



Residential Subdivision at Iron Gates

**Peer Review of the Independent Assessment Report to the
Northern Regional Planning Panel**

PPS-2014NTH020 (DA 2015/0096)

July 2022



Prepared by Kim Johnston

Commissioned by the Department of Planning and Environment

On behalf of the Northern Regional Planning Panel

EXECUTIVE SUMMARY

The proposal involves a residential subdivision of land known as Iron Gates at 240 Iron Gates Road, Evans Head. The proposal comprises a concept development application for the entire site comprising 183 lots consisting of residential (including super lots), public open space and infrastructure lots as well as detailed works for the first stage of the proposed subdivision comprising 147 lots primarily located in the north-eastern portion of the site. The development application was lodged in October 2014 and has been amended several times since its lodgement.

The Northern Regional Planning Panel ('the Panel') is the consent authority as the proposal is regionally significant development.

The application was notified in accordance with Richmond Valley Council's Community Participation Plan on a number of occasions, with a total of 928 submissions received as well as two (2) petitions of objection with 947 signatures. Approximately 73% of these submissions were objections to the proposal. Various state agencies have also provided general terms of approval as required by the planning controls, with the exception of Water NSW in relation to construction dewatering and flood work. Agencies have also provided referral comments.

This report forms a peer review of an *Independent Town Planning Assessment Report* prepared by Malcolm Scott Consultant Town Planner dated 29 June 2022 commissioned by Richmond Valley Council. The Independent Report, which has been provided to the Panel, recommends refusal. This Peer Review concurs with the Independent Report's recommendation for refusal and the general planning reasons for that recommendation. However, this Peer Review report provides a clearer set of refusal reasons as well as provides a more detailed assessment of the key issues in a more standardised report format.

A number of key issues have been identified in this peer review assessment, with the main issues including:

- Ecological and Biodiversity Impacts
- SEPP 71 Matters
- Subdivision Design and Public Open Space
- Bushfire

- Flooding
- Aboriginal Cultural Heritage
- Infrastructure and servicing (including upgrade to Iron Gates Drive)
- Earthworks and Groundwater
- Riparian and Wetland Impacts associated with SEPP 14 wetlands and Evans River

Other key issues identified included potential land contamination and acid sulphate soils, traffic and road layout matters, the management of social impacts and biting insect impacts and matters relating to the proximity of the site to the airport and military operations.

Following a thorough assessment of the proposal and consideration of the Independent Assessment Report, it is considered that the proposal results in significant ecological and biodiversity impacts, fails to satisfy various matters under SEPP 71 and has failed to adequately address a number of significant site constraints.

The inclusion on the site and/or proximity of SEPP 14 wetlands and the Evans River as well as the significant vegetation which exists on the site requires the proposal to be responsive to such site constraints, which has not been adequately demonstrated by the proposal. The lack of adequate buffer zones and other mitigation measures, including a comprehensive stormwater management plan, result in the proposal being unsatisfactory having regard to the important environmental conservation areas within and adjacent to the site.

The proposed design of the subdivision is also considered to be unsatisfactory, as it has not been drawn from a thorough site analysis nor does it represent an integrated urban and landscape design response to the site conditions. The subdivision layout arising from an earlier approval on the site appears to have been the reason behind the design.

The proposal has also not satisfied various preconditions to the grant of consent and does not provide an adequate response to the matters required to be outlined in a draft master plan, which has been replaced in this instance by the proposed concept development application. In short, the development application has not resolved significant and fundamental concerns with the proposal.

The proposal is considered unacceptable and accordingly this peer review concurs with the recommendation for refusal as outlined in the Independent Assessment Report however more detailed reasons for refusal are recommended as outlined in **Attachment A**.

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1. INTRODUCTION

Development Application No 2015/0096 proposes a residential subdivision of land known as Iron Gates at 240 Iron Gates Road, Evans Head (**'the site'**). The application proposes a concept application for the entire site comprising 183 lots consisting of residential, public open space and infrastructure lots as well as detailed works for the first stage of the proposed subdivision (**'Stage 1'**) comprising 147 lots primarily located in the north-eastern portion of the site (**'the proposal'**).

1.1 Background to the Development Application

The application was lodged on 27 October 2014 with Richmond Valley Council (**'the Council'**) and is *regionally significant development* pursuant to the then Schedule 4A (Clause 9(b)) of the *Environmental Planning and Assessment Act 1979* (**'EP&A Act'**) and Clause 20 of the then *State Environmental Planning Policy (State and Regional Development)* as a coastal subdivision of more than 100 lots. Accordingly, the Northern Regional Planning Panel (**'the Panel'**) is the consent authority.

The applicant for the development application is Goldcoral Pty Ltd (C/- Planit Consulting Pty Ltd), however, DAC Planning Pty Ltd was appointed by the applicant on 22 February 2019 to represent the applicant in relation to the development application. For the purposes of this development application, the applicant is Goldcoral Pty Ltd (**'the applicant'**).

The proposed development is classified as Integrated Development pursuant to Section 4.46 of the EP&A Act requiring approvals under the *Rural Fires Act 1997* (bushfire safety authority), the *National Parks and Wildlife Act 1974* (Aboriginal Heritage Impact Permit), and the *Water Management Act 2000* (water supply work approval for dewatering and flood work).

The development application is subject to the provisions of *State Environmental Planning Policy 71 – Coastal Protection* (**'SEPP 71'**) arising from various savings provisions and was classified as *regional development* pursuant to the now repealed *State Environmental Planning Policy (State and Regional Development) 2011* and former Clause 9(b) of Schedule 4A of the EP&A Act as a coastal subdivision. The development application remains *regionally significant development* as outlined in *State Environmental Planning Policy (Planning Systems) 2021*.

SEPP 71 provides that the consent authority must not grant consent for subdivision of land within a residential zone (or a rural residential zone) if part or all of the land is in a *sensitive coastal location* unless the Minister has adopted a master plan for the land. The applicant lodged a request to waive the requirement for a master plan which was subsequently declined and then lodged a draft master plan for the proposal. This has now been withdrawn and a concept development application is now proposed. The master plan issue is further considered in Section 4.1 of this Review.

Following consideration of the draft master plan by relevant state agencies and the Department over a number of years with unresolved issues remaining, the NSW Government Architect (**'GANSW'**) undertook a design review of the proposal in October 2020.

The GANSW raised several fundamental concerns with the proposed draft master plan, which were generally attributed to a lack of an integrated urban and landscape design and that cumulatively, the draft master plan did not appear to deliver appropriate urban design outcomes in its current form. Numerous recommendations were provided by the GANSW for improving the urban design and amenity of the project including matters relating to place and context, the overall subdivision plan (including streets, interfaces, access, connection and lot sizes), built form, integration with the natural environment and ongoing place management.

While this design review was in relation to the draft master plan, the development application proposes the same development and therefore this design review is equally applicable to the current development application.

The original application had a CIV of \$11.4 million and proposed a 186 lot subdivision comprising 178 residential lots, 3 public reserve lots, 2 fire trail lots and 3 residue lots, associated works and infrastructure and the demolition of existing dwelling and shed. The application has been amended and notified on several occasions, which is considered below.

1.2 Chronology of the Development Application

Throughout the assessment of this application, there have been four (4) separate amendments made to the application accepted under Clause 55 of the *Environmental Planning and Assessment Regulation 2000* (**'2000 Regulation'**) and the application has been notified on five (5) occasions. In total, the following submissions were lodged in relation to the

development application:

- 656 public submissions of objection
- 2 petitions of objection containing 947 signatories
- 23 'postcards' of objection and
- 249 public submissions in support.

The salient parts of the assessment of the application to date are summarised in **Table 1**, which provides a chronology of the development application.

Table 1: Chronology of the DA

Date	Event	Comments
27 October 2014	DA lodged (DA 2015/0096)	DA lodged with Council by Goldcoral Pty Ltd.
3 November 2014	DA submitted to Panel	The DA submitted to Northern Region Joint Regional Planning Panel (JRPP) as Regionally Significant Development.
3 November – 8 December 2014	Public exhibition (Exhibition #1)	Total 51 submissions – 50 objections and 1 submission of support
18 November 2014	'Stop the Clock' request (Council)	Request for additional information by Council
15 December & 22 December 2014	'Stop the Clock' request (Council & Integrated Agencies)	Request for additional information by Council & Integrated Agencies: <ul style="list-style-type: none"> • NSW RFS (9/12/2014), • NSW Office of Environment & Heritage (4/12/2014), • NSW Police (27/11/2014), and • NSW Local Land Services (10/12/2014), • NSW Office of Water (15/12/2014).
22 December 2014	'Stop the Clock' request (Council & Integrated Agencies)	Request for additional information dated 15/12/2014
23 October 2015	Amendment to DA submitted (Amendment 1)	The First Amendment included several changes to the configuration of roads and allotments resulting in a subdivision to create 183 lots (including 176 residential lots)
4 November– 7 December 2015	Public exhibition (Exhibition #2)	Total 31 submissions – 25 objections and 6 in support.
10 September 2018	Addendum submitted (but not accepted by Council)	The addendum contained changes to the configuration of roads and allotments to ensure consistency between the DA and Draft Master Plan. It also incorporated upgrades to Iron Gates Drive as part of the DA. Council did not accept the addendum and on 7/11/2018 conditions to be met before an amended application could be accepted

17 January 2019	Amended application lodged	Not accepted by Council.
26 July & 17 September 2019	A further amended application was lodged	An amended DA was lodged.
18 September 2019	Crown Land owner's consent	Provided
19 September 2019	Clause 55 Amendment 2 ('the 2019 amendment')	An amended DA was lodged and accepted pursuant to Clause 55 of the EP&A Regulation and replaced all previously submitted documentation for: <ul style="list-style-type: none"> • Subdivision to create 184 lots comprising – 175 residential lots, 3 residue lots, 4 public reserves, 1 drainage reserve and 1 sewer pump station lot • Upgrading of Iron Gates Drive • Demolition of the existing structures on site • Subdivision work including road works, drainage, water supply, sewerage, landscaping and embellishment work and street planting.
3 October – 18 November 2019	Public exhibition (Exhibition #3)	total number 557 submissions including: 202 supporting the development 350 objecting to the proposal including one petition with 304 signatures Three comments being neutral but of those, two suggesting Council to do thorough assessment and provide good development Two submission providing additional technical information to their objections.
29 July 2020	Clause 55 Amendment 3: ('the 2020 amendment')	This amendment (not re-exhibited as Council considered the changes to be minor): <ul style="list-style-type: none"> • consistency between DA and draft master plan • minor change to Lots 12 and 13 to widen adjacent fire trail to address RFS GTAs dated 17 March 2020 (pg3, point 3(2)); • removal of all foreshore parkland embellishments from Crown land; • Stormwater Management Plan for works on Iron Gates Drive (Arcadis 20/03/2020). • Amended subdivision plan (Land Partners, 23 March 2020, 8 sheets)
26 July 2021	Clause 55 Amendment 4 lodged	The applicant proposes a concept DA pursuant to Section 4.23(3) of the EP&A Act. The concept DA covers the whole proposal while Stage 1 includes The entirety of the proposal except for the subdivision of 40 lots in the proposed super lots (Lots 145, 146 and 147).
18 August 2021	Panel meeting	To discuss procedure to amend DA pursuant to CI 55 of the Regulation. The Panel requested Council provide a written submission outlining their position around the CI 55 request and for the Dept to provide a briefing report to assist in

		determining whether to accept the proposed CI 55 amendments.
6 September 2021	Panel meeting with Council, applicant and Dept staff	Discussed the proposed CI 55 amendment to the DA.
13 September 2021	Clause 55 Amendment 4 accepted ('the 2021 amendment') – Panel decision	Panel accept the amendment to the application under CI 55 of the Regulations.
24 September – 24 October 2021	Public exhibition (Exhibition #4)	Amendments making the DA a Concept Development Application containing two stages exhibited. No further amendments were made to the application since the September-October 2021 exhibition.
September – November 2021	Agency consultation	Referral of 2021 Amendment to agencies and agency responses received
18 February to 19 March 2022	Public exhibition (Exhibition #5)	Re-notification due to omission of Water NSW as an integrated approval body.
17 February 2022	Referral to agencies and responses	NRAR, NSW Heritage, Department of Defence, DPI Fisheries, Transport for NSW, DPI Agriculture and Water NSW
6 April 2022	Water NSW RFI	Water NSW requested information in relation to construction dewatering and flooding. On 12 April, the applicant provided a response including a dewatering Management Plan (11 April 2022), flood study commissioned by Council, engineering plans and previously submitted geotechnical reports.
9 May 2022	Water NSW response/RFI	The additional information provided by the applicant is unsatisfactory (dated 1994 and 1995 and does not meet current assessment criteria). Information required within 28 days.
17 June 2022	Panel meeting	Meeting to discuss Water NSW granting the applicant a 3-month extension to respond to their request for additional information. Consultant planner engaged by Council to prepare assessment report, with Council receiving draft assessment report.

1.3 Reason for the Report

This review has been commissioned by the Department of Planning and Environment ('Department') on behalf of the Panel to provide a peer review of the *Independent Town Planning Assessment* prepared by Malcolm Scott Consultant Town Planner dated 29 June 2022 ('**Independent Assessment Report**') commissioned by the Council.

This peer review is to consider whether the Independent Assessment Report satisfactorily considered the issues and whether the recommendation of, and the reasons for, refusal are

supported. A concise, standardised report format was also sought.

To undertake this peer review, a thorough consideration of the site, the proposal, the consultation undertaken with agencies, the relevant statutory considerations and the key issues was considered necessary.

Consequently, this review report provides the following sections:

- Section 2 - The Site
- Section 3 – The Proposal
- Section 4 – Statutory Assessment
- Section 5 – Consultation
- Section 6 - Key Issues.

A conclusion to this review is provided in Section 7, while Section 8 provides a recommendation for refusal subject to the revised reasons in **Attachment A**.

2. THE SITE AND LOCALITY

2.1 Background to the Site

The Iron Gates site has a long and complex history, with attempts to develop the land for residential development commencing in the mid-1990s. While the land comprises a large area of residentially land zoned (R1) largely within the previously cleared area of the site, it also contains extensive areas of remnant and natural vegetation including littoral rainforest and coastal wetlands located within areas zoned for environmental management and conservation (C2 and C3). Work on the site in preparation for residential development has been occurring throughout this time, with an aerial photograph of the site from 1998 in **Figure 1**.



Figure 1: The Site in 1998 (Source: Planit Consulting, July 2015)

The presence of these important ecological areas, the site's coastal location and the presence of Aboriginal cultural heritage on the land, has resulted in previous and current development proposals on the site being highly contentious.

There have been numerous consents issued for the site as well as various legal proceedings over the land which have included the following:

- On 20 October 1988, **DA 1988/111** was approved for the subdivision of the land to create 610 residential allotments and commercial and tourist allotments. The DA was then the subject of an appeal in the NSW Land & Environment Court (in *Richmond Evans Environment Society (TREES) v Iron Gates Development Pty Ltd* (NSW Land & Environment Court No. 40158 of 1991). The Court found that DA No. No. 1988/111 had lapsed as Condition No. 2 required construction of the access road prior to commencement of the consent. The Court found that the road had to be fully constructed for the subdivision prior to commencement of the consent.
- On 19 July 1990, **DA 1988/110** was approved by the Council (as designated development) for the construction of an access road between Wattle Street, Evans Head and the Iron Gates Estate (Portion 277) through wetlands No 147.

One of the conditions of this consent was that an area of compensation estuarine wetland habitat shall be developed within the Iron Gates development site and dedicated as Compensation Wetland Habitat. This condition (Condition 7) stated that this is to offset the loss of wetland habitat due to the construction of the road and that it shall have a minimum area equivalent to that of the wetland habitat destroyed by the construction of the access road. Earthworks pursuant to the road consent were undertaken in 1991.

- On 31 December 1992, the *Richmond River Local Environmental Plan 1992* commenced ('the 1992 Plan'), which repealed the *Interim Development Order No. 1 – Shire of Woodburn*. On 9 December 1993, the site was rezoned to enable urban and tourists uses as an amendment to this 1992 Plan.
- On 23 March 1993, Council granted development consent to **DA 1992/149** (Iron Gates Developments Pty Ltd) for the subdivision of the land into 110 residential lots (**Figure 2**) and resolved that a Fauna Impact Statement (FIS) was not required for Stage 1. There was a challenge in the NSW Land and Environment Court in *Oshlack v Richmond River Council & Iron Gates Developments* (NSWLEC No. 40090 of 1993), on whether or not a Fauna Impact Statement (FIS) was required, however, the challenge was dismissed.



Figure 2: Previously approved Subdivision Consent (Source: Council)

- On 31 March 1995, engineering plans for the development of Stage 1 in 2 parts 'A' & 'B' were approved by the Council and works commenced on Stage 1A in July 1996 as well construction of the access road. There was a further challenge in the NSW Land and Environment Court to the legality of this work.
- In 1996, DA 1988/110 was the subject of an appeal (in *Wilson v Iron Gates Pty Ltd v Richmond River Council – NSWLEC 40172 of 1996*) against the official status of the access road (Iron Gates Dr) as it had to be a gazetted road. Iron Gates Pty Ltd was restrained from using the road until the necessary applications and approvals issued. The Orders still apply to the deviated sections of road within Lots 1, 2 & 3 DP 823583 and no approvals have been issued by RVC for the sections of road within Lots 1, 2 & 3 DP 823583 (according to the Independent report).
- On 6 March 1997, the Court (Stein, J) found that Iron Gates Pty Ltd had carried out earthworks and clearing of vegetation (including damage to threatened species habitat) in contravention of NSW environmental legislation (s118D of the *National Parks and Wildlife Act 1974*) and in breach of certain conditions of the development

consent. The cumulative result was that the development as carried out was radically different from that which had been approved. Orders were issued restraining Iron Gates Pty Ltd from carrying out further development on the land pursuant to the existing consents and from completing certain roads (*Oshlack v Iron Gates Pty Ltd (1997)*).

The Court issued orders restraining:

- any further development of DA No. 1992/149,
 - from carrying out further works of and incidental to the clearing, formation and construction of an access road on any part of Lots 1, 2 & 3 DP 823583 as far as any such works are outside the boundaries of Lot 1 DP 47879 without first obtaining approval in accordance with the Environmental Planning & Assessment Act 1979
 - Iron Gates Pty Ltd from using as an access road to and from Portions 276 & 277 any parts of Lots 1,2 & 3 DP 823583.
- On 4 July 1997, orders for remediation and reinstatement of the land were made by Pearlman, J, in the Court following the judgement of Stein, J, which required:
 - Testing of water tables beneath the littoral rainforest and wetlands
 - Backfilling of drains,
 - Removal of bitumen roads that had been constructed
 - Undertake earthworks to re-contour the site to its original, free-draining topography
 - Mitigation of soil erosion
 - Remediation of retained soil
 - Revegetation of the site in accordance with the Plan (approximately 10Ha).

It is understood that these court-ordered works were not undertaken by the owners of the site at the time and the entity to which the order was issued, Iron Gates Pty Ltd, no longer exists. The Court ordered Plan is at **Figures 3 and 4**.

- Green – rainforest rehabilitation
- Red – wildlife corridor rehabilitation
- Blue - Heathland rehabilitation
- Orange - Coastal woodland rehabilitation

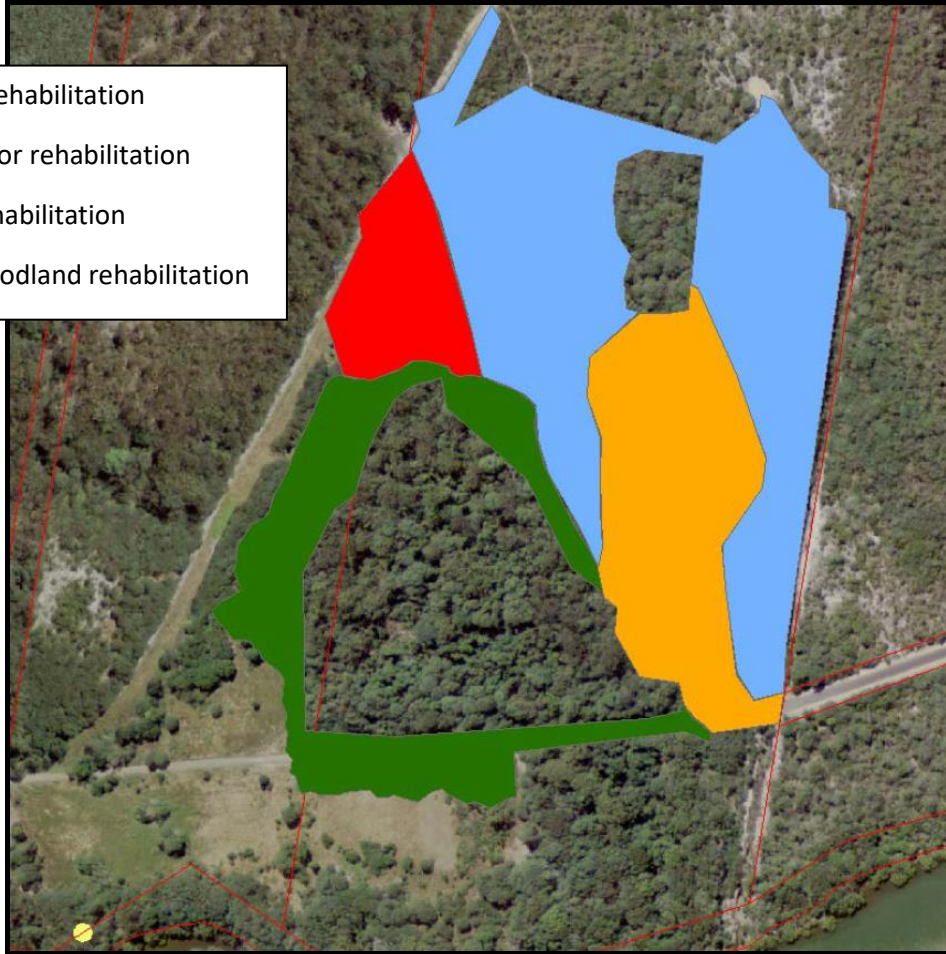


Figure 3: Digitised Court Order Map from 1997 (Source: BCD Biodiversity Conservation Principles Report, October 2020)

- In June 1998, in another case before the Land and Environment Court of NSW (*Environment Protection Authority v Iron Gates Pty Ltd* (12 June 1998)), Iron Gates Pty Ltd was charged with the construction and maintenance of certain open drains on its land which enabled polluted water to enter the Evans River. Iron Gates Pty Ltd was fined \$50,000 and ordered to block the drains to prevent further pollution.
- On 21 April 2012, the *Richmond Valley Local Environmental Plan 2012* ('RVLEP 2012') commenced which repealed the 1992 Plan and zoned the site R1-general residential, E2-Environmental Conservation, E3-Environmental Management & RU1-Primary Production. The E zones became C zones on 3 November 2021.
- Between 2015 and 2016, OEH investigated the site for alleged unauthorised clearing of native vegetation. A draft remediation order was issued under Section 12 of the *Native Vegetation Act 2003*, with the intent to remediate the land which was suspected of being illegally cleared. The draft remediation order was never finalised with

2.2 The Site

The subject site comprises three (3) allotments and is legally described as Lot 163 in DP 831052 and Lots 276 & 277 in DP 755624, known as 240 Iron Gates Drive, Evans Head. The site, for the purposes of this development application also includes the existing public road located between existing Lot 163 and Lot 276 (no works proposed) and the road reserve of Iron Gates Drive from the site to the intersection with Wattle Street and Cherry Street. This is collectively referred to as '**the site**' in this review and consists of an overall site area of 72.31 hectares (**Figure 4**).

Evans Head is a coastal village with a population of approximately 2,900, with housing largely comprising single detached dwellings with a town centre comprising a variety of shops and commercial services. The site is located to the west of the Evans Head town centre, approximately 1.1 kilometres from the edge of the existing urban area and approximately 1.5 kilometres from the town centre.

The site directly adjoins a Crown Foreshore Reserve adjoining the Evans River, which is owned and managed by Crown Lands and the Council (land reserved as a road reserve). This foreshore reserve does not form part of the site and is not part of the application (it was initially part of the proposal). The site is surrounded on all other boundaries by natural vegetation (**Figure 5**).



Figure 4: Site Location (Source: Waiver Request, Planit Consulting Pty Ltd, October 2014)



Figure 5: Aerial view of the site with Evans Head Township in the background (Source: Planit Consulting Pty Ltd, October 2015)

The site is accessed via an existing public road, known as Iron Gates Drive, to the east of the site, which currently comprises a two-way, bitumen carriageway of approximately 6 metres in width with no kerb or guttering, an unformed shoulder and no line markings (refer to **Figure 6**). Natural vegetation adjoins the road on both sides and in parts overhangs the road. Iron Gates Drive links the site with the Evans Head urban area to the north-east. An area of wetlands listed under *State Environmental Planning Policy No 14 – Coastal Wetlands* ('SEPP 14') is located on either side of this road.



Figure 6: Existing public road access to the site - Iron gates Drive looking east towards Evans Head

The site is generally vacant land with the exception of former subdivision works under DA No. 1992/149 comprising roads, stormwater infrastructure and bushfire maintenance works having been undertaken on the land, primarily in the north-eastern section of the site. There is also some underground sewer and water services installed on the site. This has resulted in a number of large cleared areas as well as sealed roads and trails.

The engineering report states that the site consists of multiple catchments and features an extensive stormwater drainage network that has been inoperative since its construction in the mid 1990's. The network consists of multiple stormwater reticulation pipes ranging in size from

375mm diameter at upstream locations to 825mm diameter at downstream outlets. The drainage configuration also makes use of open drainage channels collecting stormwater from the various drainage systems to direct stormwater south of the site towards the Evans River. These open drains are proposed to be filled in as part of the proposal.

The existing roads, mainly in the eastern section of this site, have significant cracking of the surface and have been partially washed away in some areas. This existing infrastructure on the site is unlikely to be adequate to be used for future development given this level of disrepair and the likely need for upgrading to meet current Australian standards and controls (**Figures 7, 8 and 9**).



Figure 7: Existing subdivision infrastructure in the north-east corner of the site in disrepair



Figure 8: Looking east towards the entry to the site from Iron Gates Drive



Figure 9: Existing subdivision infrastructure on the site in disrepair

A single detached dwelling, shed and gravel driveway is located in the south eastern corner of Lot 163 (**Figure 10**), which is proposed to be demolished in the application.



Figure 10: The existing dwelling and shed within Lot 163

The remainder of the site contains native vegetation, some of which is remnant vegetation, while other parts are regrowth vegetation following earlier clearing works. The site contains areas of remnant native vegetation including areas of littoral rainforest, eucalypt forest and coastal wetlands (discussed further in the key issues section of this review).

The site features varying grades ranging from 0.5% to 11%, however, the main changes in topography are limited to the western and north-western portions of the site. The eastern portion of the site is relatively flat and features very minimal grades of approximately 0.5%, largely located at RL 3.0 to 4.0. This topography stretches across the majority of the eastern side of the site and to the Crown foreshore reserve adjoining the Evans River. This portion of the site includes two (2) artificial channels running from north to south (along the eastern boundary of the site) and north-west to south-east adjoining the Littoral rainforest, which facilitates flows to the Evans River. These drains are proposed to be filled under this proposal.

A ridge is located on the western side of the site with an elevation of approximately 22 metres AHD, with steep grades of approximately 11% located in this area. There has been some clearing on the slopes of this ridge, although the ridgeline remains heavily vegetated (**Figure 11**).



Figure 11: Sloping area of the site and ridgeline in the western portion of the site

2.3 The Locality

The site is located within an extensive network of naturally vegetated areas and wetlands, and is within close proximity to the Evans River. Bundjalung National Park is located to the south, Broadwater National Park to the north and the coastline to the east. The Evans Head Memorial Aerodrome exists to the north-west of the site, currently used by limited recreational and general aviation and also contains an aviation museum.

The Evans Head Weapons Range is located to the south of the town and is still used by the Department of Defence. Evans Head is accessed from the Pacific Highway to the west of the site via Woodburn Evans Head Road. The regional context of the site is illustrated in **Figure 12**.

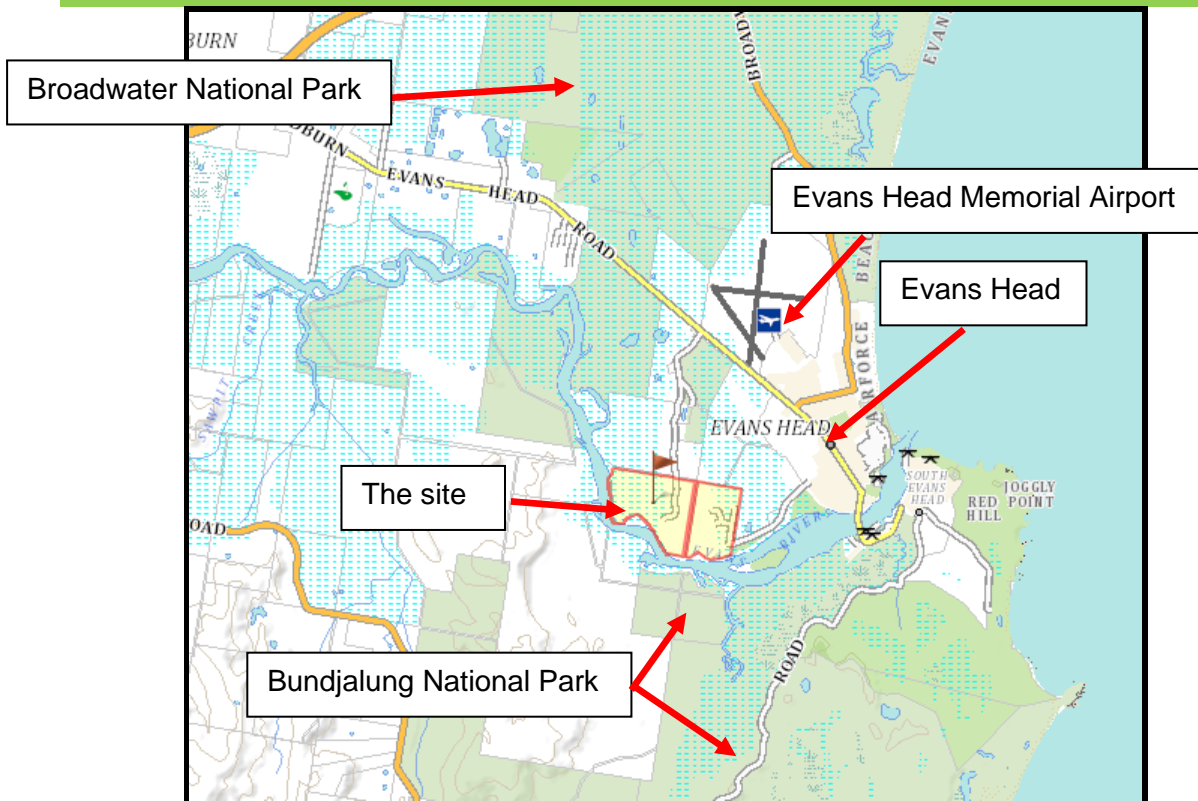


Figure 12: Regional Context (Source: SIX Maps)

The extensive network of wetlands in the locality extends to along the majority of the eastern boundary of the site and directly adjoining the road reserve of Iron Gates Drive (**Figure 13**). A large area of wetland also exists between the site and the existing urban area of Evans Head to the east of the site. At the time of lodgement of this application, these areas were formerly listed under SEPP 14, however, are now listed under Chapter 3 of *State Environmental Planning Policy (Resilience and Hazards) 2021* as coastal wetlands.

The adjoining land to the north and northeast of the site comprises Lots 544 and Lot 545 in DP 48550 and are owned by the NSW Aboriginal Land Council, while the adjoining land to the east comprises Lot 547 in DP 48550 is owned by the Crown (land ownership provided in the Independent Assessment Report).

Lot 546 in DP 48550 is located immediately to the north and comprises an easement for electricity lines. Lot 162 in DP 755624 is located immediately to the northwest and is privately owned. All of these adjoining allotments are heavily vegetated (**Figure 14**), with no improvements located upon them. While Iron Gates Drive has a bitumen surface, the remainder of the roads in the vicinity of the site are unformed, informal tracks.



Figure 13: Coastal wetlands surrounding the site (Source: <https://webmap.environment.nsw.gov.au>)



Figure 14: Adjoining allotments (Source: www.webmap.environment.nsw.gov.au)

3. THE PROPOSAL

The proposal is for the subdivision of the site for residential development and the provision of the associated infrastructure, public open space and public roads as well as upgrading of Iron Gates Drive. The development application now comprises a concept development application and the first stage of the proposed subdivision.

