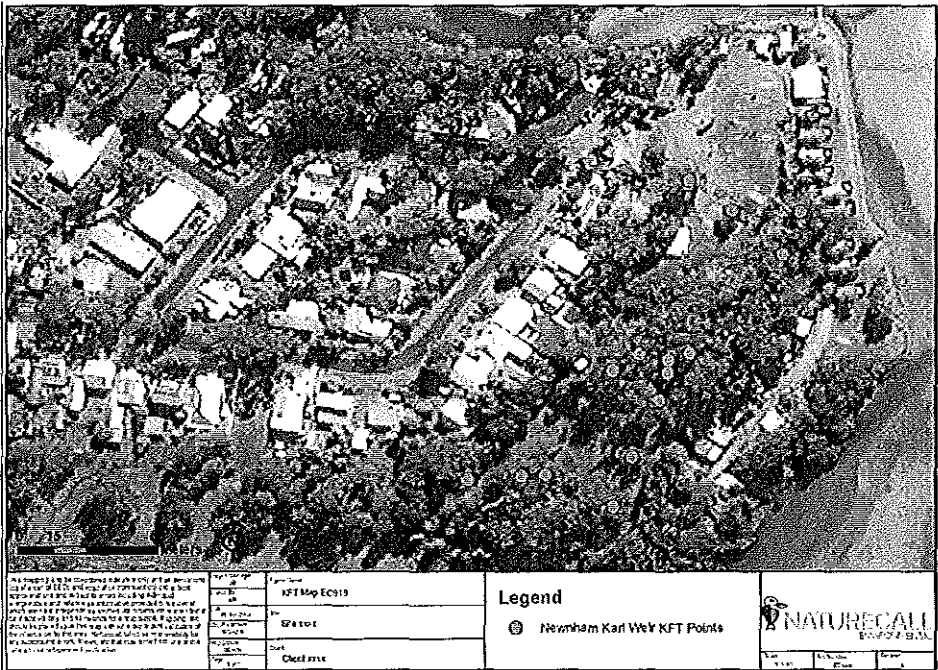
Direct impacts from the proposed development would result in:

- Loss/modification of approximately 1.8ha of urban woodland and exotic grassland vegetation, including about 10 Schedule 2 primary Koala browse trees.
- Loss of foraging resources for a number of threatened and migratory species eg. Koala browse species, sap and nectar producing species.
- Loss of 15 hollow-bearing trees providing potential roosts for small to medium hollow-obligate species
- Further fragmentation of local habitat.
- Prevention of recovery of native vegetation (on-site)

On page 152 an illustration is supplied of the Hollow-bearing trees trees that would be lost.



Page 173 displays the location of current Schedule 2 Koala Food Trees identified on site.



Naturecall Environmental recommends measures to reduce impacts and offset the loss of trees:

i. Vegetation management and habitat augmentation: The E2 zone is to be subject to a Vegetation Management Plan which will see removal of weeds (including exotic ornamentals), and supplementary/infill planting over an estimated 1575m² with Koala food trees to offset loss of trees on the remainder of the site. Nest boxes are also to be relocated/installed to offset loss of hollow-bearing trees.

Using Coffs Harbour Council guidelines, the mentioned offset would need to be planted at a concentration of 1 tree per 15 meter squared. The Statement of Environmental Effects nominates the E2 land mentioned as bushfire prone and for this reason it would be irresponsible to nominate this zone for compensatory planting. As soon as these plantings are brought into question due to Bushfire Risk, the proponent will not be able to comply with the compensatory plantings proposed. It is pertinent to note the applicant has previously avoided meeting development consent compensatory vegetation requirements. It would be negligent to approve the DA because, it would ultimately lead to the unacceptable, complete destruction of the important koala habitat, that the proponent irresponsibly commenced under the guise of 10/50 legislation.

2.9 Visual Assessment

The visual impact of the proposed revetment wall will be further reduced by replanting native vegetation within 'open' areas of the E2 zone, setback from the top of the revetment wall. The proposed replacement planting is described as follows:

- 'habitat tidal' planting along the north-western boundary of the Yarrawarra Creek and the southern corner of Arrawarra Creek;
- 'open cluster tidal planting' along the northern boundary of Yarrawarra Creek and the boundary of Arrawarra Creek;

As previously stated there is a distinct possibility the proponent will be unable to fulfil the promise of compensatory plantings they have proposed. The E2 land mentioned is located in bushfire prone nominated area and for this reason it would be reckless to nominate this zone for compensatory planting. This could therefore create the possibility of a bare wall with no added vegetation presenting a very unappealing visual impact.

3.3 Coastal Protection Act 1979 No 13

The *Coastal Protection Act (CP Act) 1979* is the principal piece of legislation that applies to the NSW coastal zone. It aims to provide for the protection of the coastal environment of the State "for the benefit of both present and future generations". This Act contains provisions relating to the use and supervision of the coastal zone, the carrying out of development within the coastal zone and the preparation of the Coastal Zone Management Plans.

The Act prohibits a public authority from authorising or carrying out development in the coastal zone, without the consent of the Minister, if the Minister is of the opinion that the development:

- is inconsistent with principles of ecologically sustainable development;
- adversely affects the behaviour of the sea or an arm of the sea or any bay, inlet, lagoon, lake, body of water, river, stream or watercourse; or
- adversely affects any beach or dune, the bed, bank, shoreline, foreshore or flood plain of the sea or an arm of the sea or any bay, inlet, lagoon margin, lake, body

of water, river, stream or watercourse.

As demonstrated in **Section 3.15**, the development meets ESD principles. The revetment wall has been designed in accordance with '*A Guide to Improving the Environmental Value of Seawalls and Seawall-lined Foreshores in Estuaries*', using low sloping, random sized natural rock material placed to encourage the regeneration of sea grasses, to encourage marine habitat and to reduce the potential for scour in front of and erosion at either end of the wall.

I stringently object to the statement the development '*meets ESD principles*' as previously outlined in my submission Coffs Harbour City Council has commenced an Estuary Management Program to develop a Coastal Zone Management Plan to manage, enhance and protect the local estuary of Arrawarra Creek. The proposed wall could '*adversely affects the behaviour of the sea or an arm of the sea or any bay, inlet, lagoon, lake, body of water, river, stream or watercourse*' therefore must comply *with* Coastal Protection Act 1979 No 13 that states.

'The Act prohibits a public authority from authorising or carrying out development in the coastal zone, without the consent of the Minister' It could be seen the proponents are attempting to gain approval for the wall before the Coastal Zone Management Plan is completed.

The objects of the CP Act are to provide for the protection of the coastal environment of the State for the benefit of both present and future generations

I submit the development application fails to adhere to a considerable number of the aims of the act, especially in terms of

- (a) to protect, enhance, maintain and restore the environment of the coastal region, its associated ecosystems, ecological processes and biological diversity, and its water quality, and
- (b) to encourage, promote and secure the orderly and balanced utilisation and conservation of the coastal region and its natural and man-made resources, having regard to the principles of ecologically sustainable development, and
- (c) to recognise and foster the significant social and economic benefits to the State that result from a sustainable coastal environment, including:
 - (i) benefits to the environment, and
 - (iii) benefits to culture and heritage, and
 - (iv) benefits to the Aboriginal people in relation to their spiritual, social, customary and economic use of land and water, and
- (d) to promote public pedestrian access to the coastal region and recognise the public's right to access, and
- (f) to recognise the role of the community, as a partner with government, in resolving issues relating to the protection of the coastal environment, and
- (i) to promote beach amenity.

Considering the inability of the Development Application to adhere to the aims of the act the submission should be denied.

As demonstrated in this report and at **Appendix F, Coastal Policy** the proposal meets the objectives of the CP Act by:

- Protecting and maintaining the boundary of the site from further coastal erosion. Protection of the site boundary will provide new opportunities for terrestrial and marine biodiversity both within the revetment wall and within the E2 buffer area.
- The proposed future residential subdivision includes a community title scheme and neighbourhood property that will improve public access to the coastal foreshore.
- The proposal meets ESD principles by securing and improving the coastal buffer area for the benefit of future generations.

I object to the statement '**The proposed future residential subdivision includes a community title scheme and neighbourhood property that will improve public access to the coastal foreshore.**' And reject the inference that this as a community lot. It is not a wonderful common area for all to use, including a carpark for day visitors who are not lucky enough to reside in Arrawarra. It is actually an access road to their proposed subdivision, with a footpath tacked on the end that appears to meander through the E2 zone. As a member of the general public I find the proponents attitude to the issue of public access as aloof, out-of-touch and offensive.

Lot	Area (m2)*	Frontage (m)*	E2 (m2) *	R2 (m2)*
1Community lot	9,304	nil	5,746	3,558

Current access to the beach by all public is not restricted and is via the front gate of the Caravan Park. Mojo surf the current tenants have welcomed all members of public access the beach. The proposed alternate access is more circuitous than the present situation. There also exist six car parks that are located on Arrawarra Beach Road. These can be utilised by day visitors from anywhere. The word public is defined '*as the people constituting a community, state, or nation*' <http://www.dictionary.com/browse/public> the proponents use of the word public throughout the application can only be seen as just the Arrawarra community because no provision has been made for parking or access for public from '*state or nation*'. This development would affectively restrict access to the location by the general public for ever and for the first time in history.

Considering this I disagree with the statement '*The proposal meets ESD principles by securing and improving the coastal buffer area for the benefit of future generations*' because it appears the only future generations to benefit will reside in Arrawarra. I am confident the Coastal Protection Act 1979 was created to protect the General Public from this type of restrictive development.

3.5 Marine Estate Management Act 2014

The proposed revetment wall will have a short term adverse impact on the marine estate during construction of the sea-wall, however, upon completion, of the sea-wall will have a beneficial impact upon the marine estate by:

- Providing a native vegetation buffer directly behind the top of the proposed revetment wall.
- Providing new habitat for terrestrial and aquatic species within the gaps amongst the revetment wall.
- Improving estuarine water quality through filtration within the revetment wall of pollutants in overland runoff before it enters the creek.
- Removal of the existing 'hard' rock gabion wall.

I reject to the implication that upon completion, *'the sea-wall will have a beneficial impact upon the marine estate'* as there has been no scientific evidence supplied to substantiate this statement.

The application fails to meet some of the core aims of the act in relation to;

- (i) promotes a biologically diverse, healthy and productive marine estate, and
(ii) facilitates:

- the cultural, social and recreational use of the marine estate, and
- the maintenance of ecosystem integrity,

3.6 Water Management Act 2000

http://www.austlii.e coreedu.au/au/legis/nsw/consol_act/wma2000166/s3.html

Once more I suggest the application does not address many of the core aims of the Water Management Act 2000.

