Greater Cities Commission

Peter Debnam Chair Sydney North Planning Panel

Ref: DOC23/21013

Re: Planning Proposal – Patyegarang (formerly Lizard Rock)

Dear Peter,

Thank you for the opportunity to provide agency review regarding the Patyegarang Planning Proposal (formerly Lizard Rock) PP-2022-3802.

The Greater Cities Commission (Commission) recognises the pathway for this Planning Proposal has been facilitated by the Development Delivery Plan approved under the State Environmental Planning Policy (Planning Systems) which supports Planning Priority N4 in the North District Plan to 'strengthen the economic self-determination of Aboriginal communities by engagement and consultation with Local Aboriginal Lands Councils to better understand and support their economic aspirations as they relate to land use planning.'

In this context the Commission considers the Planning Proposal is broadly consistent with relevant Objectives in the Greater Sydney Region Plan and associated Planning Priorities in the North District Plan and provides the following input to support detailed assessment of the proposal.

North District Plan	
Planning Priority N18 Better managing rural area	While the overall intent of the objective is to protect rural areas, including the Metropolitan Rural Area (MRA), there is also acknowledgment that: 'parts of the urban-rural fringe are owned by Local Aboriginal Land Councils. Future planning of these areas may be more flexible in order to balance rural values with greater economic participation, and community and cultural uses by Aboriginal people.'
(Notes. giving effect to Region Plan	
Objective 29: Environmental, social and economic values in rural areas are protected and enhanced)	
	Also, that: 'limited growth of rural-residential development could be considered where there are no adverse impacts on the amenity of the local area and where the development provides incentives to maintain and enhance the environmental, social and economic values of the Metropolitan Rural Area.'

	Consequently, the objective does anticipate some flexibility when considering development within the MRA.
Planning Priority N4: Fostering healthy, creative, culturally rich and socially connected communities	The proposal is generally consistent with this priority as it aims to deliver housing in conjunction with social infrastructure and a cultural community facility. It will also facilitate protection of First Nations heritage on the site and provide opportunities for cultural knowledge to be shared and facilitate the economic self- determination of First Nations peoples.
Planning Priority N5: Providing housing supply, choice and affordability, with access to jobs, services and public transport	The proposal is generally consistent with this priority as it aims to deliver a variety of housing types and in the context of economic participation will help deliver the District's 20 year-strategic housing target and supplement Council's Local Housing Strategy. It also proposes an affordable housing contribution equivalent to the Northern Beaches Council's 10% target, as outlined in the council's Affordable Housing Contributions Scheme.
Planning Priority N6: Creating and renewing great places and local centres, and respecting the District's heritage	The proposal is generally consistent with this priority, subject to more detailed information being provided on the new community infrastructure - open space and cultural community centre. It will also promote the unique cultural attributes of the site and provide opportunities for sharing knowledge of our First Nations heritage.
Planning Priority N12: Delivering integrated land use and transport planning and a 30-minute city	The site is located in close proximity to local and district centres and a short distance north of the Frenchs Forest Strategic Centre, which is consistent with 30-minute city objectives. It also has access to established transport services along Forest Way.
Planning Priority N15: Protecting and improving the health and enjoyment of Sydney Harbour and the District's waterways	Subject to detailed planning assessment by the relevant planning authority, the proposal is generally consistent with this priority as it reserves a significant portion of the site for environmental conservation purposes, which includes the upper catchment of Snake Creek. Stormwater design and management is aimed at minimising impacts on the catchment.
Planning Priority N16: Protecting and enhancing bushland and biodiversity	The proposal is generally consistent with this priority as it reserves approximately 27% of the site for conservation (C2 Zoning) and proposes a biodiversity corridor to minimise and manage biodiversity impacts not currently realised through the site's current 'deferred matter' status.

Greater Cities Commission

Planning Priority N20: Delivering high quality open space	Subject to detailed planning assessment by the relevant planning authority, the proposal is generally consistent with this priority as it includes areas of retained vegetation and open space which are linked by active transport connections.
Planning Priority N22: Adapting to the impacts of urban and natural hazards and climate change	Detailed assessment is required to determine whether the proposal adequately addresses the site's natural hazards. This needs to include the proposed mitigation measures to protect proposed housing areas, the asset protection zone and emergency evacuation routes.

In summary, the Greater Cities Commission is of the view that the Planning Proposal has strategic merit and is generally consistent with relevant objectives and planning priorities outlined in the region and district plans, and progresses the strategic potential identified in the Northern Beaches Development Delivery Plan (2022).

Should you wish to discuss this matter further, please contact Stephanie Barker, Head of Strategic Planning, at stephanie.barker@gcc.nsw.gov.au

Sincerely,

C. Hayer

Chris Hanger Chief Executive Officer

17/11/2023

Transport for NSW

13 November 2023



TfNSW Reference: SYD22/00271 DPE Reference: PP-2022-3802

Ms Kiersten Fishburn Secretary NSW Department of Planning and Environment Locked Bag 5022 PARRAMATTA NSW 2124

RE: PLANNING PROPOSAL – PATYEGARANG, MORGAN ROAD, BELROSE

Attention: Ms Lauren Templeton

Dear Ms Templeton

TfNSW appreciates the opportunity to provide comment on the above Planning Proposal as referred to Transport for NSW (TfNSW) via NSW Planning Portal on 25 September 2023 and subsequent meeting with the Department of Planning and Environment (DPE) and Gyde Consultants on 12 October 2023 to discuss the Planning Proposal. We note consultation is being undertaken with TfNSW under Condition 5 of the Gateway Determination dated 9 June 2023.

TfNSW has reviewed the submitted documentation and notes that the Planning Proposal seeks to:

- Transfer the site controls from Warringah Local Environmental Plan 2000 to Warringah Local Environmental Plan 2011.
- Apply C2 Environmental Conservation, R2 Low Density Residential and RE2 Private Recreation zones to the Site.
- Introduce dual occupancies as an additional permitted use within the R2 Zone to support housing diversity.
- Introduce environmental management works, utilities and services, bushfire works, APZs and stormwater services as an additional permitted use in the RE2 Zone.
- Introduce a maximum 8.5m building height across the site.
- Introduce a range of minimum lot sizes (200m², 450m², 600m²).
- Restrict the total maximum number of dwellings to 450.

TfNSW has reviewed the submitted documentation and provides comments in **Attachment A** for Council's consideration. Please note that the comments provided are of a preliminary nature. They are not to be interpreted as binding upon TfNSW and may change following review of formal development application/s in the future, should the Planning Proposal be finalised (notified).

Thank you for the opportunity to provide advice on the subject planning proposal. Should you have any questions or further enquiries in relation to this matter, please contact Ashish Tamhane via email: development.sydney@transport.nsw.gov.au

Yours sincerely,

Gac _____

Carina Gregory Senior Manager Strategic Land Use (Eastern) Land Use, Network & Place Planning

Attachment A – Comments on Planning Proposal PP-2022-3802

1. Forest Way / Morgan Road Intersection

- The SIDRA modelling seems to indicate the queue length in right turning lane on Morgan Road of approximately 80m in AM peak. TfNSW recommends the proponent to strongly consider either removing / restricting kerbside parking on Morgan Road to provide an extension to the two approach lanes onto Forest Way. The extension of approach lanes is expected to future proof both lanes and local road access to cater for the traffic being generated by the proposed development.
- The Traffic Impact Assessment (September 2033) identified that there is a need to extend the northbound right turn bay on Forest Way. Subject to TfNSW reviewing the updated raw SIDRA files, the right turn bay should be designed to extend at a minimum of 40m past the back of queue. This will allow adequate storage for proposed increase in traffic movements and future proof the right turn movement.
- TfNSW notes that the Traffic Control Signal phasing at the intersection of Forest Way / Morgan Road adopted in SIDRA model is based on the site observations. SCATS seem to indicate the actual cycle time onsite during both AM and PM peak is 120 sec. It is therefore recommended to seek SCATS data from TfNSW to get more accurate and realistic SIDRA model results. TfNSW will not support any additional traffic signal phasing, due to further delays envisaged, with any additional phasing. Any changes to Traffic Control Signals requires consent from the Transport for NSW (TfNSW) under Section 87(4) of the Roads Act 1993.
- SIDRA model for the intersection should be updated to include the scenarios stated above for current (2023) and future year (2033). Electronic copy of the SIDRA model should be submitted to TfNSW for review and comment, prior to the planning proposal being finalised.
- TfNSW notes that there is reference to a cultural centre / community facility in the Planning Proposal. However, the Traffic Impact Assessment does not seem to have included this in the trip analysis. It is therefore recommended to include vehicle trips likely to be generated by the proposed cultural centre / community facilities.
- Traffic assessment report has indicated that the extension of northbound right turn lane on Forest Way would be triggered following the completion of 230 dwellings on the site. Should this Planning Proposal be approved, proposed road works identified to mitigate the traffic impacts of the development would need to be reviewed and supported by TfNSW prior to the lodgement of the first subdivision development application (DA). In addition, the works would need to be completed upfront as part of the initial development to cater for additional traffic likely to be generated by the proposed development.

2. Proposed Slip Lane

• TfNSW notes that the majority of the land (Lots 10 and 11, DP 807906) required for the proposed slip lane from Morgan Road, Belrose onto Forest Way is owned by the Northern Beaches Council, zoned RE1 Public Recreation under Warringah LEP 2011 and is public land classified as "community land" under the *Local Government Act 1993*.

A Non-Binding Letter of Offer (LOO) to enter into a Planning Agreement (VPA) with Council has been submitted with the Planning Proposal and is discussed in this document (page 86 & Appendix 23). The LOO proposes contributions for key public benefits and infrastructure, including the proposed design and construction of a new slip lane at the Forest Way and Morgan Road intersection. TfNSW understand that Northern Beaches Council does not support the Planning Proposal and therefore is not in favour of entering into a VPA with the applicant.

Although TfNSW generally agrees with the intent to provide a left turn acceleration lane from Morgan Road into Forest Way southbound to cater for the additional left turn movements generated by the proposal, both in the event of a bush fire evacuation and in a typical morning peak, further discussion between DPE (as planning proposal authority), Council (as landowner) and the proponent is required. This should determine the appropriate acquisition pathway and process for the proposed slip lane, design requirements, delivery mechanism and funding arrangements and requires resolution prior to the Planning Proposal being finalised.

- We note the Traffic assessment report has indicated that the slip lane on Morgan Road is triggered following the completion of 230 dwellings on the site. TfNSW preference would be to have the slip lane constructed upfront as part of the initial development to cater for additional traffic likely to be generated by the proposed development.
- Proposed slip lane on Morgan Road should be signalised due to number of school children currently using the pedestrian crossing facilities at this intersection.

3. Proposed Dwelling Cap

• TfNSW notes that a dwelling cap of 450 dwellings on the subject land has been proposed in the Planning Proposal. TfNSW agrees with the intent to provide a dwelling cap on the subject land and would support the inclusion of a provision in the Warringah LEP 2011 to restrict the total number of dwellings.

We note however that *Section 5.1 Proposed Statutory Amendments* of the Planning Proposal (Gyde, July 2023) does not include any reference to the introduction of a proposed dwelling cap LEP provision as part of the statutory amendments that are listed in the table (refer page 31).

4. Site Specific Development Control Plan

• Site specific DCP should include proposed development controls for vehicular access arrangements to and from the site including mitigation measures and access restriction / emergency access only via Oates Place.

5. General Comments

- The traffic assessment report (September 2023, page 16) stated that the anticipated travel by bus could ultimately make up approximately 20% of all work-related trips from the site, more than double the existing model share for residents of the area. Based on a conservative estimate of 450 dwellings on the site the mode share may result in a demand of approximately 200 additional bus trips once the site is fully developed. Report further stated that observation around the occupancy of bus services in early 2022 indicated buses had more than 50% of seats unoccupied. Though it suggests existing level of public transport should be sufficient to accommodate future demands from residents, TfNSW recommends the proponent to consult with TfNSW and agree on an adequate approach to the public transport prior to planning proposal being finalised.
- TfNSW notes that that there is a proposed link to Oates Place, and it is stated that the egress via Oates Place to Forest Way will only be provided during a bushfire emergency and will not be available for daily traffic movements. It is however not clear how this will this be monitored and restricted from general traffic use? TfNSW understands that RFS does not support gates. Clarification should therefore be provided on how will the proposed road link to Oates Place be restricted from general car use.

Transport for NSW

12 September 2024



TfNSW Reference: SYD24-01483/01 DPE Reference: PP-2022-3802

Ms Kiersten Fishburn Secretary NSW Department of Planning, Housing and Infrastructure Locked Bag 5022 PARRAMATTA NSW 2124

RE: AMENDED PLANNING PROPOSAL – PATYEGARANG, MORGAN ROAD, BELROSE

Attention: Mr Murray Jay

Dear Ms Fishburn

Transport for NSW (TfNSW) appreciates the opportunity to provide comment on the amended Planning Proposal referred to TfNSW via an email dated 22 August 2024 as one of the agencies with operational responsibility for the roads and transport in the area. We understand the Planning Proposal has been amended by the proponent following public exhibition in September – November 2023.

TfNSW notes the key amendments to the Planning Proposal include:

- 1. revised zoning plan to incorporate:
 - an extension to the proposed C2 Environmental Conservation zone, incorporating land north along the Snake Creek corridor and along the two feeder streams on the western side,
 - additional RE2 Private Recreation zone to function as an APZ adjacent to the property at 20 Morgan Rd.
- 2. revised indicative structure plan, showing additional connections along sections of the perimeter road to the north and south-west.
- 3. revised minimum lot size map, incorporating a 450m2 minimum lot size adjacent to the Snake Creek corridor to support appropriate APZs.
- 4. the introduction of additional permitted uses in the C2 Environmental Protection zone to enable environmental management works and stormwater services.
- 5. the introduction of a zone interface provision, as per clause 5.3 of the *Standard Instrument Principal Local Environmental Plan* (2006 EPI 155a) to provide flexibility across zone boundaries to accommodate topographical elements during design development.
- 6. acknowledgement of alternative legislative mechanisms, such as *State Environmental Planning Policy (Precincts Eastern Harbour City)* 2021 to embed detailed design controls, in

the event the draft site-specific development control plan cannot be delivered by the State Government.

TfNSW also notes the amended slip lane design, as presented in **Appendix B** of the Traffic Statement provided by JMT Consulting (12 August 2024) and provides the following comments for DPHI's consideration.

• TfNSW generally supports the intent to provide a left turn acceleration lane from Morgan Road into Forest Way southbound to cater for the additional left turn movements generated by the proposal, both in the event of a bush fire evacuation and in a typical morning peak.

However, TfNSW does <u>not support</u> the amended slip lane design and the central median being used by the proponent for the purpose of constructing a slip lane for the following reasons:

- The proposed design will effectively reduce the opportunity for TfNSW to use the median to implement safety/ network efficiency measures in the future due to future growth along the State Road corridor.
- The amended design presents further issues relating to the angle of the slip lane, pedestrian crossing, and the lateral shift of Forest Way. Providing a left turn deceleration lane in Forest Way (southbound) into Morgan Road will require changes to the alignment of Forest Way on the southern side of the intersection which could result in compromising safety at the intersection.
- It is not clear what justification has been provided for the left turn lane in Forest Way (southbound) into Morgan Road.
- The proposal shows a high angled entry into Forest Way but introduces a short, trapped acceleration lane. This trapped acceleration lane is not supported as it introduces an unnecessary weaving movement in Forest Way and is considered a safety issue in an 80kph State Road.
- It is not clear if SIDRA modelling has been undertaken to assess the impact and justify the proposed slip lane design.
- In the event of a bushfire emergency, the current signal arrangement could be managed by TfNSW and RFS to run the approach phase longer to coordinate an evacuation, therefore the need for the engineering works may not be necessary.

The comments provided by TfNSW in its submission dated 13 November 2023 (**ATTACHMENT A**) to the original Planning Proposal are still considered relevant to the amended proposal. We request that these matters are addressed in the report to be prepared to the Sydney North Planning Panel later this year.

Should you have any questions or further enquiries in relation to this matter, please contact Ashish Tamhane via email: development.sydney@transport.nsw.gov.au

Yours sincerely,

da Com

Carina Gregory Senior Manager Strategic Land Use (Eastern) Land Use, Network & Place Planning

Attachment A – Comments on original Planning Proposal PP-2022-3802

1. Forest Way / Morgan Road Intersection

- The SIDRA modelling seems to indicate the queue length in right turning lane on Morgan Road of approximately 80m in AM peak. TfNSW recommends the proponent to strongly consider either removing / restricting kerbside parking on Morgan Road to provide an extension to the two approach lanes onto Forest Way. The extension of approach lanes is expected to future proof both lanes and local road access to cater for the traffic being generated by the proposed development.
- The Traffic Impact Assessment (September 2033) identified that there is a need to extend the northbound right turn bay on Forest Way. Subject to TfNSW reviewing the updated raw SIDRA files, the right turn bay should be designed to extend at a minimum of 40m past the back of queue. This will allow adequate storage for proposed increase in traffic movements and future proof the right turn movement.
- TfNSW notes that the Traffic Control Signal phasing at the intersection of Forest Way / Morgan Road adopted in SIDRA model is based on the site observations. SCATS seem to indicate the actual cycle time onsite during both AM and PM peak is 120 sec. It is therefore recommended to seek SCATS data from TfNSW to get more accurate and realistic SIDRA model results. TfNSW will not support any additional traffic signal phasing, due to further delays envisaged, with any additional phasing. Any changes to Traffic Control Signals requires consent from the Transport for NSW (TfNSW) under Section 87(4) of the Roads Act 1993.
- SIDRA model for the intersection should be updated to include the scenarios stated above for current (2023) and future year (2033). Electronic copy of the SIDRA model should be submitted to TfNSW for review and comment, prior to the planning proposal being finalised.
- TfNSW notes that there is reference to a cultural centre / community facility in the Planning Proposal. However, the Traffic Impact Assessment does not seem to have included this in the trip analysis. It is therefore recommended to include vehicle trips likely to be generated by the proposed cultural centre / community facilities.
- Traffic assessment report has indicated that the extension of northbound right turn lane on Forest Way would be triggered following the completion of 230 dwellings on the site. Should this Planning Proposal be approved, proposed road works identified to mitigate the traffic impacts of the development would need to be reviewed and supported by TfNSW prior to the lodgement of the first subdivision development application (DA). In addition, the works would need to be completed upfront as part of the initial development to cater for additional traffic likely to be generated by the proposed development.

2. Proposed Slip Lane

• TfNSW notes that the majority of the land (Lots 10 and 11, DP 807906) required for the proposed slip lane from Morgan Road, Belrose onto Forest Way is owned by the Northern Beaches Council, zoned RE1 Public Recreation under Warringah LEP 2011 and is public land classified as "community land" under the *Local Government Act 1993*.

A Non-Binding Letter of Offer (LOO) to enter into a Planning Agreement (VPA) with Council has been submitted with the Planning Proposal and is discussed in this document (page 86 & Appendix 23). The LOO proposes contributions for key public benefits and infrastructure, including the proposed design and construction of a new slip lane at the Forest Way and Morgan Road intersection. TfNSW understand that Northern Beaches Council does not support the Planning Proposal and therefore is not in favour of entering into a VPA with the applicant.