The specific aspects of the proposal is outlined below and illustrated in **Figure 15**:

3.1 Concept development application

The concept development application proposes the subdivision of land comprising:

- Creation of a total of 184 lots including:
 - 175 residential lots comprising 135 lots in the first stage (proposed Lots 1 to 135) and a further 40 residential lots in future stages (stage 2),
 - 2 rainforest lots (Lots 136 & 137) to be retained by the applicant,
 - 1 residue lot (Lot 138) comprising 47.42ha (with a dwelling entitlement),
 - 4 public reserves to be dedicated to Council comprising:
 - Two (2) fire trail lots (proposed Lots 139 (570sqm) and 140 (2842sqm),
 - Two (2) open space lots (proposed Lots 141 (1990sqm) and 142 (2969sqm) adjoining the Crown Foreshore Reserve adjacent to the Evans River
 - 1 drainage reserve lot (Lot 143 – 1,124sqm) for stormwater drainage purposes, and
 - 1 sewer pump station lot (Lot 144 -127sqm).
- Upgrading of Iron Gates Drive, including vegetation clearing work, and
- Subdivision works for Stage 1 and future Stage 2 including, but not limited to:
 - clearing of 16 hectares for the development footprint
 - earthworks to create level allotments (above the flood level),
 - roadworks and drainage,
 - removal of previously developed road and sewerage and drainage infrastructure,

- sewer and water supply (including service connections to Stage 1 lots and future Stage 2 lots), and
- electricity and communications (including service connections to Stage 1 lots and future Stage 2 lots).

The concept application notes that the subdivision of the three (3) super lots (Proposed Lots 145, 146 and 147) will be undertaken as a future stage (referred to as Stage 2) and will be subject to a further Development Application. All of the subdivision works will be undertaken in the first stage of the subdivision.

3.2 First stage (Stage 1)

The first stage (Stage 1) of the development application is proposed to comprise the following:

- Subdivision of land to create a total of 147 lots – including:
 - 135 residential lots comprising proposed Lots 1 to 135
 - 3 super lots comprising proposed Lots 145, 146 and 147 (subject to future development applications for residential subdivision),
 - 2 rainforest lots (proposed Lots 136 & 137),
 - 1 residue lot comprising the remainder of the site (proposed Lot 138),
 - 4 public reserves (proposed Lots 139, 140, 141 and 142) comprising a fire trail over two (2) lots and two (2) public reserves adjoining the Crown Foreshore Reserve adjacent to the Evans River,
 - 1 drainage reserve lot (proposed Lot 143), and
 - 1 sewer pump station lot (proposed Lot 144);
- Upgrading of Iron Gates Drive, including vegetation clearing work; and
- Subdivision works for Stage 1 and future Stage 2 including, but not limited to:
 - clearing and earthworks,
 - roadworks and drainage,
 - sewer and water supply (including service connections to Stage 1 lots and future Stage 2 lots), and
 - electricity and communications (including service connections to Stage 1 lots and future Stage 2 lots).

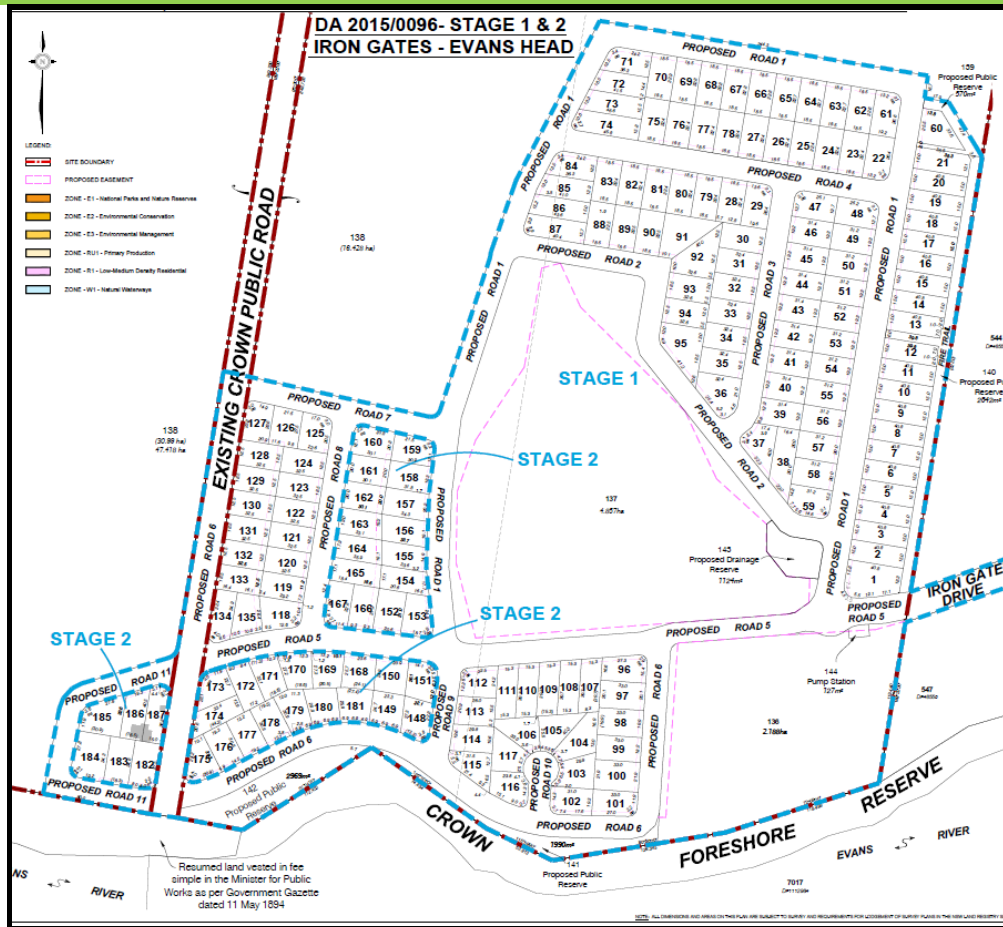


Figure 15: Proposed Development (Source: Concept Plan July 2021)

4. STATUTORY ASSESSMENT

When determining a development application, the consent authority must take into consideration the matters outlined in Section 4.15(1) of the *Environmental Planning and Assessment Act 1979* ('**EP&A Act**'). These matters as are of relevance to the development application include:

- (a) *the provisions of—*
 - (i) *any environmental planning instrument, and*
 - (ii) *any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and*
 - (iii) *any development control plan, and*
 - (iiia) *any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and*
 - (iv) *the regulations (to the extent that they prescribe matters for the purposes of this paragraph),*
that apply to the land to which the development application relates,
- (b) *the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,*
- (c) *the suitability of the site for the development,*
- (d) *any submissions made in accordance with this Act or the regulations,*
- (e) *the public interest.*

These matters are considered below:

4.1 Provisions of environmental planning instruments, proposed instruments, development control plans, and any planning agreements (Section 4.15(1)(a))

The development application was lodged in October 2014 and therefore the statutory planning

controls applicable to the proposal are significantly different to the current legislative regime.

(a) Environmental planning instruments, proposed instruments and development control plans (Section 4.15(1)(a)(i), (ii) & (iii))

The environmental planning instruments, proposed instruments and development control plans pursuant to Section 4.15(1)(a)(i), (ii) and (iii) of the EP&A Act relevant to this application include the following (as relevant at the time of DA lodgement on 27 October 2014 and having regard to relevant savings provisions):

- *State Environmental Planning Policy (State and Regional Development) 2011*
- *State Environmental Planning Policy No 14 – Coastal Wetlands*
- *State Environmental Planning Policy No 71 – Coastal Protection*
- *State Environmental Planning Policy No 44—Koala Habitat Protection*
- *State Environmental Planning Policy No 55 – Remediation of Land*
- *State Environmental Planning Policy (Infrastructure) 2007*
- *State Environmental Planning Policy No (Rural Lands) 2008*
- *Richmond Valley Local Environmental Plan 2012 ('RVLEP 2012');*
- *Draft amendments to State Environmental Planning Policy (Infrastructure) 2007, SEPP (Environment) and Remediation of Land SEPP*
- *Richmond Valley Development Control Plan ('RVDCP')*
- *Richmond Valley Council Section 94A Development Contributions Plan 2010*

The relevant controls of these planning instruments and policies are considered in a compliance table in **Attachment B**.

Integrated Development

The development application is Integrated Development pursuant to Section 4.46 of the EP&A Act pursuant to:

- Section 100B of the *Rural Fires Act 1997* (bushfire safety authority),
- Section 90 of the *National Parks and Wildlife Act 1974* (Aboriginal Heritage Impact Permit), and
- Section 90(2) of the *Water Management Act 2000* (water supply work approval for dewatering).

General terms of approval ('GTAs') have been provided from these agencies, with the exception of Water NSW, which are discussed further in this review report.

It is noted that the application is not integrated development for the purposes of Section 91(2) of the *Water Management Act 2000* as outlined by the Natural Resources Access Regulator ('NRAR') as a controlled activity in, on or under waterfront land is not proposed (notwithstanding that the application was originally lodged with this integrated approval application).

Concept Development Application and Draft Master Plan

The development application is subject to the provisions of SEPP 71, which provides that a consent authority must not grant consent for subdivision of land within a residential zone (or a rural residential zone) if part or all of the land is in a sensitive coastal location, unless the Minister has adopted a master plan for the land (Clause 18(1)(a) and (d)).

The definition of a sensitive coastal location pursuant to Clause 3(1) of SEPP 71 is (emphasis added to relevant sections of the definition for the site):

sensitive coastal location means any of the following:

- (a) land within 100m above mean high water mark of the sea, a bay or an estuary,***
- (b) a coastal lake,*
- (c) a declared Ramsar wetland within the meaning of the Environment Protection and Biodiversity Conservation Act 1999 of the Commonwealth,*
- (d) a declared World Heritage property within the meaning of the Environment Protection and Biodiversity Conservation Act 1999 of the Commonwealth,*
- (e) land declared as an aquatic reserve under the Fisheries Management Act 1994,*
- (f) land declared as a marine park under the Marine Parks Act 1997,*
- (g) land within 100m of any of the following:***
 - (i) the water's edge of a coastal lake,*
 - (ii) land to which paragraph (c), (d), (e) or (f) applies,*
 - (iii) land reserved or dedicated under the National Parks and Wildlife Act 1974,*
 - (iv) land to which State Environmental Planning Policy No 14—Coastal Wetlands applies,***
 - (h) residential land (within the meaning of State Environmental Planning Policy No*

26—Littoral Rainforests) that is within a distance of 100m from the outer edge of the heavy black line on the series of maps held in the Department of Planning and marked “State Environmental Planning Policy No 26—Littoral Rainforests (Amendment No 2)”.

The site satisfies the definition as being located within a *sensitive coastal location* as it contains land within 100 metres of the Evans River (criteria (a)) and land within 100 metres of a wetland to which SEPP 14 applies (criteria (g)(iv)). The proposal involves the subdivision of land in a residential zone (R1) and therefore the requirement for a master plan to be adopted by the Minister prior to the granting of consent applies to this application.

The applicant lodged a request to waive the requirement for a master plan pursuant to Clause 18(2) of SEPP 71, however, this waiver was declined on 3 May 2015. The applicant subsequently lodged a draft master plan for the proposal on 30 October 2015 pursuant to Clause 18(1)(d) of SEPP 71.

Following consideration of this draft master plan by relevant state agencies and the Department over several years with unresolved issues remaining, including the GANSW, the applicant withdrew the draft master plan on 19 July 2021 and amended the current development application to a concept development application pursuant to Section 4.22(1) of the EP&A Act on 26 July 2021. Pursuant to Section 4.23(2) of the EP&A Act, a concept development application satisfies the requirement of an environmental planning instrument which requires the preparation of a development control plan before any particular or kind of development is carried out on any land.

SEPP 71 required the adoption of a master plan by the Minister prior to granting consent, while Section 4.23(2) of the EP&A Act refers to a *development control plan*. Clause 95 of Schedule 1 of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017* (**‘the STOP Reg’**) provides that provisions of environmental planning instruments requiring master plans are to be construed as requiring a development control plan (DCP) under the former Section 74D of the EP&A Act with respect to the matters, and in accordance with, the procedures provided for making the master plan by the environmental planning instrument. This clause originally existed in Cl 95 of Schedule 6 of the EP&A Act and commenced on 30 September 2005. It was transferred to Cl 95 of Schedule 1 of the STOP Reg on 1 March 2018. Accordingly, the making and approval of a concept development application would satisfy the master plan requirement of Clause 18(d) of SEPP 71.

Preconditions to the Grant of Consent and Key Controls

The key preconditions of the planning controls and other key requirements include the following, which have largely not been satisfied:

- Clause 2 of *State Environmental Planning Policy No 14 - Coastal Wetlands* which requires consideration of the aims of the policy and Clause 7(1) which requires the consent of the Council and the concurrence of the Director to clear land, construct a levee on that land, drain that land, or fill that land, within a SEPP 14 wetland. It is considered that the proposal is contrary to the aims of SEPP 14 and there is doubt as to whether Clause 7 applies. These matters are further considered in the key issues section.
- Clause 7(b) of *State Environmental Planning Policy No 71 - Coastal Protection* which requires certain matters to be considered in the assessment of development applications. Clause 16 requires that consent not be granted if the consent authority is of the opinion that the development will, or is likely to, discharge untreated stormwater into the sea, estuary or other similar body of water. Clause 20(2) of the Policy requires certain matters to be outlined in a draft master plan. The proposal is considered to be inconsistent with these provisions of SEPP 71 which is discussed further in the key issues section of this report.
- Clause 3 of *State Environmental Planning Policy No 44 – Koala Habitat Protection* which requires consideration of the aims of the Policy, Clause 9 which requires a Plan of Management to be prepared for core koala habitat and Clause 10 which requires consideration of the Guidelines. It is considered that the proposal is inconsistent with the aims of the Policy, has not provided a Koala Plan of Management and has not considered the Guidelines. These issues are further considered in the key issues.
- Clause 7 of *State Environmental Planning Policy No 55 - Remediation of Land* which requires the consent authority to consider whether the land is contaminated, and if contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the proposal, and if the land requires remediation to be made suitable for the proposal to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose. These issues have not been

adequately addressed and are discussed further in the key issues.

- Clause 45 of *State Environmental Planning Policy (Infrastructure) 2007* requires the consent authority, prior to determining a development application for development involving or requiring the placement of power lines underground, give written notice to the electricity supply authority for the area in which the development is to be carried out. There has been no consultation undertaken with the local energy provider by the Council.
- The *Richmond Valley Local Environmental Plan 2012* ('**RVLEP 2012**') is the principal planning instrument applying to the site. The following clauses of the RVLEP 2012 are relevant to the proposal:
 - Clause 1.2 – This Clause contains the aims of the plan, with the proposal considered to be inconsistent with some these aims as outlined in **Attachment A**.
 - Clause 2.2 – This clause contains the zoning of the site, with the site comprising land in numerous zonings (**Figure 16**). A consideration of the proposal in relation to the zoning is outlined in **Attachment B** of this report. The proposal is permissible in the respective zones on the site.

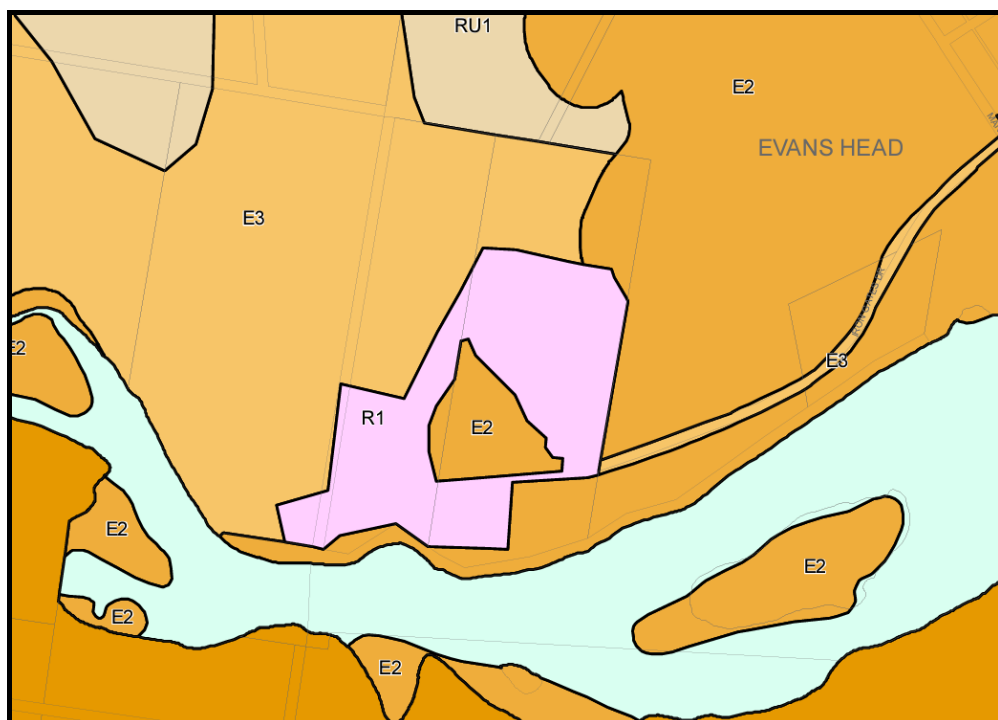


Figure 16: Zoning of the Site (Source: www.legislaition.nsw.gov.au)

- Clause 2.6 – This clause permits subdivision of land with consent.
- Clause 4.1 – This Clause contains the minimum subdivision lot size development standard, which has been achieved for all of the proposed residential lots.
- Clause 5.10 – The site contains a local heritage item as well as Aboriginal Cultural Heritage, which has not been satisfactorily addressed. This is considered further in the key issues section of this report.
- Clause 6.1 – This Clause includes controls for acid sulphate soils, which has not been satisfactorily addressed. This is considered further in the key issues section of this report.
- Clause 6.2 – This Clause requires adequate arrangements to be shown for essential services, which has not been adequately demonstrated by the proposal. This is considered further in the key issues section of this report.
- Clause 6.3 – This Clause contains controls for earthworks which have not been satisfied, considered further in the key issues section of this report.
- Clause 6.5 – This clause contains controls for flood planning which have not been satisfied, considered further in the key issues section of this report.
- Clause 6.6 – This Clause contains controls for terrestrial biodiversity, however the proposal is contrary to this clause arising from the ecological and biodiversity impacts from the proposal as outlined further in the key issues section of this report.
- Clause 6.8 – This clause contains controls relating to riparian land and watercourses, with the proposal not adequately demonstrating the proposed stormwater management arrangements for the site and is therefore contrary to this clause as discussed in this report.
- Clause 6.10 – This clause contains controls relating to wetlands and the proposal is inconsistent with this clause. This is further considered in the key

issues section of this report.

- Clauses 6.11 & 6.12 – This clause applies to airspace operations and areas subject to aircraft noise, which have been satisfied.

Richmond Valley Development Control Plan 2012

The relevant development control plan applying to the site when the application was lodged was the *Richmond Valley Development Control Plan 2012* ('RVDCP 2012') This DCP has subsequently been repealed. Parts A - Residential Development, Part G - Subdivisions, Part H - Natural resources and hazards and Part I - Other Considerations are the relevant sections of the DCP. A detailed consideration of the proposal in the context of these relevant provisions has been considered in the Independent Assessment Report. This peer review report has not considered the DCP in detail.

(b) Planning agreements (Section 4.15(1)(a)(iia))

There are no voluntary planning agreements applicable to the proposal.

(c) Provisions of Regulations (Section 4.15(1)(a)(iv))

The 2000 Regulation is the relevant regulation for the application. Clause 92(1) of the 2000 Regulation contains matters that must be taken into consideration by a consent authority in determining a development application. Pursuant to Clause 92(1)(b) of the 2000 Regulation, in the case of a development application for the demolition of a building, the provisions of *AS – 2601: The Demolition of Structures* must be considered by the consent authority as the proposal involves the demolition of the existing dwelling and shed on the site. Relevant conditions of consent (if granted) can be imposed to satisfy this matter.

4.2 Likely impacts of that development (Section 4.15(1)(b))

The likely impacts of the development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality have been considered in response to SEPPs, LEP and DCP controls outlined above and in the key issues section. The proposal is considered unsatisfactory.

4.3 Suitability of the site for the development (Section 4.15(1)(c))

The site has been zoned for residential development and has been the subject of numerous studies and consultant reports over the past 10 years. There are a number of site constraints, discussed further in Section 6 of this review report, however, it is considered that the site is not suitable for the proposed development arising from the current information provided.

4.4 Submissions (Section 4.15(1)(d))

The submissions from the community lodged during the notification periods have been considered in the Independent Assessment Report. The issues raised in the submissions are discussed in the key issues section of this report.

4.5 Public interest (Section 4.15(1)(e))

The proposal is generally inconsistent with a number of the planning controls, has not resolved several key issues and the constraints of the site have largely not been adequately addressed. It is considered that at this time, the application is not in the public interest.

5. CONSULTATION

5.1 Council Referrals

The Independent Assessment Report considers the Council submissions and the relevant issues are discussed in the key sections of this review report. The submissions were not available for this review report.

5.2 Agency Referrals

The development application was referred to the following agencies for comment and/or under the provisions of integrated development as outlined in **Table 2**.

Table 2: Agency Consultation

Agency	Concurrence/ referral trigger	Comments (Issue, resolution, conditions)	Resolved
Integrated Development (s4.46 of the EP&A Act)			
RFS	s100B - <i>Rural Fires Act 1997</i> - Bush fire safety of subdivision of land that could lawfully be used for residential or rural residential purposes	GTAs issued 16 June 2022	Discussed in Key Issues
Heritage NSW	s.90 of the <i>National Parks and Wildlife Act 1974</i> .	GTAs issued 1 November 2021 which requires an AHIP to be lodged	Discussed in Key Issues
Water NSW	s90(2) and (4) – <i>Water Management Act 2000</i> (water supply work and flood work approval for dewatering)	Requested additional information on 6 April 2022 and 9 May 2022.	No - Refer Note 1
Natural Resources Access Regulator	S89-91 – <i>Water Management Act 2000</i> (water use approval, water management work approval or activity approval under Part 3 of Chapter 3)	No longer required (removal of works in Crown foreshore reserve). Concerns regarding flooding were also raised in correspondence dated 5 May 2020.	N/A

Referral/Consultation Agencies			
NSW Police	Referral for comments	Correspondence dated 21 April 2022 stating no objections subject to recommendations relating to CPTED.	Yes
Department of Defence	Landowner in vicinity of the site - Evans Head Air Weapons Range (Evans Head AWR	Correspondence dated 19 November 2019 and 22 March 2022	Yes (conditions)
DPI – Fisheries	Key fish habitat and marine vegetation	Correspondence dated 18 November 2021 and 28 March 2022	Discussed in Key Issues
DPI – Agriculture	Agency for advice to consent authorities about the protection and growth of agricultural industries and the resources upon which these industries depend.	Correspondence dated 7 October 2021.	
Transport for NSW	Clause 104 of <i>State Environmental Planning Policy (Infrastructure) 2007</i>	Correspondence dated 13 October 2021.	Discussed in Key Issues

Note 1: WaterNSW – Integrated Development

The development application was referred to Water NSW in early 2022 as the proposal involves dewatering and flood works for the proposed development and therefore an approval under Section 90(2) and (4) of the *Water Management Act 2000* is required. Therefore, the proposal is integrated development pursuant to Section 4.46 of the EP&A Act.

In correspondence dated 6 April 2022, Water NSW requested the consent authority to stop the clock and the applicant to provide the following information:

- *In relation to Construction Dewatering:*
 1. *Geotechnical Report*
 2. *Volume of water to be extracted during construction*
 3. *Duration of the water take for dewatering*
 4. *Method of measuring the water take and recording*
 5. *Provide documents updated with the above information*
- *In relation to Flooding:*

1. *A current Flood Study*
2. *Design and Construction Plans of the Subdivision (this would include the access roads and lots). This would need to include on the design and construction plans, AHD with the height above natural surface level and a known AHD height for the 1:100 Flood height.*

On 12 April 2022, the applicant provided additional information to Water NSW, largely comprising information previously submitted.

On 9 May 2022, Water NSW advised Council that it had reviewed the submitted information and considered that since the information was dated 1994 and 1995, it did not meet current assessment criteria. To enable the dewatering application to be progressed, Water NSW considered that updated studies were required as it needed to be established what dewatering will occur, at what locations (Lot & DP), the potential volumes, and what is the potential mix of salt water and groundwater given the location.

Water NSW requested the following information to be provided within 28 days:

1. Geotechnical Report as per the Geotechnical Investigations Report Minimum Requirements fact sheet.
2. Lot and DP the Dewatering will take place
3. Potential Volumes to be extracted

The applicant requested a three (3) month extension to respond to Water NSW information, which was granted by Water NSW. The Panel considered that there were two (2) options, being to either support the extension of time to enable provision of the required Water NSW information or to request that an assessment report be provided (based on the information currently submitted), noting the community interest and delays in bringing the application to a public determination meeting.

This is a decision for the Panel, however, it is considered that the applicant has had sufficient time to lodge a complete application and was also given a further opportunity in April 2022 to provide sufficient information to Water NSW for this assessment and failed to do so.

Pursuant to Section 4.47(2) of the EP&A Act, the consent authority is not required to obtain the general terms of any approval required by Section 4.46 of the EP&A Act if the consent

authority determines to refuse to grant development consent.

Pursuant to Section 4.47(4) of the EP&A Act, if the approval body informs the consent authority that it will not grant an approval that is required in order for the development to be lawfully carried out, the consent authority must refuse consent to the application. Water NSW have not informed the consent authority that it will not grant an approval, only that it requires further information and accordingly, this section is not relevant in this case at this time.

The issue of construction dewatering and flood work is considered to be unsatisfactory and warrants refusal of the application. The recommendation of refusal in this report results in the general terms of approval from Water NSW not being required in this instance given the recommendation is for refusal of the development application.

5.3 Community Consultation

The Independent Assessment Report considered the submissions received from the community throughout the numerous notifications of the development application. The issues raised in these submissions are discussed in the key issues section of this review report.

6. CONSIDERATION OF THE KEY ISSUES

The following key issues are relevant to the assessment of this application having considered the relevant planning controls and the proposal in detail:

- Ecological and Biodiversity Impacts
- SEPP 71 Matters
- Subdivision Design and Public Open Space
- Bushfire
- Flooding
- Aboriginal Cultural Heritage
- Infrastructure and servicing (including upgrade to Iron Gates Drive)
- Earthworks and Groundwater
- Riparian and Wetland Impacts
- Land Contamination
- Acid Sulphate Soils
- Traffic Generation and Road layout
- Social Impacts
- Biting Insect Impacts
- Aircraft Noise

These key issues are considered further below.

6.1 Ecological and Biodiversity Impacts

The site contains significant areas of natural vegetation, contains threatened fauna species and provides habitat for a range of fauna and flora threatened species. The importance of the ecological aspects of the site are highlighted in the portions of the site zoned C2 and C3 as well as being located within a locality comprising large areas of heavily vegetated land, including National Parks within the C1 zone.

The relevant reports on ecology and biodiversity include:

- *Terrestrial Flora and Fauna Assessment Report* prepared by Planit Consulting Pty Ltd (August 2014) as amended by JWA Pty Ltd in July 2019 ('the 2019 Ecology Report');
- *Amended Ecological Assessment (Iron Gates Drive)* by JWA Pty Ltd, April 2019 ('Iron Gates Drive Ecology Report')

While the 2019 Ecology Report repeatedly states that the vegetation proposed to be removed is regrowth, it is important to note that the *Threatened Species Conservation Act 1995* ('TSC Act') as well as the *Biodiversity Conservation Act 2016* ('BC Act') do not differentiate between regrowth or remnant vegetation.

The then North-East Branch of the Biodiversity and Conservation Division of the NSW Department of Planning, Industry and Environment ('BCD') (now part of the Environment and Heritage Group of the Department) assisted in the assessment of this development application and the draft master plan since 2014 on a non-statutory basis as the lead NSW government agency on biodiversity.

As part of the design review process which was undertaken by the NSW Government Architect in October 2020, principally for the draft master plan, the BCD provided a report titled "*Biodiversity Conservation Principles: Urban Design Review – Iron Gates masterplan*" dated October 2020 ('the BCD Report').

The BCD Report identified the key biodiversity features of the Iron Gates site which included:

1. The littoral rainforest areas, comprising the vegetation community in the centre of the site, in the south-east of the site and along the foreshore of the Evans River. This vegetation community has a conservation status in NSW as an Endangered Ecological Community ('EEC') and a Commonwealth status of Critically Endangered.
2. Areas of threatened species habitat, including habitat for the one threatened plant and the seven threatened fauna species that were recorded on the site during on-ground field surveys. A total of 11 threatened flora species and 53 threatened fauna species have been recorded in the locality of the subject site, which BCD suggests indicates that many more threatened entities are likely to use the habitats there.
3. The koala, which has been recorded within the eucalypt forest in the western portion of the site.

4. All the existing native vegetation within and adjacent to the proposed development.
5. The riparian zone of the Evans River.

Existing Vegetation Communities

Within the development footprint and the immediate surroundings, the 2019 Ecology Report found that the site comprises four (4) broad vegetation categories, including the following (**Figure 17** - colours for each community described below);

- Disturbed (open paddock and acacia regrowth shown in green) – This covers the majority of the site (approx. 14.5ha) and is stated as comprising open paddock/cleared land and acacia regrowth. The open paddock/cleared land occurs adjacent to the existing house and the areas to the east of the existing dwelling and along the southern boundary of the site adjoining the foreshore reserve (located outside of the site). This area remains cleared land due to continuous slashing/maintenance and former agricultural pursuits.

The regrowth acacia land is described as the previously cleared areas for the earlier development on the site with a canopy height of approximately 8-10m (approx. 7.2 ha) including constructed roads and stormwater infrastructure. This land occurs in the north-east corner of the site, where the proposed north-east portion of the subdivision is proposed. This community is bound to the east and west by drainage channels excavated as part of the earlier residential development

- Heath (shown in yellow/pink/orange) - Heath dominated communities occur in the north eastern section of the site with a small portion within the proposed development footprint. This community displays structural and species variation and it is stated that the previous sand mining of this area may be a factor in this diversity.
- Eucalypt Forest (shown pink and purple) - Eucalypt forest communities occur in the western section of the site with a small portion within the development footprint (~0.09 ha for proposed Roads 1 and 6).
- Littoral Rainforest (shown blue) - This vegetation community occupies the central portion of the site, the southeast portion of the site adjoining the foreshore reserve and

the entry to the site as well as within the foreshore reserve along the Evans River which currently comprises an unconstructed road reserve along the southern boundary. The approximate area of this community occurring on site and inclusive of the road reserve is 8.1 hectares. This community is considered reflective of the *Littoral Rainforest in the NSW North Coast, Sydney Basin And South East Corner Bioregions* EEC.