The objects of this Act are to provide for the sustainable and integrated management of the water sources of the State for the benefit of both present and future generations and, in particular:

- (a) to apply the principles of ecologically sustainable development, and
(b) to protect, enhance and restore water sources, their associated ecosystems, ecological processes and biological diversity and their water quality, and
(c) to recognise and foster the significant social and economic benefits to the State that result from the sustainable and efficient use of water, including:
(i) benefits to the environment, and
(ii) benefits to urban communities, agriculture, fisheries, industry and recreation, and
(iii) benefits to culture and heritage, and
(iv) benefits to the Aboriginal people in relation to their spiritual, social, customary and economic use of land and water,
(d) to recognise the role of the community, as a partner with government, in resolving issues relating to the management of water sources.

The proposal does not adhere appropriately to many of the aims of the act outlined above. I propose the application should be rejected.

3.7 State Environmental Planning Policies

State Environmental Planning Policy (Infrastructure) 2007

SEPP Infrastructure prevails over any other EPI except where SEPP 14 (Coastal Wetlands) and SEPP 26 (Littoral Rainforests) apply.

Clause 129A (Development with consent) provides that:

1. Development for the purposes of a sea wall or beach nourishment may be carried out by any person with consent on the open coast or entrance to a coastal lake.
2. If a coastal zone management plan does not apply to the land on which any such development is to be carried out, the Coastal Panel has the function of determining a development application for development to which this clause applies.

A coastal zone management plan does not apply to the subject land, therefore the Coastal Panel will determine the development application.

1) Before determining a development application for development to which this clause applies, the consent authority must take the following matters into consideration:

- a) the provisions of any coastal zone management plan applying to the land,*
- b) the matters set out in clause 8 of State Environmental Planning Policy No 71—Coastal Protection,*
- c) any guidelines for assessing and managing the impacts of coastal protection works that are issued by the Director-General for the purposes of this clause and published in the Gazette.*

Once again the proponents demonstrate clearly their intention to try to have the approval obtained before an environmentally responsible coastal zone management plan is completed.

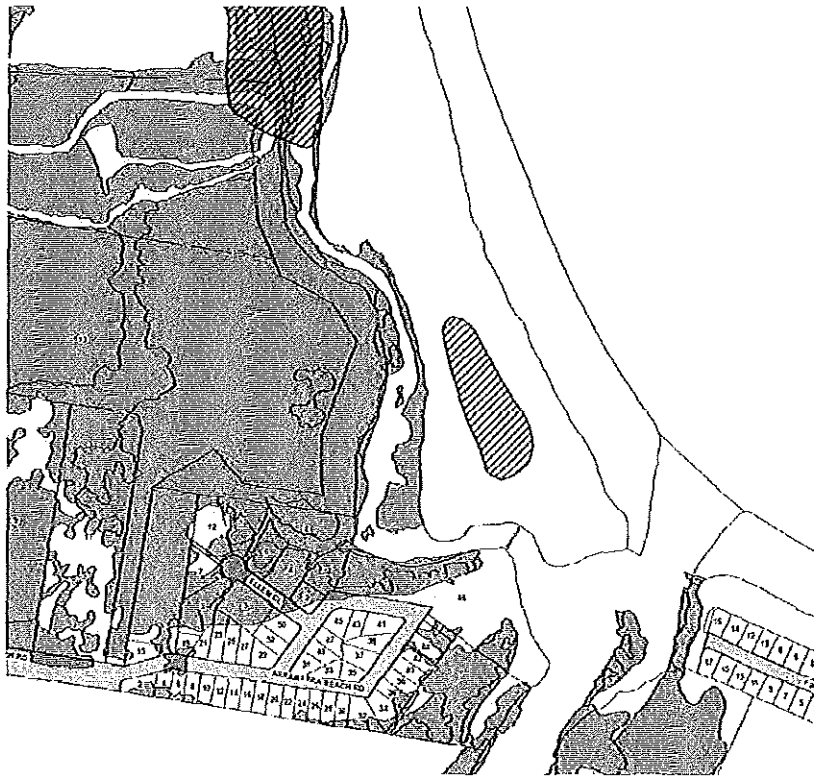
State Environmental Planning Policy No. 26 – Littoral Rainforests

To the north east of the subject site on the opposite side of Yarrawarra Creek is an area to which this policy applies. The Policy applies to land designated on a map within a heavy black line and land within 100 metres that is not zoned for residential purposes.

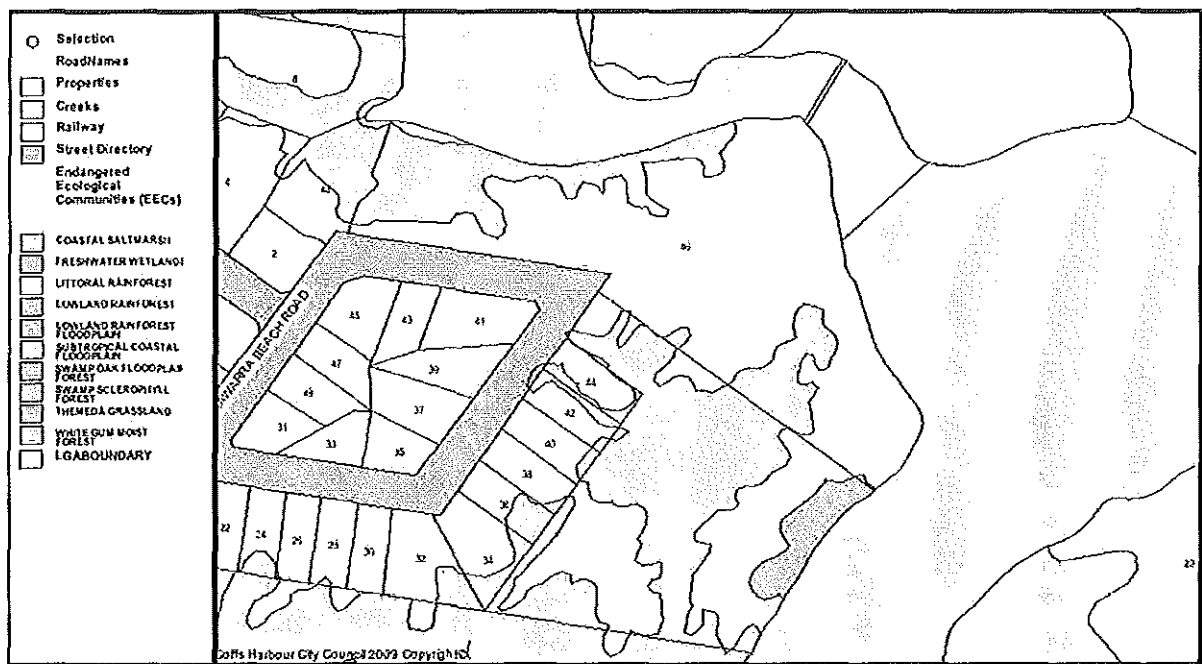
The SEPP only applies to that part of the site within the E2 Environmental Conservationzone.

The land to which the State Policy applies is separated by over 50 m of estuary/waterway. As shown at **Illustration 3.2**, there is no littoral rainforest located within the subject land. Works for the proposed revetment wall will not impact any littoral rainforest.

I reject the accuracy of the statement made about the location of the littoral rainforest. On page 33 they report it *'is separated by over 50 m of estuary/waterway'* and yet on page 136 it states *'Vegetation meeting the floristic criteria of this EEC does not occur on the site. A patch of littoral rainforest occurs within 100m, but the proposal has nil impact'*. This is a large discrepancy in the location of this important environmental feature. Furthermore I find the position shown on the provided Illustration 3.2 SEPP 14 and SEPP 26 shown below as confusing it appears to be located on the sandy beach.



Yet on page 133 Figure 6: CHCC EEC mapping of the site the important littoral forest (1 of only 2 in the Local Government Area) is clearly defined as encroaching on the bank of Yarrawarra Creek opposite the site of the proposed wall.



One must wonder if illustration 3.2 was designed to mislead or a legitimate error. I maintain the information supplied is inaccurate. The distance of 100 meters is incorrect and 50 meters is also considered excessive. I understand the littoral rainforest is closer than the figures indicated and could come under threat by the building of the proposed revetment rock wall. Photographic evidence exist revealing hastened loss of the northern bank since the installation of the current rock gabion wall, with a considerable amount of public reserve disappearing. The actual location should be clearly defined by the proponent and any projected impact should be clearly defined. In addition identified indigenous artefacts exist on adjacent land. It is inconceivable that approval could be granted without a thorough investigation into the possible risk to adjoining land that has extreme environmental and cultural significance.

Clause 14 Public access

Public access to, or from, the coastal foreshore will not be detrimentally impacted by the proposal. Upon completion of the works and the future residential subdivision, improved arrangements for public access to the estuary will be formalised through the community title scheme subdivision.

I object to this statement on page 15 of the submission it is stated

Potential disadvantages of this type of revetment include:

- Reduction of foreshore space – sloping wall reduces foreshore space.
- Foreshore access restricted to designated pathways/stairways. (This can also be considered as a potential advantage – random pedestrian access over the rocks is difficult, meaning less impact on natural marine re-growth within the rock areas).

Surely this must be considered a detrimental impact on public access. As documented, Astoria Group has previously denied access. <http://www.coffscoastadvocate.com.au/news/apn-residents-protest-over-closed-access-to/7911/>

I quote 'Peter Shanahan, director of Astoria Group, which owns the caravan park, says that while he sympathises with the protestors, they cannot go through the caravan's park private access. "The people are insisting on walking through our caravan park," he said. "We're not happy to let that happen,"'

These are the same people who now offer access via a road they own. Access by the public via a community title development does not constitute a guaranteed permanent access and as demonstrated, Astoria has previously attempted to deny access to the public.

3.1 Environment Protection & Biodiversity Conservation Act 1999

https://www.legislation.gov.au/Details/C2016C00266/Html/Volume_1#_Toc448142691

The proposal fails to meet at least 3 of the principles of ecologically sustainable development as defined in this act.

(b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;

(c) the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;

(d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;

The proponents have failed to assess the possibility of damage to the estuarine flora and fauna.

3.2 Environmental Planning & Assessment Act

<http://www.legislation.nsw.gov.au/inforcepdf/1979-203.pdf?id=bcf67089-22e3-e527-94e3-85b5d06e2ec2>

The application does not comply with the following aims of the Environmental Planning & Assessment Act:

(a) to encourage:

(i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,

(vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats,

(c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

The proponents have neglected to evaluate the harm that may occur to the flora and fauna in the estuarine, especially the SEPP26 Littoral Rainforest remnant. The application would also require the removal of carparks located on Arrawarra Beach Road with no replacement. This would restrict general public access. The opportunity 'for public involvement and participation in environmental planning and assessment.' via the government funded, development of a draft plan to enhance and protect Arrawarra Creek would be lost if the application is approved.

3.16 Justification of the Proposal

The alternative to the proposal is for the existing caravan park and surf school to remain within the site and the existing revetment wall to remain as it is. The caravan park infrastructure is nearing the end of its building life, is of dated design with many of the cabins are located within the E2 zone.

I take opposition to the above statement.