Although TfNSW generally agrees with the intent to provide a left turn acceleration lane from Morgan Road into Forest Way southbound to cater for the additional left turn movements generated by the proposal, both in the event of a bush fire evacuation and in a typical morning peak, further discussion between DPE (as planning proposal authority), Council (as landowner) and the proponent is required. This should determine the appropriate acquisition pathway and process for the proposed slip lane, design requirements, delivery mechanism and funding arrangements and requires resolution prior to the Planning Proposal being finalised.

- We note the Traffic assessment report has indicated that the slip lane on Morgan Road is triggered following the completion of 230 dwellings on the site. TfNSW preference would be to have the slip lane constructed upfront as part of the initial development to cater for additional traffic likely to be generated by the proposed development.
- Proposed slip lane on Morgan Road should be signalised due to number of school children currently using the pedestrian crossing facilities at this intersection.

3. Proposed Dwelling Cap

• TfNSW notes that a dwelling cap of 450 dwellings on the subject land has been proposed in the Planning Proposal. TfNSW agrees with the intent to provide a dwelling cap on the subject land and would support the inclusion of a provision in the Warringah LEP 2011 to restrict the total number of dwellings.

We note however that *Section 5.1 Proposed Statutory Amendments* of the Planning Proposal (Gyde, July 2023) does not include any reference to the introduction of a proposed dwelling cap LEP provision as part of the statutory amendments that are listed in the table (refer page 31).

4. Site Specific Development Control Plan

• Site specific DCP should include proposed development controls for vehicular access arrangements to and from the site including mitigation measures and access restriction / emergency access only via Oates Place.

5. General Comments

- The traffic assessment report (September 2023, page 16) stated that the anticipated travel by bus could ultimately make up approximately 20% of all work-related trips from the site, more than double the existing model share for residents of the area. Based on a conservative estimate of 450 dwellings on the site the mode share may result in a demand of approximately 200 additional bus trips once the site is fully developed. Report further stated that observation around the occupancy of bus services in early 2022 indicated buses had more than 50% of seats unoccupied. Though it suggests existing level of public transport should be sufficient to accommodate future demands from residents, TfNSW recommends the proponent to consult with TfNSW and agree on an adequate approach to the public transport prior to planning proposal being finalised.
- TfNSW notes that that there is a proposed link to Oates Place, and it is stated that the egress via Oates Place to Forest Way will only be provided during a bushfire emergency and will not be available for daily traffic movements. It is however not clear how this will this be monitored and restricted from general traffic use? TfNSW understands that RFS does not support gates. Clarification should therefore be provided on how the proposed road link to Oates Place will be restricted from general car use.



Our Ref: ID 2119 Your Ref: 2023/581281

22 November 2023

Neil Cocks Northern Beaches Council PO Box 82 Manly NSW 1655

email: council@northernbeaches.nsw.gov.au CC: shelly.stingmore@one.ses.nsw.gov.au; rohan.johnston@dpie.nsw.gov.au

Dear Neil,

Planning Proposal for Lizard Rock, Morgan Road Belrose

Thank you for the opportunity to provide advice on the Planning Proposal for Lizard Rock, Morgan Road Belrose. It is understood that the planning proposal seeks to:

- Remove 'deferred matter' status in Warringah LEP 2011
- Rezone from Locality B2 Oxford Falls to R2 Low Density Residential (51 ha) and C2 – Environmental Conservation (20ha)
- Increase the maximum building height to 8.5m
- Increase the number of dwellings to a maximum cap of 450 dwellings
- Amend Schedule 1 to introduce dual occupancies, seniors housing and community facilities
- Increase the number of jobs in this area to 125.

The NSW State Emergency Service (NSW SES) is the agency responsible for dealing with floods, storms and tsunami in NSW. This role includes, planning for, responding to and coordinating the initial recovery from floods. As such, the NSW SES has an interest in the public safety aspects of the development of flood prone land, particularly the potential for changes to land use to either exacerbate existing flood risk or create new flood risk for communities in NSW.

The consent authority will need to ensure that the planning proposal is considered against the relevant Ministerial Section 9.1 Directions, including 4.1 – Flooding and is consistent with the NSW Flood Prone Land Policy as set out in the <u>Flood Risk Management Manual</u> 2023 (the Manual) and supporting guidelines, including the <u>Support for Emergency Management Planning</u>. Key considerations are outlined in Attachment A.



STATE HEADQUARTERS

93 - 99 Burelli Street, Wollongong 2500 PO Box 6126, Wollongong NSW 2500 P (02) 4251 6111 F (02) 4251 6190 www.ses.nsw.gov.au ABN: 88 712 649 015



In summary, we:

- **Recommend** ensuring that rising road access is available for all proposed dwellings on the site.
- **Recommend** ensuring that the community is aware of the significant flood risk on nearby roads such as Oxford Falls Road and Wakehurst Parkway, for example, through appropriate signage.
- **Request** flood modelling maps detailing the 1% AEP and PMF levels, as although these were requested by NSW SES during the meeting held on 12 October 2023, these were not provided to NSW SES prior to the writing of this response.
- Note that the modelling demonstrates overall increases to peak flow for most postdevelopment scenarios¹.
- Note that the site has slope gradients reaching up to 35%², and may therefore pose a risk of overland flow flooding on the site and therefore recommend this is assessed.

You may also find the following Guidelines, originally developed for the Hawkesbury Nepean Valley and available on the NSW SES website useful:

- Reducing Vulnerability of Buildings to Flood Damage
- Designing Safer Subdivisions
- Managing Flood Risk Through Planning Opportunities

Please feel free to contact Claire Flashman via email at rra@ses.nsw.gov.au should you wish to discuss any of the matters raised in this correspondence. The NSW SES would also be interested in receiving future correspondence regarding the outcome of this referral via this email address.

Yours sincerely

P.P.

Nicole Hogan Assistant Commissioner, Director Emergency Management NSW State Emergency Service

¹ Appendix 14 Flood Impact and Risk Assessment Report, Section 4.3, pages 15 & 16

² Gateway Determination Report PP-2022-3802, June 2023, Stormwater Management, page 21



ATTACHMENT A: Principles Outlined in the Support for Emergency Management Planning Guideline³

Principle 1 Any proposed Emergency Management strategy should be compatible with any existing community Emergency Management strategy.

Any proposed Emergency Management strategy for an area should be compatible with the evacuation strategies identified in the relevant local or state flood plan or by the NSW SES.

Principle 2 Decisions should be informed by understanding the full range of risks to the community.

Decisions relating to future development should be risk-based and ensure Emergency Management risks to the community of the full range of floods are effectively understood and managed.

The Flood Impact and Risk Assessment provided states that *"the Morgan Road, Belrose site is not deemed as an area which is at risk of either flash flooding or lagoon flooding."*⁴ However, we note that the modelling demonstrates overall increases to peak flow for most post-development scenarios⁵, and that the site has slope gradients of up to 35% and may therefore pose risks of overland flooding. If possible, we would recommend flood modelling to include the risk of flooding from overland flow, noting if any overland flow paths would overtop roads and put people at risk of isolation due to flooding.

We also note there is an existing flood risk on nearby roads, particularly Oxford Falls Road and Wakehurst Parkway, with several flood rescues attended by NSW SES in recent years. We recommend that the flood risk on nearby roads and actions that should be undertaken to reduce the potential risk to life should be clearly communicated to all site users, for example through clear signage or active warning measures (e.g. lights/barricades etc).

Principle 3 Development of the floodplain does not impact on the ability of the existing community to safely and effectively respond to a flood.

The ability of the existing community to effectively respond (including self-evacuating) within the available timeframe on available infrastructure is to be maintained. It is not to be impacted on by the cumulative impact of new development.

³ NSW Government. 2023. Principles Outlined in the Support for Emergency Management Planning Guideline

⁴ Appendix 14 Flood Impact and Risk Assessment Report, Section 3.4 Emergency Management, page 12

⁵ Appendix 14 Flood Impact and Risk Assessment Report, Section 4.3, pages 15 & 16



We recommend ensuring that rising road access is available for all new proposed dwellings, to ensure that people do not become trapped by floodwater, either from creek flooding or overland flow / ponding of water in low points along roads.

Principle 4 Decisions on redevelopment within the floodplain does not increase risk to life from flooding.

The preferred Emergency Management approach is evacuation, where evacuation capacity and capability has been demonstrated as the most effective strategy to manage Emergency Management risks (i.e. a strategy that enables the users of development to self-evacuate to an area outside the floodplain that has adequate services to sustain the community in an orderly planned outcome). This includes consideration of flood warning and evacuation demand on existing and future access/egress routes considering potential impacts of localised flooding. Where this is not possible any decision involving redevelopment, and in particular increasing population at risk, needs to consider the safety of the community. This may include provisions such as effective flood warning, a practical safe refuge for the full range and behaviour of flooding (i.e. above the PMF and designed to withstand the associated forces of flooding), and provisions to be able to safely self-sustain for short duration flooding.

Managing these risks requires careful consideration of development type, likely users, and their ability respond to minimise their risks. This includes consideration of:

- Isolation There is no known safe period of isolation in a flood, the longer the period of isolation the greater the risk to occupants who are isolated.
- Secondary risks This includes fire and medical emergencies that can impact on the safety of people isolated by floodwater. The potential risk to occupants needs to be considered and managed in decision-making.
- Consideration of human behaviour The behaviour of individuals such as choosing not to remain isolated from their family or social network in a building on a floor above the PMF for an extended flood duration or attempting to return to a building during a flood, needs to be considered.

Principle 5 Risks faced by the itinerant population need to be managed.

Any Emergency Management strategy needs to consider people visiting the area or using a development.

Principle 6 Recognise the need for effective flood warning and associated limitations.

An effective flood warning strategy with clear and concise messaging understood by the community is key to providing the community an opportunity to respond to a flood threat in an appropriate and timely manner.

Principle 7 Ongoing community awareness of flooding is critical to assist effective emergency response.



In terms of the current proposal, the flood risk at the site and actions that should be undertaken to reduce the potential risk to life should be clearly communicated to all site users, for example through signage.



Our Ref: ID 2588 Your Ref:

19 August 2024

Murray Jay Department of Planning, Housing & Infrastructure Locked Bag 5022 Parramatta NSW 2124

Via email

email: Murray.Jay@planning.nsw.gov.au CC: helen.slater@ses.nsw.gov.au

Dear Murray,

Planning Proposal for Patyegarang

Thank you for the opportunity to provide comment on the Planning Proposal for Patyegarang, Morgan Road, Belrose. It is understood that the planning proposal seeks to:

- Remove 'deferred matter' status in Warringah LEP 2011
- Rezone from Locality B2 Oxford Falls to R2 Low Density Residential (51 ha) and C2 – Environmental Conservation (20ha)
- Increase the maximum building height to 8.5m
- Increase the number of dwellings to a maximum cap of 450 dwellings
- Amend Schedule 1 to introduce dual occupancies, seniors housing and community facilities
- Increase the number of jobs in this area to 125.

The NSW State Emergency Service (NSW SES) is the agency responsible for dealing with floods, storms and tsunami in NSW. This role includes, planning for, responding to and coordinating the initial recovery from floods. As such, the NSW SES has an interest in the public safety aspects of the development of flood prone land, particularly the potential for changes to land use to either exacerbate existing flood risk or create new flood risk for communities in NSW.

The consent authority will need to ensure that the planning proposal is considered against the relevant Section 9.1 Ministerial Directions, including 4.1 – Flooding and is consistent with the NSW Flood Prone Land Policy as set out in the <u>Flood Risk Management Manual</u> 2023 (the Manual) and supporting guidelines, including the <u>Support for Emergency Management Planning</u>. Key considerations relating to emergency management are outlined in Attachment A.



STATE HEADQUARTERS

93 - 99 Burelli Street, Wollongong 2500 PO Box 6126, Wollongong NSW 2500 P (02) 4251 6111 F (02) 4251 6190 www.ses.nsw.gov.au ABN: 88 712 649 015



We refer to our previous correspondence dated 22 November, 2023.

In summary, we:

- Note parts of the site are affected by flooding as frequently as a 5% Annual Exceedance Probability (AEP) event with several proposed residential areas becoming High Flood Islands due to road inundation.
- **Recommend** further flood information regarding time to overtopping and duration of inundation for the site and surrounding roads.
- **Reiterate** that rising road access should be provided for all proposed dwellings on the site to avoid the risk of isolation.

You may also find the following Guidelines, originally developed for the Hawkesbury Nepean Valley and available on the NSW SES website useful:

- <u>Reducing Vulnerability of Buildings to Flood Damage</u>
- Designing Safer Subdivisions
- <u>Managing Flood Risk Through Planning Opportunities</u>

Please feel free to contact Kate Dawes via email at rra@ses.nsw.gov.au should you wish to discuss any of the matters raised in this correspondence. The NSW SES would also be interested in receiving future correspondence regarding the outcome of this referral via this email address.

Yours sincerely,

Filigne

Peter Cinque Senior Manager Emergency Risk Management NSW State Emergency Service



ATTACHMENT A: Principles Outlined in the Support for Emergency Management Planning Guideline¹

Principle 1 Any proposed Emergency Management strategy should be compatible with any existing community Emergency Management strategy.

Any proposed Emergency Management strategy for an area should be compatible with the evacuation strategies identified in the relevant local or state flood plan or by the NSW SES. As Per the NSW State Flood Plan² and the Northern Beaches Flood Emergency Sub Plan, evacuation is the primary emergency management strategy for people impacted by flooding³.

Principle 2 Decisions should be informed by understanding the full range of risks to the community.

Parts of the site are affected by flooding as frequently as a 5% AEP event⁴ with several proposed residential areas becoming High Flood Islands due to road inundation of the proposed single access/egress road to the east, with two overland flow paths crossing the proposed road. In a Probable Maximum Flood (PMF) event this road inundation is mapped as high velocity⁵ and reaches Hazard Level 5 and 6⁶ (H5 & H6) which is unsafe for all vehicles and people.

It is noted that "Any road crossings over floodways and overland flow paths will need to be designed as bridges or contain culverts to allow flood waters to be conveyed underneath⁷", however this has not been included in any provided modelling. We recommend ensuring all proposed residential development areas are provided with rising road access to avoid becoming isolated during flood event. We therefore request further information regarding the time to overtopping and duration of inundation of roads to adequately assess the risk of isolation on this site.

Principle 3 Development of the floodplain does not impact on the ability of the existing community to safely and effectively respond to a flood.

¹ NSW Government. 2023. Principles Outlined in the Support for Emergency Management Planning Guideline

² NSW Government. 2021. NSW State Flood Plan. Section 1.6 – Key Principles. 1.6.2, page 5.

³ NSW SES, Northern Beaches Flood Emergency Sub Plan, Endorsed April 2021, Section 5.8

⁴ Colliers, 2024, Flood Impact and Risk Assessment Report, Map 031: 5% AEP Proposed Flood Depth, Page 81

⁵ Colliers, 2024, Flood Impact and Risk Assessment Report, Map 048: PMF Proposed Flood Velocity, Page 98

⁶ Colliers, 2024, Flood Impact and Risk Assessment Report, Map 049: PMF Proposed Flood Hazard, Page 99

⁷ Colliers, 2024, Flood Impact and Risk Assessment Report, Key Findings and Recommendations, Page 39



The ability of the existing community to effectively respond (including self-evacuating) within the available timeframe on available infrastructure is to be maintained. It is not to be impacted on by the cumulative impact of new development. Evacuation must not require people to drive or walk through flood water.

Development strategies relying on an assumption that mass rescue may be possible where evacuation either fails or is not implemented are not acceptable to the NSW SES.

Principle 4 Decisions on development within the floodplain does not increase risk to life from flooding.

Managing flood risks associated with High Flood Islands requires careful consideration of development type, likely users, and their ability respond to minimise their risks. This includes consideration of:

- Isolation There is no known safe period of isolation in a flood, the longer the period of isolation the greater the risk to occupants who are isolated.
- Secondary risks This includes fire and medical emergencies that can impact on the safety of people isolated by floodwater. The potential risk to occupants needs to be considered and managed in decision-making.
- Consideration of human behaviour The behaviour of individuals such as choosing not to remain isolated from their family or social network in a building on a floor above the PMF for an extended flood duration or attempting to return to a building during a flood, needs to be considered.

When evaluating potential impact, the risk of isolation, secondary risks and human behaviour should be considered. There is no known safe period of isolation in a flood, though the longer the period of isolation, the greater the risk to occupants. Risk to occupants may be compounded by secondary risks such as fires or medical emergencies.

There is no known safe period of isolation, however, the longer the period of isolation, the more chance there is for mishap requiring external intervention. Even relatively brief periods of isolation, in the order of a few hours, can lead to personal medical emergencies that have to be responded to. During flooding it is likely that there will be a reduced capacity for the relevant emergency service agency to respond in these times.

Emergency services are also exposed to greater risks than if flood-free access was available. This unnecessarily exposes emergency service personnel to flood situations which may lead to the injury or death. In recognition of this possibility, emergency services are under an increasing demand to consider the safety of personnel. Each circumstance must be subject to an individual risk assessment at the time. If, after conducting a risk assessment of an incident, a Commander or team leader is unsatisfied with the level of risk involved, the response will be delayed until the risk can be reduced or is no longer present.



In providing rising road access to proposed residential development areas, a maximum depth of 0.1 metres over the road centreline is a depth road users will have a reasonable chance of assessing the depth of floodwater and the alignment of the road. This maximum depth over the road centreline does not specifically consider vehicle stability on the trafficable lane, as driving through deeper and/or high velocity floodwater can cause sliding, toppling, or floating, leading to complete loss of vehicle control. It is therefore considered unsafe for vehicles if the hazard categorisation is H2 or greater, as set out in the Australian Rainfall and Runoff Guidelines 2019.

NSW SES does not support any strategy which requires people or vehicles to enter flood water. Driving through floodwater is the number one cause of flood related fatalities⁸, with more than 100 fatalities across Australia since 2002⁹. Near misses are not recorded in these statistics, however as an example, NSW SES attended 3823 flood rescues in 2022, and a significant proportion of these were people trapped in cars after driving into floodwater.

Principle 5 Risks faced by the itinerant population need to be managed.

Principle 6 Recognise the need for effective flood warning and associated limitations.

An effective flood warning strategy with clear and concise messaging understood by the community is key to providing the community an opportunity to respond to a flood threat in an appropriate and timely manner.

As "The site is primarily affected by overland flows from the rainfall runoff across the site area and upstream catchments¹⁰" the only warnings available for the site will be Severe Weather Warnings and Severe Thunderstorm Warnings with little to no warning time available once rainfall has commenced.

Principle 7 Ongoing community awareness of flooding is critical to assist effective emergency response.

Development in a floodplain will increase the need for NSW SES to undertake continuous community awareness, preparedness, and response operations.

Residents and users of the proposed development should be made aware of their flood risk, the <u>Hazards Near Me</u> app (a tool to receive flood warnings as part of the Australian Warning System) and the <u>NSW SES website</u> which contains comprehensive information for the general

⁸ Haynes, et al. 2016. An analysis of human fatalities from floods in Australia 1900-2015, s.l.: Report for the Bushfire and Natural Hazard Cooperative Research Centre

⁹ Peden. 2016. Royal Life Saving Drowning Data: Presentation 15 February 2016, Sydney: Royal Life Saving Australia.