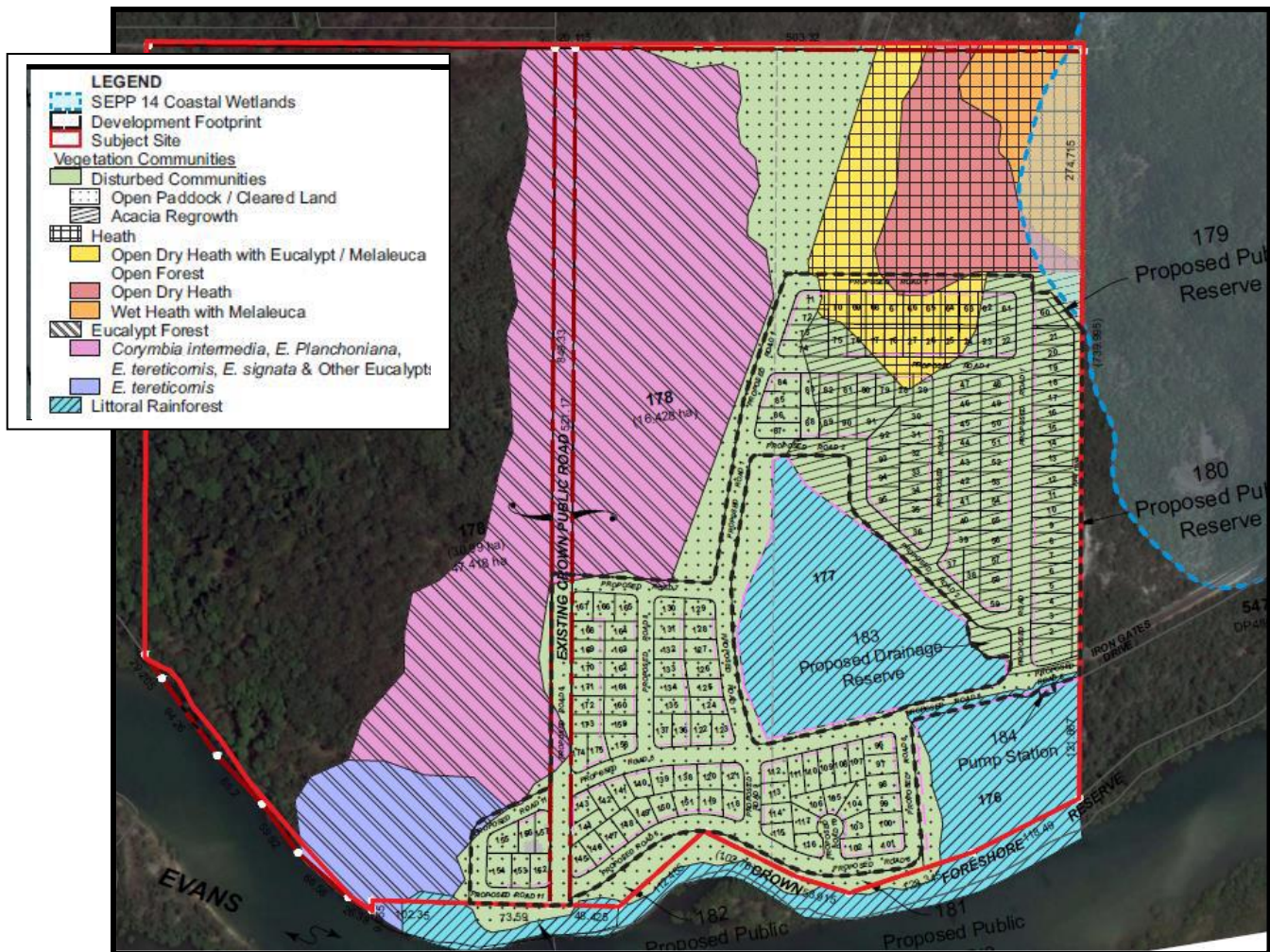


Figure 17: Vegetation Communities on the site (Source: Figure 4 - 2019 Ecology Report)

Flora and Fauna Listed Species

The fauna survey of the study area (and immediately adjacent areas) resulted in the recording of 74 species of bird, 8 reptiles, 5 amphibians and 25 mammals (or evidence of their previous presence) as outlined in the 2019 Ecology Report. No flora species listed within schedules of the Commonwealth's *Environmental Protection and Biodiversity Conservation Act 1999* or NSW's TSC Act were observed.

The following species of threatened fauna and one EEC listed under the TSC Act were recorded on the site or are considered potential occurrences within the area based upon available habitat components and may have the potential to be significantly affected through any development of the site:

- *Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions* - The Littoral Rainforest on the site was considered to represent this EEC;
- Grey-headed Flying-fox (*Pteropus poliocephalus*)
- Hoary Wattled Bat (*Chalinolobus nigrogriseus*)
- Little Bentwing-bat (*Miniopterus australis*)
- Southern Myotis (*Myotis macropus*)
- Koala (*Phascolarctos cinereus*)
- Squirrel Glider (*Petaurus norfolcensis*)
- Wallum Froglet (*Crinia tinnula*)

A Section 5A assessment pursuant to the EP&A Act (the '7-Part Test of Significance') was conducted for the seven recorded fauna species and the EEC to determine whether the proposal may have the potential to impact the species. The 2019 Ecology Report concluded that there will not be a significant impact on these species and therefore a Species Impact Statement ('SIS') was not required pursuant to Section 78A(8)(b) of the EP&A Act.

Vegetation Clearing

The July 2019 Ecology Report stated the following vegetation clearing is proposed:

- 6.83 ha of acacia regrowth and other species (green cross hatched)
- 1,175m² of Open Dry Heath (pinkish red)
- 1.16 ha of Open Dry Heath with mixed Eucalypt (yellow - listed as vulnerable)
- 1,195m² of Heathy Scribbly Gum for roads and additional 400m for bushfire requirements and lots (yellow)
- 127m² of Littoral rainforest EEC ((blue hatched - sewer pump station and road extension between eastern and western residential areas).

Site Impacts

The 2019 Ecology Report (Section 7) made the following conclusions in relation to site impacts and likely resultant impacts to flora, fauna and habitat value:

- Significance of Impacts to Threatened Species and/or Communities – The significance assessments indicated that the proposed action is unlikely to have a significant impact on any EECs, endangered populations, critical habitats, threatened plants or threatened animals
- Impacts due to Vegetation Clearing - The proposal will only directly impact areas which have previously been cleared or are currently cleared areas and it is considered it does not constitute core or critical habitat for threatened species recorded in the locality. Therefore the environmental values of the proposed modified areas of the site represents low ecological values. Given the minor scale of clearing and the type of vegetation to be removed, it is anticipated no decrease in species diversity would result from the development and the environment surrounding the site provides much higher ecological values to the area.
- Impacts to Fauna Habitat - The proposal involves minor clearing of vegetation which it is considered does not constitute core or critical habitat for threatened species recorded in the locality. The minor forage area lost is insignificant to that found in the locality and is offset by revegetation works. Following stabilization and development a modified habitat zone (i.e. residential areas with gardens beds, lawn, buildings etc) will be restored within the disturbance area. This zone however is likely to only favour common species (i.e. common animals tolerant to human proximity). The remaining vegetation communities will be maintained in their existing state to retain fauna habitat across the site. No hollow-bearing trees are proposed to be removed for the development.
- Fauna Mortality/Injury - The surveying work has identified that the majority of species recorded are highly mobile and with an appropriate fauna management plan it is unlikely impacts would arise.
- Habitat Fragmentation, Barrier Effects and Edge Effects - The proposal including revegetation ensures that the existing vegetation remnants will not be further

fragmented. Additionally, it is considered that the proposal will not introduce a new terrestrial fauna dispersal barrier or intensify an existing barrier as the works proposed are not constructing barriers such as fences between vegetation communities. The existing corridor value of the locality is therefore unlikely to be reduced by the proposal.

- Mortality Associated with Roadways/Vehicle Strike – In this instance it is considered that whilst additional daily vehicle movements will occur on the site, it is recommended that speed limits within the site should not exceed 50 km/h and wildlife road signs are to be erected to warn drivers of their presence in the locality.
- Establishment of Weeds – Weeds are abundant within the site, in particularly Community 2 which is proposed to be cleared/modified. To minimise the potential future impact of unmitigated continued spread of this species, it is considered appropriate that the existing infestation be eradicated in association with this proposal.
- Predation/Disruption By Cats and Dogs - The development proposal will introduce the incremental risk of domestic fauna impact upon native fauna species although such risks are well established within the locality and an isolated ban on domestic animals at this location would be unreasonable. It is noted that dogs and cats would not be permitted to free roam within the proposed open space areas to be an on-leash area only to minimise harassment of residual fauna.
- Other impacts were considered addressed by:
 - The proposal will result in very minor impacts on Littoral rainforest.
 - The proposed development will not directly impact areas immediately to the north and east of the development footprint which contain wetlands (Melaleuca Swampland).
 - The proposed subdivision layout seeks to maintain the natural stormwater drainage regime across the site.

Measures to Avoid And Minimise Ecological Impacts

The following mitigation measures are proposed in the 2019 Ecology Report:

- Protection & Avoidance - The proposal seeks to avoid vegetation clearing through locating development in cleared areas and thus protecting habitat, with the applicant stating the proposed vegetation to be removed if of a disturbed/cleared nature and

does not provide significant ecological values.

- Mitigation measures – The applicant proposes various construction mitigation measures in including:
 - identify and mark the boundaries of the works zones prior to construction
 - areas to be cleared to be pre-assessed by an experienced ecologist and wildlife spotter/catcher to ensure safe dispersal and relocation of native fauna.
 - Salvageable habitat components (hollow stems or ground logs) to be stockpiled and randomly dispersed throughout retained bushland external to the site.
 - Pruning works to be supervised by a suitably qualified arborist.
 - Speed limits within the site should not exceed 50km/h and wildlife road signs are to be erected to warn drivers of their presence in the locality which will mitigate fauna mortality from roadways/vehicle strike.
- Enhancement and restoration – comprising bush regeneration activities, replacing fauna habitats and restoring native vegetation biomass following construction including
 - 6.25m high crib green wall (planting suitable for the Richmond Birdwing Butterfly)
 - Weed treatment to be undertaken within the retained vegetation
 - Revegetation works comprising landscaping with introduced and native species.
- Biodiversity Offset – The provision of proposed Lots 136 and 137 as rainforest/conservation area lots.

Ecological concerns

Following a thorough consideration of the 2019 Ecology Report and the Independent Assessment Report (which considered the community submissions), the following ecological concerns remain with the proposal:

- Inadequate Flora and Fauna Assessment
- Clearing of Vegetation (including an EEC) and Impact on threatened plants and animals
- Unsatisfactory Mitigation Measures
- Habitat Fragmentation and Edge Effects to the Littoral Rainforest
- Lack of buffers
- Impacts on the koala

- Inconsistent with Planning Controls relating to Biodiversity

These issues are considered further below.

6.1.1 Inadequate Flora and Fauna Assessment

Surveying was undertaken on the site between 20 to 25 May 2014 to identify and classify vegetation species and communities which occur on site. The July 2019 Ecology Report stated that in undertaking the site survey works, focus was given to the development footprint and immediate surrounding areas (50 m) with a more general inspection of areas beyond these limits. Koala surveys were also completed on 19 and 20 March 2019 by two (2) JWA ecologists utilising the Regularised Grid-based Spot Assessment Technique.

The majority of this ecological surveying was undertaken in 2014, with such data now eight (8) years old and is considered to be a limited 'snap-shot', as a consequence of the short survey period. It is also likely that there has been new listing of species during this time and that the vegetation on the site has regenerated following the clearing undertaken on the site, which has likely increased the species diversity on the site as well as created new habitat.

The 2019 Ecology Report acknowledged that the sampling duration and methodology is not comprehensive:

Whilst the duration and sampling methodology of the fauna survey is considered appropriate, it is acknowledged that the entire seasonal fauna assemblage is unlikely to be recorded. It is also accepted that although assessments of habitat and species ecology does provide an additional measure to anticipate the presence of species (as a surrogate for its actual observation), there is no absolute certainty to the absence of a species from marginal or potential habitat.

A longer survey duration (both temporally and seasonally) could have avoided these concerns.

The timing of this ecological surveying, which appears to have been undertaken in May 2014, is also of concern given it was shortly after the land clearing in April /May 2014 and therefore it was unlikely to have had the vegetative cover to yield any useful results. Accordingly, it is considered that the ecological information used to form an opinion as to whether there is likely to be a significant effect on threatened species, populations or ecological communities, or their habitats is not supported.

There is also the likelihood that the area previously cleared on the site for the earlier consent is no longer likely to constitute 'regrowth' wattle. Surveying undertaken now would likely yield significantly different results and that the regenerated habitat may now be habitat for other threatened species.

Many of the submissions to the application raised issues with regard to the rigour of the fauna and flora assessment, with several of the submissions prepared by local ecologists or ecological consultancies and a range of environmental conservation and protection community organisations. In one such submission, it was considered that up to an additional six (6) fauna species have been recorded on the site which are all listed as vulnerable under the TSC Act. These species included the Black-necked stork, the Square-tailed kite, the White eared monarch, the Brush-tailed phascogale, the Eastern blossom-bat and the Greater broad-nosed bat.

It is also considered that the 2019 Ecology Report did not adequately consider all of the areas on the site proposed to be cleared for the proposal. These areas include the littoral rainforest which the 2019 Ecology report considers only to require minor limb removal and it is unclear if the likely clearing needed to provide footpaths, services and retaining walls throughout the site have been thoroughly considered.

It is also unknown whether the recommendation to provide a cleared space of 3 to 5 metres on either side of footpaths and cycle routes as outlined in the CPTED report (considered further in this report) has been incorporated into the proposal and assessed for potential ecological impacts. Such clearing has the potential to have a significant impact, particularly around the littoral rainforest and wetland communities which occur on the site, which is unresolved and unsatisfactory.

In total, it is considered that the biodiversity impacts of the proposal have not been clearly identified or quantified given this inadequate flora and fauna surveying.

Accordingly, it is considered that the inadequacy of the surveying of the site for the flora and fauna assessment makes the decision pursuant to Section 5A of the EP&A Act whether there is likely to be a significant effect on threatened species, populations or ecological communities, or their habitats invalid and that a Species Impact Statement (SIS) in accordance with Section 78A(8)(b) of the EP&A Act may have been required.

6.1.2 Clearing of Vegetation (including an EEC) and Impact on threatened plants and animals

The site, including the proposed development footprint, contains threatened fauna species and provides habitat for a range of fauna and flora threatened species. The 2019 Ecology Report concludes that the proposal will only directly impact areas which have been previously cleared and considers that the environmental values of the proposed modified areas of the site represents 'low ecological values'.

This Ecological assessment dismisses that there are any impacts on threatened species or habitats as the site has previously been cleared. This ignores the presence of the regrowth vegetation on the site and underestimates the potential impacts on species that currently use this regrowth as habitat. The then OEH noted in correspondence dated 11 December 2015 in relation to comments on the proposal, the following in relation to regrowth vegetation:

"We note that the majority of the vegetation to be impacted is regrowth vegetation from the previous clearing event. There is still a biodiversity value associated with the regrowth vegetation which is in a state of recovery and successional change, from the previous clearing event, to its pre-cleared state. The area affected by the previous clearing provided habitat for a range of threatened species. These threatened species still occur within the undisturbed areas of the subject site and are highly likely to utilise the vegetation proposed to be removed. Recent studies on the property conducted as part of the OEH compliance investigations found that there are still a number of threatened species that currently utilise the site including the regrowth area."

It is also noted that clearing native vegetation is listed as a key Threatening Process on Schedule 3 of the TSC.

Clearing of an EEC

The 2019 Ecology Report provides the following description of the removal of littoral rainforest community on the site, which represents an EEC:

It is considered that Community 4 is reflective of the above listed EEC as described by the Scientific Committee (Determination to make a minor amendment to Part 3 of Schedule 1 of the Threatened Species Conservation Act).

It is concluded that approximately 8.1 ha of Littoral Rainforest occurs on site. The proposal will result in very minor impacts on Littoral rainforest. As previously noted the road extension between the eastern and western residential areas of the development will necessitate minor pruning of limbs on the edges of the Littoral rainforest. Furthermore, clearing of approximately 127 m² (0.15%) of highly degraded vegetation surrounding an existing sewer pump station well (refer Section 7.2) will be required for the construction of a sewer pump station. The retained community will be rehabilitated in accordance with an appropriate plan of management and protected in perpetuity under a stewardship agreement (under the Biodiversity Conservation Act 2016) entered into by the proponent.

The very minor impacts on this vegetation community will not result in a changed ecological function or values for fauna.

Potential impacts on the EEC are dismissed as this vegetation community is largely being retained on the site, however, this assessment ignores the likely edge effects and isolation of this parcel of land (discussed below) as well as the likely additional clearing that will be needed for roads, retaining walls and other service provision on the site.

It is also considered that the proposed clearing of vegetation within this community on the site has been significantly under estimated by the 2019 Ecology Report, with **Figure 18** illustrating the current dirt track located on the site in the approximate location of proposed Road No 5 adjoining the rainforest lot. The Report states only 127m² of Littoral rainforest EEC (blue hatched area) for a sewer pump station and road extension between eastern and western residential areas is proposed.

The reserve for the construction of proposed Road No 5 is 11 metres in total, including a 7 metre wide carriageway, 0.75 metres verges on both sides and a 2.5 metre wide elevated boardwalk on the southern side of the road with underground services (**Figures 19 and 20**). Further vegetation clearing is required within this road reserve to allow for the construction of proposed Road No 5 which has not been considered in the vegetation removal calculations.

Such clearing is also described by the 2019 Ecology Report as “*minor pruning of limbs on the edges of the Littoral rainforest*”. This clearing is likely to be greater than this and would involve more than just lopping of trees. Furthermore, it is also unknown whether any vegetation clearing is required to provide for the stormwater quality and quantity treatment basin which is also located within the C2 zone and within the proposed conservation area.



Figure 18: Existing track on the site adjoining proposed Lot 137 (to the right) (Source: K Johnston)

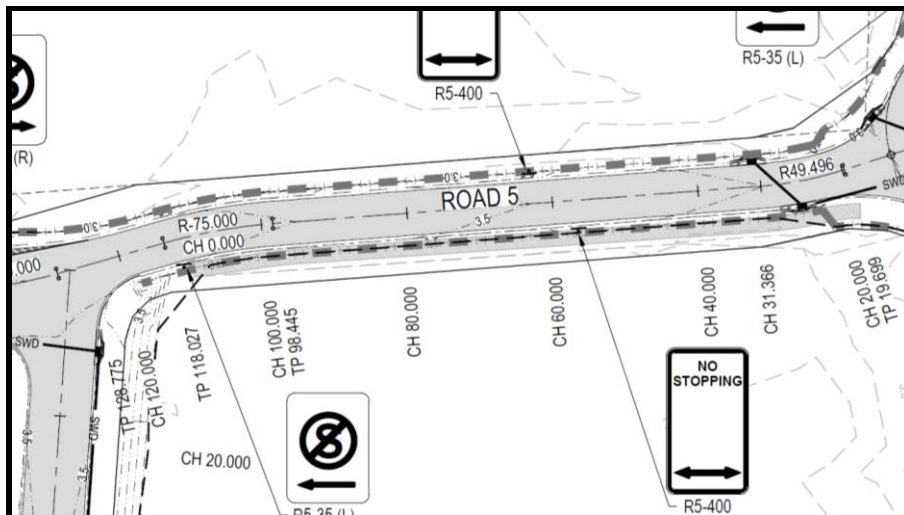


Figure 19: Proposed Road 5 adjoining Lot 137 (Source: Drawing C132 Arcadis 18 July 2019)

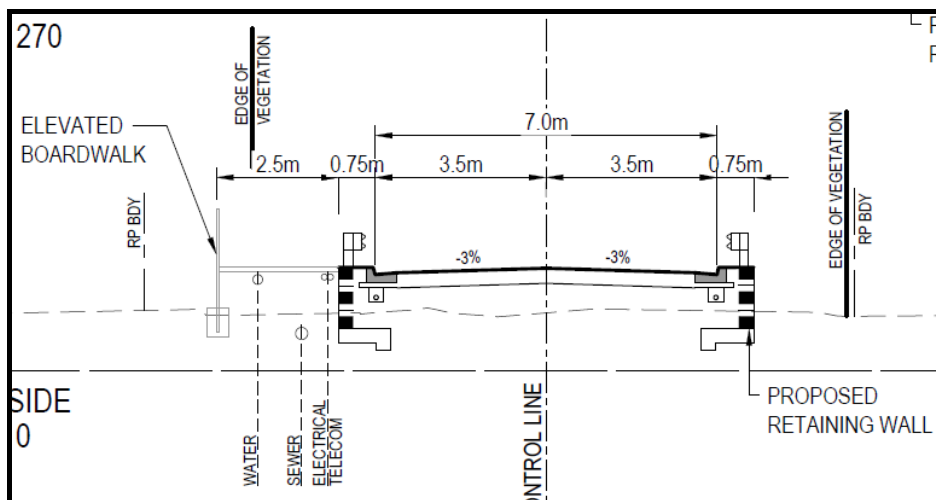


Figure 20: Road No 5 Cross Section (Source: Drawing C140 Arcadis 18 July 2019)

Given the proposed clearing of vegetation on the site, including parts of an EEC, and the likely impacts to the retained rainforest lots on the site, the proposal is likely to have a significant adverse effect on threatened species, populations and ecological communities, and their habitats in particular the Littoral rainforest within the land.

The proposal has the potential to disturb and diminish the structure, function, and composition of the areas of Littoral rainforest (proposed Lot 136 and Lot 137) and the development has not designed or sited to avoid significant adverse environmental impacts as no comprehensive site analysis has been undertaken and the specialist assessments undertaken do not consider the full range of likely potential impacts.

A Species Impact Statement prepared in accordance with Division 2 of Part 6 of the *Threatened Species Conservation Act 1995* should have been lodged with the Concept DA as the development is likely to significantly affect threatened species, populations or ecological communities, or their habitat.

6.1.3 Unsatisfactory Mitigation Measures

The mitigation measures to compensate for the impacts of clearing are unsatisfactory.

The proposed 'bush regeneration activities,' comprising the construction of a 6.25m high crib green wall (planting suitable for the Richmond Birdwing Butterfly), weed management and revegetation works comprising landscaping with introduced and native species are not adequate mitigation measures for the removal of approximately 7.54 hectares of vegetation.

One of the measures is to provide revegetation, however, outside of the rainforest lots, this revegetation is proposed in the proposed open space lots (now proposed Lots 141 and 142) and the road reserve which is more appropriately classed as landscaping. The proposed open space lots are located adjoining the road and the site boundary and comprise areas of only 1,990m² and 2,969m² which are insufficient and poorly located to be considered as offsets for the removal of vegetation on the site. Both of the proposed open space lots are an awkward shape and comprise linear shapes with large interfaces to the proposed road network.

The planting of vegetation in the road reserve to attract wildlife is not a mitigation measure given the likely vehicle strikes which would occur in such an environment, particularly for

koalas. This cannot be considered to offset the removal of natural vegetation.

A further mitigation measure was to restrict the speed limit within the site to 50km/h and erect wildlife road signs to warn drivers of their presence in the locality which is proposed to mitigate fauna mortality from roadways/vehicle strike. However, this is not reflected in the engineering report which states the design speed of the internal roads is proposed to be 70km/hr and appears contrary to the aims of revegetation of the site to conserve habitat for threatened species.

The provision of the conservation areas within proposed Lots 136 and 137 will not adequately compensate for the loss of vegetation elsewhere on the site and has not adequately considered the likely edge effects and isolation of this vegetation as discussed further below.

The proposed mitigation measures associated with construction, while supported, do not adequately compensate for the removal of vegetation on the site.

As outlined above, the mitigation measure of seeking to only remove disturbed or previously cleared vegetation undervalues the role this vegetation plays on the site in terms of providing habitat. It also undervalues the likely extensive revegetation which has occurred since the majority of the ecological surveying was undertaken on the site.

The provision of proposed Lots 136 and 137 as rainforest/ conservation area lots is noted as an offset for the removal of the acacia regrowth vegetation, however, there are concerns with this approach (discussed below) which detracts from this mitigation measure.

Offsets

One of the measures which the applicant has proposed to minimise ecological impacts of the proposal is the provision of offsets for the removal of vegetation for the proposal. The discussions regarding potential offsets were largely held between the applicant and their ecological consultants (JWA) and BCD, which at the time was known as the NSW Office of Environment and Heritage ('OEH'). These discussions were held from June 2017 to May 2018 after initial ecological concerns with first raised by OEH as early as December 2014.

From the outset, OEH clearly and repeatedly stated that there was a hierarchy for assessing the biodiversity impacts arising from the proposal, which was considered to have both direct

and indirect impacts on biodiversity. This hierarchy was that such impacts should be avoided where possible, mitigated and where such impacts still arose, then they were to be offset accordingly. OEH advocated for less impacts and greater buffers to retained vegetation before an offset package should be considered.

Following this, the OEH encouraged the use of a stewardship agreement (under the BC Act) to secure and manage proposed offset areas, with Council taking ownership as a second option. The Council subsequently confirmed they were not prepared to take ownership of the proposed offset sites.

In May 2018, BCD provided in-principal support for the offset package proposed by the applicant, which proposed to offset the loss of 7.53 hectares of acacia regrowth vegetation and potential indirect impacts of the proposed development by rehabilitating/revegetating a total of 8.83 hectares of littoral rainforest vegetation. This littoral rainforest vegetation is located both within the central portion of the site as proposed rainforest Lots 136 and 137, as well as along the coastal foreshore (which is located outside of the site boundaries).

The agreed Biodiversity Offset Package comprises the following (**Figure 21**):

- Rehabilitation of the retained Littoral rainforest including site preparation, weed control, planting locally endemic species and fencing;
- Protection of the retained Littoral rainforest in perpetuity and continued management under a stewardship agreement (under the *Biodiversity Conservation Act 2016*) which will include a Total Fund Deposit of \$371,538; and
- Acquittal of remaining offset credits via payment to the Biodiversity Conservation Trust Fund.

PCT	Direct impact (ha)	Indirect impacts (ha)	Credit requirement	Proposal
NR152	7.53	-	243	<ol style="list-style-type: none"> 1. Rehabilitation of retained Littoral rainforest to a high quality (86 credits generated); and 2. Protection in perpetuity of this area under a stewardship agreement in accordance with requirements of the Biodiversity Offsets Scheme (i.e. under the current Biodiversity Conservation Act 2016); and 3. Payment of \$274,593 into the Biodiversity Conservation Trust Fund.
NR152	-	0.38	10	Indirect impacts of the proposal will be offset through onsite mitigation measures and have also been considered in previous amendments to the development layout.
NR153	-	0.28	7	
NR161	-	0.11	5	
NR273	-	0.93	74	
TOTAL	7.53	1.70	339	

Figure 21: Biodiversity Offsets (Source: Table 16 of the 2019 Ecology Report)

The relevant legislation at the time of the lodgement of this development application was the *Threatened Species Conservation Act 1995* ('TSC Act'), which was repealed on 25 August 2017, upon the gazettal of the *Biodiversity Conservation Act 2016* ('BC Act'). The new regime under the BC Act provides for the Biodiversity Conservation Trust ('BCT'), a statutory not-for-profit body established under Part 10 of the BC Act, who can enter into a Biodiversity Stewardship Agreement ('BSA') to protect and manage land under the biodiversity offsets program. A BSA is an in-perpetuity agreement that is registered on the property title and provides for the creation and release of biodiversity credits.

The concerns with the offset package include:

- Application of the BC Act - The proposal does not specifically require offsets under the now repealed TSC Act and is not subject to the provisions of the BC Act given the lodgement date of the application. Accordingly, it is unclear how the provisions of the BC Act in relation to the biodiversity offsets scheme (Part 6) apply to the proposal. If a new development application was lodged and therefore considered under the BC Act, the proposal would need to apply the Biodiversity Assessment Method ('BAM') to the proposed development, in accordance with the NSW Government's Biodiversity Offset Scheme framework to avoid, minimise and offset impacts on biodiversity from the development.

This would also require updated flora and fauna surveys, vegetation mapping, and preparation of a Biodiversity Development Assessment Report ('BDAR'). The current ecological information is considered to be inadequate for these purposes.

- No BCT involvement - The applicant is proposing a BSA over the rainforest areas, which are issued by the BCT. An assessment of whether the rainforest areas are suitable for a BSA would need to be worked through with, and undertaken by, the BCT, however, this has not been undertaken by the applicant. Accordingly, it is unclear whether the BCT would accept the proposed offset package if presented with it and if not, then the offsets package fails.
- Concerns with land for the BSA - There are a number of concerns with the proposed BSA which include:
 - The proposed rainforest lots/areas are largely surrounded by proposed roads and urban development, which are likely to create land use conflicts and result in edge effects. The publication, '*Biodiversity Stewardship Agreement Landholder Guide*' prepared by the NSW Biodiversity Conservation Trust dated May 2021 provides information on the eligibility of land to be used as a BSA, providing the following (Section 4.1.2 page 16) (emphasis added):

"There is no mandatory minimum size for a BSA.

*A BSA must however be of a sufficient size and configuration so maintenance and improvement of biodiversity values on site are achievable. **Isolated, fragmented**, small, or narrow linear sites are **more likely to require ongoing intensive management**, and this may affect the financial viability of a BSA.*

We encourage you to engage with the BCT if you are uncertain about the suitability and feasibility of your land due to the size, configuration or adjoining land."

Further information is provided in section 4.1.5 (page 18) (emphasis added):

*"Sometimes past land uses, the size of the land and/or **adjacent land uses** mean that it is unlikely that biodiversity values of the site can be improved even under management as a biodiversity stewardship site.*

*This may mean no credits can be generated from that area or the area is excluded from the biodiversity stewardship site. Common examples include previous ground disturbance and **small areas surrounded by residential development.***

The proximity of the proposed rainforest lots to proposed roads and residential development, coupled with its isolated location and fragmented shape in the central part of a proposed large residential subdivision is likely to result in the site being prevented from being part of a BSA and therefore the loss of vegetation arising from the proposal has not been adequately avoided, mitigated or offset. The lack of a clear buffer between this area and the proposed urban development is a further concern.

Accordingly, it is unclear whether the BCT would accept the proposed offset package given these likely edge/indirect effects and lack of buffers to the rainforest area.

- Foreshore reserve - The offset package includes rehabilitation of the littoral rainforest which occurs with the Crown foreshore reserve which no longer forms part of the development application. The offsets package also required a Vegetation Management Plan to guide the rehabilitation and management of the rainforest areas and the Crown Foreshore Reserve, however, the applicant does not own this foreshore reserve nor has any owners consent to undertake works within it. Furthermore, the ongoing management of this foreshore area and its tenure has not been adequately resolved in the development application.

The available land within this foreshore reserve was calculated as 1.23 hectares (0.98ha vegetated and 0.25ha non-vegetated) for the purposes of the offset package and also assumed that the road reserve could be revegetated. There does not appear to be any basis for these assumptions as the land is owned by the Crown and is not part of the subject site. Accordingly, it is considered that the proposed offset package no longer reflects the current proposal.

- Ownership of the rainforest lots – The future ownership and management of the rainforest lots in perpetuity in the event that the BCT does not undertake a BSA for the site is unclear. The Council is unwilling to take ownership or management of this

portion of the site and accordingly, the retention of this rainforest community on the site has not been adequately addressed by the proposal.

- Inadequate ecological information - The current offsets package is based on ecological information which is considered to be incomplete and out of date. Accordingly it is considered that this ecological information no longer represents accurate information upon which to base an offsets package.
- Financial Calculations – The proposed credit and offset calculations outlined in the offsets package were prepared in May 2018. Given the time that has elapsed (approximately 4 years) since the calculations were undertaken, it is likely that these calculations no longer reflect current valuations, including for revegetation and regeneration costs. Accordingly, this results in the offset package no longer reflecting current costs.

The offset package is not supported for the reasons outlined above and therefore the impacts on biodiversity arising from the proposal have not been adequately mitigated.

6.1.4 Habitat Fragmentation and Edge Effects to the Littoral Rainforest

The proposed development involves the retention of the littoral rainforest areas on the site within two proposed conservation lots comprising Lot 136 and 137 which are zoned C2 – Environmental Conservation. The 2019 Ecology Report concluded that the proposed clearing elsewhere on the site for the proposal will not result in fragmentation or increased edge effects to the retained vegetation given the existing configuration of the remnants. However, this conclusion is not supported.

The larger lot (Lot 137) is to comprise an area of 4.857 hectares, which will immediately adjoin the main collector road for the site on all sides as well as be bounded by retaining walls or earthworks batters on all sides adjoining the road reserves. Footpaths and a proposed drainage reserve (proposed Lot 143) are also proposed adjoining this environmental conservation area. The provision of underground utility services will present further edge impacts to the conservation area.

The proposed roads will become barriers to the movement of species throughout the site which may seek out this conservation area as a refuge, while other impacts arising from nearby residential development such as light pollution, weed encroachment and vehicle

strikes are highly likely to represent barriers to species and result in fragmentation of this habitat element. This will likely result in this portion of littoral rainforest being an isolated fragment of habitat on the site.

The court orders made in 1997 required that wildlife corridor rehabilitation was to be undertaken to the north-west of the rainforest areas (shown in red in **Figure 22**), which highlights the importance of retaining corridors within the site to connect to adjoining native vegetation areas. This red portion is proposed to comprise roads and allotments and therefore would not function as a wildlife corridor.

The retained rainforest lots are also separated from each other by proposed Road 5 as well as separated from the foreshore area by the proposed southwest portion of the subdivision and other roads proposed within the site. This results in a lack of vegetated habitat connectivity within the site and to the adjoining areas of native vegetation as outlined by the yellow arrows in **Figure 23**.

The proposal also includes substantial earthworks on the land, including in close proximity to this proposed central littoral rainforest portion and it is not readily evident how internal roads and drainage changes will impact on this proposed retained vegetation within this conservation area. The proposed changes to the natural landform through the extensive earthworks to the site are likely to result in significant changes to the natural drainage regime on the site which have not been considered in the ecological assessment or engineering reports for the proposal.