As Kevin Shanahan of Astoria Group stated in a recent Newspaper story

"We're in the land subdivision not caravan park business"

<http://www.coffscostadvocate.com.au/news/arrawarra-residents-united-against-subdivision-pla/2951546/>

It is now obvious every move made by Astoria Group since the acquisition of Arrawarra Caravan Park has led to the Development Application submitted. The aging nature of the park is a direct result of the owners running the facility down. They have also inhibited the ability of Mojo Surf (the current lessors) to invest because they award short term leases that inhibit sufficient security for payback. The park is essential to the 'low key' beachside character of the neighborhood.

In the application the proponent has attempted to down play the viability of the ageing tourist facility with aging Infrastructure failing to evaluate the vibrant and highly successful Mojo Surf School that operates at Arrawarra Park.

<http://www.spotxsurf.com/> Mojo has the ability to cater for 170 people on short stay per night. (usually on a three day package so that would equate to $170 / 3 = 56$ per day) this figure is constantly met during the warmer months of the year and continue to operate the surf school year round. They also have affiliations with other tour companies including

Loca.travel <http://loka.travel/secret-surf-camp/> and Contiki Tours <http://www.contiki.com/six-two/exploring-australia-with-contiki-spot-x-surf-camp/> who regularly (3 times a week) stay in the park with their bus load of tourists. As Arrawarra has no shopping facilities each day Mojo take two mini bus trips of tourists to Woolgoolga to purchase refreshments and provisions. I personally have witnessed many times the Courtesy Bus from the Amble Inn Hotel at Corindi packed with young travelers from the surf school. A Research Project in December 2014 by Dr Warren Mundy <http://www.pc.gov.au/research/completed/international-tourism/comments/submissions/submission-counter/sub029-international-tourism.pdf> ascertained that *'for every \$100 of caravan park revenue, \$138 worth of direct economic benefit flows through the local community'* and *'The caravanning and camping sector is a large contributor to the national tourism industry, responsible for providing 10 percent of all tourism site nights in Australia and \$7 billion to the Australian economy.'* Therefore it could be seen the proposal would have a profound negative impact on the local areas economy.

Furthermore these people travel from all over the world and nominate to visit Arrawarra and experience the coastal lifestyle that has become synonymous with Australians worldwide. They speak to others on their travels and on return to their homeland of the wondrous Coffs Coast area and thus promote immeasurable tourist dollars. As Dr Warren Mundy explains *'Australia boasts a range of tourism experiences that cannot be experienced elsewhere and it is this uniqueness that should be marketed to attract inbound tourists. This uniqueness is encapsulated by a caravanning and camping holiday'*.

Considering this it is difficult to imagine how the development of 24 housing blocks could possibly offset the loss of this extremely popular and viable enterprise.

3.17 The Public Interest

The proposed coastal protection works do not raise any matters which may be regarded as contrary to the public interest and which would prevent the application from being approved. The proposed development is in the public interest as it will:

- not pose any significant negative environmental or social impacts

I stringently object to the comment above. I have previously outlined obvious environmental concerns but social impacts must be considered because this application is combined with the DA currently being assessed by Coffs Harbour Council.

The negative impact caused by the loss of the caravan park and Surf School has been overlooked.

In her paper *The Loss of Low Cost Coastal Caravan Parks – Causes, Cases and Social Consequences* <http://www.soacconference.com.au/wp-content/uploads/2013/12/Gilbert-Social.pdf>

Helen Gilbert of the School of the Built Environment, University of Technology, Sydney presents an extensive study into the numerous social impacts caused by the loss of 'affordable tourist Accommodation, the displacement of permanent residents and the policy implications involved.' Ms Gilbert states *'The natural amenity, scenic beauty and climate of the NSW coast make it an attractive destination for holidaymakers and long-term residents. Low cost accommodation providers including caravan parks, camping areas and manufactured home estates are important sources of tourist (short-term) and residential (long-term) accommodation, particularly on the coast. These sites are often located in attractive locations close to beaches, rivers, forests and national parks.'*

She explains the important role Caravan Parks have traditionally occupied.

'Caravan parks span the void between the tourism and housing sectors (Reed and Greenhalgh, 2003). Since the early 1900s they have provided affordable tourist accommodation – often in public reserves near beaches and rivers (Yeo and Grech, 2006) or en-route to holiday destinations (Reed and Greenhalgh, 2003). It was not legal to live in caravan parks prior to 1988, but people have resided in them since the 1930s depression era and councils did not act to prevent this. Permanent resident numbers increased during the 1980s coinciding with reduced housing affordability and the need to cater for construction, mining and itinerant workers (Reed & Greenhalgh 2003; Yeo and Grech, 2006).

Most recently caravan parks have been providing low cost accommodation for groups at risk of homelessness (PAVS, 2002; AHURI, 2004; Marks, 2008; Gurran, Hamin & Norman, 2008). Other demographic groups have sought permanent residence in parks in coastal locations as part of downsizing, lifestyle changes and retirement trends (Gurran, et al 2008).'

Also the important role they play in tourism today.

'Meanwhile increasing tourist numbers have ensured the caravan, motor-home and camping industries have created the fastest growing domestic tourism sector in Australia over the past 12 years (Baillie, 2010, CCIANSW, 2013).'

Helen Gilbert outlines the chief social impacts caused by the closure of Caravan Parks as lost character, social cohesion and sense of place.

'Lazarow, Smith and Clarke (2008) suggest Australia's attachment to the coast shapes the cultural values and identity of coastal visitors and residents. Caravan parks provide cohesive communities, shared spaces, camaraderie, a sense of place and links to important environmental assets. Fuller (2007) argues the flexible nature of caravan parks helps define coastal communities and their loss or redevelopment significantly reduces 'communal inheritance'. Green (2000) suggests the sense of place and local character is more likely to be overwhelmed by the scale and pace of new residential and tourism developments in smaller coastal communities where the homogenising effect of increasing suburban character undermines the unique beauty and natural attractions of the area. As noted by Gurran et al (2005) planning tools to preserve and enhance important attributes of place are inadequate.'

She also discusses the issue related to loss of affordable housing.

'NSW planning legislation (the EPA Act) obliges state and local government to encourage the provision and maintenance of affordable housing. Councils regulate and influence the supply of housing in terms of cost, type, location and amenity through planning tools and development approval powers. Coastal communities experience affordable housing supply problems as lower income families leave cities in search of low cost accommodation. The attraction of the coast for sea changers and retirees intensifies this shortage (Gosford City Council, 2009, 9). Gurran et al (2005) report that coastal caravan parks and manufactured homes are important sources of housing for low income earners and retirees. However, gentrification is apparent in some coastal lifestyle destinations as demand for new housing and holiday accommodation reduces affordable housing options and creates seasonal shortages.'

'Fuller (2007) suggests caravan parks provide local shortcuts, social connections and affordable shared summer holiday values'.

Helen concludes her paper with the following poignant words.

'The hidden values of traditional coastal caravan parks in providing a sense of place, character and identity are emerging now that communities are in danger of losing them. Current trends to upgrade facilities should not overwhelm the need for a range accommodation options for residents and the travelling public. In coastal towns, these parks provide solace, community, networks, access to beaches and reserves, remnants of vegetation or habitat and tourist and permanent accommodation. Consideration of the significant contribution these 'temporary' spaces provide is important for retaining the amenity of our coastal areas. Development pressures responding to tourist demand and the sea change phenomenon are driven by our attraction to the coast and policy adjustment is needed to ensure this valuable coastal amenity is not lost.'

Considering this there are only two residential tenancy agreements. This is because the proponents have refused other applications. Short-term occupation involves powered or unpowered sites for camping or caravans. Generations of the same families have frequented the park on an annual basis. Some groups for over 30 years. I have personally witnessed the family gatherings, each with their own caravans and the interaction between Grandparents, Parents and children is inspiring to observe. The impact the loss would have on these members of the public must be considered.

In addition there are self-contained cabins or private caravans owned by long-term casuals who have occupancy rights for 180 days per year. There are over 20 cabins that have been on site for a long time, some for over 30 years and have provided low cost holiday accommodation. The affordable holiday destinations have been an integral part of generations of family life with parents, children

and grandchildren all embracing the cultural uniqueness and ideals of the coastal character. The positioning of the cabins has created a sense of place, unified community and comradeship that is at the very core of aim 2(b) of The Coffs Harbour Local Environmental Plan 2013.

I am appalled that the application makes no mention of these long term residents of the park and no discussion on the impact on these people and their families should the park close.

The unique low cost Arrawarra Caravan Park is exactly the type of distinctive place the Coffs Harbour Local Environmental Plan of 2013 was designed to protect.

(2)

(b) to provide a high level of social, physical and cultural amenity by promoting a strong sense of community, identity and place,

(c) to provide for a business hierarchy that encourages a range of employment opportunities and appropriate tourism development,

(h) to encourage responsible and sustainable management and conservation of Coffs Harbour City's natural environment, built environment and cultural heritage.

I contend by overlooking the social and economic impact the proposal would cause, the proponents have provided a superficial document that indicates a vested interest in the Development application.

ALTERNATIVES DO EXIST

In a paper of March 16, 2015 entitled Concrete coastlines: it's time to tackle our marine 'urban sprawl'

<http://theconversation.com/concrete-coastlines-its-time-to-tackle-our-marine-urban-sprawl-38175>

Katherine Dafforn, Senior Research Associate in Marine Ecology, UNSW, Emma Johnston Professor of Marine Ecology and Ecotoxicology, UNSW, Joanne Banks Project Coordinator - World Harbour Project and Mariana Mayer-Pinto Research Associate in marine ecology, UNSW stated that;

'These artificial structures present a range of ecological problems, including loss of native species diversity and the spread of introduced species. Furthermore, the defences to coastal shores that these structures, such as groynes and seawalls, are meant to provide could actually be causing more bad than good.' and *'Indiscriminate construction within urban seascapes is, among other things, responsible for the loss and degradation of important habitats such as sediments, seagrasses, mangroves and wetlands.'*

They explain that different methods have successfully been used to protect our coastal zones against climate change. Including

'soft engineering approaches e.g. managed realignment, which involves the removal of hard defence structures and restoration of natural coastal vegetation, and beach replenishment where sand is deposited on beaches to build up the surf zone and dune protection. Where these approaches are not possible then increasingly we need to build ecologically sensitive artificial structures.'

Also *'Practices of eco-engineering are driving innovative strategies on how to manage coastal development, and increasingly, things are being built "with nature" instead of "against nature", with encouraging results.'*

They advocate the need ‘to build seawalls and breakwaters in ways that not only help to protect the local area but are also designed to avoid environmental impacts. Why not transfer the urban concept of “green roofs” to the sea, by seeding artificial structures with key desired and/or threatened species. Seeding of key species can also improve water quality through the absorption or removal of contaminants.’

So it can be seen that viable more environmentally friendly options to the intrusive rock revetment wall exist and are worthy of further investigation.

4.1 Conclusion

I contend after reading the objects of the Marine Estate Management Act 2014

http://www5.austlii.edu.au/au/legis/nsw/num_act/mema2014n72249.pdf

especially in the aims to

(a) provide for the management of the marine estate of New South Wales consistent with the principles of ecologically sustainable development in a manner that:

(i) promotes a biologically diverse, healthy and productive marine estate, and

(ii) facilitates:

- the cultural, social and recreational use of the marine estate, and
- the maintenance of ecosystem integrity .