¹⁰ Colliers, 2024, Flood Impact and Risk Assessment Report, Section 2.2 Known Flood Behaviour, Page 12



community about what to do before, during and after floods as well as in-language resources and HazardWatch (NSW SES interactive information and warnings site).





Lauren Templeman Department of Planning and Environment (Parramatta) Locked Bag 5022, Parramatta NSW 2124 Australia Your reference: (PP-2022-3802) Ref-2438 Our reference: SPI20230926000128 9 November 2023

Dear Lauren,

Strategic Planning Instrument - Proposed residential development and cultural centre located near Morgan Road, Belrose for the Metropolitan Local Aboriginal Land Council (Metro LALC)

I refer to your correspondence dated 25 September 2023 inviting the Rural Fire Service (RFS) to comment on the above Strategic Planning document.

The RFS has considered the information submitted and has the following concerns regarding the high bush fire risk expected to be experienced at the location, and the proposed evacuation options.

Risk

The site is in an area that will almost certainly be impacted by significant fire in the future. In addition to a number of localised bush fires, two significant fires have impacted the area in 1979 and 1994.

The proposed residential zoning will be surrounded on all sides by forest and heath formation vegetation, both externally, and within the proposed conservation zones within the site. The *Deferred Lands Strategic Bush Fire Risk Assessment* prepared by Meridian Urban for Northern Beaches Council dated March 2022 shows areas of potential high intensity fire surrounding the site.

The current *Warringah Pittwater Bush Fire Risk Management Plan* dated 2010 lists assets in the location as being at 'Extreme Risk'. The new draft updated exhibited plan dated 13 February 2023 currently shows the site and most of the evacuation routes as 'High Risk', with the intersection of Morgan Road and Forest Way rated 'Highest Risk'.

Evacuation

The development is likely to be difficult to evacuate during a bushfire due to the density and location of the development in relation to the surrounding road network.

The *Transport Assessment* report prepared by JMT Consulting for Metropolitan Local Aboriginal Land Council dated 18 September 2023 does not test realistic bushfire scenarios where certain roads are cut by fire or closed by emergency services.

POSTAL ADDRESS

STREET ADDRESS

NSW Rural Fire Service Locked Bag 17 GRANVILLE NSW 2142 NSW Rural Fire Service 4 Murray Rose Ave SYDNEY OLYMPIC PARK NSW 2127 **RFS.NSW.GOV.AU**

T (02) 8741 5555 F (02) 8741 5550 Traditional significant bush fire attack in this area has come from the north west in both 1979 and 1994. A fire approaching from the north or north west could cut the main evacuation route onto the proposed Forest Way slipway, which is the primary egress route relied upon in the Transport Assessment. The remaining egress options would be along Morgan road to the south east, or onto Forest Way (if not closed) via the emergency exit along Oats place.

Morgan Road is not seen as a safe and viable evacuation route given the close and overhanging forest hazard along both sides for much of its length. Oats place is adjacent to pockets of offsite hazard, and does not have a slip road onto Forest Way, limiting the potential for effective evacuation in this direction.

Within the site, the road design for the proposed S1 and S2 development areas do not include a secondary access road, and the single access road proposed is bordered by vegetation on both sides, which needs to be addressed during the next stage of the process.

Conclusions

Based on the Strategic Principles of Section 4.1 of *Planning for Bush Fire Protection 2019*, given the risk and access concerns detailed above, the site is considered not an appropriate location for the proposal in its current form.

Further traffic modelling must be undertaken to demonstrate safe evacuation times during realistic bushfire scenarios where certain roads are cut or closed by fire.

Compliance with the minimum standards of *Planning for Bush Fire Protection 2019* at the development application stage, as proposed in the Bushfire Protection Assessment prepared by Travers Bushfire and Ecology dated 28 July 2023 (REF: 18CR12), is not an appropriate solution to minimise the risk for high risk sites at the strategic planning stage. Additional bushfire protection measures will need to be proposed to further mitigate the risk to an acceptable level.

Nika Fomin

Nika Fomin Manager, Planning & Environment Services Built & Natural Environment





DOC24/150495 15 October 2024

Mr Murray Jay Manager, Planning Proposal Authority Planning, Land Use Strategy, Housing and Infrastructure Department of Planning, Housing and Infrastructure Locked Bag 5022, Parramatta NSW 2124

Dear Mr Jay,

Patyegarang Planning Proposal (PP-2022-3802)

I refer to the email from the Department of Planning, Housing and Infrastructure (DPHI) dated 22 August 2024 requesting review of updated documents in relation to the Patyegarang Planning Proposal (PP-2022-3802) (the Planning Proposal) Morgan Road, Belrose. The updated documents include:

- Patyegarang Project Urban Design Framework prepared by Cox dated August 2024.
- Patyegarang Project Draft Development Control Plan prepared by Cox dated August 2024.
- Letter to Juliet Grant of Glyde Consulting titled *Re: Response in respect of advice from Director, Planning Proposal Authority (Louise McMahon) 3rd July 2024* from John Travers of Travers Bushfire & Ecology dated 13 August 2024.
- Letter to Juliet Grant of Glyde Consulting titled *Re: Morgans Road, Belrose* from Dr Grahame Douglas of Travers Bushfire & Ecology dated 12 August 2024 with Ref: 18CR39.

I also refer to the RFS response letters dated 9 November 2023 (our reference: SPI20230926000128) and 14 May 2024 (our reference: R22/342(001)).

The NSW Rural Fire Service (RFS) acknowledges the NSW Government commitment to address the present housing shortage and where possible the RFS will do what it can to assist in this regard. However, in this instance the RFS cannot support the Planning Proposal.

The RFS advises that it does not support the Planning Proposal in its current form as:

- it has not been demonstrated that the proposed rezoning can meet the strategic principles of section 4 of *Planning for Bush Fire Protection* (PBP) 2019, including the ability to safely support the proposed population growth and density arising from exposure to high bush fire risk
- the high density (200m² lots) to the north of the proposed rezoning will contribute to the vulnerability of the housing in the event of bush fire due to the small lot sizes.
- it does not meet the objectives Local Planning Direction 4.3 (b) by discouraging the establishment of incompatible land uses in bush fire prone areas.
- it does not contain provisions for two-way access roads which links to perimeter roads required by section 5.3.2 of PBP, 2019 and Local Planning Direction 4.3(3)(c)
- the primary evacuation route from the proposed rezoning via Morgan Road could push people to exit past or through bush fire prone vegetation.

Bush fire behaviour and bush fire risk modelling

As identified in the RFS correspondence dated 14 May 2024, the draft Bush Fire Risk Management Plan prepared by the Northern Beaches Bush Fire Management Committee identifies the broader area as subject to high bush fire risk.

POSTAL ADDRESS

STREET ADDRESS

NSW Rural Fire Service Locked Bag 17 GRANVILLE NSW 2142 NSW Rural Fire Service 4 Murray Rose Ave SYDNEY OLYMPIC PARK NSW 2127 **RFS.NSW.GOV.AU**

T (02) 8741 5555 F (02) 8741 5550 The Strategic Bushfire Study prepared by Travers Bushfire & Ecology dated 14 February 2024 identifies a number of high bush fire risk scenarios relating to bush fire burning within the site and outside the site from the northeast.

Additional bush fire risk modelling comparing bush fire risk to residential dwellings currently in place and the bush fire risk to residential dwellings in the event the rezoning going ahead has shown that bush fire risk increases to the highest level for the proposed development area because of increasing population density in the locality.

The proposed development is surrounded by Dry Sclerophyll Forest with dense shrubland. In the event of a fire during dangerous fire weather this vegetation can facilitate high intensity fast-moving fires. In September 2024 under moderate fire danger a fire rapidly spread taking between 1-2 hours to spread from Oxford Falls to the Beacon Hill Cromer interface, prompting emergency warnings and a major firefighting response.

Under more severe weather conditions we can expect faster and more intense impact on the proposed Patyegarang urban interface. This impact exposing new members of the community to a significantly higher risk with potential for short timeframes to react to any new ignition.

Housing density and increasing population

It was observed during the 2019/20 bush fires even with site-based bush fire protection measures (including asset protection zones), building impact (loss and damage) still occurred. Analysis suggested that house-to-house ignition was a significant factor, and that this was affected by lot density. In this case study, the average lots size was greater than 600m². In the event of bush fire impact, the RFS is concerned the proposed 200m² and 450m² lot sizes will contribute to the vulnerability of the housing due to the density of the proposed lot sizes.

The development is within an area of high bush fire risk where density of existing development may cause evacuation issues for both existing and new occupants. The RFS is concerned that a fire approaching from the north could cut the main evacuation route onto the proposed Forest Way slipway, which is the primary egress route relied upon in the Transport Assessment report prepared by JMT Consulting dated 8 September 2023. The remaining egress options would be along heavily forested Morgan Road to the southeast, or onto Forest Way (if not closed) via the emergency exit along Oats Place. In addition, the transport study does not consider the behaviour of drivers unfamiliar with conditions or roads affected by flames or high density smoke.

The Planning Proposal relies on the assumed but non-committed provision of a slip road, which is beyond the boundaries of the subject site and reliant upon others for funding, construction and ongoing maintenance.

Access and egress indicative layout plan

Based on the indicative site layout the road design for the proposed S1 and S2 development areas in the south west of the development does not include a required secondary access road, and the single access road proposed is bordered by vegetation on both sides and on this basis the RFS considers the planning proposal does not meet the access requirements required by section 5.3.2 of PBP, 2019 and Local Planning Direction 4.3(3)(c).

While I understand that this decision will disappoint many, the RFS remains committed to working with the Department of Planning, Housing & Infrastructure in terms of how our concerns in respect of the Planning Proposal might be addressed.

If you have any questions or wish to discuss this matter, please contact the Susan Fox, Manager Development Planning and Policy, on 0458 715 952 or via email susan.fox@rfs.nsw,gov.au.

Yours faithfully,

Kyle Stewart Deputy Commissioner 28/10/2024



Our ref: DOC23/891068 Your ref: PP-2022-3802

Lauren Templeman Specialist Planning Officer Planning Group Department of Planning and Environment 4 Parramatta Square, 12 Darcy Street PARRAMATTA NSW 2150

21 November 2023

Subject: Consultation and exhibition - Planning Proposal Patyegarang (PP-2022-3802)

Dear Lauren

I refer to the email received by the Environment and Heritage Group (EHG) via the planning portal on 25 September 2023 referring the Patyegarang planning proposal, Morgan Road, Belrose for consultation under section 3.34(2)(d) of the *Environmental Planning and Assessment, Act* 1979.

According to the Planning Proposal Patyegarang Project by Gyde Planning dated July 2023, the planning proposal seeks to:

- transfer the site from Warringah Local Environmental Plan 2000 to Warringah Local Environmental Plan 2011 and implement standard instrument zones
- secure dual occupancies as an additional permitted use within the R2 low density residential zone
- secure additional permitted uses within the RE2 Private Recreation zone to enable environmental management works, stormwater services, asset protection zones (APZs) and bushfire works, utilities and servicing works where required
- introduce maximum building heights (8.5 metres)
- introduce a range of small, medium to large residential lot sizes, and
- manage an appropriate number of dwellings based on the site capacity.

In its previous pre-lodgement comments to DPE Planning on this planning proposal dated 29 April 2022, EHG raised several issues including that "in its current form the proposal fails to adequately consider and avoid the biodiversity values that exist within the site". It is noted that the exhibited planning proposal does not reference EHG's pre-lodgement comments.

EHG has reviewed the exhibited planning proposal and provides detailed comments on biodiversity and flood risk management issues in Attachment 1.

Regarding biodiversity, EHG remains of the view that the planning proposal has failed to demonstrate application of the avoid and minimise framework established under the *Biodiversity Conservation Act 2016*. The Preliminary Biodiversity Development Assessment Report (BDAR) is an incomplete report and requires significant revision to provide a complete biodiversity assessment for the proposal. In this regard, the current BDAR should not be relied on for strategic planning



purposes until it is further informed by adequate investigation of impacts and further avoidance of the site's biodiversity values. Insufficient information has therefore been provided to support the planning proposal including the proposed zone boundaries and structure plan.

Regarding flood risk management, the planning proposal seeks to alter a provision that affects flood prone land. EHG considers that insufficient information has been provided for the planning proposal and further information should be provided at this stage of the planning process.

Considering the above, EHG does not support the planning proposal and recommends that the concerns and issues raised in this submission are addressed.

Please also note that given the identified deficiencies and inadequacies, EHG will not be commenting on the Patyegarang Project Draft Development Control Plan in this submission. Once the planning proposal has been revised to address the issues and concerns raised in this submission, EHG will review the draft DCP.

Should you have any queries regarding this matter, please contact Susan Harrison, Senior Team Leader Planning via <u>Susan.Harrison@environment.nsw.gov.au</u>.

Yours sincerely,

A.

Louisa Clark Director Greater Sydney Branch Biodiversity and Conservation



Attachment 1: EHG comments on Planning Proposal Patyegarang (PP-2022-3802)

Pre-lodgement consultation

On 29 April 2023, EHG provided DPE Planning detailed pre-lodgement comments on this planning proposal (Attachment 2). EHG's submission identified a range of issues with the proposal including that "in its current form the proposal fails to adequately consider and avoid the biodiversity values that exist within the site".

EHG notes that the Department's Gateway Determination Report PP-2022-3803 dated June 23 makes no reference to EHG's pre-lodgement comments and concerns about the draft planning proposal.

The exhibited planning proposal package including the Planning Proposal Patyegarang Project by Gyde Planning dated July 2023 (Planning Proposal report) also makes no reference to EHG's prelodgement comments. Instead, Section 6.4.2 and Appendix 5 in the Planning Proposal report advise that a project presentation was made to EHG on 14 September 2022. It should be noted that the briefing with EHG was held on 11 March 2022, not 14 September 2022.

Biodiversity

Preliminary Biodiversity Assessment Development Report

The following comments are provided in relation to the Preliminary Biodiversity Development Assessment Report (BDAR). These comments should be read in conjunction with EHG's previous submission the requirements of which have largely not been incorporated into the latest information.

- The operational and construction footprint and therefore the extent of the Subject Land, as defined in the Biodiversity Assessment Method (BAM), is likely to be an underestimation given the full extent of impacts from the proposal have not been considered.
- Given the extent of the proposed rezoning, there are likely to be indirect impacts beyond the footprint of the proposed R2 Low Density Residential and RE2 Public Recreation zone development boundaries. In this regard, the identification of the Subject Land, must be incorporate the full extent of both direct and indirect impacts.
- In Appendix C "Applying the description (2011 Determination)" table there are several rows which indicate that the characteristics of the Subject Land are such that the occurrence of Duffys Forest is possible. There is one section that strongly indicates that Duffys Forest occurs within the Subject Land given that the characteristics relate to the floristic and location specifications of the threatened ecological community (TEC). Reference to the Smith and Smith (2000) method does not provide significant assistance to determine whether the Duffys Forest TEC occurs on the Subject Land. The conclusions provided from the Smith and Smith method applied within the BDAR was created from 0.4ha plots which is not commensurate to the Smith and Smith (2000) method which uses larger sites. In regard to the identification of the community, the Final Determination states "Diagnostic species provide a guide to identification of the community, but care should be taken in the



application and interpretation of diagnostic plant species because of sampling limitations; the reduction in species diversity in degraded sites; and the fact that some species may only be present at a site at some times as a part of the soil seedbank or as dormant buds/tubers." In this regard, the use of the Smith and Smith (2000) diagnostic test may not result in an accurate understanding of the presence or absence of Duffys Forest within the Subject Land. The justification for the exclusion of Duffys Forest TEC is inadequate to conclude that it does not occur given the reliance on the Smith and Smith (2000) diagnostic method.

- The Smith and Smith (2000) report states "Compared with Sydney Sandstone Ridgetop Woodland, the normal vegetation community of Hawkesbury Sandstone ridges, stands of Duffy's Forest vegetation tend to have a taller, denser tree layer and a grassier understorey" and "No sites of low open-forest or open-woodland were found, although one area of low woodland was encountered on the TAFE land at Belrose, and one area of tall open-forest at Sir David Martin Reserve, South Turramurra (neither site was sampled by quadrats)" demonstrating some variation within the TEC which has not been accounted for within the justification in the BDAR for this TEC.
- The BDAR states that "Current regional vegetation maps (Sydney Metro Area, 2016; & SVTM_NSW_Extent_PCT, 2022) do not map any part of the subject property as a PCT associated with Duffys Forest EEC", however, Smith and Smith indicate that there are instances of Duffys Forest within Belrose and the SVTM also shows Duffys Forest within close proximity to the Subject Land indicating that, if the floristic composition and location aligns with that of the Final Determination for Duffys Forest then the likelihood of it occurring within the Subject Land is high.
- Discussion regarding the identification of Coastal Upland Swamp in the Sydney Basin Bioregion endangered ecological community (EEC) on the Subject Land lacks details which should be included to be able to determine whether the community is present on the site. Given Coastal Upland Swamps occur in areas where trees "may be present as scattered individuals or clumps of mallee or arborescent eucalypts", a map of the waterlogged portions of the site and descriptions of the trees present in this area would assist. The BDAR states that "Numerous small ephemeral drainage lines feed into Snake Creek, many of which support slow draining soaks, small pools, and hanging swamps." The justification for the assessment of the presence or absence of the Coastal Upland Swamp in the Sydney Basin Bioregion EEC is inadequate given the Subject Land characteristics and the descriptions within the Final Determination.
- Given the concerns raised over the identification of the plant community types (PCTs) on the Subject Land, the ecosystem credit species (ECS) and species credit species (SCS) may require updating in accordance with accurate identification of PCTs.
- Table 15 within the BDAR lists survey times required by the Threatened Biodiversity Data Collection (TBDC) for each threatened species. There are several threatened flora species which were not surveyed within the required survey period including *Camarophyllop sis kearneyi*, *Hygrocybe anomala* var *ianthinomarginata*, *Hygrocybe aurantipes*, *Hygrocybe austropratensis*, *Hygrocybe collucera*, *Hygrocybe griseoramosa*, *Hygrocybe lanecovensis*,



Hygrocybe reesiae and Hygrocybe rubronivea. The Department's webpage on <u>Biodiversity</u> <u>experts | NSW Environment and Heritage</u> states, Surveys for species credit species need to be conducted at the optimum time for detection. Survey months for species are automatically populated in the Biodiversity Assessment Method Calculator (BAM-C) via the Threatened Biodiversity Data Collection (TBDC). These months were selected assuming 'average' conditions, and that the survey is undertaken using an appropriate method, time of day and conditions (based on relevant survey guidelines).

You can adjust survey timing if, for example, natural disturbances or climatic events are likely to alter the months when the species is most likely to be found. Sometimes additional information about survey times is provided in the 'General Notes' field of the TBDC: for example, 'shoulder' months, differences in survey season during particular environmental conditions or across the species distribution.