- Green – rainforest rehabilitation
- Red – wildlife corridor rehabilitation
- Blue - Heathland rehabilitation
- Orange - Coastal woodland rehabilitation

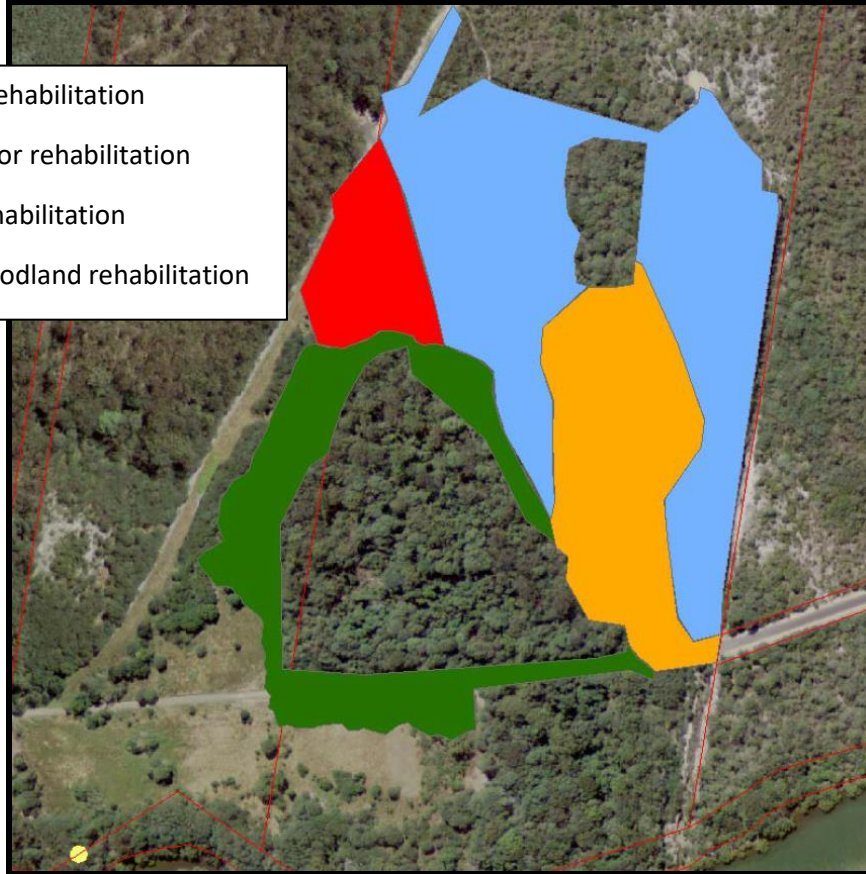


Figure 22: Digitised Court Order Map from 1997 (Source: BCD Biodiversity Conservation Principles Report, October 2020)

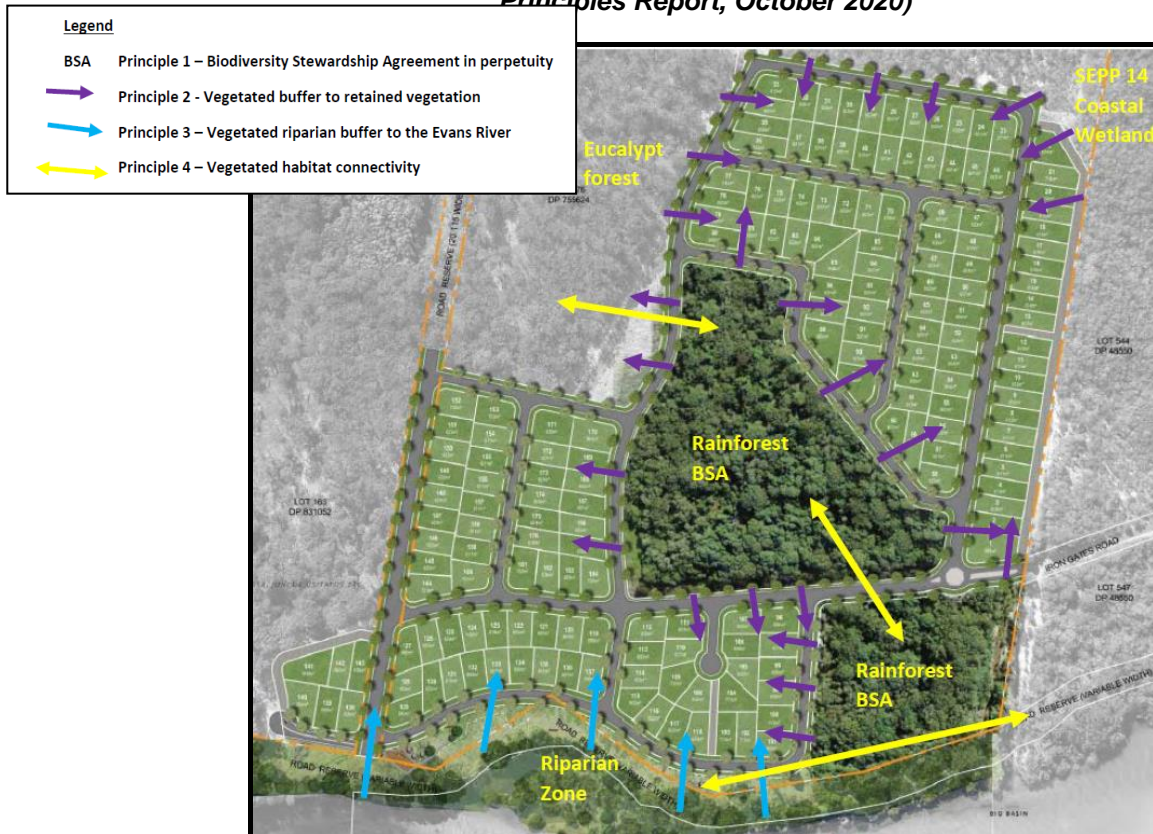


Figure 23: BCD Buffer Principles (Source: BCD Report, October 2020)

The 2019 Ecology Report also did not provide any measures to avoid and minimise ecological impacts associated with edge effects and weed management, which stated:

“The following design and management initiatives are proposed in association with site development to progressively reduce the impact of ‘edge effects’ on the retained, interconnected native vegetation remnants:”

However, there were no design or management initiatives provided.

Accordingly, it is considered that edge effects and fragmentation of the littoral rainforest on the site will occur as a result of the proposal and there have been no adequate mitigation measures proposed to reduce these impacts arising from the proposal.

6.1.5 Lack of buffers

BCD recommended vegetation buffers on the site to comprise the following:

- A 50m wide vegetated buffer to the Evans River and the littoral rainforest areas (excluding the road west of the roundabout at the entrance to the property);
- A 30m wide vegetated buffer to the SEPP 14 coastal wetland
- A 30m wide vegetated buffer to other endangered ecological communities; and
- A 20m wide vegetated buffer to all other native vegetation areas.

The BCD Report outlined biodiversity conservation principles which was considered in their assessment of the proposal, which included:

1. *Rainforest vegetation should be protected and managed in perpetuity*
2. *Vegetated buffers should be provided to areas of retained vegetation and managed to sustain their role in reducing indirect impacts*
3. *A vegetated riparian buffer should be provided to the Evans River and managed to sustain its role in protecting riparian values and Aboriginal cultural heritage*
4. *Retained vegetation should be connected*
5. *All infrastructure should be excluded from the rainforest areas to be retained*
6. *Degraded areas should be rehabilitated*
7. *Biodiversity offsets should be required for the residual direct and indirect biodiversity impacts after measures to avoid and mitigate those impacts have been applied*

BCD provided a diagram illustrating Principles 1 – 4 set out above are spatially represented in **Figure 23**.

The BCD's recommended vegetated buffers have not been incorporated into the development design, which were intended to reduce the indirect impacts to the retained biodiversity on the site in both the rainforest and riparian areas (**Figure 22**). Instead of providing vegetated buffers to avoid indirect impacts, the applicant proposed the provision of 'offsets' for these impacts in the form of required biodiversity credits. Vegetated buffers surrounding the rainforest and riparian areas on the site, rather than offsets as required by the BC Act, would provide a more appropriate biodiversity outcome on the site and would also reduce the number of biodiversity credits the proponent needs to retire (if the BC Act were to apply).

The applicant considered the provision of buffers during the negotiations around the provision of offsets and biodiversity credits in the 2019 Ecology Report (Attachment 6), illustrated in **Figure 24**.

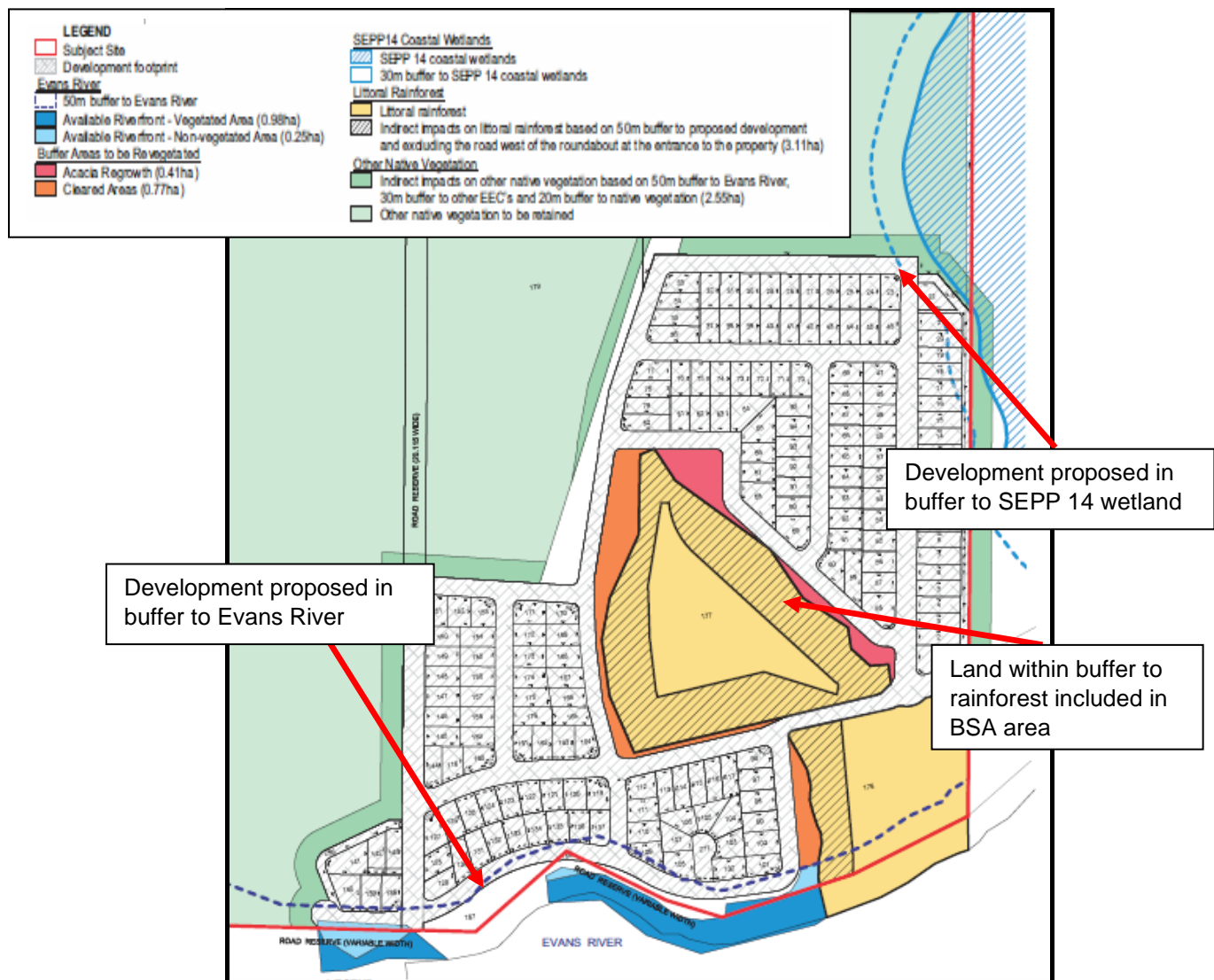


Figure 24: Impact and Revegetation Areas (Source: Attachment 2 - JWA Letter, 8 January 2018 of 2019 Ecology Report)

Notwithstanding that an 'agreement' has been reached between the applicant and BCD for offsetting large areas of biodiversity impacts on the site, the BCD's preference has always been to avoid or minimise biodiversity impacts. The development proposes to remove areas of native vegetation. The retention of areas comprising native vegetation which avoids impacts, rather than offsetting those impacts by providing biodiversity credits, would more adequately address the ecological and biodiversity concerns of the proposal. Such vegetation retention is not simply reducing the overall removal of vegetation, but providing more appropriate protection for the remaining vegetation on the site through the provision of appropriate buffers and adequate mitigation measures to reduce edge effects.

The lack of an adequate buffer area to this proposed conservation area (within proposed Lot 137) is unsatisfactory and will result in significant edge effects to this area.

Accordingly, it is considered that the lack of buffers to protect the conservation area on the site will occur as a result of the proposal and there have been no adequate mitigation measures proposed to reduce these impacts arising from the proposal.

6.1.6 Impacts on the Koala

The assessment for the presence of koalas on the site and potential impacts on koalas arising from the proposal was considered in the 2019 Ecology Report (Section 6.5 and Attachment 4). The report acknowledges that SEPP 44 applies to the site as it comprises an area greater than 1 hectare and is located within an LGA listed in Schedule 1.

SEPP 44 provides a three step process for determining the development control of koala habitat in Clauses 7, 8 and 9 of the SEPP. The first step is to determine whether the land is potential koala habitat (CI 7), the second is whether the land is core koala habitat (CI 8) and the third step is whether consent can be granted in relation to core koala habitat (CI 9). Clause 10 provides that the Council must take the guidelines into consideration in determining an application for consent to carry out development on land to which this Part applies. This Part applies to the proposal as it the policy applies to the site and a DA has been made (CI 6).

The 2019 Ecology Report does not clearly state whether it considers the land to be potential koala habitat, however, the report indicates that the eucalypt forest in association with Vegetation Community 3 contains koala trees as listed in the SEPP and that those trees

constitute at least 15% of the total number of trees in the upper or lower strata of the tree component. Accordingly, the land is considered to be potential koala habitat (Step 1 – Cl 7). Clause 8 and 9 must then be considered.

The relevant requirements of SEPP 44 include:

8 Step 2—Is the land core koala habitat?

- (1) Before a council may grant consent to an application for consent to carry out development on land to which this Part applies that it is satisfied is a potential koala habitat, it must satisfy itself whether or not the land is a core koala habitat*
- (2) A council may satisfy itself as to whether or not land is a core koala habitat only on information obtained by it, or by the applicant, from a person with appropriate qualifications and experience in biological science and fauna survey and management.*
- (3) If the council is satisfied:*
 - (a) that the land is not a core koala habitat, it is not prevented, because of this Policy, from granting consent to the development application, or*
 - (b) that the land is a core koala habitat, it must comply with clause 9.*

9 Step 3—Can development consent be granted in relation to core koala habitat?

- (1) Before a council may grant consent to a development application for consent to carry out development on land to which this Part applies that it is satisfied is a core koala habitat, there must be a plan of management prepared in accordance with Part 3 that applies to the land.*
- (2) The council's determination of the development application must not be inconsistent with the plan of management.*

The SEPP provides the following relevant definitions:

potential koala habitat means areas of native vegetation where the trees of the types listed in Schedule 2 constitute at least 15% of the total number of trees in the upper or lower strata of the tree component.

core koala habitat means an area of land with a resident population of koalas, evidenced by attributes such as breeding females (that is, females with young) and recent sightings of and historical records of a population.

guidelines means the guidelines, as in force from time to time, made for the purposes of this Policy by the Director.

Circular No. B35: State Environmental Planning Policy No. 44-Koala Habitat Protection ('Circular B35') was issued on 22 March 1995 which contains the Director's Guidelines in Section 2.

Is the land core koala habitat?

In relation to core koala habitat, the 2019 Ecology Report stated that the site is not considered to contain core koala habitat as the survey results indicated there was only a "low level" of usage of the site outside the development footprint by koalas and therefore the site did not satisfy the definition of core koala habitat.

The applicant's koala assessment concluded:

The assessment of current levels of Koala activity/usage over the site utilising the RGBSAT has identified areas of "low" level usage outside of the proposed development footprint (i.e. adjacent to the south-western corner). A small number of Koala faecal pellets were recorded under a total of three (3) trees in this portion of the site. As noted by Phillips and Callaghan (2011), where the results of a SAT site returns an activity level within the low use range, the level of use by the Koala is likely to be transitory. It is also noted that none of the faecal pellets recorded were considered to be fresh.

Based on the results of this assessment it is considered that the south-western portion of the subject site may be utilised occasionally by Koalas as they traverse the locality. The results indicate that a resident/sedentary population is not currently present on the site.

Section 2.1 of Circular B35 requires that surveys and investigations should be undertaken to consider whether core koala habitat exists on the site and states:

For the decision to be confidently made, it is necessary that a minimum standard and content of information regarding core koala habitat is provided. It is considered that the best method to obtain such information would be a survey to assess the subject site for attributes such as those contained in the definition of core koala habitat.

Circular B35 also provides the following in relation to the surveys/investigations required a

These surveys/investigations should:

- (i) examine the presence of koalas on the subject site and provide details on the extent and nature of identified populations, including: an estimate of population size; extent of tree use on the site and species utilised, (established by observing koalas or their sign e.g. dung and scratch marks); evidence of breeding females (including females with young) and the presence of juveniles / sub-adults in the population;*
- (ii) provide a vegetation map of the site which identifies the components of the tree layer and a description of the shrub layer;*
- (iii) make use of other published or publicly available data relating to the fauna of the site. This could include sources such as previous fauna surveys and impact statements, plans of management for koalas completed by the National Parks and Wildlife Service and the information available on koala distribution in the Koala Habitat Atlas (Australian Koala Foundation); and*
- (iv) employ standard, reportable techniques of koala survey, such as a properly designed on site survey using standard techniques or the approach outlined by the NPWS in producing the Port Stephens Koala Management Plan -Draft j(Jr public discussion. 27 September 1994. The latter method involves the use of a community-based survey to determine location of koala populations.*

The application does not include a vegetation map of the site which identifies the components of the tree layer and a description of the shrub layer and it is considered that the survey effort for the koala assessment is inadequate. The age of this limited surveying is also a concern given a resident koala population may be located on the site given the length of time which has now passed since the surveying was undertaken. This inadequate surveying results in the potential for core koala habitat to exist on the site which would require a Koala Plan of Management as a precondition to the grant of consent.

Importantly, Clause 8 provides that the decision as to whether the land is a core koala habitat is one for the Council, or in this case the Panel, to make, stating “A council may satisfy itself as to whether or not land is a core koala habitat”. The other important aspect of this provision is that such a decision can only be made on the basis of “information obtained by it, or by the

applicant, from a person with appropriate qualifications and experience in biological science and fauna survey and management”.

The limited surveying undertaken on the site did reveal scratch marks were present on several eucalypts on the site as well as some faecal pellets being recorded under a total of three (3) trees. The presence of koala feed trees on the site and the physical evidence on the site, suggests that koalas use the site and that a resident population of koalas is likely to use the site.

The definition of core koala habitat suggests matters which may reveal the presence of such a population, including breeding females (that is, females with young) and recent sightings of and historical records of a population, although these are not necessarily needed in the proving core koala habitat. The significant proportion of the community submissions raised the potential impacts on koalas and accordingly it is considered that sightings of koalas on the site have been made.

The Panel would need to satisfy itself that the land is core koala habitat, however, given the evidence provided and the presence of koala feed trees on the site, it is considered that the land can be considered core koala habitat for the purposes of Clause 8 of SEPP 44. The lack of a Koala Plan of Management pursuant to Clause 9 of SEPP 44 means that consent cannot be granted to the development application.

Furthermore, the proposed removal of 1,400 square metres of koala habitat from the site is considered to likely result in a significant impact on the koala on the site. There is also a lack of mitigation measures to compensate for the removal of koala habitat from the site in that there are no Koala food trees identified in the Landscape Statement of Intent or identified or shown on the Landscape Plans for the proposed open space (Lot 141 and Lot 142). There is also insufficient area in the proposed open space areas to undertake adequate offset planting and it is considered providing koala habitat trees as street trees is undesirable given the increased potential for road strike from this location and predation by domestic pets.

Accordingly, it is considered that the surveying for koalas is inadequate, the mitigation measures are unsatisfactory and there is likely to be core koala habitat for which a Plan of Management pursuant to Clause 9(1) of SEPP 44 has not been provided.

The proposal is unsatisfactory in relation to potential significant impacts on the koala and is

inconsistent with SEPP 44, which warrants refusal of the application.

6.1.7 Inconsistent with Planning Controls relating to Biodiversity

There are a number of planning controls relevant to the proposal which relate to ecological and biodiversity issues. It is considered that the proposal is inconsistent with the following controls:

(i) Clause 6.6 – Terrestrial Biodiversity of the RVLEP 2012

Clause 6.6 of the RVLEP 2012 requires consideration of land identified as biodiversity on the terrestrial biodiversity map. In this case, the entire site is identified as biodiversity on the map (**Figure 25**).

The objective of this clause pursuant to Cl 6.6(1) is to maintain terrestrial biodiversity by:

- (a) protecting native fauna and flora, and*
- (b) protecting the ecological processes necessary for their continued existence, and*
- (c) encouraging the conservation and recovery of native fauna and flora and their habitats.*

The proposal is contrary to the objectives of this clause arising from the ecological and biodiversity impacts from the proposal as outlined above.

Before determining a development application for development on land to which this clause applies, Clause 6.6(3) requires that the consent authority must consider the following matters:

- (a) whether the development:*
 - (i) is likely to have any adverse impact on the condition, ecological value and significance of the fauna and flora on the land, and*
 - (ii) is likely to have any adverse impact on the importance of the vegetation on the land to the habitat and survival of native fauna, and*
 - (iii) has any potential to fragment, disturb or diminish the biodiversity structure, function and composition of the land, and*
 - (iv) is likely to have any adverse impact on the habitat elements providing connectivity on the land, and*

(b) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.



Figure 25: Terrestrial Biodiversity Map (Source: RVLEP 2012)

As outlined above, the proposal is likely to have an adverse impact on the ecological value and significance of flora and fauna on the site, will fragment retained habitat on the site and surrounding sites and will adversely impact on the importance of the vegetation on the land to the habitat and survival of native fauna. Furthermore the proposed mitigation measures are insufficient to avoid, minimise or mitigate the impacts of the development. Accordingly, it is considered that the proposal does not satisfy the matters for consideration prior to the granting of consent.

Clause 6.6(4) requires that development consent must not be granted for development on land to which this clause applies unless the consent authority is satisfied that:

- (a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or
- (b) if that impact cannot be reasonably avoided by adopting feasible alternatives—the development is designed, sited and will be managed to minimise that impact, or

(c) if that impact cannot be minimised—the development will be managed to mitigate that impact.

It is considered that the development has not been designed, sited or will be managed to avoid significant adverse environmental impacts given the proposed extent of clearing of vegetation including with an EEC, the lack of buffers provided to the rainforest area on the site and the lack of an adequate consideration of the ecological impacts of the proposal through unsatisfactory ecological surveys of the site.

This impact could be reasonably avoided by adopting feasible alternatives, including buffer zones and adapting the development footprint to site conditions and not to the previous development footprint. Therefore it is considered that Clause 6.6(4)(b) is also not satisfied as the development is not designed, sited or to be managed to minimise that impact.

The proposed mitigation measures are unsatisfactory (as outlined above) and accordingly the proposal also does not satisfy Clause 6.6(4)(c).

Consequently, the consent authority cannot be satisfied that the proposal has achieved this precondition to the grant of consent pursuant to Clause 6.6(4) of the RVLEP 2012 and therefore consent must not be granted.

(ii) Clause 2.3 – C2 Zone Objectives of the RVLEP 2012

The objectives of the C2: Environmental Management zone pursuant to Clause 2.3 of the RVLEP 2012 state (emphasis added):

- *To **protect, manage and restore areas of high ecological**, scientific, cultural or aesthetic values.*
- *To **prevent development that could destroy, damage** or otherwise have an adverse effect on those values.*

The objectives of the R1: General Residential zone pursuant to Clause 2.3 of the RVLEP 2012 state (emphasis added):

- *To provide for the housing needs of the community.*
- *To provide for a variety of housing types and densities.*

- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To ensure that housing densities are generally concentrated in locations accessible to public transport, employment, services and facilities.*
- *To **minimise conflict between land uses within the zone and land uses within adjoining zones.***

The proposal will result in adverse impacts to land within the C2 zone, which comprises the littoral rainforest lots in relation to the lack of adequate buffers to this retained vegetation as well as edge effects arising from the proposed development being in close proximity to these retained rainforest lots. The proposal will also be inconsistent with the R1 zone objectives as the proposal does not minimise conflict between land uses with the zone (residential development) with uses in the adjoining zone (the retained rainforest lots).

(iii) SEPP 71

The matters relating to ecological and biodiversity impacts which are required to be considered under SEPP 71 are considered in Section 7.2 of this Report.

Ecology and Biodiversity – Summary

The proposed vegetation removal and the mitigation measures proposed are considered to be unsatisfactory and result in the proposal being contrary to various planning controls for the site including:

- Clause 1.2(2)(a) of the RVLEP 2012 in relation to the aims of the Plan in that the proposal does not encourage the proper management, development and conservation of natural and man-made resources;
- Clause 2.3(2) of the RVLEP 2012 in relation to the objectives of the C2 Environmental Conservation zone in that the proposal does not protect, manage or restore areas of high ecological value and does not prevent development that could destroy, damage or otherwise have an adverse effect on those values as a result of the impacts of the proposal arising from a lack of buffer zones and mitigation of edge effects and fragmentation;

- Clause 2.3(2) of the RVLEP 2012 in relation to the objectives of the R1 General Residential zone in that the proposal does not minimise conflict between land uses within the R1 zone and land uses within adjoining zones (C2) in that the rainforest vegetation is not sufficiently protected from impacts arising from the proposal.
- Clause 6.6 of the RVLEP 2012 in relation to the terrestrial biodiversity matters under the RVLEP 2012.
- The matters for consideration under SEPP 71 (discussed further below).

Accordingly, the proposal is considered to be unsatisfactory having regard to the ecological and biodiversity impacts arising from the proposal and warrants refusal of the application.

6.2 SEPP 71 Matters

State Environmental Planning Policy No 71 - Coastal Protection ('SEPP 71') applies to the proposal as it was in force at the time of lodgement of this development application and the site is located within the coastal zone as defined at the time by the *Coastal Protection Act 1979*. SEPP 71 has since been repealed and its provisions largely incorporated into Chapter 2: Coastal Management of *State Environmental Planning Policy (Resilience and Hazards) 2021*.

SEPP 71 provides matters to be taken into consideration by consent authorities when it determines development applications to carry out development on land to which this Policy applies (Part 2: Matters for consideration), outlines various matters to be considered prior to granting consent to development (Part 4: Development control) and identifies master plan requirements for certain development in the coastal zone (Part 5: Master Plans). The relevant matters are considered below.

Part 2: Matters for Consideration

Clause 7(b) of SEPP 71 requires that the matters for consideration outlined in Clause 8 are to be taken into account by a consent authority when it determines a development application to carry out development on land to which this Policy applies. These matters are considered in **Table 3** below.

Following a consideration of the relevant matters in Clause 8 required by Cluse 7(b), the proposal is inconsistent with a number of these matters for consideration and is therefore unacceptable.

Table 3: Consideration of Clause 8 Matters - SEPP 71

MATTER FOR CONSIDERATION	PROPOSAL	SATISFY
(a) the aims of this Policy set out in clause 2,	The aims are considered below.	
(b) existing public access to and along the coastal foreshore for pedestrians or persons with a 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,	The site does not directly adjoin the coastal foreshore and therefore public access is not affected by the proposal.	✓
(c) opportunities to provide new public access to and along the coastal foreshore for pedestrians or persons with a disability,	Refer above	✓
(d) the suitability of development given its type, location and design and its relationship with the surrounding area,	The type of development is considered satisfactory in that a residential development is proposed, however, the design of the development and its relationship with the surrounding area is unsatisfactory given the ecological impacts arising from the proposal, the hazards from the site constraints which have not been adequately addressed and the lack of an integrated design of the subdivision with the site analysis.	No
(e) 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,	There will be no overshadowing of view loss from public places within or along the coastal foreshore arising from the proposal.	✓
(f) the scenic qualities of the New South Wales coast, and means to protect and improve these qualities,	The proposal will not result in any significant impacts on the scenic qualities of the coast.	✓
(g) 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,	The proposal does not involve adequate measures to conserve animals and plants on the site as outlined in the consideration of the ecological and biodiversity impacts of the proposal above. This matter has not been satisfied and is considered to be unacceptable.	No

(h) 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	The proposal will not adversely impact on the marine environment.	✓
(i) existing wildlife corridors and the impact of development on these corridors,	The proposal does not involve adequate measures to conserve and protect the existing wildlife corridors on the site as outlined in the consideration of the ecological and biodiversity impacts of the proposal above. This matter has not been satisfied and is considered to be unacceptable.	No
(j) the likely impact of coastal processes and coastal hazards on development and any likely impacts of development on coastal processes and coastal hazards,	The coastal hazard of flooding has not been adequately considered by the proposal.	No
(k) measures to reduce the potential for conflict between land-based and water-based coastal activities,	The proposal does not involve any conflicts between land and water based coastal activities.	N/A
(l) measures to protect the cultural places, values, customs, beliefs and traditional knowledge of Aboriginals,	The proposal has not adequately demonstrated that the Aboriginal cultural heritage items on the site will be protected.	No
(m) likely impacts of development on the water quality of coastal waterbodies,	The potential impacts on the water quality of the Evans River and the nearby coastal wetlands has not been adequately demonstrated by the proposal.	No
(n) the conservation and preservation of items of heritage, archaeological or historic significance,	There is a heritage item on the site, however, this item will not be adversely affected by the proposal.	✓
(o) only in cases in which a council prepares a draft local environmental plan that applies to land to which this Policy applies, the means to encourage compact towns and cities,	This is not proposed.	N/A
(p) only in cases in which a development application in relation to proposed development is determined: (i) the cumulative impacts of the proposed development on the environment, and (ii) measures to ensure that water and energy usage by the proposed development is efficient.	The proposal is likely to result in adverse cumulative impacts on the environment as a result of the proposed vegetation clearing, lack of mitigation measures and buffer zones to the conservation area, wetland and the Evans River. Water and energy usage by the development can be assessed at a later stage if dwellings are proposed on the site.	No
<i>Policy Aims (Cl 2)</i>		

<p>(1) This Policy aims:</p> <p>(a) to protect and manage the natural, cultural, recreational and economic attributes of the New South Wales coast, and</p> <p>(b) to protect and improve existing public access to and along coastal foreshores to the extent that this is compatible with the natural attributes of the coastal foreshore, and</p> <p>(c) to ensure that new opportunities for public access to and along coastal foreshores are identified and realised to the extent that this is compatible with the natural attributes of the coastal foreshore, and</p> <p>(d) to protect and preserve Aboriginal cultural heritage, and Aboriginal places, values, customs, beliefs and traditional knowledge, and</p> <p>(e) to ensure that the visual amenity of the coast is protected, and</p> <p>(f) to protect and preserve beach environments and beach amenity, and</p> <p>(g) to protect and preserve native coastal vegetation, and</p> <p>(h) to protect and preserve the marine environment of New South Wales, and</p> <p>(i) to protect and preserve rock platforms, and</p> <p>(j) to manage the coastal zone in accordance with the principles of ecologically sustainable development (within the meaning of section 6 (2) of the Protection of the Environment Administration Act 1991), and</p>	<p>The natural and cultural attributes of the NSW coast are not protected by the proposal.</p> <p>Public access is not affected by the proposal.</p> <p>The site does not directly adjoin the coastal foreshore.</p> <p>The proposal does not adequately demonstrate that Aboriginal cultural heritage items on the site will be protected.</p> <p>No impacts to the visual amenity of the coast.</p> <p>No impacts arising from the proposal.</p> <p>The protection and preservation of native coastal vegetation has not been achieved by the proposal.</p> <p>The proposal will not adversely impact on the marine environment.</p> <p>No impacts arising from the proposal.</p> <p>The proposal is inconsistent with the principles of ecologically sustainable development as the conservation of biological diversity and ecological integrity should be a fundamental consideration.</p>	<p>No</p> <p>✓</p> <p>N/A</p> <p>No</p> <p>✓</p> <p>✓</p> <p>No</p> <p>✓</p> <p>✓</p> <p>No</p>
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(k) to ensure that the type, bulk, scale and size of development is appropriate for the location and protects and improves the natural scenic quality of the surrounding area, and	No impacts to the scenic quality of the coast.	✓
(l) to encourage a strategic approach to coastal management.	The proposal has not been designed following a thorough site analysis but has instead been designed based on a former subdivision layout which does not respect the site constraints or natural features of the site.	No

Part 4: Development Control

Part 4 of SEPP 71 requires the consent authority to consider a number of matters prior to granting consent to a development application to carry out development on land to which this Policy applies. The matters relevant to this proposal include:

- **Clause 14: Public access** - *A consent authority must not consent to an application to carry out development on land to which this Policy applies if, in the opinion of the consent authority, the development will, or is likely to, result in the impeding or diminishing, to any extent, of the physical, land-based right of access of the public to or along the coastal foreshore.*

Comment: The site does not directly adjoin the coastal foreshore as the Crown foreshore reserve is located between the site and the mean high water mark. Therefore, the proposal is unable to provide public access along the coastal foreshore.