The application does not adequately address the points above. The risk of harm to the marine park and aquatic reserve should logically have been assessed by NSW National Parks and the Solitary Island Marine Park before a submission was made to the NSW Coastal Panel.

Furthermore the Development Application does not adhere to the Coffs Harbour Coastal Reserves Plan of Management of 2000.

<http://www.coffsharbour.nsw.gov.au/coffs-and-council/Documents/Publications/Coastal-Reserves-POM-February%202000.pdf>

The Coastal Reserves form an important part of the community life in Coffs Harbour. The use of this natural and historic setting for exercise, relaxation, holidays and social gatherings contributes to the identity and wellbeing of the community. The reserves are a major resource for tourism that contributes significantly to the local economy.

GOALS

The goals of this Plan of Management are:

- to protect and enhance the natural, cultural, scenic, social, recreational and economic values of the Coastal Reserves
- to provide a consistent and co-ordinated approach to Coastal Reserve management in Coffs Harbour
- to provide for the use, enjoyment and safety of the general public
- to provide guidance and a common direction for Dune care, Landcare and other community groups working within the Coastal Reserve system.
- to ensure that the community is able to be involved in the preparation and implementation of the Plan of Management.

I consider this plan, in terms of social and economic values and goals, describes precisely why Arrawarra Caravan Park should be preserved for generations of the general public and international tourists to continue to enjoy. I strongly believe it is the responsibility of the NSW Coastal Panel to reject development which will affect the local environment and life style of residents of Arrawarra. Furthermore visitors from foreign shores and the General public of Australia including anyone who

has ever stayed at this idyllic place or the return families who have forged traditions by camping at Arrawarra will emphatically thank you for a responsible decision in this matter.

Thank you for the opportunity to make a comment.

Yours Sincerely

A black rectangular box redacting the signature of the sender.

NSW Coastal Panel
c/o Office of Environment & Heritage
PO Box A 290
Sydney South NSW 1232

28 April 2016

**Re: Re: CP 16-001 Submission against the proposed Revetment Wall, 46
Arrawarra Beach Road Arrawarra NSW 2456.**

Please, not another Belongil Beach.

First and foremost, I support the recognition of this place as an **Aboriginal historic site**. Any further development should meet with the approval of the local elders. We seem to value European heritage but are not very good about respecting Indigenous heritage.

If the proposal gets their approval, then I support:

- **a few homes**, set well back and quite high above ground
- **no construction, wall or otherwise**, into either creek, other than any upgrade necessary for the current pier/bridge across Yarrawarra Creek to the beach
- **guaranteed public access to the beach via the pier/bridge** as now unless a new one can be designed that doesn't interfere with the rainforest.

Any construction in the creek will change the flow of water and deflect it, potentially causing **erosion** to properties bordering the creek and the protected rainforest peninsula on the ocean side of Yarrawarra Creek.

The proposed wall will need **ongoing maintenance**, a community-responsibility constraint I expect will be placed on any approval, but which prospective buyers may not understand or be equipped to manage. Any "protection" is temporary, at best.

I have lived where community roads and bridges were to be maintained by the properties they served. But when properties changed hands, new owners had no idea they were going to have to fork out thousands of dollars to grade their access road or rebuild a bridge. They came crying to Council to effect repairs, and Council was pressured to help. Ratepayers do not want the responsibility for trying to protect houses that shouldn't have been built.

Belongil Beach at Byron is a classic example. More than 25 years ago (1988) their Council resolved on a planned retreat from risky coastal areas. Now Council and the State Gov't are asked to cough up money to protect the people who built there or stubbornly stayed there anyway. Nobody has a "right" to profit from their land – they just expect to.

We've got so many places in Australia already that are going to need literal bailing out by taxpayers and the general public in years to come—don't let them add to the list.

Thanks for your time.

The Chair

NSW Coastal Panel

of Office of Environment & Heritage

[REDACTED] I wish
to bring to your attention my opposition
to a Development Application relating
to Coastal Protection Works situation
at 46 ARRAWARRA BEACH RD ARRAWARRA
NSW 2456

[REDACTED]
[REDACTED]
DA has been proposed Your reference
number is DOC 16/155556 as a part
of a proposed residential Subdivision
of 46 ARRAWARRA BEACH HOLIDAY PARK
submitted on behalf of ARRAWARRA BEACH PTY. LTD.
(DA 0667/16 DA) submitted to Coffs
Harbour City Council for consideration.

My major concerns are centred around
the Environmental damage that I
believe will ensue if this coastal
work & subdivision is allowed to proceed.
I believe the Developer has badly misjudged
the consequences of these major works.

I believe the Retention Wall proposed

will further result in massive erosion of Littoral Rainforest north of Arrawarra Yarrowarra Creeks + destruction of Aboriginal Cultural Heritage Sites these effects seen to contravene the spirit of SEPP 26 legislation.

With the amount of fill specified up to 1.5 metres + the destruction of the remaining Swamp Mahogany + Melaleuca trees it is hard to believe the meagre guide lines for landscaping suggested by the Developer will negate the damage that will be done to this unique site.

The impact of this work on the residents of Little Arrawarra will be a major inconvenience. Certainly the affect on my lifestyle is a worry given the volume of soil + rock that will have to be added + removed from the site

I have noticed to my chagrin the deterioration of Arrawarra Beach Ennoman. I believe this whole endeavour will result in a catastrophic destruction of this site that will resonate for generations

**Coastal Protection Works, 46 Arrawarra
Beach Road, Arrawarra**

Development Application No. CP 16-001

NSW Coastal Panel

Submission on Proposal



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Foreword

I write to you to express my objection to the Proposed Development at 46 Arrawarra Beach Road, Arrawarra.

After a thorough read of the Development Application and the response to the NSW Coastal Panel's request for further information, I believe that the concerns that I have highlighted in this submission should lead the panel to not approve the proposed revetment wall. I have identified my concerns in overall rationale for the revetment wall, the shortcomings that I believe exist in the design and the limitations in the supporting environmental assessments. In respect of the assessment, I have identified some examples of my concerns by extracting specific assessment submissions and provided a corresponding comment on the assessment limitations and / or shortcomings.

As an overview of my concerns, I offer the following:

- The Development Application is written by a specialist Town Planner. The tone and approach to the assessment is one of advocacy for the development rather than presenting an objective assessment of the application
- The Development Application appears to be a superficial document, without supporting detail. For example, the DA states that there is unlikely to be further harm caused to heritage artefacts / sites. This statement was made without site specific investigation and with no consultation with the indigenous elders of the area
- 'Environmental' benefits of the DA, such as the revetment wall, are actually thinly veiled justifications to the benefit of the proposed construction work. As explained in more detail in this submission, no details beyond the barest of sketch plans of the revetment wall are provided and some commentary on the aesthetic benefit of what would be a massive rock structure
- Little to no consideration is given to the flora and fauna of the area which have already undergone significant disruption due to Arrawarra Beach Pty Ltd removal of a large number of trees
- No consideration is given to the estuarine environment and the potential adverse impacts of the revetment wall. Considering the sensitive nature of the site, one would expect that special attention would be given to the conservation of the delicate marine environment and dynamic coastal processes.

In terms of my credentials to offer the comments provided in this submission, I submit the following:

- I hold a Bachelor of Engineering, with experience as an Inspecting Engineer in Flood Mitigation and Coastal Engineering in the former Department of Public Works and Services when it had administration of the Coastal Protection Act
- More recently, I have experience working closely with NSW planning requirements. For example, I prepare the options assessment report, including assessment of heritage impacts, for the Sydney Harbour Control Tower as part of the Development Application by Barangaroo Delivery Authority for the removal of the tower.

1 Executive Summary

1.1 Overview

The comments provided in this response to the application to construct the Arrawarra Beach Caravan Park Rock-Armoured Revetment wall demonstrate that the proposal is deeply flawed and should be rejected. Areas of concern and / or major shortcomings include:

1. The flawed development philosophy which relies on a coastal protection structure to enable a permanent residential development
2. The revetment wall proposal is considered in isolation of the impacts that it will have on the fragile geomorphology of Arrawarra Creek and its interdependence with Arrawarra Beach
3. The questionable design viability of the proposed revetment wall
4. The inadequate environmental assessment of not only the revetment wall but the overall development proposal i.e. the assessment should have been a full environmental assessment report rather than the superficial Statement of Environmental Effects that is more akin to the documentation provided in a Review of Environmental Factors.

1.2 Submission Structure

This submission has been structured to address the above four (4) major shortcomings in the development proposal. The structure / response is as follows:

- Section 2: Flawed Development Philosophy – the role of revetment walls
- Section 3: Wider Impacts – identification of the likely adverse impacts of the revetment wall. These impacts are at best give scant regard in the Statement of Environmental Effects, but more often totally disregarded
- Section 4: Design Viability – provided by way of comments on the response by Water Technologies to the NSW Coastal Panel RFI
- Section 5: Inadequacy of the Environmental Assessment – provided by the submission made in response to the Development Application advertised by Coffs Harbor Council.

2 Flawed Development Philosophy

Rock revetments are commonly used to control erosion by armouring the beach or estuarine ocean / land interface. They are primarily used to protect existing developments where soft options, such as hazard area retreat, are not practical because of the nature of the existing development.

Revetment walls are seldom, if ever, used in a coastal hazard environment to facilitate higher value and permanent development. In this case the proposal is seeking to replace a current development (caravan / holiday park), that is much more in keeping with the inherent coastal and flood risk, and replacing it with a permanent residential development.

The proposal is in effect creating a long term development risk, the type of which many coastal communities / councils are currently facing with no available strategy other than the expenditure of considerable amounts in protecting these assets.

The use of rock revetments and the associated advantages and disadvantages can be summarised as follows:

Appropriate Locations	Revetment walls should be used at sites suffering severe and on-going erosion where important and extensive landside assets are at risk In this case there are no current / extensive landside assets so the rationale for a revetment wall simply does not exist
Costs	High capital with long term maintenance requirement. Any development will have to provide for periodic 'topping up' of the rock armour
Effectiveness	Long term protection is dependent on the adequacy of the coastal / estuarine investigations and the ensuing design criteria. As demonstrated in Sections 3 and 4 of this response, there is significant cause for concern as to the adequacy of both the design viability and the potential for the wall to cause erosion problems in other areas of the Arrawarra Creek environment
Benefits	Can be implemented to protect important backshore assets which cannot be relocated from a hazard area
Problems	Strong landscape impact – contrary to the claims made in the Statement of Environmental Effects Revetment walls can permanently alter the estuarine / beach dune system processes with potential erosion impacts elsewhere in the system e.g. reflected wave energy resulting from the massive scale of the revetment wall compared to the current gabion arrangement which only provide protection to the creek bank

3 Wider Impacts

3.1 The Problem

In terms of erosion potential of the site, the Statement of Environmental Effects notes:

Previous geomorphic investigations (Geomorphic Impact Assessment, Martens Consulting Engineers, 2007) found that the site is at risk from wave attack and fluvial erosion and the impact could be significant, with the potential for significant loss of property and existing ecological values from a storm event at some time in the future unless mitigation measures are implemented.

and

The residual creek bank along Yarrawarra Creek and within the southern part of the site is unprotected and susceptible to future wave attack, fluvial action and scour.