Also available for flora-specific survey is the Flora Species with Specific Survey Requirements, which you can find on the BAM-C page. If you vary your survey time from those in the BAM-C make sure you document and justify this in the Biodiversity Assessment Report. For more information see page 38 of the Biodiversity Assessment Method Operational Manual – Stage 1."

Adequate justification for alteration to the survey times or a report from a recognised "expert" has not been provided.

- In addition to the above species surveyed outside of the required survey period, there are several species listed in Table 15 that were surveyed both within and outside of the required survey period. It is unclear from the BDAR which survey effort hours are within the correct survey period and so it cannot be determined if the survey effort within the correct time periods are adequate or if the survey was largely undertaken in the incorrect survey time periods. The surveys undertaken outside of the required survey period should be disregarded unless an appropriate justification can be provided. The BDAR should show the extent of the survey efforts within the correct time periods.
- Table 19 describes caves and crevices present on the Subject Land which may be used by microchiropteran bats such as the Little Bent-wing Bat and Eastern Bent-wing Bat and the Rosenberg's Goanna and Spotted-tailed Quoll. Adequate mapping and investigation of these habitat types and their potential impacts has not been provided within the BDAR.
- SCS surveys for the threatened amphibians Red-crowned Toadlet, Green and Golden Bell Frog and Giant Burrowing Frog were required to be undertaken. Appendix D within the BDAR shares details regarding survey methods. The dedicated amphibian surveys made assumptions regarding unsuitable habitat on portions of the site, but provided no justification as to why areas were unsuitable habitat for survey. Surveys are required to be undertaken in accordance with the NSW Survey Guide for Threatened Frogs.
- Section 7.1 of the BDAR describes how biodiversity values within the Subject Land were prioritised for avoidance. While the prioritisation describes avoiding known habitat for threatened flora and fauna, the proposal impacts on a significant amount of habitat. Impacts are proposed to known threatened species habitat widely across the Subject Land, however



there are avoidance measures proposed for some areas of threatened species habitat in the areas mapped as "Conservation Zone" (Figure 3 of the BDAR). EHG considers areas mapped as "retained vegetation" have not been avoided given the proposed R2 and RE2 zoning and associated permissible uses. Future construction and land use activities within or adjacent to these areas will have direct and indirect impacts affecting vegetation retention. It is considered that the proposal has not adequately accounted for Biodiversity Values within the Subject Land and has not adequately avoided and minimised those impacts. It should be noted that the use of the R2 and RE2 zones is also discussed below under the zoning regime section of this response.

- The proposed development layout indicates minimal buffers will be provided for riparian corridors. Avoidance of further impacts through increasing riparian buffers to provide more functional biodiversity corridors is required.
- It is difficult to understand how impacts have been calculated for the credit offset requirement and where full or partial loss have been calculated for offsets without adequate mapping showing where they have been applied. Asset Protection Zones (APZs) are not considered a compatible land use within conservation areas and should be wholly contained within development areas. In fully vegetated locations, the institution of APZs are likely to change the PCT integrity to the extent that it may not meet the benchmark requirements to be classified as the community. In this regard, future vegetation integrity scores of 0 must be applied to all proposed development areas, inclusive of APZs.
- The BDAR reports that there are uncertain impacts at this "high level planning stage" in section 8.5. There are further obvious impacts that have not been accounted for and for which can be readily identified. EHG expects consideration of all potential impacts arising from the future development. This includes impacts to all areas within the proposed RE2 and R2 zones including the "retained vegetation".
- Biodiversity impacts from infrastructure upgrades for surrounding services and road networks outside of the site boundaries must be considered in the biodiversity assessment for the proposal.
- The BDAR should consider whether there are likely to be indirect impacts to the proposed "Conservation Zone" (Figure 3) and how this land will be managed into the future considering the proposed increase in the intensity of use of the Subject Land. Not all impacts have been accounted for within the BDAR which makes it difficult to provide the required avoid and minimise measures required by the BAM. See section 8.5 and 10.2 in the BDAR. Details relating to the mechanisms that will be relied upon to conserve the areas proposed for conservation are required in addition to an understanding of the impacts. This is a relevant consideration based on the extent of development that will be facilitated by the proposal. EHG does not support the assumption that there will be no impacts to the "Conservation Zone".
- Given the concerns raised in relation to the identification of the correct PCTs and associated TECs on the Subject Land, the considerations of which Serious and Irreversible Impact (SAII)



entities may be present or utilising habitat within the Subject Land and hence any information provided in relation to the assessment of SAII may be incomplete.

• The ECS and SCS are likely to be underestimations given EHG's concerns with identifying direct, indirect and prescribed impacts as described above.

It is considered that in its current form the proposal has failed to demonstrate application of the *Biodiversity Conservation Act 2016* avoid and minimise framework.

The Subject Land is fully vegetated and contributes to larger ecological corridors beyond the Subject Land's boundaries. The native vegetation on Subject Land includes numerous records of threatened species and ecological communities, and their habitats. The BDAR has failed to adequately justify its assessment of the PCTs and any associated TECs which in turn undermines all threatened species assessments on the entirety of the Subject Land.

With consideration to the proposed structure plan and topography of the site, EHG expects all areas identified for potential development, including areas mapped as "retained vegetation" and APZs would need to be cleared or partially cleared of native vegetation to achieve the development outcomes as proposed. The BDAR does not reflect the full extent of the native vegetation removal required within the areas of retained vegetation which are proposed R2 and RE2 zones, and APZs.

EHG previously recommended that at a minimum, assessment of biodiversity values and impacts be undertaken through application of stage 1 and elements of stage 2 of the BAM. This approach will ensure biodiversity outcomes are optimised and future development can proceed with greater certainty. It will also allow EHG to adequately consider any proposed biodiversity impacts.

The planning proposal will allow for R2 and RE2 zones across the locality which will increase the intensity of the use over the Subject Land. Avoiding impacts on biodiversity values should not be deferred to the future development stage but should be addressed as part of the planning proposal to maximise the integration of conservation measures with other aspects of the planning proposal outcomes including the conservation of riparian corridors, planning of infrastructure and roads, flood management, and lot patterns.

The BDAR lacks adequate consideration of the full extent of impacts to native vegetation and Biodiversity Values across the Subject Land and as such does not provide the details necessary to be able to draw conclusions in relation to biodiversity impacts. Therefore, the BDAR does not provide the information necessary to develop a planning proposal responsive to these constraints.

The proposal does not adequately avoid and minimise impacts by appropriately locating and designing the proposal and reducing the scale of the development in accordance with Section 7 of the BAM.

Section 10.2 of the BDAR it states, "there are no impacts that do not require further assessment". The BDAR is an incomplete report and requires significant revision to complete a biodiversity assessment for the proposal. In this regard, it is recommended that the current BDAR should not be relied on for strategic planning purposes until it is further informed by adequate investigation of impacts and further avoidance of the sites Biodiversity Values.



Zoning regime

RE2 Private Recreation and R2 Low Density Residential

As discussed above, Figure 3 in the BDAR shows areas mapped as 'Retained vegetation' outside of the conservation zone. The Planning Proposal report draft Structure Plan (Figure 6) also identifies these areas of 'Retained vegetation' outside the proposed conservation area. The Planning Proposal report zoning map (Figure 26) shows these 'Retained vegetation' areas within the RE2 (with additional permitted uses) and R2 zones.

Regarding the use of the R2 and RE2 zone, the Planning Proposal report states:

The revised planning proposal applies an RE2 zone to the northwest portion of the Snake Creek riparian corridor and parts of its tributaries. This reflects the proponent's intention to retain vegetation within these areas and enable their ongoing management and enjoyment by future and existing residents. The planning proposal seeks to include Additional Permitted Uses (APU) within these areas to enable works to enable the servicing and utilities of the adjoining R2 Low Density Residential zone to occur within these areas. This provision is to purely ensure that the RE2 zone can be provided without disconnecting the R2 Low Density residential zones roads and servicing across these areas. Environmental management works, bushfire works and APZs and stormwater services are also sought as additional permitted uses within the RE2 zone. The majority of these works would be exempt development under the State Environmental Planning Policy (Transport and Infrastructure) 2021 if undertaken on or behalf of a public authority, i.e., Council and Sydney Water.

EHG does not support the proposed approach of zoning the Snake Creek riparian corridor and its tributaries/ natural ephemeral flow paths, retained native vegetation and threatened species habitat to be protected as RE2 and R2. The broad range of permitted uses in the R2 and RE2 zones (including the additional permitted uses the planning proposal seeks to introduce) are inconsistent and incompatible with the retention of native vegetation and protection of the high biodiversity values present including threatened species habitat and the riparian corridor.

EHG recommends that the high biodiversity present on the Subject Land, including the entirety of the Snake Creek riparian corridor and its tributaries/ natural ephemeral flow paths as well as native vegetation and threated species habitat to be retained and protected should be zoned C2 Environmental Conservation to ensure the conservation of these areas. The objectives and permitted uses in the C2 zone in the Warringah LEP 2011 are considered compatible and consistent with the conservation of the high biodiversity values present and will afford long term protection.

C2 Environmental Conservation

EHG notes that the Planning Proposal report states that "The revised proposal makes no changes to the proposed C2 Environmental Conservation Area".

It is unclear how conservation lands will be protected in perpetuity, owned and managed. Details relating to the mechanisms that will be relied upon to conserve the proposed conservation land are required.



Perimeter roads or similar buffers should be provided between development and conservation zones. Furthermore, the pathways proposed in the conservation areas in Figure 23 Open Space Structure Plan in the Planning Proposal report is inconsistent with conservation outcomes.

Asset Protection Zones

The Planning Proposal Report states "The APZs are related to the residential development and are intended to be predominately provided within the R2 zoned land and boundaries of the proposed RE2 zones. The detailed requirements and extent of the APZs will not be finalised until the development application stage to respond to the subdivision and proposed building siting and use". As previously advised, the extent of APZs will be a significant factor in the level of vegetation removal and biodiversity impacts that occur. EHG expects that the full extent of impacts from the APZs will be included in the planning proposal.

Ministerial Direction

The Ministerial Direction 3.1 Conservation zones requires that "A planning proposal must include provisions that facilitate the protection and conservation of environmentally sensitive areas".

As discussed in this submission, EHG considers that the planning proposal contains an inadequate assessment of biodiversity values and in its current form the proposal has failed to demonstrate application of the avoid and minimise framework. Furthermore, the RE2 and R2 are not considered appropriate zones to retain, conserve and protect the high biodiversity values present given the broad range of uses permitted. EHG does not consider that the direction has been adequately addressed.

Flood Risk Management

Summary

The planning proposal seeks to alter a provision that affects flood prone land. EHG has reviewed the supporting information for the planning proposal and considers that insufficient information has been provided. Further information should be provided at this stage of the planning process prior to any decision on the planning proposal.

Consultant Qualifications

It is recommended that a consultant specialised in floodplain management completes the required assessment. EHG refers to the requirements for consultant qualifications as stated in Section 1.4 of the Flood Risk and Impact Assessment (FIRA) Guideline. Those scoping, undertaking, and reviewing a FIRA should typically include an appropriately qualified professional engineer. They should have experience and advanced skills in catchment hydrology, floodplain hydraulics and have a good working knowledge of flood risk management practices and guidance in New South Wales. Flood risk management is a separate discipline to stormwater management. Experience with other similar projects suggests that a flood risk management specialist working for the applicant is critical to avoid a protracted assessment process.



Ministerial Direction

The Planning Proposal report Appendix 4 outlines consistency with the Ministerial Directions under Section 9.1 of the *Environmental Planning and Assessment Act 1979*. Regarding Direction 4.1 Flooding, the report states "The Site is not located within flood prone land. Accordingly, Direction 4.1 is not applicable." EHG notes that the Flood Impact and Risk Assessment Report shows the land as flood affected. Therefore, consistency with the Ministerial Directions must be demonstrated. The flood planning area will need to be established.

Flood Impact and Risk Assessment Report

A FIRA needs to be prepared in accordance with the NSW Government's Guideline <u>Flood Impact and</u> <u>Risk Assessment Guideline</u> to support this planning proposal. The content of the FIRA should be in general accordance with Tables 5 and 6 of Attachment A of the guideline.

Modelling

Hydrological and hydraulic modelling has been undertaken of the 5% AEP, 1% AEP, 0.2% AEP, 0.5% AEP and PMF events for the pre and post development scenarios. However, EHG raises concerns over the accuracy of the modelling and notes that the methodology needs to be revised before EHG's advice can be provided. EHG recommends that a flood risk management specialist prepare the relevant modelling and reporting.

The Flood Impact and Risk Assessment Report states that "The stormwater volume retention from the proposed water quality and quantity features was modelled by increasing the initial loss of the developed areas, and the site development area was represented by increasing the impervious area of these catchments." This is not considered an appropriate methodology for flood modelling nor stormwater detention modelling. The proposed measures to mitigate peak flow impacts, such as stormwater detention, must be explicitly modelled and not simply using an increased initial loss. The hydrographs shown in the report are not indicative of stormwater detention measure outflows and do not correctly show the likely impact of changes to site hydrology. Hydrographs should be presented of the existing case, developed case without detention measures and developed case with detention measures. Note that it is not generally considered relevant or necessary to model any water quality treatment measures in flood modelling.

Further details are required, including the percentage imperviousness adopted in each catchment under existing and developed conditions. The flood impact mapping will need to be recalculated after reasonable modelling of the proposed development including stormwater detention measures has been completed. It is not considered appropriate for all area of allotments aside from the roof and driveway to be considered as pervious. The overall fraction impervious for the proposed residential areas must be calculated and presented to ensure it is reasonable.

Given that there is no available flood study covering the site from Council and the lack of available calibration data, reasonable efforts must be made to validate the modelling. This could include comparison with a rainfall on grid model. Relevant guidance should be followed in validating both hydrological and hydraulic modelling.

Department of Planning and Environment



It is recommended that the hydraulic model is extended downstream to include Oxford Falls Road and that a suitable frequent event such as the 1 event per year is used to map flooding over the road. It is further recommended that the hydraulic model is extended a suitable distance upstream of the site for the two flow paths at the west to enable a due comparison of flood behaviour and assessment of flood impacts. The eastern flow path appears to terminate around Morgan Road and should be extended to ensure the full extent of the flow path across the site has been mapped. Flow depths greater than 0.1m should be included on the mapping.

The use of a roughness (Manning's n) value of 0.05 for residential areas needs further explanation and justification. It is unclear for which area this applies and if it is a composite value for buildings, yards and driveways.

Flood Impacts

The Flood Impact and Risk Assessment Report has not adequately demonstrated the flood afflux of the pre and post development scenarios. Tables 1 and 2 of the Flood Impact and Risk Assessment Report both show the flows would increase, which is expected to lead to flood impacts. The flood impact mapping will need to be recalculated after reasonable modelling of the proposed development has been completed, including stormwater detention measures.

Frequent Flooding of Transport Route

The route to Wakehurst Parkway via Oxford Falls Road is frequently flooded and impassable at both Oxford Creek and Middle Creek. This should be considered in traffic and transport investigations and any consideration of emergency evacuation. Ideally, the Flood Impact and Risk Assessment Report should model and map flood affectation at Oxford Creek, especially smaller events. Council may be able to provide information on the Middle Creek crossing.

Stormwater management

The provided stormwater management report is a very high-level document that does not demonstrate adequate consideration of a strategy to mitigate the impacts of development on stormwater and flood flows. Consideration should be given to the locations of stormwater detention basins, noting that bioretention swales and basins are unlikely to meet the requirement to reduce peak flows from all storm events. In particular, the larger events must be modelled in a suitable hydrologic software package.

Proposed Earthworks Strategy

The proposed earthworks strategy involves the following per the Flood Impact and Risk Assessment Report:

- "slightly lowering the flow paths to channelise the overland flow", and
- "all proposed development areas and roads would be filled to an elevation that is above the PMF event".

NSW GOVERNMENT

Department of Planning and Environment

EHG queries this approach including the necessity of raising land above the PMF and the lowering of flow paths rather than provision of a suitable design cross section. EHG queries how this can be consistent with maintaining existing vegetation across the site.

End of Submission



DOC24/258779

Mr Rohan Johnston Senior Manager Aboriginal Planning Concierge NSW Department of Planning, Housing and Infrastructure Locked Bag 5022 PARRAMATTA NSW 2124

By email: rohan.johnston@dpie.nsw.gov.au

23 May 2024

Dear Mr Johnston

I refer to the email dated 3 April 2024 received by the Biodiversity, Conservation and Science Group (BCS) requesting a review of the *Response to Key Submissions – Patyegarang Planning Proposal PP-2022-3802 – Post-exhibition* prepared by Gyde and dated 22 December 2023 (Proponent Response to Key Submissions) on the Patyegarang Planning Proposal, Morgan Road, Belrose.

BCS has reviewed the Proponent Response to Key Submissions and the following supporting biodiversity and flood documents:

- Preliminary Biodiversity Development Assessment Report Proposed zoning of deferred lands, Patyegarang Project prepared by Hayes Environmental and dated 18 February 2024 (Preliminary BDAR)
- Planning Proposal Patyegarang (PP-2022-3802) response to DPE (EHG) submission dated 21 November 2023 prepared by Hayes Environmental and dated 22 December 2022 (Hayes response)
- Proposed zoning of deferred lands, Patyegarang Project Preliminary Biodiversity Development Assessment Report Peer Review prepared by Biosis and dated 28 February 2024
- Response to Flooding Related Comments from Environment and Heritage Group (EHG)
 Regarding Planning Proposal Patyegarang (PP-2022-3802) prepared by Colliers
 International Engineering & Design dated 16 January 2024 (Flood response).

BCS provided detailed advice at the pre-lodgement and public exhibition stages raising significant concerns about the biodiversity impacts as well as flood risk management issues. However, I note that the Proponent Response to Key Issues and supporting biodiversity and flood documents have failed to adequately address BCS's previous advice.

BCS maintains the position that inadequate assessment and information has been provided to support the Planning Proposal including the extent of the proposed urban development zone, which will have significant impacts to native vegetation and threatened species and its habitat.

Considering the above, BCS objects to the Planning Proposal and recommends the proponent be advised to re-submit an amended planning proposal that:

- demonstrates application of the avoid and minimise framework established under the Biodiversity Conservation Act 2016 (BC Act) and the Biodiversity Assessment Method (BAM). This will require a reduction in the scale of proposed development zones (R2 and RE2) and an increase in the extent of area zoned C2 for conservation purposes
- addresses the flood risk of the proposed development in accordance with the NSW Flood Risk Management Manual 2023 and demonstrates consistency with the Local Planning Ministerial Direction 4.1 Flooding.

BCS provides comments on biodiversity and flood risk management below, and detailed comments on the proponent's post-exhibition response in Attachments A and B respectively.

Biodiversity

The protection and conservation of the significant biodiversity values across the site was established in the key design principles of the Northern Beaches Aboriginal Land Development Delivery Plan (DPE, February 2022). BCS notes that the objectives of the Planning Proposal per section 1.2 of the Gateway Determination Report – PP-2022-3802 include to "conserve and protect biodiversity and important environmental values of the land".

BCS considers that the key design principles and objective have not been realised by the Planning Proposal. BCS recommends strategic mapping of high biodiversity values across the site be used to indicate where avoidance of high biodiversity values can be focused for conservation purposes. The proponent should design their proposal to ensure the persistence of the threatened entities that reside within the site and thereby conserving and protecting biodiversity and important environmental values.