- **Clause 15: Effluent disposal** - *The consent authority must not consent to a development application to carry out development on land to which this Policy applies in which effluent is proposed to be disposed of by means of a non-reticulated system if the consent authority is satisfied the proposal will, or is likely to, have a negative effect on the water quality of the sea or any nearby beach, or an estuary, a coastal lake, a coastal creek or other similar body of water, or a rock platform.*

Comment: The proposal involves the extension of the existing reticulated sewerage system which is located in close proximity to the site.

- **Clause 16: Stormwater** - *The consent authority must not grant consent to a*

development application to carry out development on land to which this Policy applies if the consent authority is of the opinion that the development will, or is likely to, discharge untreated stormwater into the sea, a beach, or an estuary, a coastal lake, a coastal creek or other similar body of water, or onto a rock platform.

Comment: The proposal has not adequately demonstrated the proposed stormwater management arrangements for the site and therefore it is unknown whether it is likely to, discharge untreated stormwater into the Evans River. Accordingly, the proposal fails to satisfy this precondition to the grant of consent.

Part 5: Master plans

Pursuant to Clause 18(1)(a) and (d) of SEPP 71, a consent authority must not grant consent for the subdivision of land within a residential zone if part or all of the land is in a sensitive coastal location unless the Minister has adopted a master plan for the land. In this case, a request to waive the requirement for a master plan was initially lodged but was denied by the Department. Following this, a draft master plan was lodged and was under assessment by the Department, however, was withdrawn by the applicant and replaced with a concept development application pursuant to Section 4.22 of the EP&A Act.

The site is located within a sensitive coastal location pursuant to Clause 3 of SEPP 71.

While a concept DA can be lodged, Section 4.23(2) allows such a DA to replace the requirement for a master plan however must still contain the information required to be included in the development control plan by the environmental planning instrument or the regulations.

Accordingly, Clause 20(2) of SEPP 71 is a relevant consideration in this assessment as it contains the requirements for a draft master plan, which need to be illustrated and demonstrated in the concept DA. These matters are considered in **Table 4** below. As outlined, there are numerous matters which have not been adequately demonstrated in the development application and accordingly, consent cannot be granted to the proposal. This matter warrants refusal of the application.

Table 4: Draft Master Plan requirements of SEPP 71

REQUIREMENT	PROPOSAL	RESOLVED
(a) <i>design principles drawn from an analysis of the site and its context</i>	<p>The proposed subdivision lacks clear design principles which arise following a thorough site analysis. The GANSW assessment clearly articulated this lack of design principles drawn from a site analysis and contextual site study, stating that there were a number of significant issues which remained unresolved and that these issues could be generally attributed to a lack of integrated urban and landscape design.</p> <p>The GANSW further commented that, cumulatively, the draft Master Plan did not demonstrate a response to the special qualities of place, presenting as a generic subdivision.</p> <p>It is considered that the proposal does not adequately address this requirement for a master plan/DCP.</p>	No
(b) <i>desired future locality character</i>	The proposed subdivision lacks an adequate consideration of the likely future built form on the site (refer below), which combined with the absence of design principles for the proposed subdivision arising from a thorough site analysis, results in the proposal being unable to achieve a desired future locality character consistent with its setting.	No
(c) <i>the location of any development, considering the natural features of the site, including coastal processes and coastal hazards</i>	The site is flood affected; however, has been the subject of limited consideration, with the exception of a letter report from BMT WBM dated July 2015. This issue has not been adequately addressed through a consolidated response with mapping and recommendations. Similarly, the site is bushfire prone land and it is considered that this issue has not been satisfactorily resolved.	No
(d) <i>the scale of any development and its integration with the existing landscape</i>	As outlined for (a), there is a general lack of an integrated approach to the design of the subdivision with the site conditions.	No
(e) <i>phasing of development</i>	This has been adequately addressed.	Yes
(f) <i>public access to and along the coastal foreshore</i>	There are no longer any works proposed in the coastal foreshore reserve.	N/A
(g) <i>pedestrian, cycle and road access and circulation networks</i>	The circulation network is not clearly outlined. While the Landscape Plan refers to footpaths and street tree planting and the engineering reports refer to road hierarchies, there is a lack of an overarching hierarchy of structuring	No

	<p>elements to enhance the legibility of the precinct.</p> <p>This issue was also highlighted by the GANSW advice and needed to include vehicle and pedestrian networks, among other matters.</p>	
(h) <i>subdivision pattern</i>	The proposal provides the proposed subdivision pattern, notwithstanding it is unsatisfactory as outlined in the GANSW advice.	Yes
(i) <i>infrastructure provision</i>	Infrastructure provision is not adequately outlined in the proposal.	No
(j) <i>building envelopes and built form controls</i>	<p>The proposed building envelopes have been provided (albeit with no documented dimensions particularly with regard to setbacks), however, built form controls have not been adequately addressed.</p> <p>The lack of built form controls was also raised by the GANSW in their design review, stating that limited information was provided on the holistic intent for the built form across the master plan, recommending that the applicant develop built form design guidelines. This has not been provided.</p> <p>In relation to built form controls, the document prepared by RPS dated 23 November 2020 which purported to address the GANSW advice, stated:</p> <p><i>“The built form guidelines are not required by the State Environmental Planning Policy No 71 process but will be prepared once the approval and conditions are granted”.</i></p> <p>This is incorrect given Clause 20(2) of SEPP 71 requires that a draft master plan illustrate and demonstrate proposals for, among other things, <i>built form controls</i>.</p> <p>In any event, the RPS document provides generic controls in relation to built form which have not been developed following an analysis of the site.</p>	No
(k) <i>heritage conservation</i>	This has been demonstrated.	Yes
(l) <i>remediation of the site</i>	This has not been adequately demonstrated.	No
(m) <i>provision of public facilities and services</i>	This has been demonstrated.	Yes
(n) <i>provision of open space, its function and landscaping</i>	The amount and location of public open space is unsatisfactory and the proposed ownership	No

	and management of the littoral rainforest is unknown.	
(o) <i>conservation of water quality and use</i>	This has not been adequately demonstrated as the proposed stormwater management arrangements for the site are unclear and it is unknown if there will be impacts on the water quality of the Evans river arising from discharged stormwater from the site.	No
(p) <i>conservation of animals (within the meaning of the Threatened Species Conservation Act 1995) and plants (within the meaning of that Act), and their habitats</i>	This has not been satisfactorily demonstrated.	No
(q) <i>conservation of 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</i>	This has been adequately addressed.	Yes

6.3 Subdivision Design and Public Open Space

The layout and design of subdivisions is a fundamental issue and determines how the resulting residential development functions and how well it relates to its surroundings in terms of physical and visible connections.

There are guidelines which can assist in assessing the design of subdivisions including the *Coastal Design Guidelines for NSW* ('the Coastal Design Guidelines') and the *Residential Subdivision: Handbook for the Design and Planning of New Neighbourhoods* ('the Subdivision Handbook') prepared by the Urban Design Advisory Service and the NSW Department of Urban Affairs and Planning in November 2000. Similarly, the *Richmond Valley Development Control Plan* ('the DCP') also provides controls for subdivisions (Part G.7).

The Guidelines were prepared to support a more place-based approach to designing new settlements along the coast which attempted to reduce the incremental, ad hoc decisions being made for development along the coast and were part of the SEPP 71 package of reform for coastal management at the time of the lodgement of the development application. These Guidelines are relevant to the proposal and are discussed below in the context of the current proposal.

Part 2 of the Guidelines outlines the design principles for coastal settlements, which include defining the footprint and boundary (Part 2.1), connecting open spaces (Part 2.2), protecting the natural edges (Part 2.3), reinforcing the street pattern (Part 2.4) and appropriate buildings in a coastal context (Part 2.5).

The Subdivision Handbook is also an important resource when designing subdivisions and includes in Part 3 elements of good neighbourhood design. This Part includes design principles to provide a clear urban structure, creating special places great parks for people and homes and gardens for living.

There are a number of concerns with the proposed subdivision layout and design in relation to the proposed allotments and road layout. In general, the proposed subdivision has not adequately demonstrated an integrated urban and landscape design that is responsive to the site conditions.

These concerns include:

- Lack of diversity of lot sizes
- Generic lot layout with limited site-specific response
- Requirement for Earthworks
- Lot layout based on previous subdivision approval
- Lack of perimeter road and configuration of Lot 60
- Lack of public open space and legible pedestrian network
- Lack of built form consideration

These issues are considered in more detail below.

6.3.1 No diversity of lot sizes or uses

The proposed subdivision involves the majority of allotments being the same size and shape. This uniformity does not provide any diversity in lot sizes which could cater for different households, different building forms or a variety of dwelling types. Of the 175 residential lots proposed, only eleven (11) lots have a lot size more than 674 square metres, with the vast majority being around 600 square metres in area, which represents the minimum lot size under the RVLEP 2012. Clearly the proposed lot layout has been designed for numerical compliance and lot yield and does not provide a site-specific response or housing choice.

The site is located within the R1 General Residential zone under the RVLEP 2012 which has an extensive list of permissible uses, including the following relevant uses:

Attached dwellings; Boarding houses; Community facilities; Dual occupancies; Dwelling houses; Home businesses; Home industries; Hostels; Multi dwelling housing; Neighbourhood shops; Passenger transport facilities; Residential flat buildings; Semi-detached dwellings; Seniors housing; Shop top housing;

The proposed subdivision does not, for example, provide any allotments for medium density development, semi-detached housing, attached housing or dual occupancy despite all of these land uses being permissible in the zone. Identification of lots for this type of housing at the subdivision stage is important given these lots are most appropriately located adjoining public open space or public transport routes, which should be outlined in the subdivision design. There are no other uses proposed, including community facilities.

This lack of lot diversity in the subdivision design is unsatisfactory.

6.3.2 Generic lot layout with limited site-specific response

The proposed lot and road layout presents as a generic subdivision design, largely based on achieving the greatest number of lots at the minimum lot size, and does not take into account the site characteristics. There is no evidence that the proposed subdivision was designed having regard to a detailed site analysis or site context consideration given the lack of an integrated analysis on the existing topography and how this relates to and has informed the design outcome. This proposed design has also primarily been based around the former subdivision approval (discussed further below) and lacks an integrated and coordinated approach to the site.

This lack of an integrated design approach to the subdivision design was also highlighted by the GANSW in their urban design review of the proposal. The GANSW considered that the proposal did not demonstrate a response to the site-specific opportunities of the site, with limited connection between the site analysis and the final design. These opportunities include its coastal setting, the ecological significance of its surroundings, the Aboriginal and cultural heritage located on the site, the coastal foreshore location or the topography of the site. The relationship of the proposal with the context of the site, particularly in relation to the existing

township of Evans Head, with the proposal currently presenting as a gated community, was also identified as unsatisfactory.

An overall Vision Statement which included a site and context analysis and makes reference to the special qualities of the place, identifies design principles informed by the specific qualities of the place, and included a set of design evaluation criteria to ensure the design principles are achieved was needed before the subdivision was designed.

Ensuring the design of the subdivision is responsive to the site characteristics is an important objective of Part G.7 (Subdivision) of the DCP. These objectives include to identify design considerations for the layout of subdivisions and to achieve the most effective and efficient use of land having regard to topographic, climatic, ecological, and agricultural features, along with land uses patterns, zoning and infrastructure/servicing.

A subdivision pattern which responds to the underlying topography and the site-specific characteristics of the environment, and the natural elements has not been provided. Any change to the natural topography needs to be adequately justified, which has not been demonstrated by the proposal.

A site responsive subdivision design is also required by Part 2.4 of the Guidelines, the proposal fails to satisfy the Guidelines as the street pattern has not been designed in response to the topography of the site and the original landform. The proposal is also inconsistent with the guidelines in that there is no public edge road (perimeter road) to the new settlement and streets and blocks are not orientated in response to topography. Some of these issues are further considered below.

6.3.3 Requirement for Earthworks

The proposed subdivision requires significant earthworks with a combination of cut and fill proposed to provide allotments above the 1 in 100 year flood level (to achieve a minimum earthworks level of 3.3m and a 300mm house slab) and provide for drainage of the site towards the Evans River. The filling of the existing drains on the site is also proposed.

Such significant earthworks demonstrates that the proposal has not been designed to suit the site conditions and is unsatisfactory. This issue is considered further in Section 7.8 of this Report.

6.3.4 Lot layout based on previous subdivision approval

The proposed subdivision has been designed on the basis of the former subdivision approval (illustrated in **Figures 2** and **3** below). This design philosophy is flawed as the previous design also exhibited the same concerns as the current design in that there is a lack of site-specific planning, no perimeter road, a lack of lot diversity and a lack of legibility in the design.

The site is generally vacant land, however, includes some former subdivision works comprising a number of partially constructed roads and stormwater infrastructure as well as other servicing under the road surfaces. These subdivision works are a dominant feature in the eastern section of the site, however, are currently in a state of disrepair with significant cracking of the surface and some of the roads have been partially washed away.

This existing infrastructure on the site may not be of a standard to be used for future development given this level of disrepair and the likely need for upgrading to meet current Australian Standards and development controls (**Figures 26**). The Engineering Report refers to the need to investigate the condition of these services and works and the likely need to upgrade these services (**Figures 27 – 30**).

[illegible]



Figure 28: Existing subdivision infrastructure on the site in disrepair



Figure 29: Existing subdivision infrastructure on the site in disrepair



Figure 30: Existing subdivision infrastructure on the site in disrepair

The Engineering Report also includes a demolition plan for the existing services on the site which indicates that the majority of the existing services are to be demolished (shown with red crosses in **Figures 31 & 32**), with the exception of the sewer and water along the north-south road along the eastern boundary. It is also noted all of the constructed roads would also be demolished.

Accordingly, designing the proposed subdivision around the existing services arising from the former subdivision approval, is not supported given the majority of these services are to be demolished and are unlikely to be in a satisfactory condition to be used in a future subdivision. Furthermore, the existing approved subdivision layout is not supported for the reasons outlined above.



Figure 31: Existing services to be demolished (Source: Hyder. July 2015)



Figure 32: Existing services to be demolished (Source: Hyder. July 2015)

6.3.5 Lack of Perimeter Road and Configuration for Lot 60

The proposed subdivision currently lacks a perimeter road along the eastern boundary of the site which would reduce the bushfire hazard to the site. This issue is a significant design flaw in the subdivision and is an issue carried from the former subdivision approval as discussed above. In addition, proposed Lot 60 is an awkward shaped lot and is surrounded on all sides by proposed roads and fire trails. Proposed allotments backing onto a fire trail are also undesirable. These issues are considered further in the bushfire issue below, and contribute to the poor design of the subdivision.

6.3.6 Lack of public open space and Legible Pedestrian Network

The proposed subdivision provides limited public open space areas comprising pocket parks or areas for passive and active recreation. While there are numerous areas denoted as 'public reserves' these areas generally comprise fire trails and the rainforest lots, with the latter being located within the E2 Environmental Conservation zone. While the rainforest lots have the potential to contribute to the conservation of biodiversity, this does not provide for useable open space areas. The use and embellishment of the foreshore no longer forms part of the proposal and therefore there are limited areas of public open space.

The only actual public open space areas which can be used by the community for active or passive recreation are proposed Lots 141 and 142, which comprise areas of 1,990m² and 2,969m² respectively and are located adjoining the southern boundary of the site. These lots are located more than 400 metres from the majority of the proposed allotments in the north-east section of the site as recommended by the Subdivision Handbook and comprise small, awkward shaped lots. It is also unknown if these areas will be embellished with park infrastructure.

These public open space lots are also dominated by stormwater infrastructure, in the form of a bio retention basin, as well as an Aboriginal midden site. It is unknown what restrictions these factors would have on the usability of these areas as public open space.

The Residential Subdivision Guidelines also encourage the provision of small local parks as they provide an important community focus and identity to neighbourhoods, which have not been provided in the proposal. While the relevant planning controls do not provide a minimum amount or size of public open space, given the distance of the site to Evans Head, appropriate open space areas within the site which are of a sufficient size and location for the future population is required.

The proposal is also considered to lack of legible and connected pedestrian network within the design. The Landscape Statement of Intent provides a concept pedestrian layout (**Figure 33**), however, this does not account for site grades or vegetation which may need to be removed for such paths. It is also unknown whether these paths are located within the road reserve (with respect to overall widths) and whether the recommendation to provide a cleared space of 3 to 5 metres on either side of footpaths and cycle routes as recommended by the CPTED Report has been incorporated into the proposal and assessed for potential ecological impacts. The proposed pedestrian linkages throughout the site and to the surrounding area are poorly described by the proposal, which is unsatisfactory.

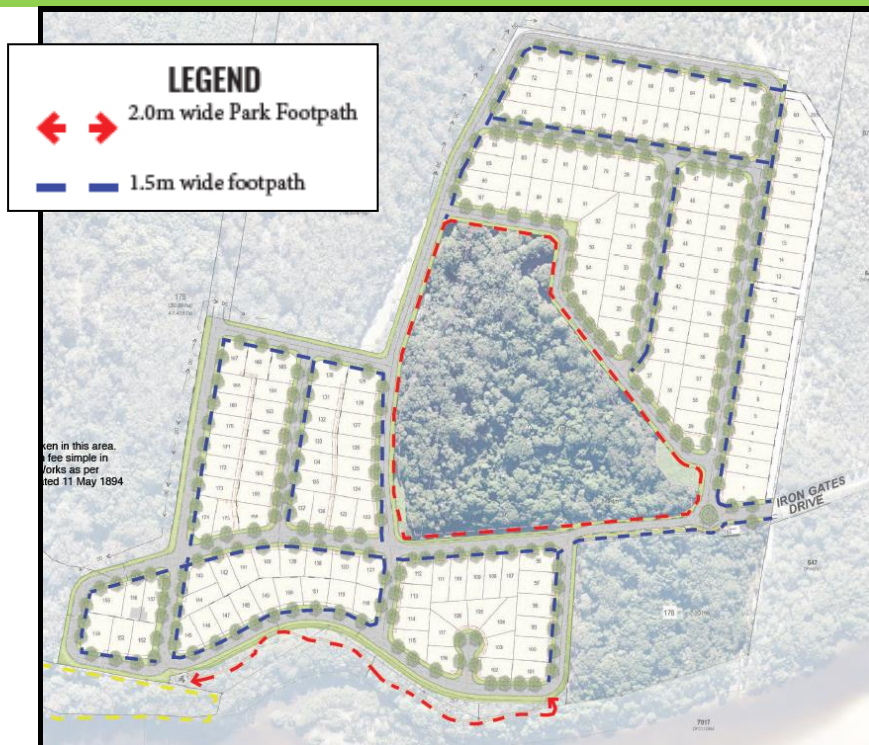


Figure 33: Proposed Pedestrian Network (Source: Landscape Statement of Intent, Plummer & Smith, 17 July 2019 Rev D)

Accordingly, it is considered that the proposal has not provided adequate public open space for the future population of the site.

6.3.7 Lack of Built Form consideration

The proposal does not sufficiently address the likely future building forms on the site, which was also raised by the GANSW in their design review in October 2020. The Coastal Design Guidelines require consideration of appropriate buildings for a coastal context, with objectives including that the built form is appropriate to the natural setting and to its location, which are of high-quality design and maintain a high quality publicly accessible interface with the foreshore.

Following the GANSW's design review, a response prepared by RPS Group dated 23 November 2020 was submitted, however, this provided only a cursory consideration of the design principles for the site. This consideration comprised generic built form guidelines and photographs of existing housing in Evans Head. The RPS report also stated that SEPP 71 does not require built form guidelines and that they will be prepared following approval. This is contrary to Clause 20(2)(a) of SEPP 71 which requires that a draft master plan is to illustrate and demonstrate design principles drawn from an analysis of the site and its context.

Demonstration of design principles drawn from an analysis of the site and its context has not been achieved/undertaken for the proposal, which results in a lack of an integrated approach for built form across the site.

The proposed design of the subdivision is considered to be unsatisfactory and warrants refusal of the application.

6.4 Bushfire

The site is identified as bushfire prone land on the Bushfire Prone Land Map for Richmond Valley Shire dated 25 January 2015 pursuant to s.10.3 of the EP&A Act. The site comprises areas of Vegetation Category 1, Vegetation Category 2 as well as vegetation buffer zone. The majority of the area of the site proposed for the subdivision development is within the Vegetation Category 2 and vegetation buffer zones (**Figure 34**).

The site is also located within an area comprising large areas of heavily vegetated areas comprising largely Eucalypt forest, heath, melaleuca forest and Littoral rainforest, resulting in a significant bushfire hazard arising on the site. The retention of two (2) allotments (Lot 136 (2.19ha) & Lot 137 (4.86ha)) containing Littoral rainforest further adds to this bushfire hazard.

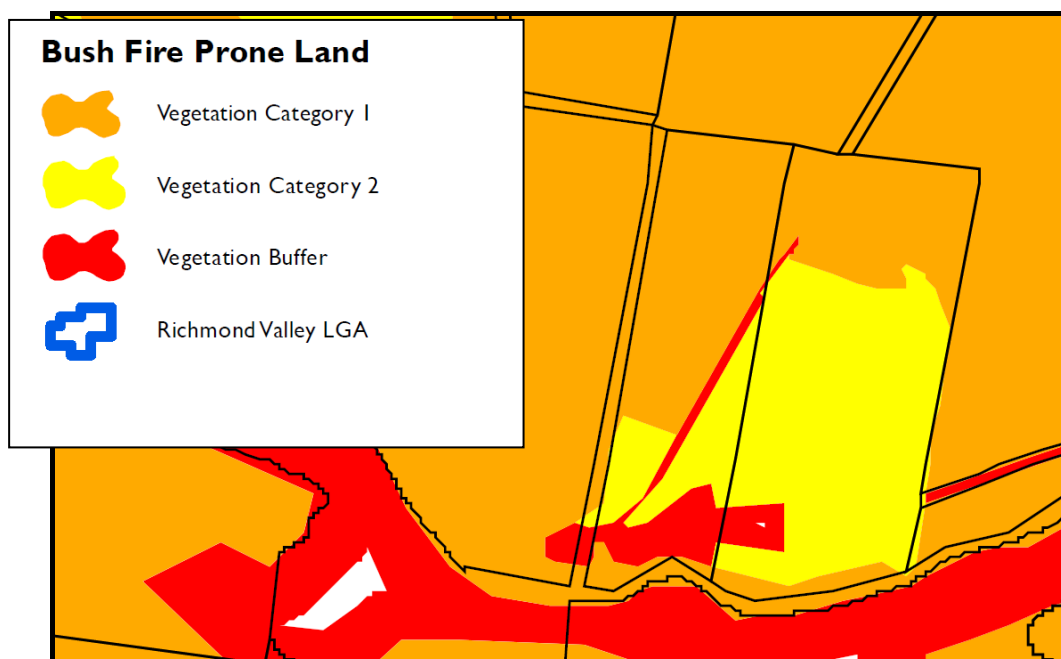


Figure 34: Bushfire Prone Land Map (Source: <https://richmondvalley.nsw.gov.au/services/bush-fire/>)

The application requires a Bushfire Safety Authority ('BFSA') pursuant to Section 100B of the *Rural Fires Act 1997* from the NSW Rural Fire Service ('RFS') as it involves residential subdivision. This requirement makes the application integrated development pursuant to Section 4.46 of the EP&A Act. The RFS and Council have had significant involvement in this application on this issue which numerous meetings and versions of GTAs being issued since 2014.

Various changes to the proposal have been made since its lodgement, with the main changes including the addition of the proposed upgrade works to Iron Gates Drive as the existing carriageway does not satisfy the requirements of the RFS and the removal of a secondary fire trail which was initially proposed from the site to Woodburn Road via Blue Pools Road.

The applicant has provided the following bushfire reports:

- *Revised Consolidated Bushfire Report* dated July 2019 prepared by *Bushfire Risk* ('the 2019 Bushfire Report'); and
- *Bushfire Assessment – Additional Information Response Re: Iron Gates Drive Evans Head NSW* prepared by *Bushfire Risk* dated 8 March 2017 ('Iron Gates Drive Bushfire Report').

These reports outline the proposed Asset protection Zones ('APZs') for the site which comprise either 15 metres, 21 metres or 27 metres for the various lots (**Figure 35**), however, this plan has not been updated for the final version of the application.

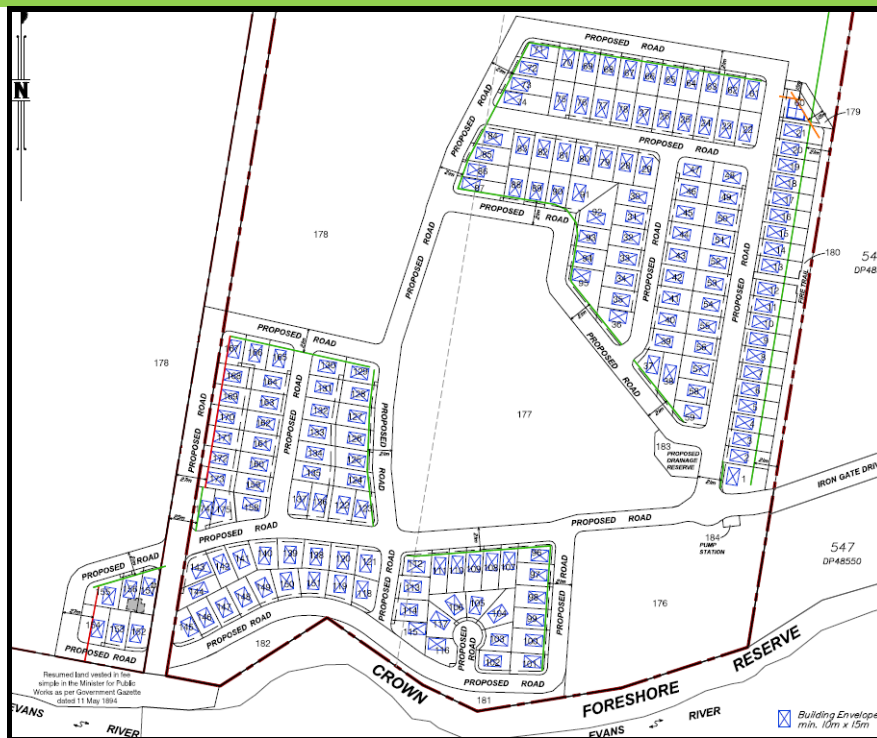


Figure 35: Proposed APZs on the site (Source: Landpartners, 23 March 2020)

The July 2019 Bushfire Report considers that there were three (3) compliance issues with *Planning for Bushfire Protection 2006* ('PfbP') (s4.1.3(1)) in relation to the proposed public internal roads including:

- Lack of secondary access/egress point (only Iron Gates Drive);
- Proposed Road 5 (between proposed rainforest lots) is too narrow; and
- Proposed fire trail in lieu of a perimeter road at the rear of lots 1 to 21 & lot 60

PfbP applies to all development on land which is bush fire prone pursuant to Section 1.1 of PfbP, with relevant provisions included in Section 3 (Bushfire Protection Measures) and Section 4.1 - Planning Controls for Residential and Rural Residential Subdivisions. These matters are considered in further detail below.

A BFSA has been issued by the RFS dated 9 November 2021 for the application, which replaces the earlier versions issued for the proposal. The BFSA has been considered under the requirements of PfbP 2006, given the lodgement date of the application, which reflect the relevant requirements at that time. The 2006 version of PfbP has since been superseded by *Planning for Bushfire Protection, 2019*.

Following a thorough assessment of the proposal in accordance with the requirements of PfBP, consideration of the bushfire reports submitted and comments from the RFS, there are several fundamental bushfire issues which have not been satisfactorily addressed by the application comprising the following:

- Lack of a perimeter road to the eastern boundary (required by PfBP)
- Inadequate Road No 5
- Prohibition of on-street car parking
- Inadequate access road into the site via Iron Gates Drive
- Inappropriate APZs
- Inconsistent with subdivision objectives of PfBP

These issues are further discussed below.

6.4.1 Lack of Perimeter Road

Sections 4.1.3[1] of PfBP outlines the importance of public and perimeter roads for any development in bushfire prone areas and provide controls for these roads to mitigate the bushfire risk to the site. Both perimeter and public roads are required to be a minimum of 8 metres in width. Proposed Road No 1 forms a perimeter road for the north-eastern portion of the proposed subdivision, while proposed Road 6 forms a perimeter road for the western and southern sides of the proposed subdivision in the south-western corner of the site.

However, the proposal does not provide for a perimeter road along the eastern boundary of the site adjoining proposed Lots 1-21 or in the north-eastern corner adjoining proposed Lot 60, leaving these parts of the proposed subdivision vulnerable to bushfire and is contrary to the PfBP requirements.

In lieu of the required perimeter road, a fire trail is proposed which is to comprise a 5 metre wide gravel road within an 8 metre wide road reserve, which is also proposed to include a water main and hydrants along the trail. The proposed fire trail is to be dedicated to Council as a public reserve and secured by locked RFS approved gates.

In relation to the lack of a perimeter road in this location, the 2019 Bushfire report stated that *“at least, equivalence has been demonstrated”*, however, this is not supported.

Section 4.1.3[1] outlines the bushfire protection measures in relation to perimeter roads stating (emphasis added):

*A perimeter road is the preferred option to separate bushland from urban areas. **Fire trails will only be considered acceptable in exceptional circumstances.** This is based on the difficulties and costs associated with maintaining fire trails on private land. A perimeter fire trail cannot be imposed on the adjoining land and should not cross a number of residential allotments.*

The perimeter road forms part of the APZ and is required to provide a separation between the building and the boundary of the bush fire hazard.

Further, Section 4.1.3[3] outlines the measures in relation to fire trails (emphasis added):

Fire trails are used as access for firefighters, as fire control lines and for APZ maintenance.

*A fire trail is **not a substitute for a perimeter road** and any proposals will need to demonstrate clear benefits over the use of a perimeter road. Fire trails are expensive to maintain and can only be effective in the context of a strategic advantage and access for hazard reduction operations.*

The proposal is inconsistent with these requirements as the perimeter road is not provided in the north-eastern corner and along the eastern boundary, which would provide the required separation between bushland and the future urban area of the site. Furthermore, PfBP makes it clear that fire trails are not a substitute for a road, nor is it considered an appropriate trade-off for the provision of perimeter road access requirements.

It is considered that since this site is a greenfields subdivision, there is adequate area on site for a perimeter road which will provide for an improved bushfire mitigation outcome for the site. The proposed fire trail is a poor design outcome for the site and is based on the earlier subdivision footprint which no longer represents best practice in mitigating bushfire hazards on the site.

The concerns with the proposed fire trail, apart from the lack of a perimeter road, also include:

- Retaining walls of variable height are proposed to be erected along the full length of the fire trail adjoining the eastern boundary of proposed Lots 1 to 20 and 60, both sides of the fire trail access points between proposed Lots 12 and 13, to the north and north-east of proposed Lot 60 and also along the eastern boundary of the land adjoining Lot 544 DP 48550 (owned by others) from proposed Lot 14 to proposed Lot 60. The height of these retaining walls adjoining the fire trail is unknown as the residential land is to be filled. These walls are likely to provide hazards for bushfire vehicles including a lack of adequate space for firefighters to adequately use the equipment in the narrow space and there are likely to be fences encumbering this area given the proposed walls.
- The proposed fire trail east of proposed Lots 1 to 20 and proposed Lot 60 will be located on the filled drain and is immediately adjoined by tall closed / open forest (*Melaleuca quinquenervia*) vegetation within the adjoining lot to the east (Lot 544) with trees approximately 8 to more than 10 metres in height. This is likely to result in difficulties with firefighting with vegetation up to the edge of the proposed fire trail and potential for trees falling to block the fire trail.
- The proposed APZ from vegetation to the east for Lots 1 to 20 and 60 is 21 metres, which extends into approximately half of the proposed allotments given the absence of a perimeter road. This proposed APZ relies on future owners of these 21 lots complying with Conditions 1 and 2 of the GTA's of the RFS and not erecting structures, planting any significant landscaping and Council ensuring compliance in perpetuity. A perimeter road would eliminate these concerns and would result in a formally constructed road dedicated to Council as a perimeter road and which provides the RFS with a higher quality area for firefighting.
- The fire trail to the east for Lots 1 to 20 and 60 does not provide for safe passage of fire fighters in the event of a bushfire emergency and is not a suitable alternative to a perimeter road.

It is considered that a perimeter road in this location with associated footpaths would provide for a more appropriate APZ in this location and provide an improved roadway for the RFS to defend properties given the extensive vegetation located on the adjoining property.

6.4.2 Inadequate Road 5

There is a section of proposed Road 5 which separates the two (2) rainforest lots (proposed Lots 136 & 137) close to the entry point to the site which does not satisfy the requirement of PfBP for all public roads to have a minimum carriageway width of 8 metres. This road design has been proposed in order to minimise further clearing of vegetation from the rainforest area.