The Statement then provides a generalised description of the revetment wall as it relates to the subject property. The identified *'potential disadvantages of this type of revetment include:*

- *Possible community concerns over visual amenity.*
- *Reduction of foreshore space – sloping wall reduces foreshore space.*
- *Foreshore access restricted to designated pathways/stairways. (This can also be considered as a potential advantage – random pedestrian access over the rocks is difficult, meaning less impact on natural marine re-growth within the rock areas).*
- *Requires trucking of rock via Arrawarra Beach Road.'*

The foregoing highlights the narrow perspective adopted by the Statement. In particular, the Statement is silent on the wider impact of the revetment to other areas of Arrawarra Creek and Yarrawarra Creek and the adjacent lands, including erosion on the opposite side of the creek system.

It should also be noted that the area of the unprotected creek bank forming part of the site and that is identified as being subject to wave attack, fluvial action and scour is currently quite a stable section of creek bed. The same cannot be said of other areas of the creek that might be impacted by the revetment wall

3.2 Scale Problem of the Revetment Wall

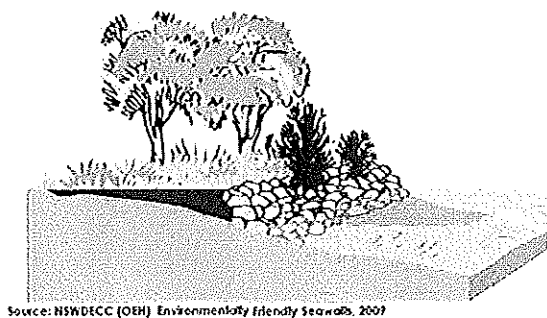
There should be no question that the proposed revetment wall represents a massive structure compared to the existing gabion wall. The existing gabion wall provides scour protection to the toe of the embankment and is overtopped by large tides. In comparison, the proposed revetment wall is:

- Some 4 m high
- Made up of large boulders up to 3 tonne in size

- Extends some 90 m beyond the areas covered by the gabion to protection wall (CH 330 to CH 420 Survey Layout)
- The alignment extends into the creek to reclaim land previously lost to the migration of the creek (e.g. some 60 m from CH69.49 to CH 130.968 Drawing No15-847NSW-09 Rev. A)
- Acts as a retaining wall for filling substantial areas of the site that are subject to flooding.

Given the substantial increase in size and scale, the potential to reflect wave flood energy elsewhere in the creek / estuary system should not be ignored. The impacts could include increased scour and erosion to what can only be described as a sensitive coastal / estuarine environment and habitat.

It should be noted that the Statement of Environmental Effects promotes the impression of a relatively modest revetment wall as reflected in the following diagrammatic representation compared with a more likely representation.



Source: NSWDECC (OEH) Environmentally Friendly Seawalls, 2009

Statement of Environmental Effects Representation



More Likely Representation

3.3 Assessing the Wider Impacts of the Revetment Wall

Water hitting revetment wall can promote erosion during storms, since wave energy will be reflected elsewhere in the creek / estuary system. The Statement of Environmental Effects has identified the erosion risk within the creek / estuary system as justification for the revetment wall. However the Statement simply passes over (i.e. ignores) the risk that the revetment wall will create for other creek / estuary areas and the adjoining lands.

Nearby lands likely to be impacted included the sensitive coastal verge between Yarrawarra Creek and Arrawarra Beach, noting that this area is already impacted by the northward movement of the creek entrance as demonstrated by comparison of the following aerial photographs. The movement of the creek entrance has resulted in the loss of substantial local flora and the risk is that this will be accelerated with construction of the revetment wall.



Google Earth 2014



Aerial Photograph 1956

Given the potential of revetment walls to create adverse impacts, a precautionary approach should be followed i.e. works of this type should be avoided if they are likely to cause significant damage to the coastal or estuarine environment.

If it can be proven that the revetment wall will result in wider economic and environmentally sustainable benefits (beyond that applying to the subject property) and there is minimal damage to the coastal / estuarine landforms and ecosystems, then it might be acceptable. However, before this can be established it is considered that a thorough coastal and estuarine process study must be completed and the outcomes subject to independent expert peer review.

3 Questionable Revetment Wall Design Viability: Comments on Water Technology's response to the NSW Coastal Panel RFI

4.1 Approach

The response is provided by identifying key issues within the Water Technology response to the NSW Coastal Panel's request for further information. Corresponding comments that identifies issues, areas or concern or shortcomings are then provided.

4.2 Water Technology Section 2: Design Ocean Water Levels & Wave Conditions

Report

It is important to appreciate that these wave conditions prevail in the ocean waters well offshore of Arrawarra Beach – not within the estuary itself. There will be significant attenuation of waves as they penetrate through the entrance of Arrawarra Creek.

Comment

The comment is based on a theorized assessment or calculation i.e. there is no empirical coastal or estuarine process modeling to support the conclusions. In a flood and elevated ocean scenario, the impact of any entrance mitigation will be severely reduced i.e. it is considered that the increased water depth will allow substantially greater wave penetration than suggested by Water Technologies.

Report

When determining the possible condition of the ocean entrance to Arrawarra Creek at the time of the Design Event, the surveyed entrance bathymetry used for previous flood modelling for Arrawarra Creek (Umwelt, 2003) has been considered by Coastal Engineering Solutions.

Comment

Water Technologies appears to have accepted the previous study as reflective of current conditions without any apparent validation. In a coastal setting, particularly as one as dynamic as the Arrawarra Creek / Beach entrance, it is a considerable assumption to rely on a study that was completed 13 years ago.

Report

The resulting design wave parameters for the revetment location behind the creek entrance shoals are presented overleaf in Table 2-2. These are the water level and wave characteristics used for the design of the rock-armoured revetment.

Comment

The 'creek entrance shoals' are likely to be non existent in times of deep scour, elevated ocean levels and high wave action. It is considered that the reliance on the mitigation impact of 'creek entrance shoals' demonstrates the limitations with the response provided to the

NSW Coastal Panel's concerns. At the very least, the NSW Coastal Panel should require site specific modeling that demonstrates that the adequacy of the design envelop proposed by Water Technologies.

Report

The selection of specific characteristics of the 100 year ARI Design Event that were used in the design of the revetment was not a straight forward or simple process, as it consists of a combination of severe waves and extreme ocean water levels. Quite comprehensive and specialised studies are typically required to establish their joint probability.

Comment

The design criteria appears to be limited to a 'combination of severe waves and extreme ocean water levels' and does not consider the increased estuary water levels caused by catchment flooding.

The report includes the following design criteria:

Table 2-1 100 year ARI Ocean Water Levels & Wave Conditions - Offshore

Climate Scenario	Storm Tide Level	Wave Height
Present-day	RL+3.0 m AHD	8.20 metres
Year 2050	RL+3.3m AHD	8.45 metres

In designing the revetment wall, Coastal Engineering Solutions adopted the following:

Table 2-2 100 year ARI Ocean Water Levels & Wave Conditions - Inshore

Climate Scenario	Storm Tide Level	Wave Height
Present-day	RL+3.0m AHD	2.0 metres
Year 2050	RL+3.3m AHD	2.25 metres

In comparison, Table 3.8 of the Coffs Harbour Coastal Process Definition Study identifies the following water levels for the Arrawarra Creek:

Typical State	Immediate			2050			2100		
	Almost Certain	Unlikely	Rare	Almost Certain	Unlikely	Rare	Almost Certain	Unlikely	Rare
Open / Closed	1.5	2.4	3.5	1.5	2.8	3.9	1.5	3.3	4.4

Given the purpose of the revetment wall, it is considered that the RL+4.4 m AHD would have been adopted (i.e. a revetment crest level approximately 1.4 m higher than proposed). The report argues for the adoption of lower but described as 'conservative' levels by Coastal Engineering Solution on the basis of the '*revetment location behind the creek entrance shoals*'. The inconsistency between what appears to be the more rigorous Coffs Harbour

Coastal Process Definition Study and the revetment wall design parameters should be a significant concern for the NSW Coastal Panel.

In addition to the foregoing, the Long Term Recession contained in the Coffs Harbour Coastal Process Definition Study indicates an 'almost certain' probability of 15 m, 'unlikely' probability of 50 m and 'rare' probability of 85 m landward movement of South Corindi (Ararwarra) Beach'. The recession is likely to reduce the mitigation impact of the creek entrance shoals that are heavily relied upon by Coastal Engineering Solutions in the design of the revetment wall.

4.3 Water Technology Section 3: Approach / Methodology for Structural Design

Report

The methodology adopted by Coastal Engineering Solutions has been to design the rock armour to accommodate the expected increased wave energy as a consequence of climate change (sea level rise and changed storm climatology); and to construct the revetment to accommodate this possible future loading. To later increase rock armour characteristics on an existing seawall would be extremely difficult and costly – requiring substantial reconstruction.

Comment

Given the likely underestimation of the design criteria, it is likely that the 'future loading' concern identified above is more a reality than a possibility i.e. the wall is likely to require reinforcement to protect the proposed residential development.

Report

In summary, the application of the design techniques of van der Meer (in conjunction with the approach of placing armour to accommodate future climate influences) has resulted in a structure having:

- *Primary armour: two layers of 1.0 tonne rocks*
- *Filter armour: two layers of 100kg rocks*
- *To accommodate overtopping: extending the filter armour layers behind the crest of the revetment to create a scour blanket to mitigate any adverse effects of wave overtopping.*

Comment

Given the inconsistency demonstrated above, it is evident that the revetment wall has the potential to be significantly be overtopped in rare events. This raises significant questions on the adequacy scour blanket and thereby the stability of the wall.

It is for this reason that a scour blanket consisting of 100kg rocks has been incorporated by Coastal Engineering Solutions into the revetment cross section where its crest level is below RL+3.0m AHD. The intent is that this scour blanket be covered with topsoil and grassed so as to be less visually intrusive. Should significant overtopping occur during a Design Event, then this soil and vegetation would be damaged and probably eroded away, but the overall structural integrity of the revetment and the scour blanket armour would be unaffected.

Comment

The cross sections of the revetment wall indicate that the wall and rock blanket are laid over the embankment i.e. the design of the revetment wall relies on the stability of the supporting embankment. In major events, particularly if the peak water level is underestimated, it is to be expected that any loss or erosion of the supporting embankment will impact on the revetment. Accordingly, it appears to be an overstatement to suggest that the revetment and the scour blanket armour would be unaffected. Further, while the impacts might be tolerable for one event, the cumulative impact of a number of events should be considered.