Avoid and minimise impacts

The Planning Proposal has not been amended post-exhibition in response to BCS concerns regarding avoidance and minimisation of impacts to biodiversity values across the site. These matters have not been adequately addressed and remain unresolved.

The extent of the proposed C2 Environmental Conservation zone is unlikely to be able to support the conservation of biodiversity values on the site. Further, the justification for the range of impacts in the Proponent Response to Key Submissions and supporting documents fails to adequately demonstrate how avoidance and mitigation measures have been incorporated in the Planning Proposal accordance with the BAM. In this regard, the Planning Proposal does not comply with the requirements of BAM or the objectives of the Planning Proposal and the key design principles of the Northern Beaches Aboriginal Land Development Delivery Plan.

Ministerial Direction 3.1 Conservation zones

The Proponent Response to Submissions and the supporting biodiversity documents have not adequately addressed BCS's previous comments. BCS maintains the view that Direction 3.1 has not been adequately addressed.

Zoning regime for conservation land

The Proponent Response to Key Submissions and the supporting biodiversity documents have not adequately addressed BCS's previous comments. As previous advised, BCS does not support the proposed RE2 Private Recreation and R2 Low Density Residential zoning of the Snake Creek riparian corridor and its tributaries/natural ephemeral flow paths, retained native vegetation and threatened species habitat to be protected. The broad range of permitted uses in the R2 and RE2 zones (including the additional permitted uses the Planning Proposal seeks to introduce) are incompatible with the retention of native vegetation and protection of the threatened species habitat and the riparian corridor.

BCS reiterates its recommendation that high biodiversity values present on the site be zoned C2 Environmental Conservation to ensure the conservation of:

• the entirety of the Snake Creek riparian corridor and its tributaries/natural ephemeral flow paths

• native vegetation and threatened species habitat to be retained and protected.

The objectives and permitted uses in the C2 zone in the Warringah Local Environmental Plan (LEP 2011) are considered compatible and consistent with the conservation of the high biodiversity values present and will afford long term protection.

Flood Risk Management

BCS remains concerned about the flood risk associated with the proposed development. As detailed in Attachment B, limited consideration has been given to the previous issues that BCS has raised, and the Proponent Response to Key Submissions states that an additional flood assessment was completed however this has not occurred.

BCS maintains the position that the Planning Proposal is inconsistent with Ministerial Direction 4.1 Flooding and the NSW Government's Flood Risk Management Manual 2023.

Consistency with Local Environmental Plan Making Guidelines

Part 3 of the Local Environmental Plan Making Guideline (DPE, August 2023) – Justification of strategic and site-specific merit includes the following advice:

- This section must provide a detailed assessment of the proposal's strategic and site-specific merit to determine whether the planning proposal should be supported. This is the most important section of the planning proposal and should integrate findings from supporting studies and investigations and provide justification for the proposed amendments to the LEP (p.72)
 - Does the proposal give regard and assess impacts to: the natural environment on the site to which the proposal relates and other affected and (including known significant environmental areas, resources or hazards) (p.73).

In addition, Attachment C Supporting Technical Information of the LEP Guidelines includes the following requirements:

- The information and supporting technical studies that will be required to support the planning proposal will be confirmed at the pre-lodgement stage with input from authorities and government agencies (as relevant) and detailed in the planning proposal requirements issued by council or the Department (p.1)
- A flood impact and risk assessment may be required when the land to which the planning proposal relates is affected by flooding, affects the flow of water, is identified in flood prone land or flood liable land or as defined in legislation (p.4)
- The proposed scope and methodology for the biodiversity assessment should be confirmed at the pre-lodgement stage, in consultation with council and [DCCEEW Biodiversity, Conservation and Science] (p.8).

As discussed above, the Proponent's Response to Submissions and supporting biodiversity and flood documents have not adequate addressed BCS's requirements at the pre-lodgement stage and advice at exhibition stage regarding biodiversity and flood risk management impacts. The Planning Proposal has not been informed by adequate assessments to justify the proposed LEP amendment.

BCS does not support the proposed approach of deferring unresolved issues to development application stage. The issues BCS has raised should be addressed upfront as part of the Planning Proposal to ensure adequate consideration of issues and impacts consistent with the LEP Guidelines.

If you have any further questions about this issue, please contact the Greater Sydney Planning Team via rog.gsrplanning@environment.nsw.gov.au.

Yours sincerely

Ah.

Louisa Clark Director Greater Sydney Biodiversity, Conservation and Science

Issue	Hayes response	BCS Comment	
A. Adequate demo	A. Adequate demonstration of the avoid and minimise, then offset hierarchy		
	 The Patyegarang project is the culmination of a lengthy and comprehensive avoid and minimise process, as follows: 1. The MLALC seek an income stream to fund the goals identified in their Community Land Business Plan. 2. Consideration of funding options by MLALC identified that a land development project could achieve this goal, noting that the MLALC own 	1. The Biodiversity Assessment Method 2020 (BAM) requires applicants to document the reasonable measures taken by the proponent to avoid or minimise clearing of native vegetation and threatened species habitat during proposal design. Areas providing habitat for TECs or threatened species or corridors between habitats should be avoided to comply with the avoid and mitigate requirements. A focus on avoidance of biodiversity values as require by the BAM will ensure the retention of these values in the locality and the	
	912 hectares of land in Metropolitan Sydney, including 621 hectares in the Northern Beaches LGA.	proposal must include measures to adequately protect and conserve these biodiversity values in secure ownership and management into the future. The focus of the avoidance measures should include the preservation of corridors	
	3. All of the MLALC lands contain native vegetation in good condition so there was no upfront option to completely avoid impacts on biodiversity.	with adequate buffers as a priority in the planning proposal design where the above listed biodiversity values are present.	
		Strategic mapping of high biodiversity values across the site could indicate where avoidance of these high biodiversity values can be focused for conservation purposes. The proponent should consider how to design their proposal to ensure the persistence of the threatened entities that reside within the site and thereby conserving and protecting biodiversity and important environmental values. The extent of the conservation zone as proposed is unlikely to be able to support the conservation of these high significance biodiversity values currently supported on the site and the justification for the extent of impacts is inadequate to demonstrate how avoidance and mitigation measures have been incorporated in accordance with the BAM. In this regard, the proposal does not meet the objectives of the Planning Proposal, nor BAM requirements.	
		2. This is not an applicable consideration under the avoid and minimise framework under the BAM and the BC Act purpose which states:	
		(k) to establish a framework to avoid, minimise and offset the impacts of proposed development and land use change on biodiversity	
		3. Regardless of the choices of land on which to pursue development options, the requirements of the BAM are to be adequately considered and incorporated into the design, layout and zoning on the land.	

Attachment A: BCS comments on proponent's post-exhibition response – Biodiversity

Issue	Hayes response	BCS Comment
Regional-scale avoidance and minimisation.	 4. An independent strategic assessment of MLALC landholdings in the Northern Beaches LGA was prepared in 2020 by Gyde Consulting, in association with Craig & Rhodes, Travers Bushfire and Ecology, JMT Consulting and in consultation with the MLALC. The strategic assessment was peer reviewed by Barr Property and Planning (October 2021). The assessment investigated the development potential of each of the land parcels, looking at matters such as biodiversity values, heritage values, bushfire risk, and infrastructure needs. 5. The assessment resulted in only six of the sites being nominated for inclusion in the Aboriginal Lands SEPP. It was identified that avoidance of the significant remaining landholdings across the Northern Beaches LGA provides opportunity for biodiversity offsets to be achieved locally, including through creation of biodiversity stewardship sites. 6. The Northern Beaches Aboriginal Land Development Delivery Plan (DDP) was subsequently prepared by the NSW Department of Planning & Environment (DPE) in accordance with State Environmental Planning Policy (Planning Systems) 2021. The DDP considers the high-level opportunities and constraints associated with future development of the six identified sites within the Northern Beaches LGA. 7. On the basis of strategic investigations and assessment, only one, the 71ha Lizard Rock site [now referred to as the Patyegarang Project] is currently endorsed by MLALC members and the NSW ALC to be actively investigated for land dealing. Whilst fully vegetated, this site contains lower biodiversity values than the other sites, and also contains an important cultural rock engraving that could be better protected and managed with development of the land. This site was deemed the best option to avoid and minimise impacts at the regional scale, whilst meeting project objectives. 	 4. Noted. See response to 1-3 above. 5. Noted See response to 1-3 above. Also, BCS considers that the key design principles of the Development Delivery Plan and the objectives of the Planning Proposal have not been demonstrated in relation to biodiversity conservation. 6. See response to 1-3 above. Also, BCS raised significant concerns in its submission on the proposed amendments to the State Environmental Planning Policy (Aboriginal Land) 2019 and the draft Northern Beaches Aboriginal Land Development Delivery Plan (DDP) that were not addressed (see BCS submission dated 23 March 2022 DOC22/163750). 7. The claim that the cultural rock engraving could be better protected and managed with development of the land has not been justified. The extent of avoidance of impacts to biodiversity values on the site has not been adequately explored nor justified. Focusing on areas of high biodiversity value should be the focus of avoidance and part of the discussion and justification of avoidance.
Site-scale avoidance and minimisation	8. Biodiversity values within the site were assessed to identify opportunities for further avoidance and minimisation of impacts at the site scale. This resulted in amendment to a previous 2004 concept masterplan for the land, with development substantially pulled back from the more remote southeastern areas not currently bordered by existing development. This reduction in scale and re-positioning of the development also reduced fragmentation of the large local patch of bushland which extends onto adjacent lands to the south and east.	8. The fact that the current planning proposal impacts less vegetation than the 2004 master plan is not a relevant consideration for the current proposal.
Project-scale avoidance and minimisation	9. Hayes Environmental carried out a more comprehensive biodiversity assessment (following the <i>Biodiversity Assessment Method 2020</i>) to inform	 9. Noted. 10. The C2 conservation zone only protects a small portion of the biodiversity values within the Site (19.8ha or 28% of the total site). As discussed above,

Issue	Hayes response	BCS Comment
	and refine the project design, and to assess the likely impacts and offset liability.	biodiversity values across the site are to be taken into consideration in designing the size of the proposal in response to the site constraints.
	10. The twenty hectares of avoided land across the southeast was designated as a conservation zone, with ongoing discussions between specialist consultants and the project team to ensure the Structure Plan could be achieved without impacting directly or indirectly upon the conservation zone.	It still remains unclear whether there will be further impacts within the areas nominated as a conservation zone given the increased intensity of the use of the site and other ancillary works in association with any subdivision that occurs on the site.
	11. The Snake Creek riparian corridor was widened in the south to exceed statutory minimum corridor requirements. This improved opportunities for maintaining water quality downstream, and improved the connectivity values of the Snake Creek riparian corridor.	11. The Snake Creek riparian corridor width does not incorporate the full extent of habitat for threatened entities on the site. In this regard, the width of the corridor does not signify adequate avoidance of biodiversity values.
	12. Design of residential precincts included use of perimeter roads, to enable	12. Noted.
	collection and management of stormwater, and to provide opportunities for control of access to community land (particularly the conservation zone).	13. Noted.14. All indirect impacts are not avoided by these measures. The significant
	 13. A substantial bushfire APZ (up to 60m in width) would extend beyond the perimeter road, thus providing open space for recreational use, and a buffer to indirect impacts on the conservation zone, including opportunity for installation of stormwater management features and other impact management measures. 14. These design measures combine to provide best practice protection for the conservation zone, avoiding all direct and indirect impacts upon this area. 15. Further discussions between the ecologist and the project team drilled into opportunities for more specific protection of threatened species habitat, tweaking the design to retain habitat for <i>Tetratheca glandulosa</i> and the Redcrowned Toadlet, and ensuring the Structure Plan contained sufficient flexibility to enable further refinements during detailed design for the Development Application stage. Many of these details are necessarily conceptual at this level of the planning process. 	 increase in the intensity of use of the site will have additional impacts such as increased weed infestations from human access to those conservation areas. 15. Significant areas of habitat for these two threatened species are to be impacted under the proposed zoning. Adequate avoidance of these habitats has not been provided. Adequate justification for how the proposal will provide protection so these species can persist within the site has not been provided.
Precinct-scale avoidance and minimisation	 16 Discussions between the ecologist and stormwater consultant have resulted in conceptual design around water quality controls and treatment, and the location and method of discharges. The project team is committed to not only meeting statutory requirements in relation to water quality, but to set a benchmark for improvement of the quality of water being discharged from the site. 17 A range of management plans would be prepared at the development application stage to further manage, minimise and mitigate potential impacts on biodiversity values at the precinct scale (refer to Ch 8.4 of the Preliminary BDAR). These would include, but not be limited to: 	16. Noted.17. The range of management plans are generally supported but do provide security for the conservation of biodiversity values on the site to ensure their persistence into the future.Furthermore, the commitment to prepare management plans at DA does not address avoidance of biodiversity values.

Issue	Hayes response	BCS Comment
	- Conservation Zone Management Plan, to protect and monitor biodiversity values within the conservation zone.	
	- Vegetation Management Plan for areas of 'retained vegetation' within the development zone, including specific management and protection actions for areas of known habitat for threatened species (such as <i>Tetratheca glandulosa</i> and the Red-crowned Toadlet).	
	- Construction Management Plan, to include a Chapter on biodiversity management and protection, including a tree and vegetation removal protocol, management of displaced and injured wildlife protocol, protection measures such as temporary fencing, biosecurity actions, control of site wastes.	
	- Stormwater Management Plan, including specific sections addressing avoidance of impacts on areas of known Red-crowned Toadlet habitat.	
	- Site-specific Development Control Plan, to address matters such as street and external house lighting, road and verge design to avoid wildlife collisions, signage, pedestrian management, biosecurity, <i>etc</i> .	
	In summary, the Structure Plan is the result of a lengthy investigative and assessment process to avoid and minimise impacts on biodiversity values at the regional scale, site scale, and project scale. Additional planning has already commenced to further avoid and minimise impacts at the precinct scale, with these details to be lodged with the development application.	
B. Underestimatio	n of the extent of impacts	
1. Overestimation of impacts within the Preliminary	The Structure Plan specifically addresses lot sizing, road placement and asset protection zone boundaries to facilitate retention of trees and natural rock features within the development.	Noted.
BDAR	Asset Protection Zones would retain native vegetation to the extent that meets statutory APZ requirements. This vegetation would effectively be protected and maintained through a Vegetation Management Plan implemented by the community strata and controlled by Council.	
	Residential lots and private spaces would not be cleared and levelled to suit broadscale project home development, but offered as treed sites with restrictions where appropriate, to encourage bespoke house designs similar in character to other residential areas across the Northern Beaches.	
	Despite this, the biodiversity assessment has conservatively assumed for the purpose of assessment and calculation of impacts that all land within the development footprint, including APZ inner protection areas, public open	

Issue	Hayes response	BCS Comment
	space, road verges, and private spaces would be completely cleared of all native vegetation.	
	This is an overestimation of the extent of impacts across 44.7 hectares of land.	
2. Potential for underestimation of impacts	The biodiversity assessment has assumed that the APZ outer protection areas (2.67 ha) would retain occasional trees and some native groundcover. This is based on discussions, joint site inspection and site-specific mapping with the bushfire consultant.	Agreed that there are still impacts to biodiversity values from the proposal that have not been accounted for and which may increase the level of impacts on the Site. All impacts should be subject to the avoidance requirements of the BAM.
	The biodiversity assessment assumes that riparian corridors and the cultural reserve (6.9 ha) would not be directly impacted by the development, but are likely to be subject to indirect impacts. This is based on detailed discussion with the bushfire consultant, stormwater consultant, and broader project team. Indirect impacts require more detailed site plans and management plans to be quantified. It is the intent of the project team to minimise indirect impacts to the extent that additional off-setting is not warranted.	The increase in the intensity of use of the site will have additional impacts such as increased weed infestations from human access to those conservation areas. Therefore, it cannot be assured that the cultural reserve will not be impacted by the proposed rezoning.
	The biodiversity assessment does not include an assessment of the impacts of infrastructure requirements that are outside of Patyegarang site. The areas being considered for external infrastructure are comparatively small, and are already cleared or highly disturbed. Additional impacts associated with these would be minor.	
3. Implications for strategic planning	In summary, the potential for underestimation of impacts is substantially less than the overestimation of impacts that has been incorporated into the assessment.	BCS remains of the view that the Planning Proposal has failed to demonstrate application of the avoid and minimise framework established.
	The extent of impacts would be re-calculated on the basis of final detailed plans at the development application stage. The minor queries raised by EHG would not materially alter the outcome of the biodiversity assessment nor compromise the feasibility of the project.	
	In any case, offset credit calculation and pricing have been regularly changing and updating since the commencement of the BC Act, such that changing credit requirements is an ongoing risk for all strategic planning decisions which necessarily rely on unfinalised BDARs.	
	Sufficient information has been provided to confidently assess project merits and feasibility for rezoning.	

Issue	Hayes response	BCS Comment
1. Duffys Forest EEC	Consideration of Duffys Forest EEC has been carried out through both qualitative and quantitative comparison with the Final Determination of the NSW Scientific Committee (this being the legal definition of the community). The quantitative comparison referred to the Smith & Smith (2000) report and method which is specifically referred to for this purpose in the Final Determination. There are cautions and limitations relevant to this method, as with any scientific method. These cautions and limitations, however, have been carefully considered and addressed in the Preliminary BDAR, and do not affect the findings set out in the Preliminary BDAR. The limitations refer to (i) degraded sites where the species diversity has been reduced, (ii) to situations where seasonal or disturbance-related dormancy might affect species diversity, and (iii) sampling limitations. None of these limitations apply to the Patyegarang site. The site is in good condition, was surveyed during appropriate conditions, and a high species diversity was recorded (meeting the minimum criteria for the method to be used). The issue of sampling limitations is relevant to large sites where random sampling has been traversed on foot and sampling has targeted the most likely areas for this community on the site.	The Response to Key Submissions by Gyde dated 22 December 2023 does not provide adequate justification as to the identification of key Threatened Ecological Communities that may be present on the site and so concerns are still raised for the identification of TECs.
2. Coastal Upland Swamp	There is one patch of Coastal Upland Swamp mapped within the site on recent regional mapping. This appears to be a mistake in aerial photo interpretation due to weed invasion, most notably Coral Trees, Privet and Senna. Further details and photos have been added to the Preliminary BDAR.	As above.
3. Threatened species associations.	The plant community types associated with Duffys Forest EEC are almost identical to the PCTs used for the BDAR assessment, such that any changes to threatened species associations would be minor. Any newly relevant species would most likely already have been adequately surveyed. However, threatened species associations to respective PCTs have been regularly changed and updated since commencement of the BC Act, such that this is an ongoing risk for all strategic planning decisions which necessarily rely on unfinalised BDARs.	It is noted that further work has been undertaken within the BDAR to outline addition threatened species habitats. There are still some concerns in regard to the PCT identification and also as to whether all species likely to be on the site have been included given the uncertainties around the PCT identification.