PfBP states (Section 4.3.1):

Roads should provide sufficient width to allow firefighting vehicle crews to work with firefighting equipment about the vehicle.

The engineering report states the following in relation to this section of proposed Road 5 and illustrated in **Figure 36**:

A section of the Proposed Road 5 between chainage 20 and 140 has been designed with a reduced verge and pavement width to minimise impacts on the environmentally protected areas to the north and south of the road. The adopted cross-section shown on Drawing C140-AA007094-07 in Appendix A, shows two 3.5m lanes without the additional 2m parking zones on each side of the road. Safety barriers (guard rails) have been adopted on both sides of the road to help in minimizing the total width. No verge is proposed on the northern edge of the road. Along the southern edge a 2.5m wide elevated platform will be provided as a pedestrian connection between the wider sections of the road.

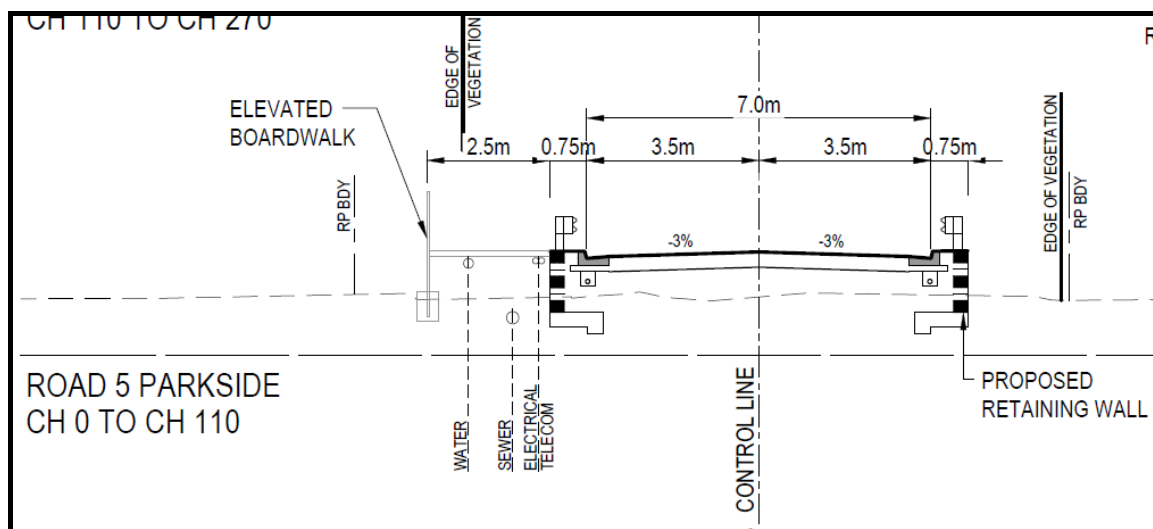


Figure 36: Proposed Road 5 located between the proposed rainforest lots (Source: Arcadis)

The 2019 Bushfire Report states the following in relation to this section of Proposed Road 5:

Bushfire corridors are minimal by incorporating perimeter roads compliant with the requirements of s4.1.3 [1] PBP 2006. The exception being part of 'Road 5' being approx. 100m long, and 7m wide, traverses via an existing area of ecological significance near the southeast corner of the subject site. In order to negate additional clearing of significant ecological communities, the road incorporates an existing road width of 7m (3.5m each way). This stretch of road forms part of a perimeter road system around proposed lot 177, providing the option to bypass this stretch of road if required.

Either side of the road reserve are 2.75m (min.) verges clear of vegetation. Despite being nontrafficable the verges provide a suitable area for fire fighters working about their vehicles. Thus negating the requirement for a full 4m wide trafficable (one-way) width having additional room on the verges to work about the vehicle, which is otherwise afforded on the recommended road width of (4m either side).

I understand this area of road was recommended for closure for ecological purposes i.e. for wildlife connectivity (corridor), having potential to impact on safe access / egress for fire fighters and occupants in an emergency. The compromise in order to negate further clearing of vegetation was to maintain the existing road, with a 7m wide carriageway with min. 2.75m wide verges either side, in lieu of an 8m wide carriageway.

The existing gap between these two rainforest areas coinciding with the zone boundaries between the C2 and the R1 zones is approximately 15 metres, while the clearing for the existing track on the site is approximately 10m to 12m wide between trees and other vegetation. The existing trees adjoining this access track are approximately 12 to more than 15 metres high.

This section of the road does not provide for safe passage in the event of a bushfire emergency unless additional clearing of significant ecological communities is undertaken, which has not been proposed or considered from an ecological perspective.

This section of proposed Road 5 is not supported as it does not satisfy the requirements of PfBP for public roads (minimum width of 8 metres) and does not allow the RFS sufficient room

within the road reserve for firefighting. The proposed road is also surrounded by vegetation which is of a height that may cause a blockage to this road area.

6.4.3 Prohibition of on-street car parking

The 2019 Bushfire Report in its assessment of the proposed internal roads between 6.5m and 8.0m wide (with parking restricted to 1 side) and roads up to 6.5m wide (with parking bays) states:

“On-street parking is not proposed”

This is consistent with condition 3 of the GTAs of the BFSA which states the following in relation to the on-street car parking on the site:

- *Public roads greater than 6.5 metres wide locate hydrants outside of parking reserves to ensure accessibility to reticulated water supply for fire suppression.*
- *Public roads between 6.5 metres and 8 metres wide are ‘No Parking’ on one side with services (hydrants) located on this side to ensure accessibility to reticulated water for fire suppression.*

This is considered to be an unrealistic expectation in perpetuity and potential on-going compliance issue for both the Council and the NSW Police. The Revised Engineering Report indicates road geometry design has generally been undertaken in accordance with the *Northern Rivers Local Government’s Development and Subdivision of Land, 2006* which provides for parking on the carriageway. The report does not refer to either prohibiting on-street car parking on 1 side with services (water main and hydrants) or to ‘no on-street parking’.

Since the site is located approximately 1.5km from the Evans Head township, car ownership and usage is likely to be high and the demand and use of one or both sides of the road for on-street car parking is also very likely to be high. The internal road system is considered insufficient if such a prohibition on car parking on the street is required to satisfy PfBP. Accordingly, the proposed internal road system is not supported

6.4.4 Inadequate access road into the site via Iron gates Drive

Iron Gates Drive, the sole vehicular access point to the site (**Figure 37**), is currently

inconsistent with the requirements of PfBP to function as an access road as it currently comprises only a 6 metre wide carriageway, with thick vegetation occurring on both sides of the road close to the carriageway, including coastal wetlands under SEPP 14. The Iron Gates Drive Bushfire Report noted that SEPP 14 wetlands and Endangered Ecological Communities (EEC) have been identified along the entire length of Iron Gates Drive.

In February 2016, the RFS provided comments to the Department in relation to the then draft master plan, stating that it did not support the proposal until the public road access arrangements were finalised.



Figure 37: Existing Iron gates Drive looking east towards Evans Head

The intent of measures for public roads in PfBP states:

Access (1) – Public Roads

Intent of measures: to provide safe operational access to structures and water supply for emergency services, while residents are seeking to evacuate from an area.

The performance criteria (the intent may be achieved where) of PfBP for public roads (Section 4.1.3[1]) states:

“public road widths and design that allow safe access for firefighters while residents

are evacuating an area.”

The proposal includes the widening of Iron Gates Drive to incorporate a sealed carriageway of 8 metres wide inside a 20 metre wide road reserve. There are two sections along Iron Gates Drive which cannot be widened due to the location of mapped SEPP 14 wetlands. There are also branches which currently overhang into the road reserve, which would need to be trimmed to comply with the minimum vertical clearance of 4 metres, including vegetation within the coastal wetlands community.

The Iron Gates Drive Bushfire Report is considered deficient in the following aspects:

- The report does not describe or identify the location of the existing and proposed road carriageway in relation to the boundaries of the Iron Gates Drive road reserve.
- The report does identify the height of trees along the length of Iron Gates Drive that are within and immediately adjoining the road reserve, the separation distances to the proposed road formation, potential for road blockage, fire flame length and potential visibility issues together with vegetation management strategies for the SEPP No. 14 wetland areas.
- The structural integrity and weight of loads capacity of the bridge in Iron Gates Drive over the wetland is unknown.
- The proposed works to the road carriageway, location of verges and footpaths are not provided in sufficient detail to assess the potential impacts of the proposed upgrade works to Iron Gates Drive.

There is a significant lack of detail in the proposed upgrade works to Iron Gates Drive to be undertaken to this road, the dimensions of the road (including cross sections) and whether the road can be constructed within the currently gazetted road reserve have not been adequately demonstrated. It is also unknown whether Council supports the works being undertaken to the Council owned road and whether such works comply with relevant Australian standards and road specifications.

Given these deficiencies in the application, the proposal has not satisfactorily demonstrated consistency with the intent of measures for public roads or the performance criteria or PfBP in that safe operational access to structures within the site for emergency services, while residents are seeking to evacuate from an area, has not been provided.

As outlined above, this broader issue of access to the site via Iron Gates Drive has not been satisfactorily addressed by the proposal and remains unsatisfactory.

This lack of clarity over Iron Gates Drive is exacerbated by the site's relatively isolated location within the Evans Head locality and the lack of a secondary access or egress point to the site.

The Revised 2019 Report acknowledged this inconsistency, stating that the proposal has the '*potential to create a 'bottleneck' and 'pinch point' to the development*'. If a bushfire were to impact to the east of the site, to the extent that Iron Gates Drive became impassible, there is no access for firefighters nor egress from the site for residents, which is unsatisfactory.

6.4.5 Inappropriate APZs

APZs are required to be provided for development on bushfire prone land pursuant to Section 4.1.3 of PfBP. All of the proposed lots are required to be maintained by the future owners as managed landscaped gardens and public access roads and fire trails shall become the ongoing responsibility of and be maintained by Council as an inner protection area ('IPA').

The relation to APZs, the intent of measures is outlined in Section 4.1.3 of PfBP which state:

Intent of measures: to provide sufficient space and maintain reduced fuel loads, so as to ensure radiant heat levels at buildings are below critical limits and to prevent direct flame contact with a building.

While the majority of the proposed APZs have been provided within the proposed road reserves and front setback areas, there are no APZs wholly located in either public reserves or road reserves, resulting in 83 of the proposed 175 residential lots, or 47%, being burdened by easements for an APZ. This is an undesirable outcome.

The proposed APZs on proposed Lots 1 to 21 and Lot 60 are to be located predominately within the proposed lots. An APZ of 21 metres is proposed for these lots, which are 40 metres long and 15 metres wide, making them relatively long, narrow blocks, with lot areas of between 600-612 square metres (Lot 1 is 969m²). A 21 metre APZ represents a significant encroachment into the developable land of these proposed allotments, which is an unsatisfactory outcome. Therefore, this is a substantial restriction upon future landowners who will not be able to develop almost half of their allotment.

It is further noted that when rear boundaries adjoin fire trails and areas of public open space, there are often problems with rubbish dumping, which can exacerbate the bushfire hazards, as well as public property being subsumed into private property. This lot layout having regard to APZs is unsatisfactory.

Proposed Lot 60 is also significantly constrained with a 15 metre APZ on two of its boundaries and is surrounded on all four (4) side boundaries by public roads and/or fire trails. This lot is only 632m² and comprises an undesirable lot configuration and location, which is not supported.

A perimeter road in accordance with PfBP as outlined above would resolve these issues and would result in lots facing a public road and eliminating rear lot boundaries facing a fire trail. This solution would provide an improved urban design outcome and would enhance the bushfire protection measures for the site. The site is a large greenfields site in which there are no constraints preventing the provision of APZs within the road reserve where management is more certain and private allotments are not unnecessarily constrained and burdened by APZs.

6.4.6 Inconsistent with specific objectives for Subdivisions

The specific objectives for residential and rural residential subdivision pursuant to Section 4.1.2 of PfBP include the following (bold indicates the objectives which are not satisfied by the proposal):

- ***minimise perimeters of the subdivision exposed to the bush fire hazard. hourglass shapes, which maximise perimeters and create bottlenecks, should be avoided.***
- ***minimise bushland corridors that permit the passage of bush fire***
- *provide for the siting of future dwellings away from ridge-tops and steep slopes - particularly up-slopes, within saddles and narrow ridge crests.*
- *ensure that separation distances (APZ) between a bush fire hazard and future dwellings enable conformity with the deemed- to-satisfy requirements of the BCA. In a staged development, the APZ may be absorbed by future stages.*
- ***provide and locate, where the scale of development permits, open space and public recreation areas as accessible public refuge areas or buffers (APZs)***

- ***ensure the ongoing maintenance of asset protection zones***
- *provide clear and ready access from all properties to the public road system for residents and emergency services*
- *ensure the provision of and adequate supply of water and other services to facilitate effective firefighting.*

The proposal is inconsistent with these objectives given the proposal:

- does not minimise perimeters of the subdivision exposed to the bush fire hazard as a result of the lack of a perimeter road along the norther-eastern and eastern boundaries of the site (adjoining Lots 1 to 20 and 60)
- does not minimise bushland corridors that permit the passage of bush fire arising from the retention of the two areas of Littoral rainforest (Lot 136 and Lot 137) in the centre of the subdivision. The vegetation within Lot 136 is contiguous with the vegetation to the east of the site.
- does not provide open space and public recreation areas as accessible public refuge areas or buffers.
- cannot ensure the ongoing maintenance of asset protection zones as there will be multiple landowners who properties are in the asset protection zones.

Accordingly, it is considered that the proposal is unsatisfactory having regard to the bushfire considerations on the site.

6.5 Flooding

Flooding is required to be considered pursuant to Clause 6.5 of the RVLEP 0212, which applies to land at or below the flood planning level (CI 6.5(2)). The objectives of this clause include (CI 6.5(1)):

- (a) to minimise the flood risk to life and property associated with the use of land,*
- (b) to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change,*
- (c) to avoid significant adverse impacts on flood behaviour and the environment.*

There are certain matters which need to be considered prior to the granting of consent, which include the consent authority being satisfied as to the following matters in relation to the development:

- (a) is compatible with the flood hazard of the land, and*
- (b) is not likely to significantly adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties, and*
- (c) incorporates appropriate measures to manage risk to life from flood, and*
- (d) is not likely to significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses, and*
- (e) is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding.*

The application was accompanied by the *Evans River Flood Study – Final Report* prepared by BMT WBM dated November 2014, which was a study prepared for the Council (as an Attachment to the Revised Engineering Report). This Flood Report did not provide any site-specific information for the proposal. A letter from BMT WBM dated 22 August 2014 was also provided as part of this attachment which was prepared to assess whether on-site detention of runoff is required to protect downstream properties from the site.

The revised Engineering Report provided the following in relation to flooding on the site:

The proposed developed features 175 residential allotments, with all internal road areas and lot areas constructed above the current 1 in 100 year flood level. Permanent residents and visitors can move freely around the site during flood events up to the 1 in 100 year regional flood. The proposed development is connected to the Evans Head town centre by a single road, being Iron Gates Drive. Iron Gates drive is susceptible to current day 1 in 100 year flooding, with the lowest point inundated by approximately 400mm for 5 hours. It should be noted that this flooding is low velocity back water, and would be considered trafficable if required by emergency vehicles.

All lots have been designed to achieve FFL above Flood Planning Levels of 3.6m. This assumes a minimum Earthworks level of 3.3m and a 300mm house slab.

The Natural Resources Access Regulator (DPIE Water) raised the following concerns in relation to flooding for the draft master plan in correspondence dated 5 May 2020:

The project has not provided any further information to DPIE Water's comments on the EIS other to state that they were not necessary. DPIE Water's comments remain and are as follows:

- 1. The Iron Gates development proposal site lies at a pinch point on the Evans River. A slight elevation is aligned approximately along an existing road easement west of Lot 276 DP 755624. The subdivision is located on the eastern flank of this elevation, extending into a SEPP 14 coastal wetland.*
- 2. A flood study developed for the Evans River indicates likely inundation of the Iron Gates Road and potential floodwater storage within the development area. The development is likely to be isolated during floods, and climate change risks of increased flooding severity may pose some threat to part of the development area.*
- 3. The Master Plan does not provide sufficient information for assessment of geomorphic risks arising from existing flood regimes or potential changes as climate change scenarios occur.*
- 4. Geomorphic processes driving sediment transport and deposition are significant in a wave dominated delta estuary. Sediment accumulation may drive increased flood height or storm surge backwater storage in the SEPP 14 wetland and associated watercourses and drainage lines.*
- 5. Geomorphic processes are not addressed in the documentation provided. Detailed assessment of estuarine geomorphic processes is required to account for likely and possible changes in flood flow behaviour resulting from climate change, leading to altered sediment transport and deposition processes in the Evans River estuary. This should form a basis for mitigation to flooding risk to the Iron Gates subdivision proposal and identify appropriate development limits to housing on the site.*
- 6. Hydrologic linkages between the Richmond River estuary and the Evans River inlet through the Tuckmobile Canal below Woodburn require further detailed examination.*
- 7. The risk of inundation and isolation of the Iron Gates proposal resulting from storm surge meeting flood wave travelling along the Evans River requires detailed explanation. The flood scenarios rely upon the WBM Evans River Flood Study, therefore the inundation and fringing flood zones adjacent to the development site should be assessed against the recommended flood protection elevation buffers for the lower Evans River.*
- 8. Sedimentation storage and influence on flood surges into and along the lower Evans River should also be included in any such study. This must also address intrusion into the existing SEPP 14 wetland and development adjacent to an unnamed drainage line within Lot 544 DP 48550.*

The proposal does not adequately consider the following matters in relation to flooding:

- outline the extent of flooding on the proposed subdivision layout
- assess the flood impact of the proposed filling of the land for the proposed development
- assess the impact of a Probable Maximum Flood (PM F) on evacuation routes from the development

- The floor levels and filling of the proposed lots are in accordance with Council policies, including a climate change allowance
- The filling of the lots does not adversely impact on the flood levels at other properties in the area
- the evacuation of the proposed subdivision layout for a full range of floods including the PMF
- The overland flow paths that traverse the development site do not impact on the proposed lots. The overland flows should be contained in roadways and drainage reserves.

The proposed subdivision is considered to be unsatisfactory having regard to flooding and warrants refusal of the application as it is inconsistent with Clause 6.5 of the RVLEP 2012.

6.6 Aboriginal Cultural Heritage

The potential impacts on Aboriginal cultural heritage have been considered in the *Iron Gates Residential Subdivision: Cultural Heritage Assessment* prepared by Everick Heritage Pty Ltd dated 18 July 2019 Revision 8 ('Aboriginal Cultural Heritage Report'). Consent is required under Cause 5.10(2)(f)(ii) of the RVLEP 2012 as the proposal involves subdividing land on which an Aboriginal object is located.

The objectives for heritage conservation pursuant to Clause 5.10(1) of the RVLEP 2012 are as follows:

- (a) to conserve the environmental heritage of Richmond Valley,*
- (b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,*
- (c) to conserve archaeological sites,*
- (d) to conserve Aboriginal objects and Aboriginal places of heritage significance.*

Three (3) Indigenous cultural heritage sites were identified in the Aboriginal Cultural Heritage Report within the Project Area, which were comprised of a shell midden and two isolated lithic artefacts, known as IG01, IG02 and IG03 (**Figure 38**). These items are located within or adjacent to the Crown foreshore reserve.



Figure 38: Aboriginal Cultural Heritage Survey Results (Source: Figure 8 - Everick Heritage Pty Ltd, July 2019)

- Midden IG01 – this comprises estuarine and beach shell (whelk, cockle and oyster) on a flat above Evans River bank and is highly disturbed, mechanically spread, with shell highly fragmented. The Traditional Owner representatives stated it was a crossing place to important site areas on the south bank.
- Isolated Artefact IG02 – comprises a single platform, coarse grained grey beach cobble, exhibits single striking platform and with more than 10 flakes removed resulting in multiple step fractures, located on low ridge line approximately 30m north of the Evans River bank, in a former open woodland. The condition of item is described as minimal past ground disturbance as evidenced by mature trees.
- Isolated Artefact IG03 – comprises a primary flake coarse greywacke material, exhibits a striking platform, located on the flat above Evans River bank. The condition is stated as highly disturbed, mechanically spread sands.

The Aboriginal Cultural Heritage Report concluded:

“.... no cultural heritage constraints to the proposed subdivision have been identified, however, the Project Area is situated within an important cultural landscape to the

The following impact mitigation strategies are recommended in the Aboriginal Cultural Heritage Report to mitigate any impacts to the cultural significance of the region:

- **Recommendation 1:** *Aboriginal Heritage Impact Permit - The shell scatter component of the IG01 Midden consists of isolated pieces of shell that have been previously distributed over a large area of the river bank by machinery. Subject to the successful determination of the existing AHIP application, submitted 06 July 2015, by OEH, it is recommended that this surface expression of shell material is collected and placed in a safe area to be nominated by the Traditional Owners.*

Comment: General terms of approval for an Aboriginal Heritage Impact Permit have been issued by Heritage NSW as outlined below.

- **Recommendation 2:** Cultural Interpretation - The Project Area is situated within a significant cultural landscape to the Traditional Owners. The Project presents several opportunities to acknowledge this significance through cultural interpretation. It is recommended that the Proponent continue to engage with the Traditional Owners over how to incorporate Aboriginal knowledge, story and history (as appropriate) into the landscaping plans for the Project open space. This should include:
 - (a) Cultural signage of the midden and reference to the significance of the nearby Gumigadah site.
 - (b) Discussions over a cultural walk through the central environmental protection zones, including use of traditional knowledge and plant names in signage and design.
 - (c) Use of appropriate plant species in any revegetation works.

Comment: None of these recommendations have been included in the Subdivision or Landscape Plans for the site.

- **Recommendation 3:** Cultural Inductions - It is recommended that the Proponent engage representatives of the Traditional Owners to provide a cultural heritage induction to all plant operators undertaking initial ground disturbance within the Project Area.

Comment: This can be included as a condition on any consent granted.

- **Recommendation 4:** Aboriginal Cultural Material – Find Procedure – A protocol is recommended in the event suspected Aboriginal material has been uncovered as a result of earth working activities within the Project Area.

Comment: This can be included as a condition on any consent granted.

- **Recommendation 5:** Notifying OEH - A protocol is recommended if Aboriginal cultural materials are uncovered as a result of development activities within the Project Area, they are to be registered as Sites in the Aboriginal Heritage Information Management System ('AHIMS') managed by the OEH.

Comment: This can be included as a condition on any consent granted.

- **Recommendation 6:** Aboriginal Human Remains - A protocol is recommended in the event that human remains are located at any stage during earthworks within the Project Area.

Comment: This can be included as a condition on any consent granted.

- **Recommendation 7:** Conservation Principles - It is recommended that all effort must be taken to avoid any impacts on Aboriginal Cultural Heritage values at all stages during the development works. If impacts are unavoidable, mitigation measures should be negotiated between the Proponent, OEH and the Aboriginal Community

Comment: This can be included as a condition on any consent granted.

Heritage NSW (within the Department of Premier and Cabinet) have reviewed the Aboriginal Cultural Heritage Report and the public submissions received during the recent exhibition period, noting that the report identified that Aboriginal objects IG01 AHIMS ID 13-01-0204 will be impacted by the proposal. General terms of approval for those known Aboriginal sites which would require an Aboriginal Heritage Impact Permit ('AHIP') pursuant to s.90 of the *National Parks and Wildlife Act 1974* have been issued by Heritage NSW under the integrated provisions of the EP&A Act.

While GTAs have been issued, there are a number of concerns with the consideration of the Aboriginal cultural heritage on the site which include the following:

- There has been no inclusion of recommendation 2 (Cultural Interpretation) into the proposal.
- Significant concerns with the proposal have been raised by the local Aboriginal Community but not resolved, particularly the Bandjalang Aboriginal Corporation Prescribed Body Corporate (Registered Native Title Bodies Corporate – R'NTBCs'), who submitted an objection dated 22 October 2021 advising that the Corporation opposes the DA *'on the basis of the significant tangible and intangible cultural heritage in both the project area and the surrounding area'*.

The Corporation raised issues with the Aboriginal Cultural Heritage Assessment including that it:

- does not accurately reflect Aboriginal oral history not the full record of site recorded on the Aboriginal Heritage Information Management System
 - does not provide adequate consideration of the impact on nor protection of Aboriginal cultural heritage in the Iron Gates area
 - does not reflect the presence of a traditional wedding ceremony site or burials in the project area and
 - does not provide adequate consideration of the impact on nor protection of Aboriginal sites identified by Mr L Wilson's descendants.
- The two (2) lithic artefacts identified in the Aboriginal Cultural Heritage Report (Isolated Artefact IG02 and IG03) are located in close proximity to the proposed residential footprint, with no detailed survey work having been carried out to ensure such items are not impacted by the proposal and no recommendation is made in regard their on-going protection and conservation.
- There has been no Aboriginal cultural heritage assessment for the proposed removal of vegetation and ground disturbance for the proposed upgrade works to Iron Gates Drive for bushfire safety.

The proposed subdivision is considered to be unsatisfactory having regard to the conservation or Aboriginal cultural heritage and warrants refusal of the application as it is inconsistent with the objectives for heritage conservation pursuant to Clause 5.10(1)(d) of the RVELP 2012 as the proposal does not provide for the conservation of Aboriginal objects.

6.7 Infrastructure and Servicing

The provision of infrastructure services to the site is required to either be available, or adequate arrangements must have been made to make them available when required, pursuant to Clause 6.2 of the RVLEP 2012. These services include a supply of water, electricity, sewerage disposal and management, stormwater drainage and road access. These issues are considered in the Revised Engineering Services and Civil Infrastructure Report prepared by Arcadis dated 23 July 2019 ('the Engineering Report') and are considered below.

6.7.1 Water Supply and Sewerage Disposal

The Engineering Report states that there is existing external local water and sewer reticulation infrastructure located to the south-east of the site within the Iron Gates Drive road reserve, with connection to this existing infrastructure proposed for the site. The report also outlines that there is existing water and sewer reticulation infrastructure located within the north-east portion of the site from the works undertaken on the site for the previous approval and that it is proposed to maximise utilisation of this existing network.

The adequacy of the current water reticulation is unknown and the Engineering Report concludes that this is still to be determined to ensure compliance with Council standards and that the internal potable water network *shall be the subject of detailed design during the Construction Certification phase of the project*. The report further notes *that a water network design will be undertaken by a qualified hydraulic engineer for the proposed development to determine adequate levels of services for all internal firefighting flows and services demands*. It is considered that the adequacy of the existing sewer infrastructure on the site is similarly unknown.

The Demolition Layout Plan (Dwg C107 and C108 dated 18 July 2019 prepared by Arcadis) proposes to remove the majority of the underground services (water and sewer), with the

exception of the water and sewer along the north-south extent of proposed Road No 1 along the eastern site boundary (**Figure 39**).



Figure 39: Existing Infrastructure to be retaining/removed (Source: Arcadis, July 2019)

Network Capacity Assessments were undertaken and included in the Engineering Report to determine the effects of the development on the surrounding water and sewer infrastructure. These assessments indicated that once fully developed and in-use, the proposal will have no additional impact on the Evans head potable water or sewer network.

While there appears to be sufficient capacity within the water supply and sewer networks for the proposal, the provision of the physical infrastructure required to be provided within the site has not been adequately demonstrated. This includes whether further vegetation may need to be cleared and whether there will be any adverse impacts on the retained vegetation on the site or adjoining the site from the provision of further underground services. It also does not indicate whether any easements are required for these services and whether the services are compatible with the movement networks throughout the site.

The condition of the existing services is also unknown and therefore the extent of the works required to provide these services is unknown and cannot be readily demonstrated.

Accordingly, it is considered that insufficient information has been provided in relation to the supply of water and the disposal and management of sewage for the consent authority to be satisfied pursuant to Clause 6.2(a) and (c) of the RVLEP 2012.

6.7.2 Stormwater Drainage

Stormwater management on the site is an important consideration for the proposal given the ecological and riparian areas which are located in close proximity to and within the site including the Littoral rainforest, the Evans River, the wetlands listed under SEPP 14 and the presence of key fish habitats on and surrounding the site (discussed further in Section 6.9 of this report).

The Engineering Report outlines that the proposed stormwater management system for the site comprises the following components:

- Bio-retention areas – located along the southern side of proposed Road 6 within proposed Lots 141 and 142 (public reserve lots);
- Gross pollutant traps ('GPTs') – Four GPTs have been proposed for the site, to be used as pre-treatment devices before discharge into secondary treatment devices (bio-retention basins)
- Infiltration Pits - due to existing soil conditions comprising high infiltration rates, infiltration pit systems have been introduced into the treatment train in Catchments A and B to supplement the proposed bio-retention and swale systems. Individual infiltration pits are proposed on a per lot basis to allow for further treatment of roof areas (modelled as lumped infiltration system for lumped roof catchment areas).
- Onsite detention - the site is not suitable for onsite detention due to the proximity of the site to the river mouth as outlined by BMT WBM. This assessment concluded that the application of detention devices would not achieve the desirable effects of stormwater flow mitigation, rather worsening flows overall in the regional catchment if flows from the development were detained.

The concerns with the proposed stormwater arrangements for the site include:

1. Infiltration pits - The report states the following in relation to infiltration pits:

“It should be noted that lots generally drain to the front of lot towards the adjacent road reserve. These infiltration systems are not proposed in lieu of inter allotment drainage, with their sole purpose being to act as stormwater quality treatment devices. All flows in excess of infiltration capacity will be directed to the road reserve where inter allotment drainage is not proposed.”

The Council were concerned with this arrangement, stating that is it Council's preference for the overflow to be discharged to street kerb or via Internal Allotment Drainage. The engineering plans also indicate that these infiltration pits will require an easement over the lot through the following notation:

“Note: seepage pit to be located in lot frontage adjacent to sewer line. An easement for stormwater will be provided over each device.”

This is an excessive use of easements given that such easements would affect all of the proposed lots in the north-east corner of the site.

2. Sedimentation Pond – It appears from the servicing plan that a sedimentation pond is proposed within the SEPP 14 wetland and its associated buffer in the north-east corner of the site (**Figure 40**). There are no details or diagrams outlining this stormwater infrastructure however it is considered to be unacceptable in this location.
3. Lack of a Stormwater Management plan – The proposal does not include a stormwater management plan which outlines the proposed stormwater arrangements for the site and which demonstrates that the quality of the stormwater leaving the site is sufficient that there will not be an adverse impact on the environment.

The proposed arrangements for stormwater management on the site have not been clearly outlined by the proposal and are unsatisfactory.

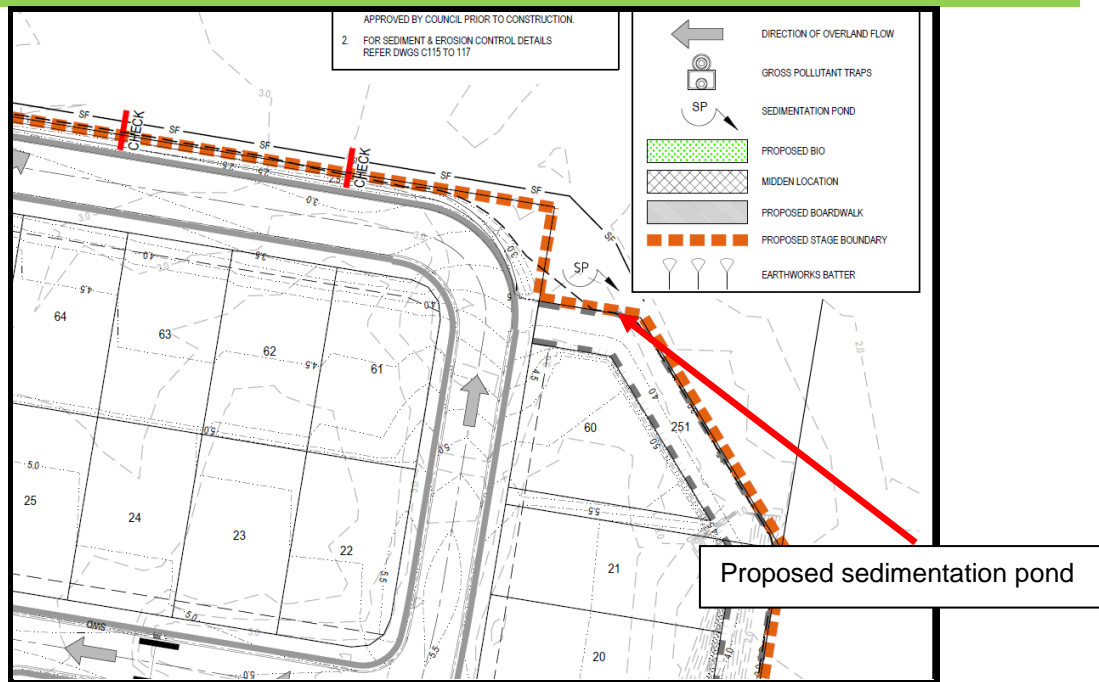


Figure 40: Proposed Sedimentation Pond in SEPP 14 wetland (Source: Arcadis July 2019)

Accordingly, it is considered that insufficient information has been provided and the current arrangement are unsatisfactory in relation to the provision of stormwater drainage for the consent authority to be satisfied pursuant to Clause 6.2(d) of the RVLEP 2012.