4.6 Maintenance Regime

Report

Coastal Engineering Solutions' design is such as to limit damage levels to 5%. In actual fact this may not necessarily require any significant repair works. The term 'damage' nominated in such a way in coastal engineering designs accounts for the percentage of individual rocks which move from their initially placed position – which can be to a more stable position within the rock armour matrix. Often during severe storm events, the rock armour slope consolidates – resulting in a tightening of interlocking between individual rocks. So future 5% 'damage' can also represent an improvement in structural stability at some locations within the revetment.

Comment

The report acknowledges that during storm events the revetment wall will 'move' given its nature as a 'flexible rubble-mound structure' as noted in the NSW Coastal Panel's request for further information.

The issue here is that the response indicates that there is no contemplated maintenance requirement / provision. Is the response seeking to suggest that the revetment wall is so 'future proofed' in its design that it will not require any maintenance?

Contrary to the foregoing, it is submitted that most revetment wall literature highlights and ongoing maintenance requirement. This issue is considered critical given the long design life necessary to protect the proposed permanent and higher intensity development.

The oversight of this key design / maintenance aspect of the revetment wall should be related back to the point made in the introduction of this submission i.e. the DA is expressed more as an advocacy document for the development rather than an objective assessment.

4.7 Inadequacy of Environmental Assessment

5.1 Overview

It is evident from the following comments that have been made in response to the Development Application that was lodged with Coffs Harbour Council, that the environmental assessment of not only the revetment wall, but also the overall development proposal, is inadequate given the scale and range of adverse impacts. The assessment is more akin to a Review of Environmental Factors that would be undertaken to determine the need for the preparation of a full Environmental Impact Statement.

It is considered that the following comments demonstrate that the Statement of Environmental Effects does not demonstrate the viability / sustainability of the development, but rather highlights through its omissions that there are a significant range of impacts that are not quantified and a substantially more robust assessment should be completed before the development is given any further consideration. The NSW Coastal Council's request for further information is testament to the limitations of the assessment so far provided.

5.2 Comments made to Coffs Harbour Council on the Statement of Environmental Effects

5.2.1 Section 2 The Proposed Development

Section 2.1 Description of the Proposal – Planning Intention

Statement of Environment Effects

The planning intention for the site is to replace an ageing tourist facility with a development that is in keeping with the established 'low key' beachside character of the neighbourhood. The proposed lots have been designed to enable sufficient space for detached family homes set within landscaped grounds. Each proposed lot is sufficiently sized to provide for a dwelling, double garage, areas of private open space and a suitable vehicular access. The internal road ways will be narrow, however the road reserves are wide enough to allot for generous native street trees and for passive cycling and pedestrian activities.

Comment

The 'ageing nature' of the facility is a direct result of the owners running the facility down. This has included limiting the lease tenure of the current occupants to inhibit investment by not allowing security of tenure to allow sufficient payback. The DA proponents should not be rewarded by Council considering the 'ageing' aspect of the facility as a reason for granting approval to the DA.

The existing facility has been there for over 40 years and is as much a part of the 'character' of Arrawarra as is the village.

Section 2.2 Revetment Wall

Statement of Environment Effects

A revetment wall has been purpose designed for the site by Coastal Engineering Solutions, the drawing set is found at Appendix N. The NSW Coastal Panel are the consent authority

for 'coastal protection works', therefore the proposed revetment is the subject of a separate DA and consent for the revetment is not a part of this Development Application. For information purposes, the revetment is described below.

Comment

It is not understood how the redevelopment DA can be considered in isolation of the DA for the revetment wall as the revetment wall drawings contained in the DA are schematic at best and give no indication of the design criteria including design life, wave energy considerations, maintenance requirements.

It should be obvious that any structure in an active marine environment will require ongoing maintenance to ensure its integrity. The question that follows is how Council can consider approving permanent residential development that is dependent on a protective structure, when the application for the revetment wall lacks in detail and accuracy. To be consistent with the flooding 1:100 year design criteria, the revetment wall would require a 100 year design life which is extremely likely given that there is no maintenance provisions included in the application.

There is a likelihood that the extended revetment wall will impact on the stability of Yarrawarra Creek which is impacted by the northerly trend in the movement of the creek entrance i.e. setting the one side of the creek boundary is the way suggested is likely to dramatically increase the pressure on the opposite creek bank and its overall stability. It is suggested that some form of coastal process study should be required to consider the development at what can only be described as a pivotal point in the localised coastal / estuarine system.

Statement of Environment Effects

There is an existing gabion basket sea wall that extends for approximately 210 m along the Arrawarra Creek frontage. The residual creek bank along Yarrawarra Creek and within the southern part of the site is unprotected and susceptible to future wave attack, fluvial action and scour.

Comment

This overstates the erosion impact on areas not protected by the gabion wall and is just an attempt to obtain approval to the revetment wall to areas of the development that require filling i.e. in these areas the revetment wall is more a retaining wall for filling of the site.

Statement of Environment Effects

The proposed revetment wall will be located wholly within the site boundary and within the E2 zone.

Comment

The plans for the development show that the proposal is reclaiming land within the current creek / estuarine environment. The DA does not adequately address the impacts on the estuary of the reclamation, and in any case why should the proponent be allowed to fill the area to the historical boundary line, particularly as the proponents purchased the land in its current configuration.

Section 2.3 Heritage

Statement of Environment Effects

Everick Heritage Consultants are of the opinion that, given the extent of existing disturbance within the development footprint, the proposed residential subdivision is unlikely to result in further harm to Aboriginal Heritage.

Comments

The scale of the development is significantly greater than anything that has occurred previously. Irrespective of the past surveys, the scale revetment wall and the extensive filling will destroy any remaining artefacts. While it is noted that the proposal includes 'stop work' should anything be found, this is not considered sufficient (e.g. a bulldozer operator is hardly likely notice sensitive materials / artefacts / remains) and at the very least stringent inspection and management controls should be applied to any work onsite.

Section 2.4 Flood and Stormwater Management

The flood study states that the *'Results of this modelling indicated that with fill in place, flooding would be restricted to the creek system, with no impacts predicted to occur to the upstream flood regime'*.

Comment

While the loss of the floodplain areas might be relatively minimal, higher flows are being retained within the creek which will in turn impact on the estuarine environment. Further, the extended revetment wall is likely to increase scour potential.

Section 2.7 Ecological Assessment

The DA provides no assessment of impacts on the estuarine flora and fauna which is considered a major omission, particularly the likely impacts of the revetment wall and reclamation of areas of the creek. It is inconceivable that any approval could be considered in the absence of this assessment.

Section 2.8 Social Impact

Statement of Environment Effects – Public Access

There is a public footway located along the site's western boundary off Arrawarra Beach Road as shown in the photos below. This pathway leads to the Yarrawarra Creek. From the path, the public must traverse the creek to get to the beach. This entry is accessible only at low tide and is in a poor state of repair.

Comment

Nobody accesses the beach via the public footway. At the very least this is a gross misrepresentation as the public are free to access the beach through the caravan park and the bridge over the creek.

The proposed public access is more circuitous than the current access through the main entry to the caravan park.

In the past, the proponents of this development application had barred public access to the park forcing access via the public footway. Since the current tenants have had tenancy of the caravan park, the public have had free access to the beach. Only in the cases where

local residents have displayed extreme antisocial behaviour have the tenants restricted access.

Statement of Environment Effects – Economic Opportunities

The proposal has the potential to increase the permanent population of Arrawarra by a minimum of 50 people (2.1 persons per future dwelling). The anticipated increased population will have a positive impact on the Woolgoolga area's economy particularly in view of the direct link to Woolgoolga via Solitary Islands Way and north to Corindi, once the highway upgrade is completed.

Comment

The economic benefit of the existing caravan park (employment / services / tourist spend) is likely to significantly exceed the economic benefit of 50 additional people in dwellings. This estimate is also based on the assumption of permanent residents, whereas the demographics of the Arrawarra area lean more towards the development being used by holiday makers.

With the loss of the tourist attraction, the cash flow into local businesses will drop significantly.

Statement of Environment Effects – Loss of the Caravan Park and Surf School

As there are only two long term occupants of the caravan park, the proposal will have a very minor impact on permanent housing supply. The redevelopment of the caravan park may not occur for a number of years. The two permanent occupants of the park will be given 12 months' notice to vacate the park after development consent is granted. An alternative arrangement may be made by negotiation with the tenants.

In terms of alternative caravan parks and surf schools, there are other caravan and holiday parks located in Arrawarra to the north and south of the site. There is an alternative surf school located at Emerald Beach approximately 20 km south of the site providing nearby alternative viable options.

Comment

The assessment misses the point on how long term occupants should be defined. The Arrawarra Holiday park has a large number of annual visitors who have been frequenting the park for 40 years. These include 3 generations of the same families whose interests should be considered in any decision on the future of the park. Once again, the application deliberately seeks to diminish the concerns of others and represents anything but an objective assessment.

The Surf School also provides an important public safety benefits as Arrawarra Beach is unpatrolled. As all the instructors are qualified in aquatic safety (lifeguard), the Surf School provide a beach patrol presence whenever surf classes are undertaken.

Statement of Environment Effects – Visual amenity and recreational value of the environmental buffer zone

The finished revetment wall and vegetated environmental zone will visually change the site's creek boundaries.

- *Old style cabins and 'unsympathetic' landscape elements – old picnic tables, ornamental garden shrubs and trees presently occupy part of the 20 m wide E2 zone buffer between the caravan park and the estuary. The proposed revetment wall and re-vegetated buffer will return this area to a more natural state for public enjoyment.*
- *Paths and passive recreation areas will create opportunities for walking, picnics and fishing off the rocks.*

The revetment wall design includes rows of large boulders, rock armour placed at the toe to disburse the wave energy. The more natural placement of the rock armour will provide potential habitat for marine species and fish to hide among the crevices which are envisaged to increase over time. Furthermore, the proposed revetment wall will significantly reduce erosion thereby enhancing the revetment wall's ecological value over time.

Comment

The sketch included in the DA does not depict 'large boulders' referred to in the comments. The wave energy environment is not known from the DA (refer earlier comments) and it is unlikely that the revetment will be a 'Environmentally Friendly Seawall' as depicted. It is suggested that the revetment wall will dominate the landscape and will thereby alienate the creek significantly more than the current gabion wall. Rather than enhance amenity, it is likely to do the opposite.

The 'old style cabins' and the nature of the park creates an amenity and recreational value to significantly more people than 50 residents of the proposed development.

Section 2.9 Vegetation Removal – Koala Habitat

This will see the need for around 105 replacement Koala food trees to be planted. These are nominated to be planted in the E2 zones in the north, and in the east-southeast to infill existing vegetation. Based on the CHCC guidelines, the offset will be planted at a density of 1 tree per 15 m², hence a minimum of 1,575 m² of E2 zone will be planted out with associated understorey, to establish a self-sustaining native vegetation community as per CHCC's guidelines.

Comment

There is a significant lag between the removal of existing food trees and the development / maturity of new plantings. The existing owners have, under the guise of safety concerns, diminished the value of the existing vegetation, thereby presenting a scenario of significantly less impact. Consideration of the DA should be on the basis of previous vegetation and irrespective of the outcome, a replanting requirement should be put in place.