Issue	Hayes response	BCS Comment
1. Fungi	Current legislation and guidelines do not require that variation to survey timing be justified by a listed DPE 'expert'. EHG have erroneously discounted the justification provided in the Preliminary BDAR on this basis. The fungi surveys were conducted by an expert on the genus, after whom one of the species is in fact named.	It is unclear what legislation and guidelines the proponent is referring to in this instance and so this justification for the survey for these threatened species outside of the survey period is not adequate.
2. Threatened plants	Targeted parallel traverse surveys for threatened plants have now been completed. These had been delayed due to seasonal survey requirements and so were not included in the July version of the Preliminary BDAR. No new threatened plant species were recorded. Results have been added to the Preliminary BDAR.	Noted.
3. Threatened fauna	 EHG have queried the survey of habitat for several ecosystem credit species (Rosenbergs Goanna, Spotted-tailed Quoll, and non-breeding Bent-wing Bats). These species are appropriately assessed as ecosystem credit species in accordance with the BAM (2020). Further survey or mapping of habitat is not required. Amphibian surveys were designed and carried out in collaboration with Dr Marion Anstis, a recognised expert on the relevant frog species, and author of technical books relied upon in the ecological industry for identification of frogs and tadpoles. Further detail around the identification of habitat and survey design has been added to the Preliminary BDAR. 	Noted.

Issue	Proponent flood response	BCS comment
Flood risk management	An updated Flooding Impact and Risk Assessment is attached that addresses these concerns.	In summary, limited consideration has been given to the issues raised by BCS.
	The CED FIRA Report July 2023 maps both the 1% & PMF flood events in the pre & post development scenarios within the extent of the planning proposal lands.	An updated FIRA was not provided with the post-exhibition response.
	Additional models are being prepared to assess the impact of the 1% & PMF events on Oxford Falls Rd.	
	It is noted that Oxford Falls Rd is frequently impacted by more frequent flood events and the road is often closed in this location. To this extent flood gates are installed at Oxford Falls and managed by Northern Beaches Council so as to prevent vehicles crossing flood waters.	
	The CED Storm Water Management Report July 2023 outlines a range of strategies to manage the impacts of storm water flows in the context of the site and environmental considerations. This strategy does not intend to construct large detention basins on the site but rather a sequence of devices that minimise and replicate natural environmental flows.	
	A detailed earthworks strategy is yet to be resolved as this is a development application consideration. However, it is intended to minimise the extent of earthworks to reflect the natural contours of the land.	
Consultant Qualifications	The flooding works completed as part of this FIRA has the full oversight and review by Kylee Smith, a degree qualified senior civil engineer at Colliers Engineering & Design with chartered status (CPEng, NER) and with over 13 years' experience in water resources and flood modelling.	BCS acknowledges that the CV of Kylee Smith has been provided. However, several issues have not been adequately responded to, including in relation to the hydrological modelling methodology.
Ministerial Direction 4.1 Flood Prone Land	2. The site is not identified as "flood prone land" in Council's statutory mapping from the Local Environmental Plan (LEP). Notwithstanding, the site is affected by minor	2. The FIRA has confirmed that the site is flood prone. Flood mapping was removed from LEPs following release of the Flood Planning Package in 2021. Consistency with the Local Planning Directions must be demonstrated.
	flooding which is mainly concentrated within the Snake Creek corridor and connecting overland flow paths. Whilst a site-specific flood planning area map was not produced for the planning proposal, the development was undertaken with consideration to the Local Planning Directions under Section 9.1(2) of the <i>Environmental Planning and Assessment Act</i> 1979 by the Minister for Planning (2022).	3. Per original advice on the planning proposal: <i>The flood planning area will need to be established</i> . This is to assess consistency with the local planning direction. The direction will no longer apply at the DA stage, so it would be too late to prepare this at the DA stage.
	3. The DA Design will ensure that all lots are above the Flood Planning Level – 1% AEP + 0.5m and where necessary, road centrelines will be adjusted accordingly. Therefore, a map showing the flood planning area	

Attachment B: BCS comments on proponent post-exhibition response – Flood Risk Management

Issue	Proponent flood response	BCS comment
	overlaid on the proposed layout will be prepared and provided at the time of DA submission.	
Flood Impact and Risk Assessment Report	Impact and Risk Assessment Report Morgan Road, Belrose, September 2022) and submitted on July 2023 with consideration to the NSW	4. BCS agrees that not every element of Table 5 and 6 is required but considers there are substantial elements lacking from the FIRA to make it suitable for the planning proposal stage. BCS has reviewed Tables 5 and 6 against the FIRA and recommends the following be included:
	support this planning proposal. At Planning Proposal stage, the analysis is necessarily high-level and therefore it is not possible to respond to every element of Table 5 and 6, however, as the project develops a full FIRA	a) FIRA requirements including local planning direction; and discussion of each item in the direction to demonstrate consistency
	assessment in accordance with LU01 Tables 5 and 6 will be submitted for DA assessment.	 Refer to the Flood Risk Management Manual 2023 and supporting guides (not only LU01) as informing the FIRA. eg FB04 Incorporating 2016 Australian Rainfall and Runoff in studies
		c) Follow guidance in FB04, including Section 3.7.1 on losses. This includes probability neutral burst losses and consideration of losses from calibrated studies eg Narrabeen Lagoon Flood Study
		d) Subcatchment map with scale and legend, preferably on an aerial photo, to ensure sufficient discretisation across the site that enables all relevant flow paths to be mapped. Subcatchments on the site may be too large
		e) Critical durations and temporal patterns – demonstrate selection is reasonable
		f) Model checks
		g) Mapping of depth, level, velocity and hazard for the 5% AEP and PMF events and one of the 0.5% AEP and 0.2% AEP events, for both existing and proposed conditions. Mapping to date has included only the 1 % AEP event
		h) Impacts: flood level difference mapping for 1% AEP, PMF; comparison of hazards pre to post development
		i) While BCS does not require FERCC mapping, demonstration of rising road access should be provided for all flood affected lots.
	5. The flood modelling methodology described by BCS involves a typical development with stormwater detention basins to detain the stormwater runoff such that post-development flows are less than or equal to pre- development flows. As discussed in full detail within the Stormwater Management Plan (Stormwater Management Plan, Morgan Rd, Belrose, September 2022) and summarised in Point 16 below, Colliers considered the option of traditional end-of line water guality treatment and detention,	5. BCS is concerned at the methodology used and recommends that relevant industry guidance is followed, including Australian Rainfall and Runoff. Regardless of whether end of line treatment or dispersed treatment measures is adopted, the flood modelling methodology must appropriately reflect the hydrological changes under developed conditions, including changes to flow volume and timing. The original advice remains relevant: <i>This is not considered an appropriate methodology for flood modelling nor</i>

Issue	Proponent flood response	BCS comment
	 however due to the very steep and rocky nature of the terrain, a stormwater strategy involving detention basins at the bottom of each catchment was deemed to be unviable and incompatible with an effective and sustainable design. 6. The proposed stormwater strategy instead adopts a more innovative Stormwater Footprint Strategy which involves introducing both stormwater storage and stormwater treatment throughout the development at an individual lot scale, street scale and precinct scale, rather than focusing on just a basin at the bottom of each catchment. A more detailed summary is provided in Point 16 below. 7. Within the flood modelling, a methodology was adopted whereby initial loss was increased as a simplified approach to simulating storage. This was adopted for the early stages of modelling for the Planning Proposal submission only to assess potential changes in flow regime due to the development. It is expected that due to most flows being contained within the waterway, there will be minimal change to the flooding outcomes by incorporating the detention elements once detailed. Nevertheless, the water quantity / detention elements will be incorporated into the TUFLOW model and an updated, complete set of mapping will be provided at DA Stage once the earthworks grading and detailed sizing of the stormwater Management Strategy (2022) for the Stormwater Footprint is sufficient to demonstrate that there is no adverse impact to the downstream waterway because of the development. 8. The impervious area of the catchments was provided in Appendix B of the FIRA report (2022). For the developed catchments, an impervious area of 60% was adopted for the residential lots, 70% for road reserves, and 10% for open space areas. For the existing catchments, an impervious area of 10% was adopted dore stress the values recommended in Council's AUS SPEC Engineering Specifications (2000). Additionally, the catchments existing conditions scenario and developed in the developed conditions scen	 stormwater detention modelling. The proposed measures to mitigate peak flow impacts, such as stormwater detention, must be explicitly modelled and not simply using an increased initial loss. The hydrographs shown in the report are not indicative of stormwater detention measure outflows and do not correctly show the likely impact of changes to site hydrology. Hydrographs should be presented of the existing case, developed case without detention measures and developed case with detention measures. If the proponent is unable to model the dispersed on-site detention, the post-development scenario may include increased imperviousness without any treatment measures. This would be a conservative representation but may be more accurate than the current modelling. BCS requests that hydrographs are provided further upstream, at locations where the impacts due to increased imperviousness can be seen. e.g. for site subcatchments. BCS suggests an independent peer review of the hydrology may be necessary if the requested amendments cannot be made. 6. The stormwater strategy proposed has been in use for over 20 years. The stormwater strategy does not influence BCS advice on the requirements for flood risk management. 7. Per point 5, BCS advises that this approach does not appear to be generating accurate representations of post-developed flow behaviour. Whether or not the flows are contained within the waterways remains unclear as the post-development scenario modelling does not follow relevant guidance. BCS does not consider it necessary to incorporate any water quality or detention elements into TUFLOW provided that these are appropriately incorporated in the hydrological model. BCS considers the DA stage too late to define flood behaviour. Flood constraints on the land must be established prior to rezoning. 8. Appendix B provides impervious fractions for over 30 individual subcatchments A, B, C etc. This will enable consideration of whether the overall impervious fracti

Issue	Proponent flood response	BCS comment
	 10. Whilst it may ultimately be useful to extend the hydraulic model further downstream to cover Oxford Falls Road at the crossing over Oxford Creek to ensure that the full extent of the flow path across the site is mapped. It is more appropriate to undertake this analysis at DA stage once the bulk earthworks design and detailed design of the stormwater elements is complete. At this stage, extension of the model will provide no additional information to assist assessment of the Planning Proposal. 11. Extending the model further upstream of the two western flow paths will have limited benefit as the flow regime is largely shallow sheet flow in the upper reaches of the catchment due to a lack of defined flow paths in the topography. This would not result in substantially increased peak flows at the location of the inflows currently adopted. In addition, prior to detailed site grading and stormwater drainage design being modelled, sheet flow from the upstream catchment would result in shallow sheet flooding across the development lots, which is not a realistic future scenario. 12. The Manning's roughness n value of 0.05 for the residential areas represents the composite value of the developed lot excluding the building itself. However, in this model the value is largely irrelevant given the lots themselves are not inundated, as it is not a rainfall on grid model. 	 and should be reconsidered. Inflating the impervious fraction for existing site conditions can disguise true impacts due to development. 9. Validation has been provided for the hydrological modelling only. Validation of the hydraulic model is still recommended. Sensitivity testing would be recommended if there are no suitable validation methods. 10. BCS recommends that the original advice is followed as it is highly relevant for the planning proposal stage. <i>It is recommended that the hydraulic model is extended downstream to include Oxford Falls Road and that a suitable frequent event such as the 1 event per year is used to map flooding over the road.</i> 11. BCS recommends that the original advice is followed as it is highly relevant for the planning proposal stage to understand the nature of potential for impacts caused by the development. Due to edge effects, the model boundary should never be the site boundary. The flood extents on the site may not be accurate at these inflow points. 12. Resolved.
Flood Impacts	13. The flows reported in Table 1, 2 and 3 of the FIRA do show a marginal increase in the post-development peak flow, however the flood afflux result shows a negligible change in peak water level. This is due to a change in the timing of the peak of the hydrographs in the post-development scenario, as Figures 11-15 of the FIRA shows the extracted flow hydrographs downstream of the site from the TUFLOW modelling, where the peak of the hydrograph in the developed conditions scenario is approximately the same as in the existing conditions scenario, but slightly shifted to the left (i.e. the peak occurs slightly earlier).	13. BCS notes that the flood impacts cannot be accurately assessed until the modelling issues above are resolved. BCS requests that information such as peak flows be provided for the post-development scenario both with and without treatment measures so that the changes due to the development and impact of treatment measures can be understood. This is requested due to the concern around the hydrological modelling.
Frequent Flooding of Transport Route	 14. For emergency evacuation, there is a rising flood-free egress route via Morgan Road headed in a north and western direction. This would be the recommended evacuation route as opposed to travelling downstream towards the road crossings over Oxford Creek and Middle Creek which are flood affected. This can be detailed in a Flood Emergency Response Plan for the development if PMF modelling results in flooded lots upon completion of detailed design, although it is considered that this will be unlikely. 15. Refer also to the Transport report prepared by JMT. 	 14. BCS original comment is not specifically in relation to flood evacuation, but other emergencies such as bushfire and also day-to-day access. It is noted that fires and floods may occur concurrently. We request this comment be given due consideration and response. As requested above and in our original comments, <i>the Flood Impact and Risk Assessment Report should model and map flood affectation at Oxford Creek, especially smaller events.</i> BCS recommends the SES is consulted on any proposal to develop a Flood Emergency Response Plan. The lots appear to be largely unaffected by the PMF. As such evacuation due to flood emergencies may be unnecessary.

Issue	Proponent flood response	BCS comment
		15. BCS requests that an explanation is provided in the FIRA regarding any information from the transport report that may be relevant to this issue.
Stormwater management	16. The Storm was prepared by Leaders in the field of Integrated Stormwater Management Design. It is proposed to act as an innovative industry benchmark, rather than adopt a traditional approach where the traditional approach is not viable due to the landform and topology. The strategy is designed to mimic natural stormwater flows by minimising impervious areas, reusing rainwater and stormwater, and providing treatment measures that replicate the natural water cycle as per Point 5 in the Council DCP. The approach results in management of flood afflux as well as water quality and ensures that there is no prompt for hydrogeological adjustments to the waterway due to negligible change in the hydrological regime. This minimises the need for hard engineering solutions and works within the constraints of the natural features and topography of the landscape where possible. The Stormwater Footprint approach considers stormwater volume as the key variable across various scales including lot, street, and neighbourhood. The Stormwater Footprint is the ratio of the average annual runoff from post-development to the average annual runoff from pre-development where a stormwater footprint target close to 1 is the desired outcome to ensure the downstream waterway will remain unaffected by the proposed development, the geomorphic conditions will remain unchanged and the stormwater quality will achieve a reasonable result. This approach is an innovative alternative that utilises distributed water quantity and quality treatments and adopts best practice management of stormwater. The results of which were demonstrated within the Stormwater Management Strategy (2022) utilising the industry standard software MUSIC and XP RAFTS to analyse water quality and quantity.	 16. BCS notes that the proposed strategy using distributed treatment measures has been in use for over 20 years. BCS also notes that water sensitive design measures are typically designed for the management of day-to-day rain events and do not reduce flood afflux caused by developments for larger events. As stated in the Flood Risk Management Measures guideline: The focus of FRM is on understanding and managing the rare to extreme flood events that have significant impacts on and risks to communities. These may be risks to people or may relate to damage to property and infrastructure. These events are typically of significantly longer duration than those that are relevant to WSUD. BCS reiterates that appropriate hydrological modelling has not been completed to demonstrate no impact to flows and recommends this is completed per above comments.
Proposed Earthworks Strategy	 17. The bulk earthworks design is not yet complete. Colliers Engineering & Design notes the Department's preference to ensure suitable cross-sections with maintenance of vegetation. This preference will be considered throughout the development of the design. 18. Owing to the steep terrain on site, the proposed development areas adjacent to the waterways and overland flow paths are generally already above the PMF level, however Colliers agrees that raising the development above the PMF is not necessary and that raising to the 1% AEP + 0.5m freeboard is the preferred approach. 	17. Resolved. The earthworks strategy wording should be updated to reflect this.18. Resolved. It should be confirmed that the updated flood modelling reflects this approach, noting that BCS does not suggest filling of lots to the 1% AEP plus freeboard would be necessary.



DOC24/676215

Murray Jay Manager Planning Proposal Authority NSW Department of Planning, Housing and Infrastructure Locked Bag 5022 PARRAMATTA NSW 2124

18 September 2024

Dear Murray

I refer to your email dated 19 August 2024 received by the Biodiversity, Conservation and Science Group (BCS) in the Department of Climate Change, Energy, the Environment and Water (DCCEEW) requesting a review of the *Planning Proposal Patyegarang Project, Belrose* (Gyde, August 2024) (updated Planning Proposal).

BCS has reviewed the updated Planning Proposal and the following supporting documents:

- *Planning Proposal Patyegarang (PP-2022-3082) response to peer review of BDAR* (Hayes, 10 August 2024) (Biodiversity Letter)
- *Patyegarang Planning Proposal additional information (*Gyde, 14 August 2024) (Additional Information Letter)
- Indicative Structure Plan, Land Use Zoning, Minimum Lot Size and Height of Buildings maps
- Flood Impact and Risk Assessment Report Morgan Road, Belrose (Colliers, July 2024) (FIRA).

BCS provided detailed advice at the Development Delivery Plan, pre-lodgement, public exhibition and Response to Submissions (enclosed) stages raising concerns about the biodiversity impacts as well as flood risk management issues. However, I note that the updated Planning Proposal and supporting biodiversity documents do not adequately address BCS's previous biodiversity advice. Regarding flood risk management, BCS raises concerns with the accuracy of the flood modelling and adequacy of mitigation measures presented in the FIRA.

BCS believes the proposal will have significant impacts on native vegetation and threatened species and their habitats and is inconsistent with:

- the *Biodiversity Conservation Act 2016* (BC Act) and Biodiversity Assessment Method (BAM)
- key design principles of the Northern Beaches Aboriginal Land Development Delivery Plan
- stated objectives of the updated Planning Proposal
- Ministerial Direction 3.1 Conservation Zones.

Considering the above, BCS maintains its objection to the updated Planning Proposal and provides comments on biodiversity and flood risk management below in addition to detailed comments on the FIRA in Attachment A.

Biodiversity

The protection and conservation of the significant biodiversity values across the site was established in the:

- key design principles of the *Northern Beaches Aboriginal Land Development Delivery Plan* (DPE, February 2022)
- objectives of the Planning Proposal per section 1.2 of the Gateway Determination Report PP-2022-3802 which include to "conserve and protect biodiversity and important environmental values of the land".

BCS considers that the updated Planning Proposal will not achieve the key design principles and objectives. BCS continues to recommend that strategic mapping of high biodiversity values across the site be used to indicate where avoidance of high biodiversity values can be focused for conservation purposes. BCS recommends the proponent should design their proposal to ensure the persistence of the threatened entities that reside within the site and thereby conserving and protecting biodiversity and important environmental values. The current proposed zoning does not adequately avoid impacts. BCS considers it is likely that biodiversity within the site will continue to decline if the proposal is approved in its current form.

Adequacy of biodiversity assessment

BCS has reviewed the Biodiversity Letter and notes that the Preliminary BDAR prepared by Hayes Environmental dated February 2024 has not been updated. As such BCS concerns remain regarding the adequacy of the biodiversity assessment to inform land use planning, including:

- identification of key Threatened Ecological Communities that may be present on the site, including the Coastal Upland Swamp and Duffy's Forest Endangered Ecological Communities (EECs), of which Duffy's Forest is also a Serious and Irreversible Impact entity under the BC Act
- Plant Community Type (PCT) identification uncertainties, which may mean that the preliminary BDAR has failed to identify potential threatened species on the site, and therefore has not undertaken surveys to confirm presence or otherwise of threatened species.