6.7.3 Electricity

The Engineering Report provides correspondence from an electrical consultant which states:

“It will be necessary to construct new infrastructure within the development and within Iron Gates Drive to make connection available to the existing electricity and communications infrastructure within Wattle Street near the corner of Cherry Street.

The Engineering Report does not outline the provision of electricity services on or to the site and does not make any comments in relation to whether this electricity will be provided overhead or underground. Furthermore, the Engineering Report does not make any mention of the existing overhead electricity which is currently located on the site.

It is also noted that it appears no consultation has been undertaken with local energy providers. The provision of electricity infrastructure for the proposal along Iron Gates Drive has also not been adequately addressed by the application in relation to vegetation clearing and excavation which may affect the SEPP 14 wetland areas adjoining this road.

Accordingly, it is considered that insufficient information has been provided in relation to the provision of electricity infrastructure for the consent authority to be satisfied pursuant to Clause 6.2(b) of the RVLEP 2012.

6.7.4 Road Access – Iron Gates Drive

The road access to the site is via Iron Gates Drive and is the sole access point to the site. There has been an extensive history of works being undertaken to this road and whether such works were lawful, whether they are located within the designated road reserve and the designation of the road as a public road.

Importantly for this proposal, it would appear that the road is a public road for the purposes of the *Road Act 1993* and is managed by the Council. The other important aspect regarding the proposed upgrading of Iron Gates Drive is that it is needed for the proposal to comply with the requirements of PfBP and the requirements of the GTAs issued by the RFS. This aspect combined with it being the only road access to the site, makes Clause 6.2(e) of the RVLEP 2012 relevant to this component of the proposal.

It is understood that the road currently comprises a carriageway of approximately 6 metres to 6.5 metres in width with no kerb and guttering or on-street car parking and includes a bridge over the wetland area which is approximately 18m long with a 6.8m wide trafficable concrete deck. The Engineering Report states that the road is approximately 1000 metres in length, with a 6.5 to 7.5 metre sealed bitumen carriageway with gravel shoulders. The total area of the existing pavement is approximately 7,000 to 7,500m².

The proposal involves the following works within the road reserve of Iron Gates Drive:

- Removal of all trees and shrubs in the 20 metre road reserve, other than where the road traverses and/or adjoins the SEPP No. 14 wetlands;
- Trimming tree branches which overhang the road where the road traverses and/or adjoins SEPP No. 14 wetlands;
- Widening the pavement and shoulders both sides of the carriageway over a 460 metre length of the road over an area of approximately 690m²;

- Installation of two (2) traffic 'slow points' (chicanes) with speed signposted to 50km/hr; and
- Provision of traffic signage.

The following plans and reports have been provided:

- *Contour Level and Detail plan of Iron gates Access Road* prepared by Robert. A. Harries dated 23 July 2014;
- *Access Road Signage & Line marking Layout Plan* prepared by Arcadis (Dwg K218 sheets 1 and 2);
- *Stormwater Management Plan – Iron Gates Drive* prepared by Arcadis dated 20 March 2020;
- *Amended Ecological Assessment: Iron Gates Drive* prepared by JWA dated April 2019; and
- *Bushfire Assessment – Additional Information Response: Iron Gates Drive Evans Head NSW* prepared by Bushfire Risk dated 8 March 2017.

The concerns with this proposed upgrade of Iron Gates Drive including the following:

- Inadequate and inconsistent information – There are numerous reports and plans which refer to this work, however, there is no plan which provides a full dimensioned plan of the proposed road work and which includes the overall road reserve width and footpath which currently exists adjoining the road. It is also evident in Council's Independent Assessment Report that Council requires the existing 2 metre wide footpath adjoining the road to be widened to 2.5 metres. It is unclear if this has been incorporated into the proposal and whether any additional vegetation clearing is required.

The width of the final road and road shoulders in the proposed upgrade works are inconsistently referred to in numerous plans and reports including:

- An 8 metre carriageway with 1 metre gravel shoulders for the full length of the road (Engineering Report);
- An 8m carriageway with 0.5 metre shoulders outside the SEPP No. 14 wetlands (Iron Gates Drive Bushfire assessment);

- A 6 metre and 6.5 metre to 8 metre wide carriageway (Amended ecological assessment report).

The Bushfire report provides cross sections of the proposed road yet the road carriageway is shown as a maximum width of 7 metres.

- Clearing for footpath and services – it is unknown if all of the required services and footpaths can be provided in the road reserve and whether any additional clearing will be required. This is an important consideration given three (3) EECs were recorded - *Swamp sclerophyll forest on coastal floodplains of the NSW North Coast Bioregion, Littoral rainforest in the NSW North Coast, Sydney Basin and South East Corner Bioregions and Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions*. It is also considered that there is inadequate information relating to the impacts of such works, particularly on the SEPP 14 wetland.
- Mitigation measures – The Ecology Report outlines an offset package which has been proposed for the proposed vegetation clearing, however, as outlined in Section 6.1 of this report, there are significant concerns with the delivery and implementation of such a package.
- Potential for designated development – This issue has been raised several times throughout the assessment of this application, however, it is still not clearly established, given the extent of the work proposed are not clear, whether or not the upgrading of Iron Gates Drive is designated development pursuant to Clause 7(3) of SEPP 14. This is particularly the case with respect to possible additional clearing required for electricity, water and sewer services and the recommendations of the CPTED report relating to the provision of 3 to 5 metre wide cleared areas surrounding footpaths/shared paths and the potential removal and/or pruning of overhanging trees for bushfire protection.

The Ecology report states the following:

“SEPP 14 Wetland No. 147 is mapped as occurring on and adjacent to the Iron Gates road reserve. The proposed works will involve some trimming of branches overhanging the road reserve in the SEPP 14 areas. However, as the proposed trimming does not involve the destruction or removal of any native plants, as defined in clause 7(4), it is

not considered that SEPP 14 will be triggered. There is no requirement to provide buffers to the SEPP 14 land as the proposed works are contained within an existing road reserve”.

There is some doubt over this proposed work and whether it does trigger the requirements for designated development under SEPP 14.

Accordingly, it is considered that insufficient information has been provided in relation to the provision of suitable road access for the consent authority to be satisfied pursuant to Clause 6.2(e) of the RVLEP 2012.

In relation to the provision of services to the site, Clause 6.2 of the RVLEP 2012 states:

Development consent must not be granted for development unless the consent authority is satisfied that any of the following services that are essential for the proposed development are available or that adequate arrangements have been made to make them available when required:

- (a) the supply of water,*
- (b) the supply of electricity,*
- (c) the disposal and management of sewage,*
- (d) stormwater drainage or on-site conservation,*
- (e) suitable road access.*

Following a thorough consideration of the proposed servicing arrangements for the site, it is considered that the proposal does not adequately demonstrate satisfaction with Clause 6.2 of the RVLEP 2012, which warrants refusal of the application.

6.8 Earthworks & Groundwater

There are significant earthworks proposed on the site with a combination of cut and fill proposed to provide allotments above the 1 in 100 year flood level (to achieve a minimum earthworks level of 3.3m and a 300mm house slab) and provide for drainage of the site towards the Evans River. The filling of the existing drains on the site is also proposed.

These earthworks are proposed despite the site being reasonably flat, with the Engineering

Report describing the eastern portion of the site is being 'very flat and features very minimal grades of approximately 0.5%.' The western portion of the site comprises steeper grades, with a ridge located on the western side of the site with an elevation of 22m AHD. Steep grades of approximately 11% are located in this area as the ridge flattens out to the east.

All of the proposed lots have some degree of earthworks where there is significant changes to the natural topography on the site through site regrading works. It is assumed that this is to provide terraced building lots, suitable for project home development. The proposed areas of cut (dark grey) and fill (light grey) are illustrated in **Figure 41**, which is adapted from the engineering plans.

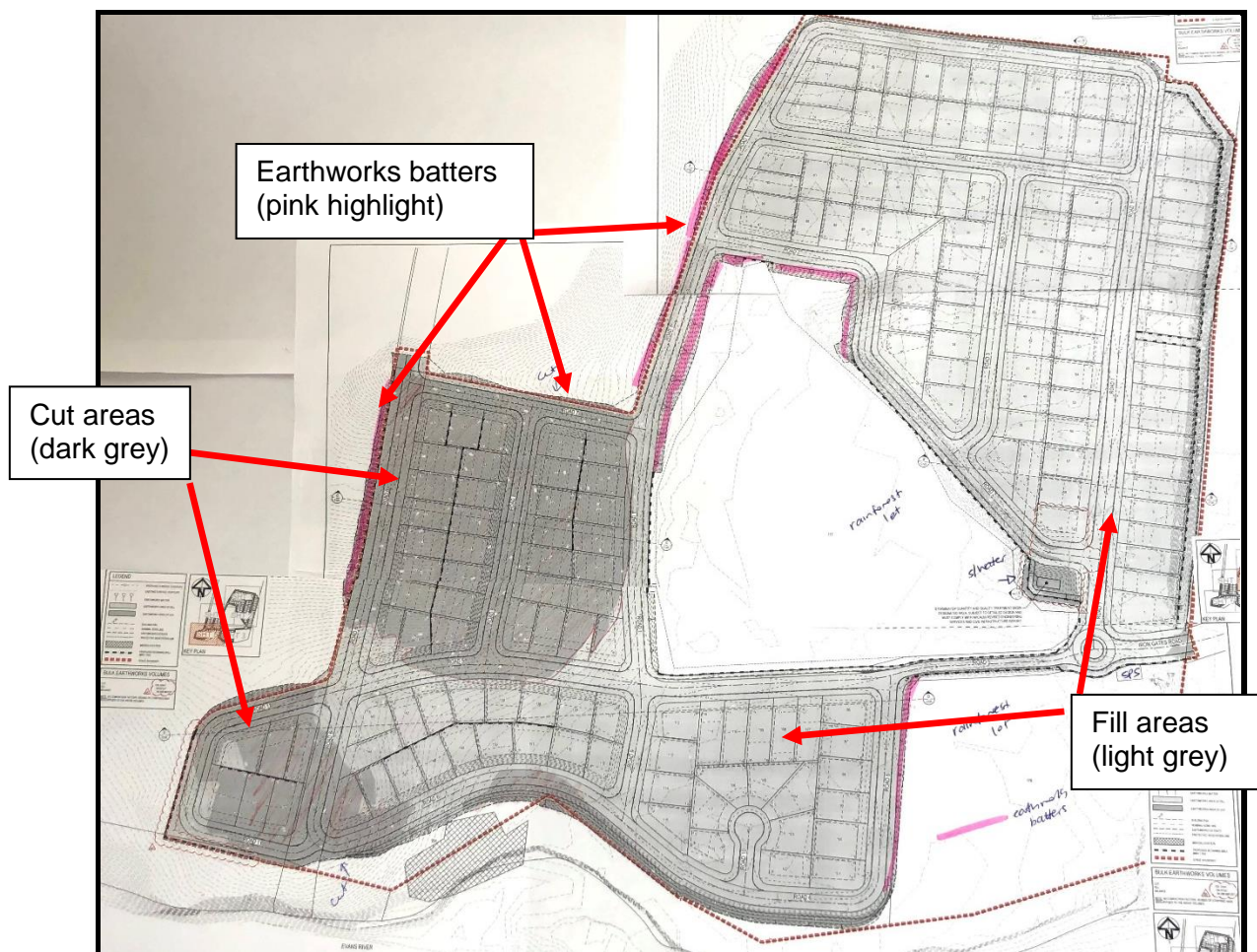


Figure 41: Proposed Earthworks (Source: adapted from Arcadis, 18 July 2019)

The Engineering Report (Section 3) states the following earthworks quantities:

- Total cut volume – 130,103 m³
- Total fill volume – 194,672 m³

- Balance volume - 64,569m³

There are also a significant number of retaining walls proposed to retain this fill material, which are described in the Revised Engineering Report as:

In areas that have significant grade or level difference, retaining walls may be used. It is proposed that either a concrete sleeper or reinforced block walls will be used.

The proposed retaining walls include:

- 6.25m high retaining wall on the western side of proposed Road 6 (due to a significant level difference between the proposed subdivision and the environmental zone to the west of Proposed Road 6). The wall will be structurally designed as part of the Construction Certificate design. Council considered this wall to be visually excessive, which the applicant then proposed a green wall. Council engineers were concerned this would be a maintenance problem.
- Retaining walls along the proposed fire trail and to the rear of proposed Lots 1 to 21 and Lot 60;
- Adjoining the central rainforest lot along the north-eastern, eastern, southern and part of the western boundary;
- Adjoining the northern boundary of the smaller rainforest lot and proposed Road No 5;
- Numerous inter-allotment retaining walls in the south-western sections of the site within the Stage 2 area.

The proposal also includes numerous earthworks batters adjoining a number of the proposed roads including proposed Road 1, 6, 7 and 11.

Clause 6.3 of the RVLEP 2012 provides the controls for earthworks, Clause 6.3(1) providing the following objectives for earthworks:

(1) The objectives of this clause are as follows:

(a) to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring

- uses, cultural or heritage items or features of the surrounding land,*
- (b) to allow earthworks of a minor nature without requiring separate development consent.*

Consent is required for the proposed earthworks as such works are not exempt development and are not ancillary to other development for which development consent has been given pursuant to Clause 6.3(2) of the RVLEP 2012.

Before granting development consent for earthworks, the consent authority must consider the following matters pursuant to Clause 6.3(3):

- (a) the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,*
- (b) the effect of the proposed development on the likely future use or redevelopment of the land,*
- (c) the quality of the fill or the soil to be excavated, or both,*
- (d) the effect of the proposed development on the existing and likely amenity of adjoining properties,*
- (e) the source of any fill material and the destination of any excavated material,*
- (f) the likelihood of disturbing relics,*
- (g) the proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area,*
- (h) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.*

There has been no assessment of the potential impact of the proposed earthworks in the engineering report on either the site or the adjoining sites, particularly with regard to potential impacts on the drainage to the environmental conservation areas of the littoral rainforest and the adjoining wetlands.

There are also no cross sections or other details in relation to the proposed retaining walls or earthworks batters and there is no consideration of the potential geotechnical implications of these proposed earthworks within the site or on surrounding sites.

There has also been no engineering or geotechnical assessment of the proposed removal of material from the ridgeline or the side slope of this ridgeline in the western portion of the site to provide fill material for other sections of the site or its suitability for future building envelopes.

These proposed changes to the natural landform of the site are contrary to SEPP 71, the Coastal Design Guidelines and the DCP. The aims of SEPP 71 include protecting and managing the natural attributes of the New South Wales coast, which encompasses retaining the natural contours of the site.

The Coastal Design Guidelines seek to provide a permeable block and lot pattern in sympathy with the topography (Part 2.1) and to recognise and design streets in response to topography (Part 2.4(4)). The DCP also seeks to achieve the most effective and efficient use of land having regard to topographic, climatic, ecological, and agricultural features, along with land uses patterns, zoning and infrastructure/servicing.

It is considered that the proposed earthworks on the site are inconsistent with the objectives for earthworks pursuant to Clause 6.3(1) of the RVLEP 2012 in that it has not been adequately demonstrated that the proposed earthworks will not have a detrimental impact on environmental functions and processes on the site or on neighbouring uses.

The proposed subdivision is considered to be unsatisfactory having regard to the earthworks required and warrants refusal of the application as it is inconsistent with Clause 6.3 of the RVLEP 2012.

6.9 Riparian and wetland Impacts

The site is located in close proximity to wetlands listed under SEPP 14 and the Evans River and accordingly riparian issues are an important consideration. The site is also identified on the *Wetlands Map* and the *Riparian Land and Waterways Map* under the RVLEP 2012 (**Figure 42**) as containing land comprising wetland and key fish habitat. These matters are considered below.

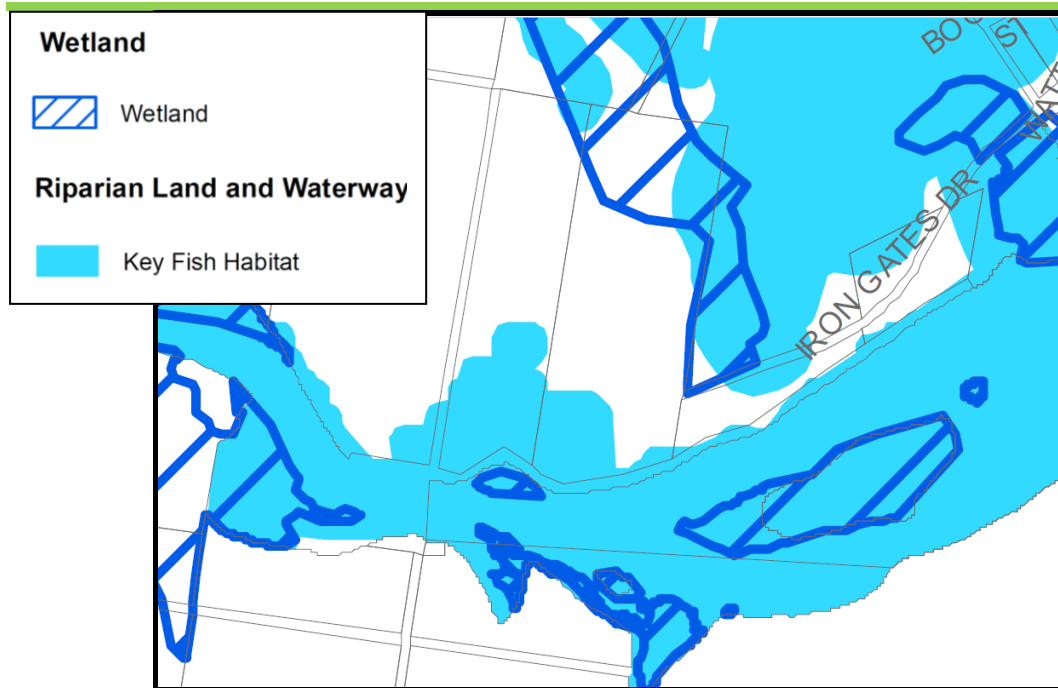


Figure 42: Wetlands Map and Riparian Land and Waterways Map (Source: RVLEP 2012)

6.9.1 Impact on the SEPP 14 Wetland

An area of wetland listed under SEPP 14 is located in the north-east corner of the site (**Figure 43**). The 2019 Ecology Report considers that this area does not contain vegetation which is reflective of this community or display characteristics of a wetland, which states:

*As outlined in the report the extent affected by the wetland mapping does not reflect the site vegetation. The area noted as occurring within the allotment as illustrated is regenerating acacia and or cleared land. No permanent water exists in this location. The area does not display characteristics of a wetland in either physical conditions or vegetation communities. An area to the north of this which is also designated as part of the SEPP wetland is reflective of this designation and is mapped as wet heath with Melaleuca over storey. This community intergrades with Dry Heath. The mapped wet heath with Melaleuca over storey in **Figure 4** is considered a better reflection of the SEPP area.*

The 2019 Ecology Report further states:

The proposal does not impact on the SEPP wetland and the proposed filling of the eastern drainage line may assist in reducing draw down of the water table from within the mapped SEPP area.

There is no further assessment of SEPP 14 or whether there will be any direct or indirect impacts on the SEPP 14 wetlands, including the proposed earthworks to raise the level of the land above the flood planning level and whether there will be any adverse impacts arising from

the proposed stormwater management arrangements for the site (which are not provided). The filling of the drain excavated into the site is also not considered in a detailed hydrologic assessment, instead it is said to *potentially assist* in reducing draw down of the water table within the SEPP 14 wetland.

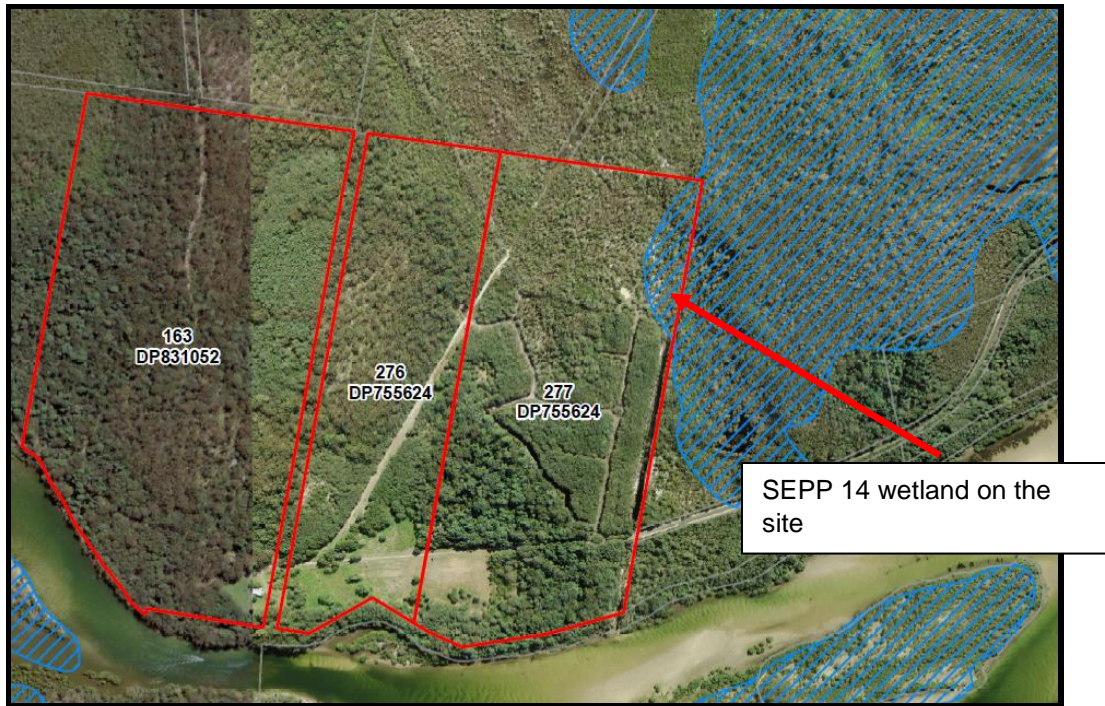


Figure 43: SEPP 14 Wetland mapping (Source: DPIE)

As outlined in **Figure 44**, there is also no buffer to this SEPP 14 wetland with proposed residential lots (Proposed Lot 60) and roads and fire trails proposed in the 30 metre buffer proposed by BCD to this SEPP 14 wetland boundary.

The aim of SEPP 14 (Clause 2) is to ensure that the *coastal wetlands are preserved and protected in the environmental and economic interests of the State*. It is considered that given the application has not adequately considered the potential impacts to the SEPP 14 wetlands on the site, including arising from the proposed earthworks, stormwater discharge and the filling in of the artificial drainage channels on the site, that the proposal cannot satisfy this aim.

Accordingly, the potential impacts to the SEPP 14 wetland have not been adequately considered by the proposal and is therefore inconsistent with Clause 2 of SEPP 14.

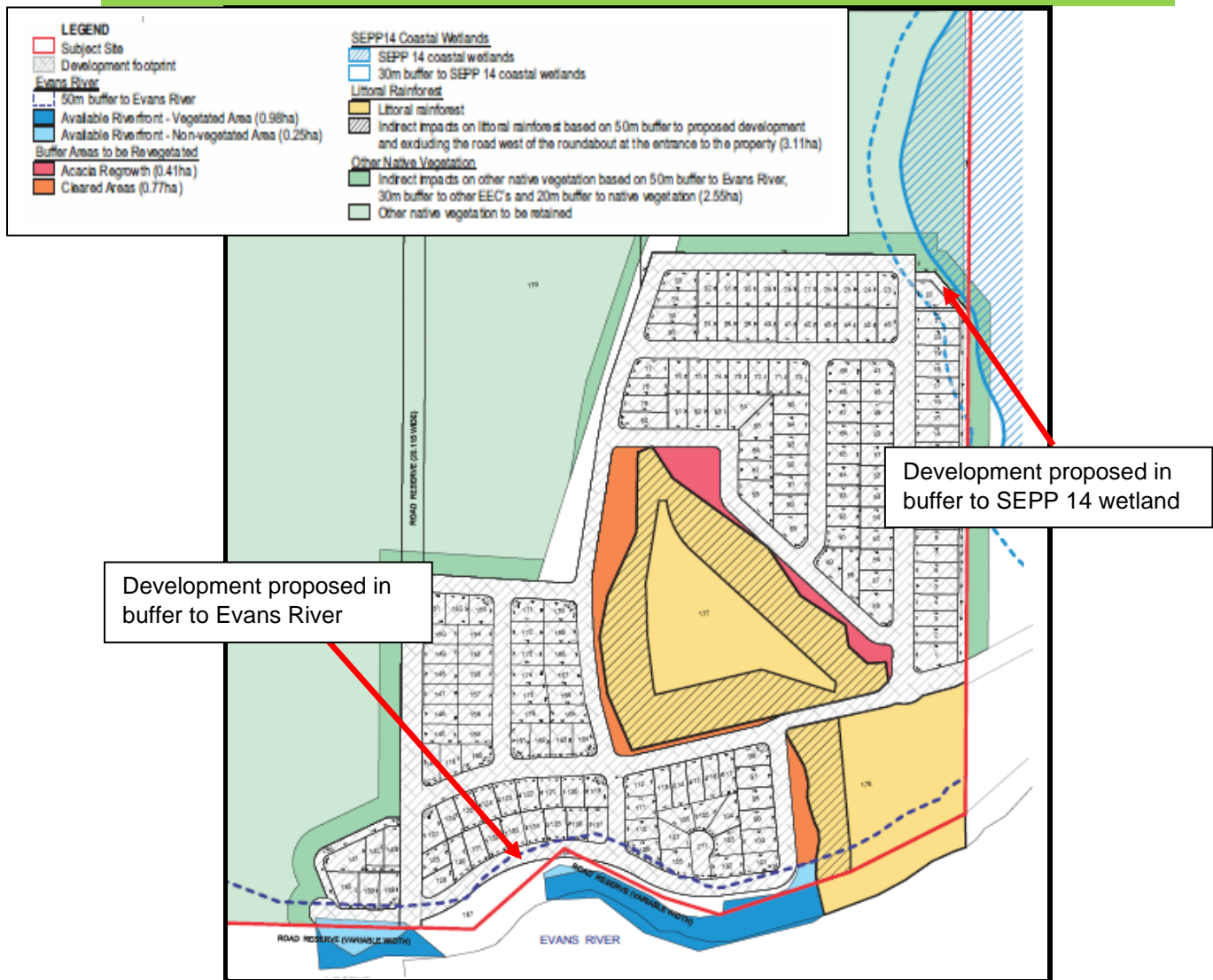


Figure 44: Buffers as outlined in the 2019 Ecology Report

The RVLEP 2012 also requires consideration of the potential impacts on wetlands on the site as mapped under Clause 6.10 Wetlands of the RVLEP 2012 (shown in **Figure 42**).

The objective of this clause is to ensure that wetlands are *preserved and protected from the impacts of development* (CI 6.10(1)). The proposal is contrary to this objective as stormwater discharge and the proposed encroachment of the development in close proximity to the wetland area does not reserve or protect the wetland from the impacts of the development.

Pursuant to Clause 6.10(3), before determining a development application for development on land to which this clause applies, the consent authority must consider the following matters:

(a) *whether or not the development is likely to have any significant adverse impact on the*

following:

- (i) the condition and significance of the existing native fauna and flora on the land,*
- (ii) the provision and quality of habitats on the land for indigenous and migratory species,*
- (iii) the surface and groundwater characteristics of the land, including water quality, natural water flows and salinity, and*
- (b) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.*

The proposed development does not extend into the area denoted as “Wetland” under Clause 6.10. However, without a stormwater management plan which demonstrates that there will be no adverse impacts on this mapped wetland area on the site and the encroachment of the proposed development into the recommended 30 metre buffer zone results in the proposal being unable to demonstrate that there will not be any impacts on this wetland area.

Development consent must not be granted unless the consent authority is satisfied as to the following pursuant to Clause 6.10(4) that:

- (a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or*
- (b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or*
- (c) if that impact cannot be minimised—the development will be managed to mitigate that impact.*

Given the encroachment into the recommended buffer zone and the lack of a stormwater management plan, it is considered that the proposal has not been designed, sited or will be managed to avoid significant adverse environmental impact on the wetland listed under the LEP. The impact has also not been minimised since such impacts could have been reasonably avoided (Cl 6.10(4)(b)) while the proposal is also contrary to Clause 6.10(4)(c) as the impact could have been minimised and mitigated.

6.9.2 Key Fish Habitat and Riparian Issues

Clause 6.8 of the RVLEP 2012 applies to the site as a portion of the site is identified as Key Fish Habitat. DPI Fisheries is responsible for ensuring that fish stocks are conserved and that

there is 'no net loss' of key fish habitats ('KFH') upon which they depend. DPI Fisheries were referred the application and considered that the proposal is of particular interest to DPI Fisheries due to its proximity to KFH including the Evans River and SEPP 14 Wetlands and is known and expected habitat of the threatened fish species Oxleyan Pygmy Perch (OPP).

DPI Fisheries noted that the proposal will not directly impact on key fish habitat, including areas of the Evans River below the highest astronomical tide or Coastal Wetlands, and that consequently, no permits under the Fisheries Management Act will be required. However, DPI Fisheries considered that given the close proximity of components of the development to key fish habitat, particularly works associated with the embellishment of the public reserve adjacent to Evans River and the upgrade works to Iron Gates Road which are adjacent to Coastal Wetlands, the following comments were provided:

Key Fish Habitat - DPI Fisheries notes development activities will be located within close proximity to KFH. To ensure that KFH will not be impacted as a result of the development, environmental impact mitigation and management plans (i.e. sediment and erosion control plan, stormwater management plan, construction management plan etc.) should be prepared, approved and implemented when and where necessary.

With regard to the proposed foreshore embellishment works, foreshore access points should be minimised in number and located in suitable locations such as at existing informal access points or other areas that are devoid of marine vegetation. All other areas that do not provide foreshore access should be retained as foreshore buffer zones and include/retain sufficient riparian vegetation.

Comment: The proposal does not provide a satisfactory stormwater management plan to demonstrate there will be no adverse impacts on the riparian areas adjoining the site and is therefore unsatisfactory. The proposal no longer involves works in the Crown foreshore reserve and accordingly, this is not an issue for the current proposal.

Buffers to Key Fish Habitat - The protection and rehabilitation of the vegetated riparian corridor between the Evans River and the development footprint is important for maintaining the shape, stability and ecological functions of the river. DPI Fisheries recommends that developments, including embellishment of foreshore areas, incorporate foreshore buffer zones of 50-100m width adjacent to TYPE 1 marine vegetation and at least 50 m width adjacent to TYPE 2 marine vegetation. Where a

buffer zone of at least 50m is physically unachievable due to land availability constraints, the available buffer width must be maximised to achieve protection of TYPE 1 and 2 marine vegetation (i.e. from edge effects, changes to water quality, flood protection and to allow for climate change adaptation). The buffer zone should not be used for other asset protection purposes (e.g. as a bushfire or mosquito buffer). It should be noted that foreshore buffer zones are measured from the outer edge of tidal areas (e.g. highest astronomical tide level - generally 1.0m AHD).

DPI Fisheries recommends that the design of riparian buffer zones incorporates the maintenance of lateral connectivity between aquatic and riparian habitat. The installation of infrastructure, terraces, retaining walls, cycle ways, pathways and grass verges within the riparian buffer zone that interrupt lateral connectivity should be avoided.

Comment: The proposal does not provide the required 50 metre buffer from the mean high water mark for the Evans River and the proposed development footprint. Proposed Road 6 is located within this buffer area as well as two (2) proposed public open space lots (Lots 141 and 142).

Threatened Species - *Areas representing known or potential habitat for the threatened fish species Oxleyan Pygmy Perch (OPP) may be indirectly impacted by the proposed development. DPI Fisheries encourages the proponent to consider whether any development works would involve indirect impacts to OPP habitat, and if so, ensure that such works include best management practice environmental impact mitigation measures, such as sediment and erosion control measures, to ensure that any foreseeable indirect impacts are avoided.*

It should be noted that any development works that are likely to have an impact on threatened species listed under the FM Act, either directly or indirectly, must be preceded by an assessment of significance.

Comment: The proposal has considered and surveyed for the Oxleyan Pygmy Perch on the site and found no evidence of it.