5.2.2 Section 3 Statutory and Policy Assessment

Section 3.3 Coastal Protection Act 1979 No 13

Statement of Environment Effects

The Act prohibits a public authority from authorising or carrying out development in the coastal zone, without the consent of the Minister, if the Minister is of the opinion that the development:

- *is inconsistent with principles of ecologically sustainable development;*

- *adversely affects the behaviour of the sea or an arm of the sea or any bay, inlet, lagoon, lake, body of water, river, stream or watercourse;*
- *or adversely affects any beach or dune, the bed, bank, shoreline, foreshore or flood plain of the sea or an arm of the sea or any bay, inlet, lagoon margin, lake, body of water, river, stream or watercourse.*

As discussed in Section 3.11, the development meets ESD principles.

Comment

Section 3.11 is primarily as restatement the ESD principles of the Local Government Act 1993. The report then makes the following two conclusions:

Inter-generational equity principle

The proposal will contribute to the supply of housing to meet the needs of current and future generations. The proposal aims to minimise impacts on remnant native vegetation and provide for future biodiversity through the management and enhancement of the riparian buffer land.

Biodiversity and ecological integrity principle

A detailed and rigorous statutory environmental assessment has been prepared for the proposal. Recommended mitigation measures and management strategies will be implemented to manage the construction works and the ongoing community title development.

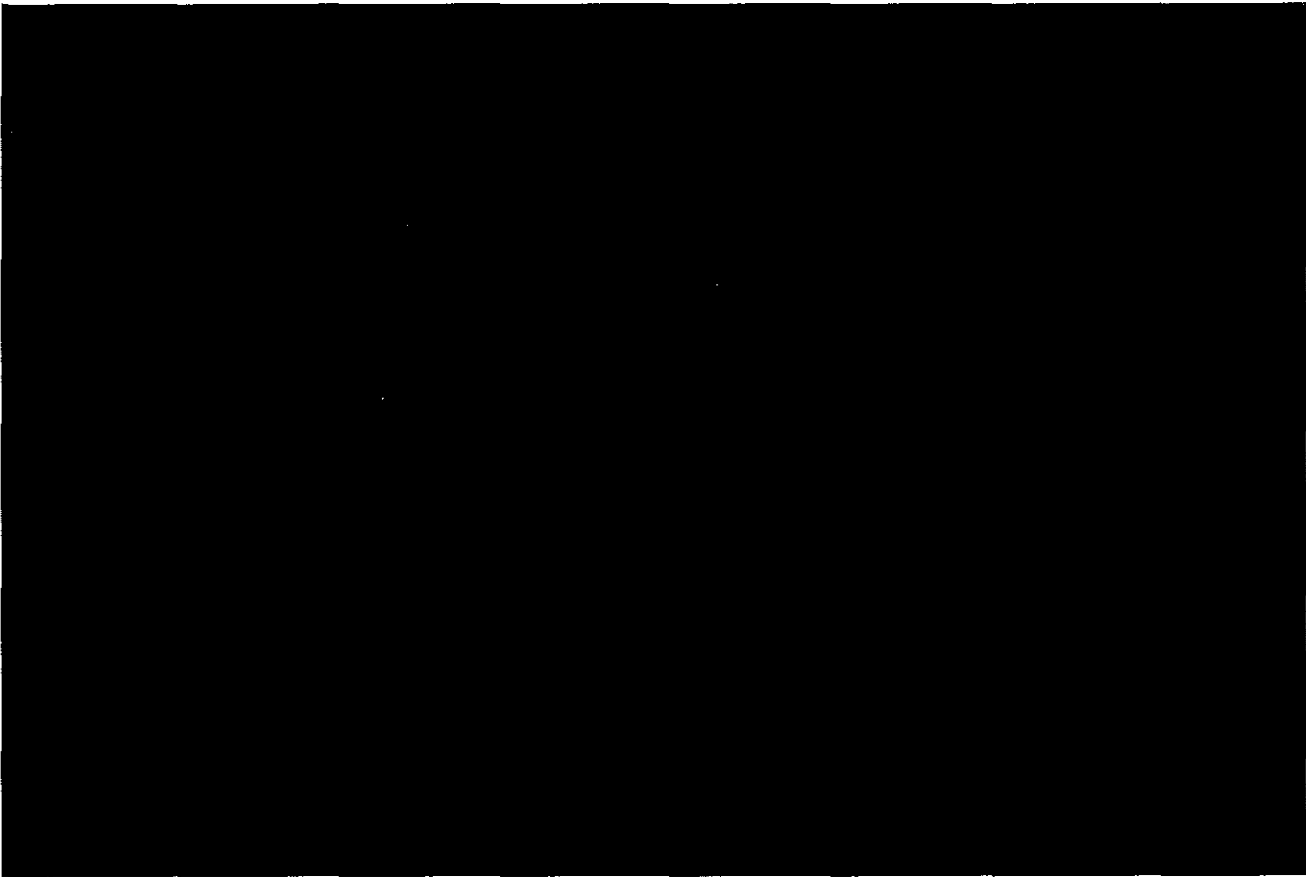
Having regard to the preceding comments on the DA report, the following comments are made:

- The *Inter-generational equity principle* comments are narrow and neglect a wide range of issues, that when addressed, are likely to demonstrate that the development has an overall negative affect.

Issues include long term maintenance liability of the revetment wall need to protect the development, impact of the development on the local coastal and estuarine processes, adverse impacts on the generations of long terms park users, adverse economic impact on the surrounding areas of loss of the park, loss of amenity – rather than enhance amenity the development is more likely to ‘lock up’ to the benefit of the anticipated 50 residents.

- The *Biodiversity and ecological integrity principle* is predicated on the presumption that the environmental assessment is detailed and rigorous. As demonstrated by the preceding comments, the environmental assessment contains significant omissions and / or shortcomings.

The assessment is considered to be represent an environmental ‘advocacy’ document rather than the type of assessment required by the Act.



The Chair
NSW Coastal Panel
c/o Office of Environment & Heritage
PO Box A 290
Sydney South NSW 1232

Re: CP 16-001 Submission against the proposed Rock Revetment Wall, 46 Arrawarra Beach Road Arrawarra NSW 2456

I find it difficult to reconcile why we are even having this conversation. Right now in Byron Shire, consideration is being given to building a sea wall to protect 34 properties at a total cost of \$59 million dollars, over 11 years.

Sure the current landowners will pay, so will the State Government, the public (who-ever they are) and more importantly Byron Shire ratepayers will be expected to pay this unwelcome and unfair burden, because of a poorly informed planning decisions. We should know better now.

I agree with Astoria, the land is valuable but, it shouldn't be cut up into tiny lots to maximise profits at the expense of ratepayers and future residents of the development. By way of example, there is no mention throughout the DA of any future maintenance of either their massive revetment structure. Who is going to pay for ongoing repairs, and for maintenance and monitoring of the E2 Buffer revegetation?

A caravan park with relocatable infrastructure is the best use for the land. The development application for the residential subdivision proposes extensive modification of the site in an attempt to make the land suitable for the residential development of the land. It is proposed to:

- Destroy/modify approximately 1.8ha of urban woodland (including about 10 Schedule 2 primary Koala browse trees and 9 hollow-bearing trees),
- Provide compensatory habitat of over 1575m²,
- Reclaim land from the adjoining creeks,
- Build a revetment wall to protect the development from coastal erosion, and
- Fill a large part of the land by up to 1.5 metres in depth.

None of these works are required for the continued operation or upgrade of the existing caravan park. The operation of the caravan park is such that the landowners can respond to the threats of coastal erosion, bushfires and flooding by either retreating until the threat has abated or retreating permanently if necessary. The inherent hazards that impact on the use of the land is the reason why the use of a caravan park was proposed in the first instance and has persisted to date.

The continued use as a caravan park will not destroy the likely aboriginal sites under the land.

The social impact assessment in the statement of environmental effects is superficial and too readily dismisses the exceptional social value of these low key affordable tourist facilities along the NSW coastline. A Social Impact Assessment should be prepared by a qualified and experienced social planner.

The Coastal Panel CP 16-001 DA for a Rock Revetment Wall should not be assessed in isolation from the DA lodged with Coffs Harbour City Council at 46 Arrawarra Beach Rd Arrawarra, because they are intrinsically linked, as demonstrated in my submission.

My submission is against the proposed closure and subsequent development of Arrawarra Beach Holiday Park for the following reasons:

The Coastal Protection Act 1979

The Coastal Protection Act 1979 No13 (CP Act) prohibits a public authority from authorising or carrying out development in the coastal zone, without the consent of the Minister, *if the Minister is of the opinion that the development: is inconsistent with principles of ecological sustainable development; adversely affects the behaviour of the sea or an arm of the sea or bay, inlet, lagoon, lake, body of water, river, stream or watercourse; or adversely affects any beach or dune, the bed, bank, shoreline, foreshore or flood plain of the sea or an arm of the sea or any bay, inlet, lagoon margin, lake, body of water, river, stream or watercourse.*

This development raises a considerable number of issues relating to the CP Act that the proponent hasn't even attempted to address. The very basis of this proposed development is inconsistent with the principles of ecological sustainable development and therefore should be prohibited.

State Environmental Planning Policy 71 (SEPP71)-Coastal Protection

The subject site is within the SEPP 71 identified area. Under Clause 8 of SEPP 71 the development must provide/maintain/enhance public access to beach and creek (Refer dot points below). Public access through a community title development does not constitute a guaranteed permanent access to Arrawarra Beach. The proponent has spoken of a gated community and in 2005 previously denied community access to the beach. This matter became the subject of an enquiry by the Human Rights Commission.

The proponent fails to adequately address or fails to address altogether, the following:-

- existing public access to and along the coastal foreshore for pedestrians or persons with disability should be retained and, where possible, public access to and along the coastal foreshore for pedestrians or persons with a disability should be improved,
- opportunities to provide new public access to and along the coastal foreshore for pedestrians or persons with a disability,
- the suitability of development given its type, location and design and its relationship with the surrounding area,
- any detrimental impact that development may have on the amenity of the coastal foreshore, including any significant overshadowing of the coastal foreshore and any significant loss of views from a public place to the coastal foreshore,
- the scenic qualities of the New South Wales coast, and means to protect and improve these qualities,
- measures to conserve animals (within the meaning of the *Threatened Species Conservation Act 1995* and plants (within the meaning of that Act), and their habitats,
- measures to conserve fish (within the meaning of Part 7A of the *Fisheries Management Act 1994* and marine vegetation (within the meaning of that Part), and their habitats
- existing wildlife corridors and the impact of development on these corridors,
- the likely impact of coastal processes and coastal hazards on development and any likely impacts of development on coastal processes and coastal hazards,
- measures to reduce the potential for conflict between land-based and water-based coastal activities,
- measures to protect the tangible and intangible cultural places, values, customs, beliefs and traditional knowledge of Aboriginals,
- likely impacts of development on the water quality of coastal waterbodies,
- the conservation and preservation of items of heritage, archaeological or historic significance,
- the cumulative impacts of the proposed development on the environment, and
- measures to ensure that water and energy usage by the proposed development is efficient.