Zoning regime for conservation land

BCS notes that the updated Planning Proposal includes an additional 2.3 ha of C2 zoned land in the north along Snake Creek and two tributaries on the western side which will replace the previous RE2 Private Recreation zone. However, to compensate for this amendment to the zoning, the updated Planning Proposal at Section 5.1 includes additional permitted uses within the C2 zone, including environmental management works, utilities and services and stormwater services.

While the area of the C2 zoned land has increased, the additional permitted uses will increase impacts to *all* C2 zoned land across the site, as utilities, services and stormwater infrastructure uses will be permissible throughout all C2 land. These additional uses are incompatible with the retention and protection of native vegetation and threatened species habitat. The effect of this change will be an overall decrease in the protection of biodiversity values across the whole of the site, which in BCS's view is a worse outcome than previously proposed.

Given utilities, services and stormwater infrastructure are required to support urban development, they should be located in urban zoned land, not conservation land. The proposed additional permitted uses are also inconsistent with the Warringah Local Environmental Plan (LEP 2011) C2 zone objectives and permissible uses which are limited to environmental protection works, oyster aquaculture and roads.

As previously advised, BCS considers that the permitted uses in the C2 zone in the Warringah LEP 2011 are compatible and consistent with the conservation of the high biodiversity values present and would afford long term protection.

BCS reiterates its previous recommendation that high biodiversity values present on the site be zoned C2 Environmental Conservation, with permitted uses consistent with the Warringah LEP C2 zone.

Avoid and minimise impacts

The updated Planning Proposal does not respond to BCS previous concerns regarding avoidance and minimisation of impacts to biodiversity values across the site. BCS continues to be of the view that the proposal has failed to demonstrate application of the BC Act avoid and minimise framework.

As previously advised, the extent of the proposed C2 zone is unlikely to be able to support the conservation of biodiversity values on the site. Further, the justification for the range of impacts in the updated Planning Proposal fails to demonstrate how avoidance and mitigation measures have been incorporated in accordance with the BAM. In this regard, the updated Planning Proposal does not comply with the requirements of BAM, or the objectives of the Planning Proposal and key design principles of the Northern Beaches Aboriginal Land Development Delivery Plan. The updated proposal will have significant impacts on native vegetation and threatened species and their habitats.

In addition to the proposed zoning amendments and the introduction of additional permitted uses to the C2 zone, other biodiversity-related amendments in the updated Planning Proposal include:

- an extra road crossing over Snake Creek within 'retained vegetation'
- provision of a strip of RE2 zoned land to function as an asset protection zone (APZ) adjacent to the property at 20 Morgan Rd, which previously contained an area 'retained vegetation'.

BCS also notes that there are inconsistencies in the location of the 'retained vegetation' between the Preliminary Biodiversity Development Assessment Report (BDAR) (Hayes Environmental, February 2024) and the updated Indicative Structure Plan.

According to the Biodiversity Letter "These changes listed above would not increase the assessed impact on biodiversity values and would not alter the findings of the preliminary biodiversity assessment for the project". BCS does not agree with this conclusion as the proposed amendments increase biodiversity impacts from the extra road, APZ and the additional permitted uses in the C2 land. This means that the preliminary biodiversity assessment did not assess these impacts and is inconsistent with the requirements of the BAM and the BC Act.

While not mentioned in the updated information, there is also a new area of zone R2 in the north of the site that was previously zoned RE2. It is unclear why this area is not zoned C2.

Development near zone boundaries

Section 5.1 of the updated Planning Proposal states that it is proposed to "*Include Standard Instrument clause* 5.3 – *Development near zone boundaries, for zones* R2, RE2, and C2". The relevant distance where this clause applies between zones would be 15m.

However, the Standard Instrument – Principle Local Environmental Plan (2006) states:

(3) This clause does not apply to-

(a) land in Zone RE1 Public Recreation, Zone C1 National Parks and Nature Reserves, Zone C2 Environmental Conservation, Zone C3 Environmental Management or Zone W1 Natural Waterways, or

The application of this clause to land in the C2 zone must therefore be removed.

Ministerial Direction 3.1 Conservation zones

The updated Planning Proposal has not adequately addressed BCS's previous comments due to the issues raised above. BCS maintains the view that Direction 3.1 has not been adequately addressed as the proposal does not 'include provisions that facilitate the protection and conservation of environmentally sensitive areas'.

As discussed above, the updated Planning Proposal has not adequately addressed BCS's advice at the Development Delivery Plan, pre-lodgement, exhibition and response to submission stages. Therefore, biodiversity and flood risk management issues remain.

BCS does not support deferring unresolved issues to development application stage. The issues BCS has raised should be addressed upfront as part of the Planning Proposal to ensure adequate consideration of issues and impacts consistent with the *Local Environmental Plan Making Guideline* (DPE, August 2023).

If you have any further questions about this issue, please contact the Greater Sydney Planning Team via rog.gsrplanning@environment.nsw.gov.au.

Yours sincerely

Al.

Louisa Clark Director Greater Sydney Biodiversity, Conservation and Science

Encl. BCS advice - proponent post exhibition response - Patyegarang Planning Proposal (23 May 2024)

Attachment A: BCS comments on proponent's updated Planning Proposal – Flood Risk Management

Note: comments have only been provided on outstanding issues.

Issue	Proponent flood response July 2024	BCS comment
Consultant Qualifications	CED believes the issues have been adequately responded to with Revision C of this report.	Some concerns raised below again point to the need for consultants to be adequately experienced in flood risk management.
Qualifications Flood Impact and Risk Assessment Report (FIRA)	 with Revision C of this report. 4. a) Compliance to the Ministerial Local Planning Direction 4.1 has been discussed in Table 12. b) Relevant supporting guidelines have been reviewed as per Section 4. c) Losses from the Narrabeen Lagooon Floodplain Risk Management Study (Cardno, 2019) have been adopted for the updated modelling. d) Subcatchment maps have been provided in Appendix C, Map 01. e) Critical duration and temporal patterns statistics from XP-RAFTS has been discussed in Section 5.4. f) Model Checks including mass balance and Peak CME have been provided long with a summary of modelling parameters, refer to Section 6.1 	 d) The maps indicate there is insufficient subcatchment discretisation. This is particularly evident for the external catchments, but internal subcatchments should also be reviewed to ensure that they follow the topography. Subcatchment Ext02 discharges runoff to the two west-east flow paths across the site. BCS queries how the flow can be accurately applied to the hydraulic model when the subcatchments discharging to two flowpaths have been considered as one. BCS raises similar concern for Subcatchment Ext01 in the north, which needs to be discretised according to where individual flow paths cross Morgan Road and enter the site. Flows from 24 Morgan Road would not be expected to enter the site with the bulk of this catchment, near Hilversum Crescent. The tributary at the east of the site also requires review as subcatchments Ext06 and E do not appear to be adequately discretised. In particular, the
	g) Mapping for all modelled storm events is provided in Appendix C.	subcatchment upstream of Morgan Road should be considered separately so that the flood behaviour across the road is adequately modelled.
	h) Impacts for 1%, 0.5%, 0.2% and PMF events have been provided in Appendix C.	Review of the subcatchment boundaries should also be undertaken as there appear to be inaccuracies.
	 h) Impacts for 1%, 0.5%, 0.2% and PMF events have been provided in Appendix C. 	To facilitate due consideration of subcatchments, a terrain map should be provided, preferably with the subcatchment layer overlaid.
	i) The proposed lots for the development are outside of the PMF extents. Additionally, the site has enough fall to ensure	 g) The mapping identifies that Morgan Road at the north of the site is cut in at least the 5% AEP event with highly hazardous floodwater (category H5). A mitigation measure to provide adequate drainage infrastructure to

	that there is rising road access away from the flood corridors for all lots.	this section of road should be considered, particularly as the proposed development would add traffic to this road.
		Similarly, shallow sheet flow traverses Morgan Road at the east of the site. This may need similar consideration following revision of the subcatchments under item d.
		i) BCS acknowledges that the lots appear to be outside the PMF extents. BCS also recommends avoiding the creation of flood islands. Several roads within the precinct and Morgan Road would be cut in extreme and possibly rare flood events, which would create flood islands.
		Emergency management planning requires consideration of the full range of flood events. While it may not be unreasonable to expect that internal roads would be designed to be trafficable in the 1% AEP event, it is not standard practice to provide stormwater drainage to manage PMF flows.
Flood Impacts	13. Peak flows for all modelled scenarios, including the post- development scenario with and without stormwater detention, have been included in the updated FIRA for impact assessment.	13. BCS notes that the flood impacts cannot be accurately assessed until the modelling issue under item 4d and below are resolved.
		BCS remains concerned with the hydrology as the PMF flows are predicted to decrease even without mitigation measures. This leads to potentially implausible flood level decreases being predicted in the PMF. BCS therefore recommends further scrutiny is applied to the hydrological modelling. The consultant may need to undertake an internal review.
Frequent Flooding of Transport Route	14. See comment 10 above.	14. This item also relates to Middle Creek flooding at the causeway on Oxford Falls Road, which has not been upgraded as has the Oxford Creek crossing of Morgan Road. Flooding at both these locations would cut road access to the east to Wakehurst Parkway. BCS original comment was that <i>This should be considered in traffic and transport investigations and any consideration of emergency evacuation</i> . Evacuation of the precinct due to flood emergencies is considered unlikely, however other emergencies such as fire may occur concurrently with flooding. Should these other emergencies be required to be addressed in the planning proposal, consideration should be given this issue.

END OF SUBMISSION



22 November 2023

Case Number: 210514

Lauren Templeman Council Assessing Officer Department of Planning and Environment lauren.templeman@planning.nsw.gov.au

RE: Planning Proposal PP-2022-3802 at Morgan Road, Belrose (Patyegarang Project by Metropolitan Local Aboriginal Land Council)

Thank you for notifying Sydney Water of PP-2022-3802 at Morgan Road, Belrose which proposes to deliver 450 dwellings, secure dual occupancies as an additional permitted use within the R2 low density residential zone, secure additional permitted uses within the RE2 Private Recreation zone to enable environmental management works, stormwater services, APZ and bushfire works. We have reviewed the application based on the information supplied and provide the following comments for your information to assist in planning the servicing needs of the proposed development.

Sydney Water cannot support this planning proposal at this time as it is outside our wastewater servicing catchment. We advise the proponent to engage with Sydney Water to discuss alternative servicing solutions for the site.

Growth Data

- Sydney Water supports government-backed growth initiatives within our area of operations and endeavour to provide services in a timely and prudent manner that delivers cost effective water and wastewater infrastructure whilst not impacting our current customer base economically, environmentally, or unduly impacting current service levels.
- In order to fully support all growth and developments and to fully assess proposed developments, we require the ultimate and annual growth data for this development as noted in the attached appendix, be fully populated and returned to Sydney Water.
- Sydney Water acknowledges that timescales and final growth numbers may alter however, to provide robust servicing advice and to investigate the potential for staged servicing to meet timescales, we require a realistic indication of demand and timescales. Failure to provide this may result in Sydney Water being unable to formulate proper planning requirements.
- The growth data should be completed and provided via the WSC feasibility process referencing the case(s) above.
- Sydney Water requests that all future proposals are formally lodged via the NSW Planning Portal or, where not feasible, direct all enquiries via <u>UrbanGrowth@sydneywater.com.au</u> to ensure that we can track and respond to all enquiries in a timely manner.

Wastewater Servicing

- The proposed development is outside Sydney Waters' catchment. Whilst there is a pumping main located nearby, along the Morgan RD, Sydney Water currently has no plans to provide wastewater services for this area.
- The proposed development is close to the Sydney water Warriewood and West Middle Harbour wastewater servicing catchments.
- Should the proponent wish to connect to the Sydney Water catchment they would be required to undertake an options assessment to identify a preferred servicing strategy



and enter into an agreement with Sydney Water for the delivery of services out-with our catchment.

Water Servicing

- The proposed development is primarily outside the existing water supply zones. The closest water supply zone to this development is Belrose water supply zone.
- Preliminary assessment suggests that trunk system may have capacity to service this development. Augmentation or extension may be required for the local reticulation. This will be further assessed during the S73 application and any associated relevant commercial requirements.

Next Steps

- The proponent is required to raise a feasibility via a Water Servicing Coordinator to initiate initial discussions on how to progress an options assessment. The WSC should reference case number 210514.
- The options assessment and any required works for wastewater servicing is anticipated to be funded by the proponent as it out-with our current catchment.
- The proponent will be required to provide ultimate and anticipated annual growth demand data as part of the lodgement of the feasibility.
- Once the options assessment is completed and a route for servicing indicated, a new referral should be sent to Sydney Water.

The development servicing advice provided is based on the best available information at the time of referral (e.g. planning proposal and development applications). It is important to note that this information can evolve over time in tandem with the progression of other development projects in the catchment, changes within the local systems and receiving works. This is particularly important in systems with limited capacity. Furthermore, Sydney Water does not reserve or hold capacity for proposed developments, regardless of whether the area has been rezoned or not. To ensure accuracy and alignment with current conditions, it is best to approach Sydney Water for an updated capacity assessment particularly if an advice letter is more than 12 months old.

If you require any further information, please contact the Growth Planning Team at <u>urbangrowth@sydneywater.com.au</u>.

Yours sincerely,

Kristine Leitch Commercial Growth Manager City Growth and Development, Business Development Group Sydney Water, 1 Smith Street, Parramatta NSW 2150



Case Number: 210342v3

18th April 2024

Colliers Engineering And Design c/- METROWATER MANAGEMENT

Feasibility Letter

Developer:	Colliers Engineering And Design
Your reference:	096-16 Feaso 3
Development:	Lot 947 DP752038 MORGAN RD, Belrose
Development Description:	Proposed low density residential development with 423 new residential dwellings.
Your application date:	November 10, 2023

Dear Applicant

This Feasibility Letter (Letter) is a guide only. It provides general information about what our requirements could be if you applied to us for a Section 73 Certificate (Certificate) for your proposed subdivision. The information is accurate at today's date only.

We have not allocated any system capacity to your proposal from the investigation into this Feasibility advice. This advice is only an indication of our systems and possible requirements as of today. Where there is system capacity, it may have been fully utilised by the time you obtain a Consent. The requirements applied to any approved Development proposal may differ significantly in the future since the original advice was issued.

If you obtain development consent for that subdivision from your consent authority (this is usually your local Council) they will require you to apply to us for a Section 73 Certificate. You will need to submit a new application (and pay another application fee) to us for that Certificate by using your current or another Water Servicing Coordinator (WSC).

We'll then send you either a:

- Notice of Requirements (Notice) and Developer Works Deed (Deed) or
- Certificate.

These documents will be the definitive statement of our requirements.

There may be changes in our requirements between the issue dates of this Letter and the Notice or Certificate. The changes may be:

- if you change your proposed development eg the development description or the plan/site layout, after today, the requirements in this Letter could change when you submit your new application
- if you decide to do your development in stages then you must submit a new application (and pay another application fee) for each stage.

Infrastructure contributions for drinking water and wastewater will be payable on all developments that require a Section 73 Compliance Certificate to be issued from 1 July 2024 onwards. Infrastructure contributions help recover the cost of providing infrastructure to new developments. Please refer to the Costs section of this letter for more information.

No warranties or assurances can be given about the suitability of this document or any of its provisions for any specific transaction. It does not constitute an approval from us and to the extent that it is able, we limit its liability to the reissue of this Letter or the return of your application fee. You should rely on your own independent professional advice.

What You Must Do To Get A Section 73 Certificate In The Future.

To get a Section 73 Certificate you must do the following things. You can also find out about this process by visiting <u>Plumbing</u>, <u>building & developing</u> page on our website.

1. Obtain Development Consent from the consent authority for your subdivision proposal.

2. Engage a Water Servicing Coordinator (WSC).

You must engage your current or another authorised WSC to manage the design and construction of works that you must provide, at your cost, to service your subdivision. If you wish to engage another WSC (at any point in this process) you must write and tell us.

You'll find a list of WSC's at Listed providers on our website.

The WSC will be your point of contact with us. They can answer most questions that you might have about the process and developer charges and can give you a quote or information about costs for services/works (including our costs).

3. Developer Works Deed

After the WSC has submitted your new application, they'll receive the our Notice and Developer Works Deed. You and your accredited Developer Infrastructure Providers (Providers) will need to sign and lodge both copies of the Deed with your nominated Coordinator. After we've signed the documents, one copy will be returned to the WSC.

The Deed sets out for this project:

- your responsibilities
- our responsibilities
- the Provider's responsibilities.

You must do all the things that we ask you to do in that Deed. This is because lots in your subdivision do not have water services and you must construct and pay for the following works extensions under this Deed to provide these services.

Note: The Coordinator must be fully authorised by us for the whole time of the agreement.

4. Water and Sewer Works

4.1 Water

Each lot in your subdivision must have:

- a frontage to a drinking water main that is the right size and can be used for connection
- its own connection to that water main and a property service (main to meter) that is available for the fitting of a meter.

We've assessed your application and found that:

- The proposed development is partly in Belrose water supply zone and most of it is outside of the existing Sydney Water supply system.
- High level assessment suggests that the trunk may have capacity.
- Amplification or extensions of the reticulation may be required to service the development. This will be reassessed in the S73 application. The developer needs to provide the concept plan during S73 application.
- The advice is applicable only at the time of this assessment. This does not commit or reserve any allocation of demand to their development. This will be reconfirmed during S73 application.



4.2 Sewer

Each lot in your subdivision must have a sewer main that is the right size and can be used for connection. That sewer must also have a connection point within each lot's boundaries.

We've assessed your application and found that:

• The proposed development lies outside the Sydney water Warriewood and West Middle Harbour wastewater servicing catchments. This proposed development is not included in

the Warriewood 2021 GSIP study or any other growth planning studies. The high level assessment indicates that Warriewood network has some capacity constraints. However, treatment plant has capacity to service the proposed 450 dwellings. Therefore, to service the development, developer needs to engage a consultants to investigate the network capacity, connection point and any network upgrade requirements if required.

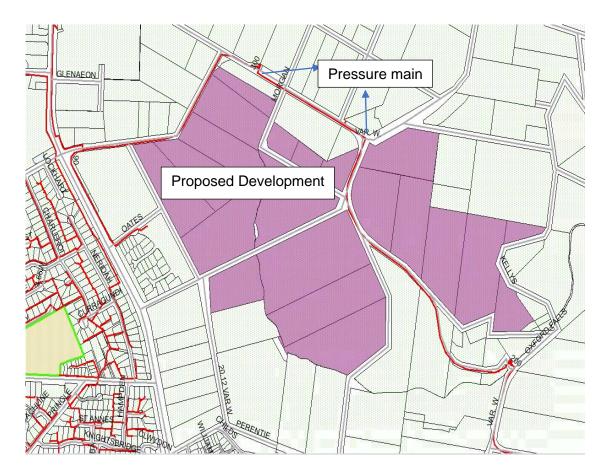


Figure 2 – Wastewater Location Map

5. Ancillary Matters

5.1 Asset adjustments

After we issue this Notice (and more detailed designs are available), we may require that the water main/sewer main/stormwater located in the footway/your property needs to be adjusted/deviated. If this happens, you'll need to do this work as well as the extension we have detailed above at your cost. The work must meet the conditions of this Notice and you will need to complete it **before we can issue the Certificate**. We'll need to see the completed designs for the work, and we'll require you to lodge a security. The security will be refunded once the work is completed.