6.9.3 Clause 6.8 of the RVLEP – Riparian Land and Watercourses

Clause 6.8 of the RVLEP 2012 applies to the portion of the site which is identified as key fish habitat on the map (Clause 6.8(2)) in **Figure 42**, which primarily includes the area proposed to comprise the stage 2 residential lots as well as the Evans River. DPI Fisheries considered the key fish habitats issue and believed that a buffer of 50 metres should be provided as well as a stormwater management plan. Neither of these mitigation measures have been provided in the proposal.

The objectives of this Clause (Clause 6.8(1)) is to protect and maintain the following:

- (a) water quality within watercourses,*
- (b) the stability of the bed and banks of watercourses,*
- (c) aquatic and riparian habitats,*
- (d) ecological processes within watercourses and riparian areas.*

The proposal is considered to be inconsistent with Clause 6.8(1)(a) in that the water quality within watercourses is not protected or maintained given the proposal has not clearly outlined the proposed stormwater management arrangements for the site and the buffer zones to the Evans River and the wetland area have not been provided.

This clause also requires that before determining a development application for development on land to which this clause applies, the consent authority must consider (Cl 6.8(3)):

- (a) Whether or not the development is likely to have any adverse impact on the following:*
 - (i) the water quality and flows within the watercourse,*
 - (ii) aquatic and riparian species, habitats and ecosystems of the watercourse,*
 - (iii) the stability of the bed and banks of the watercourse,*
 - (iv) the free passage of fish and other aquatic organisms within or along the watercourse,*
 - (v) any future rehabilitation of the watercourse and its riparian areas, and*
- (b) whether or not the development is likely to increase water extraction from the watercourse, and*
- (c) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.*

The proposal is likely to have an adverse impact on the water quality within the Evans River as the stormwater management arrangements on the site have not demonstrated that stormwater leaving the site will not adversely impact on the river. This is contrary to Clause 6.8(3)(a)(i) of the RVLEP 2012.

The proposal is unlikely to adversely impact on the stability of the bed and banks of the watercourse or the free passage of fish and other aquatic organisms within or along the watercourse, and will not increase water extraction from the watercourse.

There have not been any appropriate measures proposed to avoid, minimise or mitigate the adverse impacts of the development on the Evans River, contrary to Clause 6.8(3)(c) of the RVLEP 2012.

Pursuant to Cause 6.8(4) of the RVLEP 2012, development consent must not be granted unless the consent authority is satisfied that:

- (a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or*
- (b) if that impact cannot be avoided by adopting feasible alternatives—the development is designed, sited and will be managed to minimise that impact, or*
- (c) if that impact cannot be minimised—the development will be managed to mitigate that impact.*

A buffer of 50 metres should be provided from the Evans River to the proposed development as well as a stormwater management plan demonstrating that there will be no adverse impacts on the Evans River arising from stormwater discharged from the site. These measures however have not been provided in the proposal. Therefore the proposal is inconsistent with Clause 6.8(4) as the development has not been designed, sited or managed to avoid significant adverse environmental impact, it does not avoid impacts by adopting feasible alternatives and the impact could be minimised through these measures.

The proposal is considered to be unsatisfactory having regard to the impacts on the riparian and wetland areas on and adjoining the site.

6.10 Land Contamination

State Environmental Planning Policy No 55—Remediation of Land ('SEPP 55') is the relevant planning instrument in relation to the potential for land contamination. Clause 7 of SEPP 55 requires a consent authority to consider contamination and remediation in determining a development application. Clause 7 states:

- (1) A consent authority must not consent to the carrying out of any development on land unless:
 - (a) it has considered whether the land is contaminated, and*
 - (b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
 - (c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.**
- (2) Before determining an application for consent to carry out development that would involve a change of use on any of the land specified in subclause (4), the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.*

Comment: The site is land specified in subclause (4)(b) as it is land on which development for a purpose referred to in Table 1 to the contaminated land planning guidelines is being, or is known to have been, carried out (mining and agriculture)

- (3) The applicant for development consent must carry out the investigation required by subclause (2) and must provide a report on it to the consent authority. The consent authority may require the applicant to carry out, and provide a report on, a detailed investigation (as referred to in the contaminated land planning guidelines) if it considers that the findings of the preliminary investigation warrant such an investigation.*

Comment: As outlined above, a detailed site investigation should have been carried out, which has not been provided.

- (4) The land concerned is:
 - (a) land that is within an investigation area,*
 - (b) land on which development for a purpose referred to in Table 1 to the contaminated land planning guidelines is being, or is known to have been, carried out,*
 - (c) to the extent to which it is proposed to carry out development on it for residential, educational, recreational or child care purposes, or for the purposes of a hospital—land:
 - (i) in relation to which there is no knowledge (or incomplete knowledge) as to whether development for a purpose referred to in Table 1 to the contaminated land planning guidelines has been carried out, and*
 - (ii) on which it would have been lawful to carry out such development during***

any period in respect of which there is no knowledge (or incomplete knowledge).

Comment: The land is subject to these provisions by subclause 4(b) and (c) as residential development is proposed and the potential for agricultural use of the site given it was a permissible use.

A Stage 1 Preliminary Contamination Assessment has been prepared by Arcadia dated 8 July 2019 ('Stage 1 Contamination Report') which comprised a desktop review of the site history, a site walkover and preparation of the report. The Stage 1 Contamination Report found that sand mining activities took place in the eastern portion of the site and on adjoining land to the east during the 1970s and early 1980s and that as a result, tailings dams may have concentrated monazite and illminite separated out as part of the mining process (**Figure 45**). Monazite and illminite tailing can be responsible for elevated radiation levels and potentially causes health risks.



Figure 45: Evidence of Previous sand mining activities in 1971 on the site and adjoining site
(Source: *Preliminary Radiation Site Assessment, Hyder Consulting Pty Ltd, May 2014*)

The Stage 1 Contamination Report found there were no visible signs of contamination or staining identified during the site inspection, there were no odours encountered on site that may indicate land contamination and there were no signs of contamination associated with any roads or structures on or around the site.

Subsequent to these findings, a *Preliminary Radiation Site Assessment* was prepared by Arcadis dated 10 July 2019 ('Radiation Report') which comprised a preliminary site

investigation, to establish whether radioactive sand residues from former mineral sand mining activities exists on the site and if required, establishing the extent of soil contamination, and possible environmental, health and safety impairment risks, with a view to establishing a suitable remediation/management strategy.

The Radiation Report found that surface radiation levels monitored on the site in areas where previous sand mining activities were located are all equivalent to background levels displayed at the three off site background control locations. Surface radiation levels generally varied between 0.00 uSv/Hr to 0.3 uSv/Hr, with some discrete areas displayed levels of 0.4 and 0.5 uSv/Hr however these areas are still below Action Level Criteria for dwellings.

The Radiation Report recommended that surface radiation level monitoring should be undertaken in areas where works are more than 1 metre below current surface levels during construction to determine the presence/absence of contaminated materials in the form of radioactive residues associated with sand mining activities. Such a recommendation can be imposed as a condition of consent on any consent granted for the proposal.

However, the Stage 1 Contamination Report did not consider the past agricultural use of the site, which from aerial photography was considered to have potentially been used for growing bananas. Therefore, a Stage 2 Detailed Investigation in accordance with the *Managing Land Contamination Planning Guidelines* prepared by the Department of Urban Affairs and Planning and Environment Protection Authority dated August 1998 should have been prepared. The Guidelines state (Section 3.4.1) the following in relation to the information to be provided by the Proponent (my emphasis added):

“A detailed investigation is only necessary when a preliminary investigation indicates that the land is contaminated or that it is, or was, formally used for an activity listed in Table 1 and a land use change is proposed that has the potential to increase the risk of exposure to contamination”.

In this case, the site has previously been used for *agricultural/horticultural activities* and *mining and extractive industries*, which are both included in Table 1 of the Guidelines and the site is proposed for a land use change from vacant land to residential development. Accordingly, a detailed investigation should have been prepared which would have included on-site testing of soils to inform the assessment of contaminated land. In this way, the proposal is considered to be unsatisfactory and is inconsistent with Clause 7 of SEPP 55.

6.11 Acid Sulphate Soils

The proposal involves substantial earthworks and is located within an area of low lying land and in close proximity to both the Evans River and nearby wetlands. Accordingly, geotechnical and soil issues have the potential to affect the natural environment. The proposed dewatering of the site during construction is an added layer of complexity in relation to soil and groundwater issues on the site.

The site is affected by Class 3 and Class 5 acid sulphate soils pursuant to the acid sulphate soil map under Clause 6.1(2) of the RVLEP 2012 (**Figure 46**). The Class 3 land is the predominant class over the majority of the proposed north-east section of the proposed subdivision.

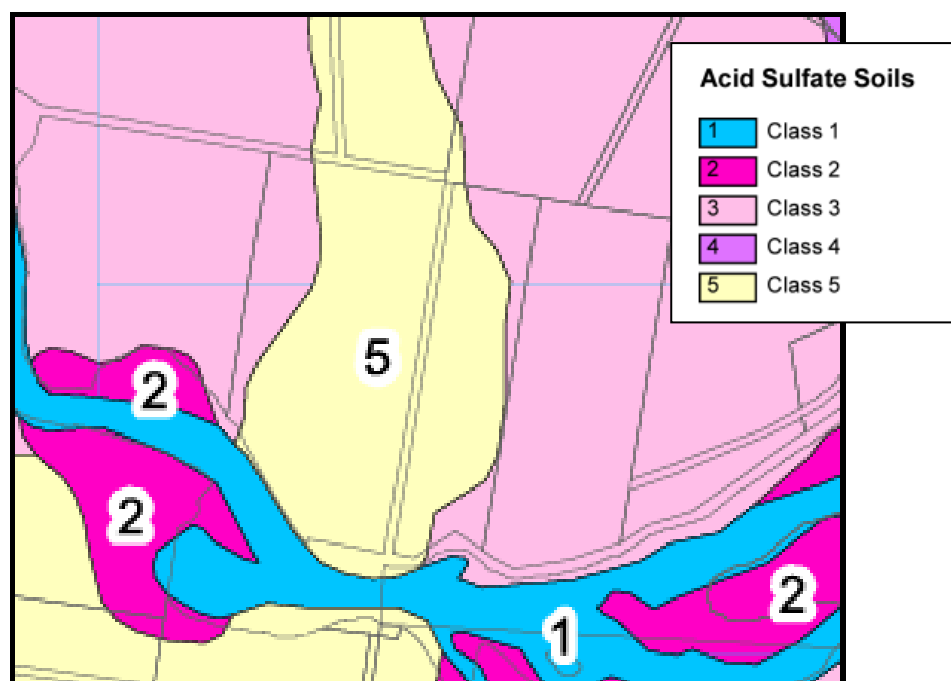


Figure 46: Acid Sulphate Soils Map (Source: Richmond Valley LEP 2012)

An *Acid Sulfate Investigation and Soil Management Plan* prepared by Arcadis dated 6 July 2019 ('the ASS Report') has been provided, however, the report relies on field investigations undertaken for geotechnical, groundwater and acid sulfate assessment reports developed by Douglas Partners in 1991, Coffey Geosciences Pty Ltd (Coffey) in 1995 and Geotech Investigations Pty Ltd in 2015. The quality of these investigations and the techniques involved in the collection of the data is unknown and the information is up to 27 years old. The 1995

Coffey, for example, does not include a plan showing the location of test bores or drain. It is considered that any report based on such data cannot be relied upon to thoroughly assess the potential for acid sulphate soils to affect the development.

It is considered that the development application has not satisfied the objective for acid sulphate soils of Clause 6.1(1) of the RVLEP 2012 in that it has not ensured that the development *does not disturb, expose or drain acid sulfate soils and cause environmental damage* as the report and site investigations are inadequate.

There has been no assessment of the potential for acid sulphate soils to be disturbed during the proposed earthworks on the site and for such disturbance to result in pollution of the Evans River. There has been no sampling investigations for acid sulfate soils in the 'proposed residential footprint.'

The proposal has not undertaken any recent significant geotechnical studies into the subsurface conditions on the site or the potential for the proposal to affect the subsurface environment, which is particularly important given the site possess Class 3 land and excavation for services and other earthworks are proposed.

Clause 6.1(2) requires consent for the carrying out of certain works on certain classes of land including the following for the site:

- Class 3 - Works more than 1 metre below the natural ground surface. Works by which the water table is likely to be lowered more than 1 metre below the natural ground surface; and
- Class 5 - Works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum and by which the water table is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.

In relation to the Class 3 land, the proposal involves excavation of more than one (1) metre for services and the removal of existing services installed for the earlier subdivision consent. In relation to the Class 5 land, the proposal involves development within 500 metres of the Class 3 land and is land below 5m AHD which is likely to lower the water table. Consent is required for the proposal under Clause 6.1(2).

Clause 6.1(3) provides that consent must not be granted under this clause for the carrying out

of works unless an acid sulfate soils management plan has been prepared for the proposed works in accordance with the Acid Sulfate Soils Manual and has been provided to the consent authority. It is considered that the *Soil Management Plan* provided in Section 3 of the ASS Report is a generic report which relies on further testing of the site for recommended actions and therefore does not satisfy this requirement of the LEP. The proposal is unsatisfactory with respect to acid sulphate soils and warrants refusal of the application.

6.12 Traffic and Road Issues

6.12.1 External Road Network

A Traffic Letter Report prepared by ttm dated 17 July 2019 accompanies the application ('Traffic Report') as an attachment to the revised engineering report and submitted in response to a requests for information letter from Council. The Traffic Report concluded that the proposed local road is suitably designed to cater for the expected development traffic and there is to be suitable public transport infrastructure to cater for the needs of the local area. It appears that this Traffic Report only considered the external road network.

The salient points of the Traffic Report included:

- Traffic generation - The proposed development is expected to generate 1,685 daily vehicle trips, all of which would be via Iron Gates Drive;
- Intersection impacts - The proposal would have the most impact on the Woodburn Street / Wattle Street intersection and recommends that a CHR and a BAL turning treatment be incorporated into the design of this intersection. A functional layout plan which demonstrated the recommended turning treatments and line marking was provided and recommended that it is implemented before the completion of the development.
- There are no load limits associated with the bridge on Iron Gates Drive (as far as they know) and there is no signage on the approach to identify limits below the national standard. The Traffic Report stated that it is *assumed that the bridge was designed and constructed to the relevant design standards at the time of construction.*

- Bulk Earthworks Traffic Impact Assessment - the bulk earthworks would have a duration of 16 weeks of import, 6 days per week for 9 hours per day, expecting 36 truck trips each way per day. This corresponds to a maximum average rate of 4 trucks in per hour and 4 trucks out, with all delivery traffic utilising the Woodburn Street / Wattle Street intersection. The Traffic Report considers that this existing intersection design is sufficient to cater for the traffic associated with the proposed bulk earthworks.
- RFS Truck access - A swept path assessment of a fire truck negotiating the Woodburn Street / Wattle Street intersection was undertaken and considered that it would be able to access all required areas of the proposed development.
- Bus route - Future bus stop and bus route to be provided along the proposed bus route through the site (**Figure 47**), along with the 3 options for bus stops to service the development. This would provide the development access to the future public transport network. The site access roundabout has been designed with a 34m diameter of road reserve, assuming 4.25m wide verges, which would allow for a roundabout with a total diameter of 25.5m, which is sufficient for a roundabout to accommodate a 12.5m long rigid bus.

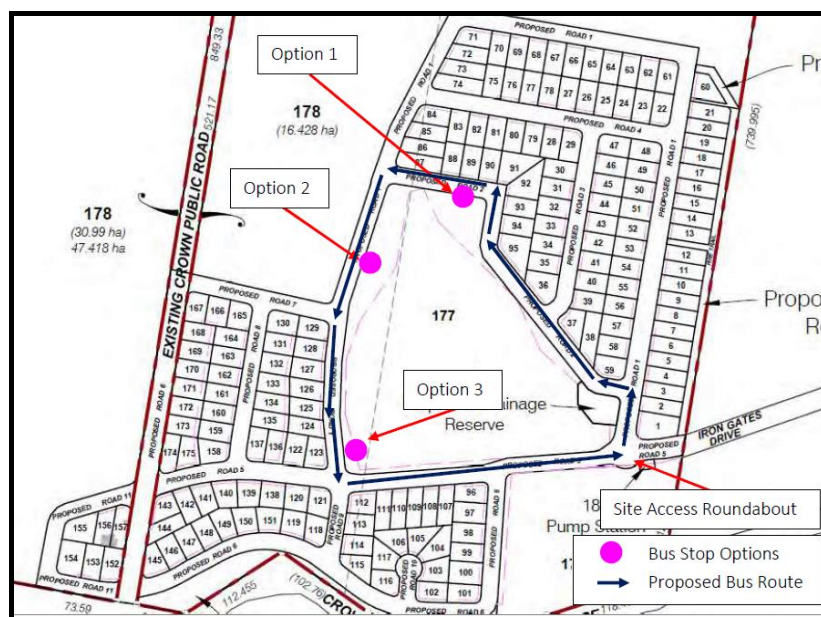


Figure 47: Bus Route and Bus Stops (Source: Figure 8 of Traffic Report, ttm 17 July 2019)

6.12.2 Internal Road Network

The proposed internal road network comprises various internal roads, roundabouts and intersections as outlined in the Revised Engineering Report and outlined in **Table 5**. The

proposed internal road network provides a roundabout at the entry and from that point provides Road No 1 which is a circular road which connects the north-west section of the proposed subdivision with the south-western section via proposed Road No 5. Various other roads provide access to the proposed allotments, with a bus route as outlined above being provided around the central littoral rainforest lot.

Table 5: Summary of Road Types (Source: Table 4-1 of the Revised Engineering Report)

Road name	Road type	Reserve width (m)	Pavement width (m)
Road 1	Local street	Variable 16.5 -19.5	11.0 CH0-320 9.0 CH320+
Road 2	Local street	16.5	9.0
Road 3	Local street	16.5	9.0
Road 4	Local street	16.5	9.0
Road 5	Collector road	15 Variable 16.6 -18.5	7.0 CH20-140 11.0 CH0-20; 140+
Road 6	Local street	Variable 12.9 - 16.5 - 18.3	9.0
Road 7	Local street	16.5	9.0
Road 8	Local street	16.5	9.0
Road 9	Local street	16.5	9.0
Road 10	Local street	16.5	9.0
Road 11	Local street	16.5	9.0

Council's Independent Assessment Report stated that Council engineers have no objections to the proposed internal road network. The concerns with the vegetation removal for proposed Road No 5 are considered in the ecological assessment.

6.12.3 Pedestrian Network

The Engineering Report stated that footpaths will be provided generally in accordance with NRLG's standard drawing R07, with shared paths for collector roads intended to be provided at the time of construction and that all footpaths within local roads are proposed to be postponed until the majority of the houses are constructed and occupied. This is unsatisfactory and would need to be considered further.

The pedestrian network on the site is poorly described with no engineering plan illustrating the width of the roads and footpaths on the site. The lack of a legible pedestrian network has been considered in Section 7.3 of this report in relation to the concerns with the subdivision design of the proposal.

The application was referred to Transport for NSW ('TfNSW') with the following comments made:

- The Traffic report was not updated to reflect the proposed staging of the development;
- The Woodburn and Wattle Streets intersection plan be updated to incorporate additional facilities in Woodburn Street to improve pedestrian safety at the intersection.
- The final development will generate an increase in demand for active transport users travelling along Iron Gate Drive between the site and Evans Head and Council should consider the scope and timing of infrastructure needed to connect the development to the existing active transport infrastructure and public transport services.
- Any proposed regulatory signs and/or devices are required to be endorsed by the Local Traffic Committee prior to Council approval. Please refer to A guide to the delegation to councils for the regulation of traffic.

Accordingly, the pedestrian connections to the site from the local area are required to be further considered by the proposal.

6.13 Social and Economic impacts

The potential social and economic impacts of the proposal have been considered in the *Social & Economic Impact Assessment* prepared by Hill PDA dated July 2019 ('the SIA'). The SIA estimates that a population of 480 people is anticipated to result from the proposed development.

The conclusions of the social impacts from the SIA included:

The analysis has found that existing social infrastructure is adequate but it will be important for community service providers to be kept informed of the progress of housing development at the site, in order to prepare for the needs of the incoming population. The relatively isolated location of the proposal from the township itself also poses risks to the future population, however the risk is considered to be manageable, but monitoring of future residents' needs is recommended. This report has assessed social risks and found them to be acceptable, with appropriate mitigation measures.

The SIA information is now three (3) years old and therefore the information provided in this

report in relation to social services is now out of date and cannot be relied upon to assess potential social impacts arising from the proposal. The capacity of the local area to absorb the future population arising from the proposal has not been adequately considered.

The conclusions of the economic impacts from the SIA included:

Potential benefits arising from the development include 211 jobs years arising from construction and 63 additional local jobs when completed. There will also be significant flow on effects both during and after construction, further increasing local economic activity and making significant differences in a region with higher levels of economic disadvantage. Retail spend generated by residents on site would be around \$6.6 million (\$2018) with around 50% to 60% expected to be captured in the local area. The proposed development would provide sources for an increase in retail sales captured by Evans Heads retailers in the order of between \$3.3 to \$3.9 million per annum.

The proposal is likely to have a positive economic impact on the area.

A Crime Prevention Through Environmental Design ('CPTED') assessment was also undertaken in the *Crime Prevention Through Environmental Design Assessment* prepared by Stuart Crawford Consulting dated 29 June 2019 ('the CPTED Report') to assess the elements of crime that may be associated with the proposal.

The CPTED Report concluded that the development was identified as having a minor crime risk, and made the following recommendations in order to reduce opportunities for crime:

- Territorial reinforcement - Heavy vegetation should be avoided so as not to create/provide concealment opportunities. Vegetation closest to pedestrian pathways and cycle ways require close consideration.
- Surveillance - It is recommended that 3-5 metres of cleared space be located either side of residential pathways and cycle routes.
- Access control - shared cycle/pedestrian path be included in the Iron Gates Drive upgrade.
- Space/ Activity management - Facilities such as barbeques, toilets and playground

equipment should be situated close to areas where most natural activity occurs such as entry and exit points and nearby residences.

- Lighting & Technical Supervision - Areas adjoining pathways should be illuminated to avoid concealment/ entrapment opportunities.

It is unknown whether the recommendation to provide a cleared space of 3 to 5 metres on either side of footpaths and cycle routes has been incorporated into the proposal and assessed for potential ecological impacts. This is unsatisfactory.

6.14 Biting Insect impacts

The application is accompanied by Revised Iron Gates Biting Insect Impact Assessment prepared by **Darryl McGinn** (Version 2.6) dated 10 July 2019. This report concluded that the required riparian buffer requirements of the biting midges is contained within the proposed APZ to the foreshore reserve. No further clearing is required.

In relation to mosquito breeding sites, the report provided the following recommendation:

Stormwater management systems should be engineered to prevent them acting as mosquito breeding sites. Detention basins should be designed to drain within 72 hrs of filling. Building Approvals should include conditions regarding installation of insect screening to dwellings and anti-mosquito screens to any rainwater storage tanks.

This requirement has not been adequately demonstrated in the proposed stormwater management arrangements for the site and is unsatisfactory.

6.15 Aircraft Noise

The site is located in close proximity to Evans Head Memorial Aerodrome and the Evans Head Air Weapons Range (Evans Head AWR) which is part of the Bundjalung National Park. These matters are considered below.

Evans Head Memorial Aerodrome

The site is located approximately 1.3 kilometres to the south of the aerodrome and mapping

confirms that the site is outside the 20 ANEF contour for this airport (**Figure 48**). In relation to the obstacle limitation surface, the site is located within the restricted zone of between RL51.5 and RL70. The proposal does not involve development which would penetrate this surface.

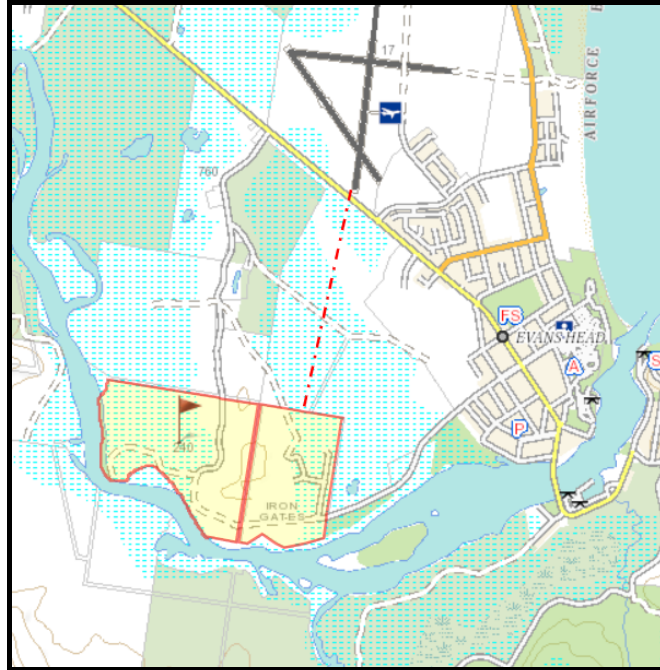


Figure 48: Aerodrome Location (Source: SIX Maps)

Evans Head Air Weapons Range (Evans Head AWR)

The proposed site is located in close proximity to Evans Head Air Weapons Range ('Evans Head AWR') which is part of the Bundjalung National Park. The Department of Defence ('Defence') was consulted regarding the proposal and advised that the Evans Head AWR is the primary air weapons training range for 82 Wing Super Hornets, based at RAAF Base Amberley and the range is also used infrequently by F/A-18 Hornets and Hawk Lead-InFighters from RAAF Base Williamtown.

Defence advises that the range of noise levels in the vicinity of the site, generated by the Super Hornet will be in the range of 70-93 dB(A), which is said to compare with the noise levels generated by busy road traffic and construction work. Defence stated that while it is conscious of the noise generated by its activities and makes efforts to minimise community exposure to noise and vibration, it cannot readily modify its activities due to the establishment or intensification of a noise-sensitive development in proximity to air weapons ranges and low flying training areas. It has also been stated that this acidity is likely to increase in scale and

intensity over time, with future residents at the site likely to be exposed to greater amounts of aircraft noise.

Defence have recommended that conditions be imposed on any consent granted for the proposal in relation to:

- all buildings to be designed and constructed to be compliant with indoor design sound levels for determination of aircraft noise reduction as outlined in *AS2021-2015 Acoustics – Aircraft noise intrusion – Building siting and construction*.
- A property notation be placed on any S10.7 certificate advising that the property is subject to high levels of aircraft noise generated by activities at Evans Head AWR.
- Any future residential developments are to be comprised of non- reflective building materials. If any reflective surfaces from possible future residential developments cause a glare problem for pilots, Defence may request these surfaces be suitably modified to extinguish the glare.

Such recommendations could be incorporated as conditions on any consent granted.

7. CONCLUSION

This Peer Review has considered the Independent Assessment Report, its recommendation and the reasons for refusal. The recommendation for refusal of the development application of the Independent Planning Report is supported and the planning reasons outlined in the Independent Planning Report are sound, however, it was considered that a more thorough assessment of the key issues was required and revised reasons for refusal were also required to be drafted.

The Independent Planning Report also did not specifically clearly outline the responses from agencies, a summary of the relevant statutory considerations or an assessment of the key issues. The site constraints were addressed but not in a consolidated form where an assessment of whether they had been adequately addressed was undertaken. A concise outline of the current proposal was also not provided. As outlined in this Peer Review Report, these tasks have now been undertaken. Importantly, the assessment of the community submissions has been undertaken in the Independent Planning Report, with only the key

issues considered in this report (and not the content of the individual submissions).

As outlined in this Peer Review Report, this development application has been considered in accordance with the requirements of the EP&A Act and the 2000 Regulation. Following a thorough assessment of the relevant planning controls, issues raised in submissions and the key issues identified in this peer review report, it is considered that the application cannot be supported.

The key issues with the proposal have been assessed and are considered unsatisfactory for the following reasons:

- The proposal will result in adverse impacts on the ecological integrity and biodiversity on the site arising from the proposed clearing of vegetation, including an EEC, which will adversely impact on threatened plants and animals. The proposal considers that the regrowth vegetation which has arisen from the previous clearing on the site has no habitat value, which is not supported.
- The proposed mitigation measures and the flora and fauna assessment are also inadequate, the proposal will result in fragmentation of the littoral rainforest habitat on the site and will result in edge effects on the littoral rainforest which have not been adequately mitigated with a buffer zone. The proposal will also have an adverse impact on the koala which has not been addressed in a Koala Plan of Management. Accordingly, the proposal is inconsistent with various planning controls resulting from this adverse impact on ecology and biodiversity.
- The proposal is inconsistent with SEPP 71 including the aims of the policy, the matters for consideration when determining a development application and the assessment of stormwater disposal under Clause 16. The development application also does not adequately demonstrate all of the matters required to be outlined in a draft master plan (CI 20(2)), which is required given a concept development application is proposed.
- The design of the proposal is considered unsatisfactory arising from the lack of diversity of lot sizes, the generic lot layout with limited site-specific response and requirement for significant earthworks on the site. The lot layout based on previous subdivision approval, the lack of perimeter road and unacceptable configuration of proposed Lot 60 are also unsatisfactory. The proposal also involves a lack of useable

public open space and a legible pedestrian network and does not consider future built form on the site.

- The proposal is unacceptable having regard to the bushfire risk of the site arising from the lack of a perimeter road to the eastern boundary, the inadequate width of proposed Road No 5, the proposed prohibition of on-street car parking and the inadequate access road into the site via Iron Gates Drive. Some of the proposed APZs are also inappropriate and the proposal is inconsistent with the subdivision objectives of *Planning for Bushfire Protection 2006*.
- The proposal does not adequately outline the extent of flooding on the proposed subdivision layout, assess the flood impact of the proposed filling of the land for the proposed development or adjoining land and does not assess the evacuation of the site for the full range of floods.
- The proposal does not adequately address Aboriginal Cultural Heritage as there has been no inclusion of the cultural interpretation recommendation of the Aboriginal Cultural Heritage report into the proposal, there are significant concerns with the proposal from parts of the local Aboriginal Community which have not been resolved and there has been limited consideration for the location and on-going protection and conservation of two Aboriginal objects located in close proximity to the proposed development. There has also been no Aboriginal cultural heritage assessment for the proposed removal of vegetation and ground disturbance for the proposed upgrade works to Iron Gates Drive.
- The proposal has not demonstrated that adequate arrangements have been made for essential services to the site as required by Clause 6.2 of the RVLEP 2012 in relation to water supply, electricity, sewerage disposal and management, stormwater drainage and road access comprising the proposed upgrade to Iron Gates Drive.
- The proposal has not adequately considered the potential impact of the proposed earthworks on either the site or the adjoining sites, particularly with regard to potential impacts on the environmental conservation areas of the littoral rainforest and the adjoining wetlands and the removal of material from the elevated areas on the site. The proposed earthworks on the site are inconsistent with the objectives and matters for consideration for earthworks pursuant to Clause 6.3 of the RVLEP 2012.

- The proposal will result in adverse impacts on the riparian and wetland areas on the site arising from the lack of adequate buffers to these areas from the proposal and the lack of an adequate stormwater management plan for the site demonstrating that there will be no adverse impacts on the Evans River arising from stormwater discharged from the site. In this way the proposal is inconsistent with Clauses 6.8 and 6.10 of the RVLEP 2012 as well as SEPP 14.
- The proposal has not adequately considered potential land contamination on the site and is therefore inconsistent with SEPP 55.
- The proposal has not adequately considered acid sulphate soils on the site arising from inadequate and outdated technical investigations which do not demonstrate that the proposal does not disturb, expose or drain acid sulfate soils and cause environmental damage. In this regard, the proposal is inconsistent with Clause 6.1 of the RVLEP 2012.
- The proposal has not satisfactorily addressed potential social impacts as a result of the lack of adequate consideration of the likely impact on social services within Evans Head arising from the proposal.
- The proposal has not adequately demonstrated that stormwater management systems have been engineered to prevent them acting as mosquito breeding sites.

The site is considered to be unsuitable for the proposed development, based on the current information.

It is considered that the key issues as outlined in Section 6 of this review report have not been resolved satisfactorily and form the revised reasons for refusal at **Attachment A**.

8. RECOMMENDATION

This peer review report concurs with the Independent Assessment Report that Development Application DA No 2015.096 for a concept development application for residential subdivision and upgrading of Iron Gates Drive including the first stage of works at Lot 163 DP 831052, Lot 276 & 277 DP 755624 No 240 Iron Gates Rd Evans Head be **REFUSED** pursuant to Section 4.16(1)(b) of the *Environmental Planning and Assessment Act 1979* subject to the revised reasons for refusal attached to this report at **Attachment A**.

Attachments:

A: Revised reason for refusal

B: Compliance Tables

Attachment A: Revised Reasons for Refusal

Attachment B: Compliance Tables