The right of footway marked on the Concept Plan as Easement A, the current public access to Yarrawarra creek and the beach in the north-western corner of the development should not be closed. As a long term resident of the area, I object to any proposal that denies public access or fails to improve access (as required by the CP Act). Its closure will prevent easy access to a deep water pool (at high tide) for kayaks and paddleboards.

That right of footway marked on the Concept Plan as Easement A in the North-western corner is to be removed from Lot 25. My understanding is the burden of the easement was not on the developer's land it was on the land to the west, Lot 25. The easement is the communities only guaranteed access to Yarrawarra Creek and the beach

Note. Clause 92 of the *NSW Environmental Planning and Assessment Regulation 2000* requires the Government Coastal Policy (as defined in that clause) to be taken into consideration by a consent authority when determining development applications in the local government areas identified in that clause or on land to which the Government Coastal Policy applies. The subject site is identified as a "Sensitive Coastal Location"

The Revetment Wall

The long term viability of the proposed development is entirely dependent on protecting the remaining land from further erosion. The Revetment wall is to protect the subject site from erosion by wave action, storm surges and currents however the Statement of Environmental Effects (SEE) does not address the potential impacts on:

- Adjoining lands
- Lands on the opposite side of the creek by refraction and reflection of waves
- The listed SEPP 26 Littoral Rainforest (also Nationally listed under the EPBC Act – refer below/attachment)
- Solitary Islands Marine Park (beaches and dunes)
- The Arrawarra Creek/Yarrawarra Creek ICOL

In regards the SEPP26 Littoral Rainforest to the NE of the site, the location and size of the site as addressed by the applicants Statement of Environmental effects on page 42, grossly misrepresents reality. CHCC's Vegetation mapping shows that the Littoral Rainforest extends to the edge of Yarrawarra Creek forming part of the Coffs Coast Regional Park at Arrawarra and therefore the proposed works will impact the rainforest when mapped correctly. ***Attached is a copy of the Arrawarra Coastcare Site Draft 2016 Management Plan prepared by NPWS which indicates the extent (Zone A) of the Littoral Rainforest referenced from CHCC 2012 Fine Scale Vegetation Mapping – NPWS GIS layers.***

Attached is an email from Toni Hart, Compliance Officer, Dept. of Environment Canberra confirming the listing for the Arrawarra Littoral Rainforest Coastcare site as a nationally threatened ecological community, and detailing the Government's role in regulating actions that may impact on defined items of Australia's natural and cultural heritage (called matters of 'national environment significance').

Detail specification drawings are conflicting. The proposed Revetment Sea Wall drawings 15-849NSW-00 to 15-849NSW-18 from Coastal Engineering Solutions Pty Ltd in the SEE show a minimum design height of 3m AHD. The de Groot and Benson, Typical Section drawing No: 00074-DA05 contained within the Engineering Issues Statement, submitted to Council, show a design height of 2m AHD?

The proposed works place an unacceptable additional risk of further serious erosion to an even larger portion of the Coastal Reserve, the SEPP 26 Littoral Rainforest remnant and remaining Aboriginal culture on the adjoining land, all of extreme environmental and cultural significance.

The proposed revetment wall is not located wholly within the site boundary as claimed in the DA submission. Subject to the approval of the revetment wall the proponent intends to reclaim land to the historical boundary which has been lost to erosion. A previous attempt to repair and relocate the sea wall in 2008 DA 887/08 was rejected by Council. ***887/08 Extension and repair to existing sea wall submission attached- as the same issues apply.***

Ambulatory boundaries are natural boundaries formed by a permanent body of tidal or non-tidal water. In NSW, under this doctrine, boundaries formed by tidal waters are defined by the mean high water mark and all land below this belongs to the Crown. (NSW Government)

Note: Anyone who frequents the area knows full well the current gabion rock wall and the indicated MHWL is already permanently in Yarrawarra and Arrawarra Creeks. It is often mostly inundated by high tides, whilst King Tides and storm events see the gabion wall completely submerged.

The doctrine of accretion holds that, since the position of bounding water-lines may move over time, legal boundaries formed by water may also change over time, but only if two conditions are satisfied: the change must occur gradually, and as a result of natural processes.

Australian case law has made it clear that where land is gradually eroded by the sea, or covered by rising seas, any part that comes to lie below the mean high water mark ceases to be land that is 'real property'

When that happens a boundary originally defined by survey ceases to exist, the property gains an ambulatory boundary, and the ownership of the lost land reverts to the Crown. (The NSW Government).

Disputes over the ownership of land covered by the sea date back to the 14th century in England so the doctrine of accretion is an ancient and well settled legal doctrine.

There is no consideration of the responsibility for future maintenance of either the Rock Revetment Wall or for the future maintenance and monitoring of the E2 Environmental Conservation (Buffer) zone

The Yarrawarra/Arrawarra Creek System is an ICOLL, another fact not addressed by the SEE. Consideration should have been given to ensure that the proposed sea wall development does not impact on the natural entrance processes that occur. In November 2015 I was involved in discussions with Council and WBM about the Arrawarra Creek Coastal Zone Management Plan study. The Draft Options Report is due for release and may have outcomes that are relevant to the proposed development of the rock revetment wall.

E2 Environmental Conservation Zone

The E2 zone contains the stormwater detention system (retention basin) is not appropriate and does not meet with the principles and objectives of E2 zones.

The berm and batter for the detention system and the revetment wall is within the E2 zone -again this is not appropriate and does not meet with the objectives of the zone. The CHCC DCP 2015 specifies that the types of infrastructure (retention systems and revetment walls) are NOT to be located in Environmental zones.

The principle function of the E2 zone is to create a continuation of the connecting corridor function for faunal passage linking the north and south. The proposed zone is too narrow and with the detention system and lack of vegetation it cannot achieve this important function. The corridor would predominantly need to cater for gliders and birds.

The E2 zone in the Northern portion of the development should be retained as a community asset, community land, and removed from inclusion in privately owned blocks 20-25.

Based on the CHCC guidelines, the offset required would need to be planted at a density of 1 tree per 15 m², hence a minimum of 1,575 m² of E2 zone will be planted out with associated understorey.

The E2 zone referred to above is identified in the Statement of Environmental Effects as being a bushfire fire source and would be bushfire prone. Therefore to nominate this area to be compensatory habitat planting is irresponsible, irrational and should not be condoned.

Once the compensatory habitat plantings are brought into question as a Bushfire Risk, the proponent will be unable to meet Councils compensatory planting requirements. And utilising the NSW 10/50 Vegetation Clearing Code of Practice, a landowner would be able to remove such compensatory habitat without the need for consent.

Ecological

Items listed and protected under the *Environment Protection and Biodiversity Conservation Act 1999* are matters of national environmental significance which are relevant in the Arrawarra area include the ecological community

Littoral Rainforest and Coastal Vine Thickets of Eastern Australia which is listed critically endangered under the Act, and adjacent to the property.

In particular the koala (*Phascolarctos cinereus* combined populations of Qld, NSW and the ACT) which is listed vulnerable under the Act is known to occur within the area.

Considerable vegetation was previously removed using the 10/50 Bushfire legislation, what level of assessment was done?

The proposal claims to minimise impacts on the remaining remnant native vegetation, which can readily be disputed, for example. The SEE it states that trees will be removed to allow filling the site and provide for future biodiversity through the management and enhancement of the riparian buffer land. This is a complete misnomer because should the concept plan DA be approved; a considerable amount of the riparian buffer zone will be in private hands, which has little hope of long term survival.

It's claimed a detailed and rigorous statutory environmental assessment has been prepared for the proposal but the assessment and the Statement of Environmental Effects (SEE) does not address at all the potential impacts of the development on the habitat of the following threatened species, listed under the Threatened Species Conservation Act 1995, that are highly likely/previously known to utilise the "habitat" on the site:-

- Glossy Black cockatoos
- Grey Headed flying foxes

The subject site also contains:-

- Secondary koala habitat-(even though the vegetation has mostly been selectively removed/logged under the guise of the 10/50 Bushfire legislation, the proponent still needs to adequately address CHCC's Koala Plan of Management)
- Endangered Ecological Community -- Subtropical Coastal Floodplains & Swamp Oak Floodplain Forest - the proponent needs to adequately address this matter in the SEE.
- SEPP 14 Wetlands adjoin site - the proponent still needs to adequately address this in the SEE.
- The site forms Part of an identified Regional Vegetation Corridor (as identified in the Regional Growth Strategy 2009), again the proponent still needs to adequately address this matter in the SEE.
- 19 hollow bearing trees-15 trees are to be removed for the development to progress – where are ALL the hollows going to be relocated to?

Aboriginal Cultural Heritage

There is the need to assess the direct and indirect impacts of the development on Aboriginal Cultural Heritage Values -- both tangible and intangible.

The assessment needs to address the potential impacts of

- the revetment wall
- the fill
- the subdivision
- the future development of houses and
- the provision of infrastructure and services for the subdivision.

Cultural Heritage studies are considered unprofessional given that neither the Coffs Harbour and District Local Aboriginal Land Council or the Garby Elders (from Yarrawarra) have been consulted by the consultants in the preparation of the studies. Given the site was historically known as Yarrawarra (meeting place) a full Heritage study exists with the site being recognised as being culturally significant. Garby Elders involved in the study and subsequent carbon dating still reside in the area and should be engaged. The subject site is less than 1 kilometre from the highly significant Arrawarra Fish Traps. Within close proximity there are registered and identified sites cultural material

Given a large part of the development site will be covered by up to 1.5m of fill we owe it to the traditional owners to seek their guidance on matters that are significant to them. I understand the site contains burial grounds and I am

offended by the irresponsible dumping of fill over burial grounds. What does it say about our treatment of traditional owners to condone having their ancestors buried a further 1.5m underground, possibly under a house or a sealed road?

The proposal states *"the proposed residential subdivision is unlikely to result in further harm to Aboriginal Heritage. No Aboriginal objects were identified within the area of proposed works. One known Aboriginal site (Arrawarra Headland site #22-1-0392) was recorded to extend into the Project Area however the site is well within the proposed buffer zone and has been previously disturbed"*.

On one hand the proponent claims the site is well within the proposed buffer zone and states reduced pedestrian traffic will offer greater protection to the remains of the shell scatter in the Northwest corner of the site. But the site is within the E2 zone which takes up around half of the site will be included within the E2 zone on private property? What guarantees can we give our first peoples the shell scatter remains will be treated with respect, none I'm afraid.

General

There is no mention of the current footbridge (unlicensed) at the confluence of Yarrawarra and Arrawarra Creeks as part of the development proposal?



Thank you for the opportunity to comment

Yours Faithfully



Attachments:

Arrawarra Coastcare Site plan

Toni Hart Dept. of Environment Canberra

887/08 Extension and repair to existing sea wall submission