5.2 Entry onto neighbouring property

If you need to enter a neighbouring property, you must have the written permission of the relevant property owners and tenants. You must use our **Permission to Enter** form(s) for this. You can get copies of these forms from your WSC or on our website. Your WSC can also negotiate on your behalf. Please make sure that you address all the items on the form(s) including payment of compensation and whether there are other ways of designing and constructing that could avoid or reduce their impacts. You will be responsible for all costs of mediation involved in resolving any disputes. Please allow enough time for entry issues to be resolved.

5.3 Costs

Construction of these **future** works will require you to pay project management, survey, design, and construction costs **directly to your suppliers**. Additional costs payable to us may include:

- water main shutdown and disinfection
- connection of new water mains to our system(s)
- design and construction audit fees
- contract administration, Operations Area Charge & Customer Redress prior to project finalisation
- creation or alteration of easements etc
- water usage charges where water has been supplied for building activity purposes prior to disinfection of a newly constructed water main.
- Note: Payment for any Goods and Services (including Customer Redress) provided by Sydney Water will be required prior to the issue of the Section 73 Certificate or release of the Bank Guarantee or Cash Bond.

Your WSC can tell you about these costs.

Infrastructure Contributions

Infrastructure contributions for drinking water and wastewater will be payable on all developments that require a Section 73 Compliance Certificate to be issued from 1 July 2024 onwards.

The infrastructure contributions are set in accordance with the Development Servicing Plans registered with the Independent Pricing and Regulatory Tribunal (IPART) and in accordance with *Independent Pricing and Regulatory Tribunal Act.*

The contributions will be gradually reintroduced such that they will be capped at 25 percent in 2024-25 and 50 percent in 2025-26, with full contributions payable from 1 July 2026 onwards, in line with a transition plan approved by the NSW Government.

You can find more information on the reintroduction of drinking water and wastewater contributions at https://www.sydneywatertalk.com.au/infrastructure-contributions.

If applicable, Sydney Water will confirm the amount of the infrastructure contribution for your development, we anticipate this information will be available in late 2023.

6. Approval of your Building Plans

You must have your building plans approved **before the Certificate can be issued. Building construction work MUST NOT commence until we have granted approval.** Approval is needed because construction/building works may affect our assets (e.g. water and sewer mains).

Your WSC can tell you about the approval process including:

- Your provision, if required, of a "Services Protection Report" (also known as a "pegout"). This is needed to check whether the building and engineering plans show accurately where our assets are located in relation to your proposed building work. Your WSC will then either approve the plans or make requirements to protect those assets before approving the plans
- Possible requirements
- Their Costs
- Timeframes.

We recommend that you apply for Building Plan Approval early as in some instances your WSC may need to refer your building plans to us for detailed review. You'll be required to pay us for the costs associated with the detailed review.

You can also find information about this process (including technical specifications) on our <u>Plumbing, building & developing</u> page on our website or call us on 13 20 92.

Notes:

- The Certificate will not be issued until the plans have been approved and, if required, our assets are altered or deviated
- You can only remove, deviate, or replace any of our pipes using temporary pipework if you have written approval from us. You must engage your WSC to arrange this approval
- You must obtain our written approval before you do any work on our systems. We'll take action to have work stopped on the site if you do not have that approval. We will apply Section 44 of the *Sydney Water Act 1994*.

OTHER THINGS YOU MAY NEED TO DO

Shown below are other things you need to do that are NOT a requirement for the Certificate. They may well be a requirement from us in the future because of the impact of your development on our assets. You must read them before you go any further.

Backflow Prevention Water supply connections

A backflow prevention containment device appropriate to the property's hazard rating must be installed at the property boundary. The device is to be installed on all water supplies entering the

property, regardless of the supply type or metering arrangements. It is needed to reduce the risk of contamination by backflow from these supplies.

A licensed plumber with backflow accreditation can advise you of the correct requirements for your property. To view a copy of our Backflow Prevention Policy and a list of backflow accredited plumbers <u>Plumbing, building & developing</u>.

The water service for your development

We don't consider whether the existing water main(s) talked about above is adequate for fire fighting purposes for your development. We cannot guarantee that this water supply will meet your Council's fire fighting requirements. The Council and your hydraulic consultant can help.

You must make sure that each home/lot has its own 20mm meter.

When access to the water supply is required, the property owner or agent must apply to with us online. A meter must be installed before any water is used. It is illegal for anyone other than us to remove the locking mechanism on the water meter.

The online application can be found by visiting our website <u>Plumbing, building & developing</u>. You'll need to have the:

- account (Property) Number which can be obtained from the WSC
- serial Number which can be found on the metal tag on your property service.

You can find more information by using the "Ask Sydney Water" section of our website.

Fire Fighting

Definition of fire fighting systems is the responsibility of the developer and is not part of the Section 73 process. It is recommended that a consultant should advise the developer regarding the fire fighting flow of the subdivision and the ability of our systems to provide that flow in an emergency. Sydney Water's Operating Licence directs that our mains are only required to provide domestic supply at a minimum pressure of 15 m head.

Disused Water Service Sealing

You must pay to disconnect all disused private water services and seal them at the point of connection to our water main. This work must meet our standards in the Plumbing Code of Australia (the Code) and be done by a licensed plumber. The licensed plumber must arrange for an inspection of the work by a NSW Fair Trading Plumbing Inspection Assurance Services (PIAS) officer. After that officer has looked at the work, the drainer can issue the Certificate of Compliance. The Code requires this.

Disused Sewerage Service Sealing

Please don't forget that you must pay to disconnect all disused private sewerage services and seal them at the point of connection to our sewer main. This work must meet our standards in the Plumbing Code of Australia (the Code) and be done by a licensed drainer. The licensed

drainer must arrange for an inspection of the work by a NSW Fair Trading Plumbing Inspection Assurance Services (PIAS) officer. After that officer has looked at the work, the drainer can issue the Certificate of Compliance. The Code requires this.

Soffit Requirements

Please be aware that floor levels must be able to meet our soffit requirements for property connection and drainage.

Other fees and requirements

The requirements in this Notice relate to your Certificate application only. We may be involved with other aspects of your development and there may be other fees or requirements. These include:

- plumbing and drainage inspection costs
- the installation of backflow prevention devices; and
- council fire fighting requirements. (It will help you to know what the fire fighting requirements are for your subdivision as soon as possible. Your hydraulic consultant can help you here.)

No warranties or assurances can be given about the suitability of this document or any of its provisions for any specific transaction. It does not constitute an approval from us and to the extent that it is able, we limit its liability to the reissue of this Letter or the return of your application fee. You should rely on your own independent professional advice.

END

11 October 2023



Department of Planning and Environment 4 Parramatta Square 12 Darcy Street PARRAMATTA NSW 2150

Jemena Gas Networks (NSW) Ltd ABN 87 003 004 322

Level 14 99 Walker St North Sydney NSW 2060 PO Box 1220 North Sydney NSW 2060 T +61 2 9867 7000 F +61 2 9867 7010 www.jemena.com.au

Attention Christina Brooks christina.brooks@planning.nsw.gov.au

Dear Christina,

Site address and LGA: NORTHERN BEACHES Property: Lizard Rock, Morgan Road, Belrose Reference: PP-2022-3802

Agency Ref: 2444

Jemena Gas Networks (**Jemena**) has reviewed and assessed the planning proposal referenced above. Jemena has given consideration to the potential safety and impacts on and from the Jemena gas pipelines located to the east of the proposed development.

Jemena confirms that it has no objection or comments regarding the proposed amendments to the *Warringah Local Environmental Plan 2011*.

In assessing the development application, Jemena can confirm that it operates a high pressure pipeline, which is located approximately 700m to the east of the proposed development area. Owing to the physical separation between the proposed development and the Jemena high pressure gas pipelines, it is anticipated that there will be no impact deriving from the development, or the continued operation of the pipeline.

If you have any questions or queries, please do not hesitate to contact the undersigned.

Kind regards,

Michael Schwede Lands Management Officer Jemena 22/11/2023



24-28 Campbell St Sydney NSW 2000 All mail to GPO Box 4009 Sydney NSW 2001 T +61 2 13 13 65 ausgrid.com.au

To Whom it May Concern,

RE: PP-2022-3802 Patyegarang, Morgan Road, Belrose

Ausgrid would like to thank you for seeking input and feedback regarding this planning proposal.

Ausgrid requires that due consideration be given to the compatibility of proposed development with existing Ausgrid infrastructure, particularly in relation to risks of electrocution, fire risks, Electric & Magnetic Fields (EMFs), noise, visual amenity and other matters that may impact on Ausgrid or the development.

Ausgrid notes that in Appendix 33. Appendix 18 "Infrastructure Delivery Plan - Morgan Rd, Belrose" the proponent has previously contacted Ausgrid regarding supply to the development through the connection application process. The proponent should recommence discussions related to supply configurations and capacity as soon as practicable noting the last communication was in 2022.

Ausgrid Overhead Powerlines are in the vicinity of the development.

The developer should refer to SafeWork NSW Document – Work Near Overhead Powerlines: Code of Practice. This document outlines the minimum separation requirements between electrical mains (overhead wires) and structures within the development site throughout the construction process. It is a statutory requirement that these distances be maintained throughout the construction phase.

Consideration should be given to the positioning and operating of cranes, scaffolding, and sufficient clearances from all types of vehicles that are expected be entering construction sites.

The "as constructed" minimum clearances to the mains must also be maintained. These distances are outlined in the Ausgrid Network Standard, NS220 Overhead Design Manual. This document can be sourced from Ausgrid's website at www.ausgrid.com.au.

Ausgrid notes the project will require a section of Transmission overhead feeder S21 to be relocated from overhead to underground. A relocation request will need to be submit to Ausgrid to commence this process. This can be accessed through the Ausgrid website.

Ausgrid does look forward to reviewing future Development Application submissions for any developments attached to this proposal and will then provide further feedback accordingly.

Additional information can be found in the Ausgrid Quick Reference Guide for Safety Clearances "Working Near Ausgrid Assets - Clearances". This document can be found by visiting the following via the Ausgrid website:

www.ausgrid.com.au/Your-safety/Working-Safe/Clearance-enquiries

Please do not hesitate to contact me for further information. Regards,

Paul Nakhle - Portfolio Manager - Asset Protection | Transmission Services 02 9269 7587 | 0419 631 174



Our Ref: DOC23/248113 Planning Number: PP-2022-3802

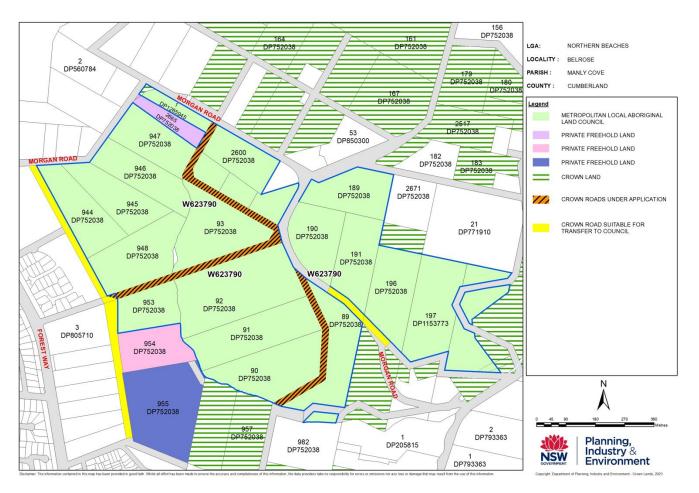
Patyegarang, Morgan Road, Belrose

The Department of Planning and Environment – Crown Lands and Public Spaces (the Department) has reviewed the subject Planning Proposal as it relates to its statutory obligations under the following Acts:

- Crown Lands Management Act 2016
- Aboriginal Land Rights Act 1983
- Roads Act 1993, and
- Native Title Act 1993 (Cth)

The Department notes that there are a number of Crown roads within the project area. These roads may provide legal access to the development but may not provide practical access. The Department advises that these roads should not be relied upon for practical access to the project site.

Please refer to Figure 1 below depicting the Crown roads within or adjoining the proposal area. The Department has received applications to close and purchase all the Crown roads within the proposal area, identified in orange with cross hatching 'CROWN ROADS UNDER APPLICATION'. The Crown roads suitable for transfer to Northern Beaches Council (Council) are identified in yellow 'CROWN ROADS SUITABLE FOR TRANSFER TO COUNCIL'.



PO Box 2185 Dangar NSW 2309 LAM.projects@crownland.nsw.gov.au ABN: 20 770 707 468

Figure 1 – Crown Roads Crown roads suitable for transfer to Council

The Crown road to the west of the planning proposal area running south from Morgan Road provides legal access, but may not provide practical access, to the adjoining freehold lots to the south (Lots 954 & 955 in DP752038). The northern section of this Crown road has been identified in the planning proposal as part of the proposed lots depicted in pink in Figure 2 'Draft Structure Plan', below.



Figure 2 – Draft Structure Plan

It is also depicted as part of a proposed Asset Protection Zone (APZ) - Inner Protection Zone depicted in light green in the 'Bushfire Protection Plan', Figure 3, below. Crown roads cannot be used for APZ's. APZs must be designed and incorporated within the development they serve.



Figure 3 – Bushfire Protection Plan

This Crown road meets the criteria for transfer to Council under the Department's Administration of Crown Roads Policy as it is partially constructed in the northern section adjoining Lot 1 DP1037395 and also provides legal access to the aforementioned freehold lots to the south. The road also appears to be part of the proposed road network as depicted in Figure 2, noting that there does not appear to be provision to extend that road network to Lots 954 and 955. The existing access to these lots runs off Morgan Road to the east of the Crown road, directly through the proposal area. This is due to the steep topography of the Crown road alignment making practical access along the road unachievable.

Transferring this Crown road to Council would enable Council to realign the road along the most practical alignment to provide access to Lots 954 and 955. A realignment process involves closing the road and then opening the road on a practical access alignment. This realignment process should form part of the proposal to ensure that legal and practical access to Lots 954 and 955 is maintained.

There is also a small section of Morgan Road (a Council public road) adjoining Lots 191 and 196 in DP752038 on the south-eastern side of the proposal area, that is still a Crown road as depicted in Figure 1 and Figure 4 below. This part of Morgan Road, which is constructed and provides access to numerous developments, meets the criteria for transfer to Council.



Figure 4 – Crown Road adjoining Lots 191 and 196

Crown Reserve

There is also a small parcel of Crown Reserve known as R83616 (Figure 5) that has been included in the proposal area (Figure 2) as Retained Vegetation & Open space/Protected Area. This Reserve is 633.2m² in size, being Part Lot 2, DP1285945. This is a Crown Reserve and therefore cannot form part of the proposal area.

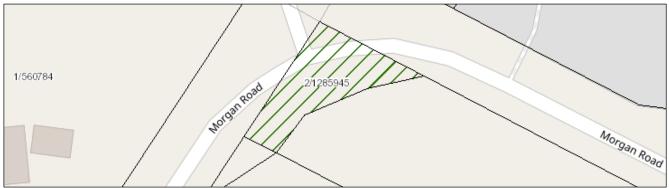


Figure 5 - Crown Reserve R83616

If the proponent requires further information, or has any questions, please contact Chris Wright, Senior Group Leader Property & Projects, on 0438 587 369 or at chris.wright@crownland.nsw.gov.au.

Yours sincerely,

Glen Camenzuli Area Manager Metro Department of Planning and Environment – Crown Lands and Public Spaces T 0438 587 369 | E glen.camenzuli@crownland.nsw.gov.au



Department of Planning and Environment

Our ref: DOC23/1016042-3

Mr. Rohan Johnston Senior Manager Aboriginal Planning Concierge Planning Delivery Unit Department of Planning and Environment rohan.johnston@dpie.nsw.gov.au

Planning Proposal – Patyegrang Project, Morgan Road, Belrose

Dear Rohan

Thank you for the opportunity to comment on the planning proposal for the revised Patyegarang Project, Belrose, as subject to consideration by the Sydney North Planning Panel under the *Warringah Local Environmental Plan 2011* (Warringah LEP).

We have reviewed the planning proposal and make the following comments:

Aboriginal cultural heritage considerations under the National Parks and Wildlife Act 1974

Heritage NSW has reviewed the Aboriginal Archaeological Assessment Patyegarang Project, Belrose NSW, dated 11 July 2023, as prepared by Dominic Steele. We recognise that this report provides detailed information regarding archaeological and cultural values associated with the project area, as documented in consultation with Metropolitan Local Aboriginal Land Council. The report provides commitments to avoid direct harm to known engraving sites and to introduce measures aimed at ongoing protection of these sites.

Heritage NSW recognises the consultation undertaken with Metropolitan Land Council but notes that the consultation to date does not comply with the relevant requirements of the *National Parks and Wildlife Regulation 2019* or the *Aboriginal cultural heritage consultation requirements for proponents 2010*. Consultation in accordance with these requirements is key to assessing the impacts of this planning proposal on Aboriginal cultural heritage as required by Ministerial Direction 2.3. This is because without Aboriginal community consultation (completed in accordance with relevant legislation and requirements) the extent of the impacts on Aboriginal objects and heritage values through the planning proposal and future development is not known.

(02) 9873 8500

As is our approach with other planning proposals, Heritage NSW recommends that a comprehensive Aboriginal Cultural Heritage Assessment Report (ACHAR) be prepared in accordance with relevant policy and guidelines, identifying, describing, and assessing any impacts to Aboriginal cultural heritage sites or values associated with the project. The ACHAR must be prepared in accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH, 2011) and the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW, 2010), including results of thorough archaeological survey. The ACHAR must also include evidence of adequate and continuous consultation with Aboriginal parties, completed with reference to the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW, 2010).

In accordance with Clause 5.10.8 of the Warringah LEP 2011, it is important that any management, mitigation, and conservation mechanisms are developed at the planning proposal stage to help mitigate the cumulative impact of development in this region on Aboriginal cultural heritage.

General Comments

Prior to finalisation of the proposal, Council should be satisfied that all necessary heritage assessments have been undertaken and that any impacts have been sufficiently addressed. Council's assessment should include, but not be limited to, a search of the Aboriginal Heritage Information Management System (<u>https://www.heritage.nsw.gov.au/protecting-our-heritage/record-aboriginal-sites/</u>) and an ACHAR prepared as discussed above.

If you have any questions please contact Nicola Roche, Principal Assessments Officer at Heritage NSW, Department of Planning and Environment by phone on 02 9228 6424 or via email <u>nicola.roche@environment.nsw.gov.au</u>

Yours sincerely

Nicole Davis

Nicole Davis Manager Assessments Heritage NSW Department of Planning and Environment As Delegate under National Parks and Wildlife Act 1974 21 November 2023